

IBM Consulting Group  
Strategy Department

February, 1994

Presented by

INPUT

The Atrium at Glenpointe  
400 Frank W. Burr Blvd.  
Teaneck, NJ 07666  
201-801-0050  
201-801-0441 (fax)



**PROFILE: ANDERSEN CONSULTING**

**IBM Consulting Group  
Strategy Department**

**February, 1994**

**Presented by**

**INPUT**

**The Atrium at Glenpointe  
400 Frank W. Burr Blvd.  
Teaneck, NJ 07666  
201-801-0050  
201-801-0441 (fax)**



## Table of Contents

Section	Page
A. Overview	1
1. Executive Summary	1
2. Firm Background	3
B. Details	4
1. Financial Performance	4
2. Strategy	8
3. Market Model	17
4. Delivery Model	23
5. Intellectual Capital	29
6. Infrastructure	33
7. People	37
C. Analysis	39
1. Core Competencies	39
2. Strengths and Weaknesses	39
3. Key Differentiators	40



## Andersen Consulting

A.

---

### OVERVIEW

#### 1. EXECUTIVE SUMMARY

- Vision Statement

Andersen Consulting plans to help large corporations and government organizations be more successful in the achievement of business goals through the use of information technology and other innovations by means of its business oriented approach to management consulting, methodologies that address all processes involved, and its knowledge of how to utilize information technology.

- Market Image

Andersen Consulting has an image of a very successful vendor in the sale and delivery of consulting and information services that will solve business problems through the use of information technology. Andersen is also thought of as a vendor that performs work in a very systematic manner with methodologies for conducting all aspects of consulting and information services work.

- Core Consulting Competencies

Andersen Consulting provides strategic and IT consulting services on a stand alone basis and together with SI and professional services to almost every major vertical market group. Andersen provides front-end strategy consulting, BPR and change management consulting as well as IT consulting associated with projects. AC utilizes a consulting methodology that covers BPR and change processes called Value-Driven Reengineering.

Services are offered on a worldwide basis from offices in 47 countries. Over 50% of AC's business is from offices outside the U.S.





AC focuses its chief attention in marketing and planning for consulting services and other business on a set of market targets. The chief market targets, financial services (which is defined to include banking, brokerage and insurance for Andersen Consulting), utilities, products (which includes discrete and process manufacturing, distribution and airlines for Andersen Consulting), healthcare, telecom and government (federal, state and local government).

- Future Directions

Andersen Consulting is taking steps to strengthen its BPR capabilities through further development of its methodology for BPR and change management processes called Value-Driven Engineering as well as through training of additional personnel in this methodology.

Further research is being carried out to identify changes in software and hardware products that will be used with client/server technology to enable Andersen Consulting to maintain its lead in consulting for the use of this technology as well as implementing solutions that utilize it.

An alliance has been made and research is being undertaken to enable Andersen Consulting to maintain a leadership position in consulting for and implementing image system technology.

An effort is being launched to stress the strength of Andersen Consulting as an agent of change in the use of new information technology and business innovation or reengineering.

An effort is also underway to develop more strength in software engineering for future work.

- Key Highlights

Andersen Consulting has a large number of jobs and volume of consulting work, and projections of its growth are at a compound rate of over 15%.

The investment in training which Andersen Consulting makes for its staff guarantees a high level of staff support for the sale and performance of consulting and other services.



The mission and strategies of Andersen Consulting are well suited to further development of consulting business since they are focused on helping organizations achieve a higher level of success through changes.

The partnership model helps in the sale and performance of consulting work although it has some weaknesses.

The approach that is taken with consulting business leads to additional work.

## **2. FIRM BACKGROUND**

- History

Andersen Consulting started in business as a consulting activity of Arthur Andersen & Co. similar to the consulting activities of other Big 6 firms. As it grew and had questions develop about conflicts between its plans and the plans of its parent, it was organized as a separate business unit in 1989 with its own operations and managing partner.

- Key Milestone

In addition to the date mentioned above when Andersen Consulting began to operate as a separate business unit, spokespeople for the company mention 1991 as a milestone since the firms revenue went over \$2 billion in that year.

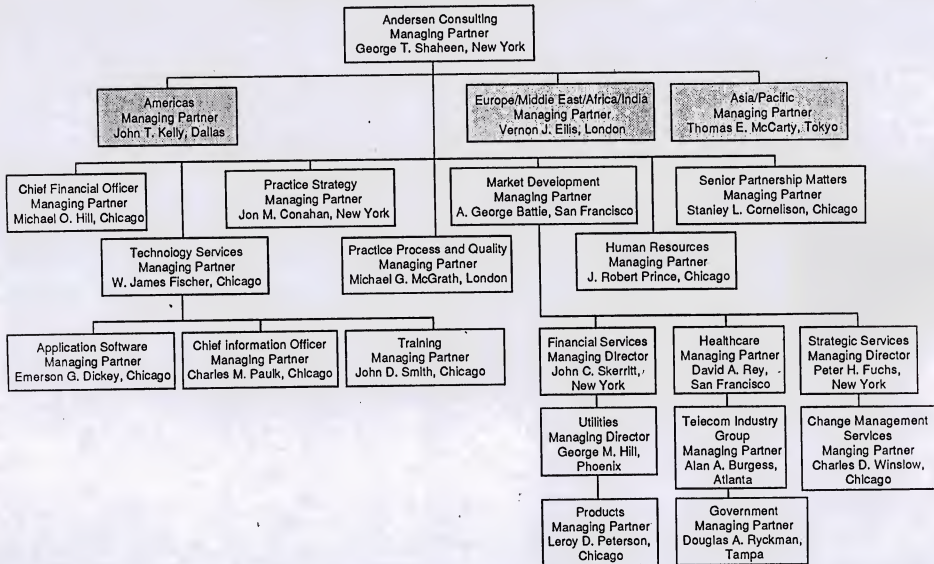
- Officers

The managing partner is George T. Shaheen. The chief officers and organizational structure are shown in Exhibits 1 and 2. Terry Neill, the partner in charge of change management is located in Chicago and William Stoddard, the partner in charge of BPR is located in N.Y.



EXHIBIT 1

Andersen Consulting Organizational Structure\*

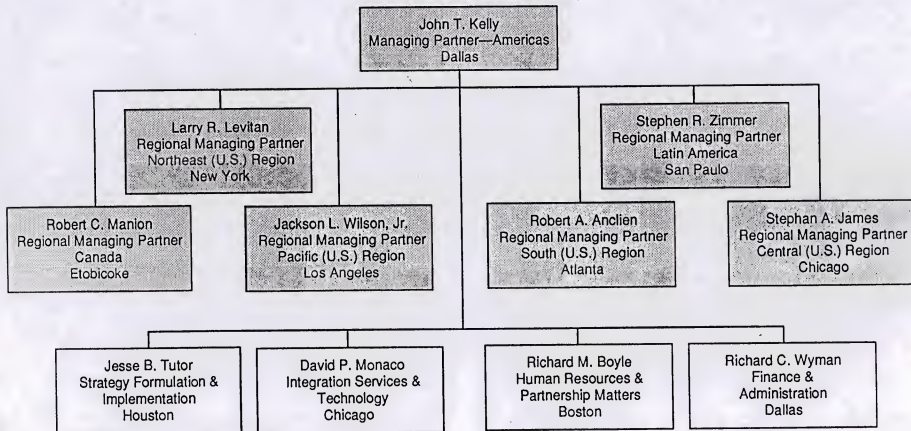


\*Shaded boxes indicate line operations. All others are classified under worldwide management.

3A

**EXHIBIT 2**

**Andersen Consulting  
Americas Operations\***



\*Shaded boxes indicate line operations. All others are classified under worldwide management.





- Core Competencies of the Corporation

Andersen Consulting has been recognized as one of the leading firms in SI services. Almost two-thirds of its business is from SI contracts and about 30% is from professional services. As part of its products and services, Andersen Consulting provides application software products, particularly for the manufacturing and distribution markets, and software products to aid in the use of methodologies or to develop solutions. Andersen Consulting also provides consulting services as a part of SI and professional assignments as well as on a stand alone basis.

Andersen Consulting supplies equipment from IBM, DEC and other vendors as part of its SI services. Almost two-thirds of the equipment involved in SI contracts now involves client/server technology. Andersen Consulting has been emphasizing its strength in client/server technology.

## **B.**

---

### **DETAILS**

#### **1. FINANCIAL PERFORMANCE**

- General Financial Performance

Since it is a private corporation, Andersen Consulting refuses to make its balance sheet available.

- Five Year Historical Revenue Analysis

Overall revenues for five years are shown in Exhibit 3. Exhibit 4 shows the split of revenues geographically for four years, back to the beginning of Andersen Consulting as a separate unit. Figures cannot be estimated for the period when results were combined with Arthur Andersen & Co.

A division of revenues by vertical market for U.S. markets is shown in Exhibit 5, below.



### EXHIBIT 3

## Total Revenues of Andersen Consulting

### FINANCIALS

#### Revenues

<u>Year</u>	<u>\$Millions</u>	<u>% Increase</u>
1992	2722	16
1991	2341	14
1990	2057	30
1989	1580	29
1988	1222	60



EXHIBIT 4

	1992	1991	1990	1989
ITEM	REVENUE	REVENUE	REVENUE	REVENUE
Americas				
- U.S	\$1,253.5	\$1,119	\$1,070	\$880
- Canada	64.2	53.3	40	30
- South America	55.6	46.9	35	28
- Mexico	8.7	6.5	5	4
Europe/ Middle East/ Africa/India	\$1,130.9	\$949.5	\$780	568
Asia/Pacific	\$209.0	\$165.5	\$127.	70
TOTAL	\$2,722.9	\$2,341.4	\$2,057	\$1,580



### Exhibit 5

Market	<u>1992</u>		<u>1991</u>	
	Revenue \$ Mill	Percent of Total	Revenue \$ Mill	Percent of Total
Products	1124	41	985	42
Financial Services	672	25	591	25
Government	288	11	282	12
Utilities	260	9	185	8
Telecom Industry	192	7	136	6
Health care	78	3	70	3
Other	110	4	93	4

Market	<u>1990</u>		<u>1989</u>	
	Revenue \$ Mill	Percent of Total	Revenue \$ Mill	Percent of Total
Products	907	44	727	46
Financial Services	535	26	411	26
Government	250	12	190	12
Utilities	124	6	79	5
Telecom Industry	107	5	63	4
Health care	53	3	47	3
Other	80	4	63	4





1988 data can not be estimated due to the fact that results were combined with Arthur Andersen & Co. at that time.

The division of revenues by services is shown in Exhibit 6.

- Operating Results (Margins)

Since Andersen Consulting does not release any financial details regarding its performance, INPUT has estimated profit before tax figures for the period of time of interest in Exhibit 7.

- Projected Growth

Andersen Consulting does not enjoy the high rate of growth of its first few years as an independent entity. Growth rates for revenue and profit before taxes have fallen in half from 1989 and 1990 to 1992. The company is larger and competition has increased. Both of these factors make it difficult to resume growth in the 20 to 30% range. Andersen Consulting will make an effort to push its rate of growth from 15 to 20%, but the most likely projection is for an average rate of growth around 16% for the next five years, assuming there will be no major acquisition.

- Fee Volume/Revenue from Consulting

Consulting services sold on a stand alone basis or with SI and professional services are included in the figures shown below in Exhibit 8. Consulting services can be included in SI and professional services contracts, even when the consulting services were sold as a separate step leading to a SI or professional services contract.



EXHIBIT 6

Division Of Revenue By Services

SERVICES

YEAR	S1 (%)	PROFESSIONAL SERVICES (%)	OTHER INCLUDING MANAGEMENT CONSULTING AND SOFTWARE PRODUCTS %
1992	65	30	5
1991	66	29	5
1990	66	29	5
1989	67	29	4
1988	69	27	4

6A

**EXHIBIT 7**

**Andersen Consulting**

**FINANCIALS**

**Profit (before tax)**

<u>Year</u>	<u>\$Millions</u>	<u>% Increase</u>
1992	545	15
1991	475	13
1990	420	27
1989	330	29
1988	260	n/a

6B

## Exhibit 8

### Strategy Consulting and IT Consulting revenues

<u>Year</u>	IT Consulting and Strategy Consulting in \$Millions by Year	
	<u>1991</u>	<u>1992</u>
U.S.	200	238
Worldwide	420	495

---

### Related revenues

	SI and Professional Services Systems Development	
	<u>1991</u>	<u>1992</u>
U.S.	375	446
Worldwide	841	1000

#### • Typical Consulting Project Revenue

Stand alone strategic and BPR assignments tend to be in the \$200 to 600,000 range although there are smaller assignments undertaken to analyze or explore business opportunities for clients or undertake studies of other types that may serve as a means of trying out Andersen services. IT consulting is almost always a part of SI or professional services projects and generally ranges between \$150,000 to \$400,000 per project although there can be smaller stand alone IT activities.

#### • Business Development Costs

Business development costs for consulting work is lowered for Andersen Consulting since most of the development cost is borne by SI and professional services work. The development cost is generally in the 3 to 5% range.





- Contract Backlog

Since the consulting backlog is distributed across a number of offices and stand alone jobs as well as larger contracts, the backlog is hard to estimate. In addition, Andersen Consulting will not allow a delay to exist for long without seeking aid from additional sources. Contacts have also stated that there is at least \$20 million of new consulting work in the hopper at all times and sometimes as much as \$40 million.

## 2. STRATEGY

- Vision

Andersen Consulting's vision is focused on helping its customers change to be more successful. It wants to help customers achieve results, "find the right solution at the right time to the right problem". Andersen plans to do this for the large corporations and government offices that it serves by employing its business oriented consulting, methodologies for performing consulting and information services work and its knowledge of information technology.

- Short Term Strategy

Point out to major corporations that the business orientation and methodologies of Andersen Consulting toward the delivery of consulting services and IT solutions can help a client achieve a much higher level of business success.

A second current strategy is to emphasize the experience that Andersen Consulting has in current business and IT areas of high interest such as business process reengineering, the use of client/server technology and new types of imaging applications. Andersen Consulting wants prospects to remember that it is the firm to use when change is being considered.

Advertisements and brochures as well as presentations stress that clients of Andersen Consulting can achieve a mega jump through the use of IT with the aid of Andersen's business oriented consulting approach.



- Long Term Strategy

The methodology, which AC calls Value-Driven Engineering is being introduced as a long term strategy for consulting and client assignments. It consists of three phases:

- Phase One-Enable Change. In this phase, a shared vision is formulated for the business that includes new business processes, people skills, organizational structures, technology, and infrastructure requirements.
- Phase Two-Achieve Change. In this phase, the planned change is implemented including the design and pilot test of new processes. SI projects will be carried out to provide the automation necessary for the new processes.
- Phase Three-Sustain Change. In this phase, performance is monitored versus plans to ensure change is complete and achieves the anticipated goals.

Andersen Consulting also supplies front end strategy consulting on business plans, human resource issues and change management to support the three phases described.

In each practice area or vertical market, partners of AC are now ensuring that targets are met for training staff members in the Value-Driven Reengineering consulting methodology. 15% to 20% of professionals are trained in the methodology. Adherence to the methodology has become part of Andersen Consulting's culture.

The use of this methodology is a long term strategy to ensure that Andersen Consulting becomes the leading or one of the leading practitioners of BPR.

- Mergers and Acquisitions

Andersen Consulting has not been known for acquisition or merger activity.

- Strategic Alliances

Andersen Consulting has alliances and marketing agreements with various vendors that complement the firm's strategy of providing the services and products that best meet the needs of its clients.



Examples of alliances announced by Andersen Consulting include the following:

Andersen Consulting has a cooperative agreement with SAP AG whereby Andersen can market SAP's R/3 integrated business software and provide systems integration and consulting services to joint clients.

Andersen Consulting and Norand Corporation have an alliance to market each other's products and services to retail, wholesale distribution, and consumer products clients. The agreement involves Norand's portable data collection equipment and Andersen's DCA/Logistics distribution software and MAC-PAC manufacturing software.

Since 1991, Andersen Consulting has allied with Microsoft to provide services to clients in developing client/server applications.

In late 1989, the organization became a remarketer of Sun Microsystems' entire line of computers and software.

The Business Integration Partnership (BIP), part of the Americas Technology Integration Services organization, is Andersen Consulting's program for establishing and managing business relationships with third-party providers of hardware, software, and specialized services.

The primary objectives of the BIP program are to enhance Andersen's overall business integration capabilities, develop an alternate channel of business opportunity, and generate margin from the sale of third-party products.

Current partners under the BIP program include Amdahl, Apple, AT&T/NCR, BBN Software Products, Dell Computer, Digital Communications Associates, DEC, FileNet, Hewlett-Packard, IBM, Infonet, Informix, Microsoft, Norand, Novell, Palette Systems, Plexus, Pyramid, Sun, Sybase, Symbol, SynOptics Communications, Systems Center and Tandem.



- Training Investments

Andersen Consulting spends \$7,500 per consultant. During 1992, Andersen Consulting invested a total of \$164 million on training. The Andersen Consulting Education group develops and conducts training programs for consulting personnel worldwide. Topics addressed include technical issues such as client/server development, and management and personal development courses

Through the Professional Education Division, more than 250 courses are available to each Andersen Consulting consultant. By the time a consultant reaches the associate partner level, he or she will have received more than 1,000 hours of training.

The St. Charles (IL) Center for Professional Education is the organization's hub for internal training and has 120 classrooms accommodating more than 2,000 participants.

Other worldwide training locations include Melbourne (Australia), Singapore, and Veldhoven (the Netherlands).

Following initial training, consultants return to St. Charles every 18 months for additional training.

- Specialties

In support of BPR and change management consulting, Andersen Consulting notes that it offers the following special capabilities:





<u>Capability</u>	<u>Andersen Consulting Rating</u>
Business Strategy Consulting	Partial Services
Diagnosis of Performance Problems	Partial/improving
Customer Research	Full Services
Technology Strategy	Full Services
Benchmarking	Full Services
Best Practices Data Bases	Limited/improving
Mapping Internal Processes	Full Services
Redesign and Reorganize	Full Services
IT Architecture	Full Services
Prototype	Full Services
Pilot and Test	Full Services
Software Development	Full Services
Hardware and Network Services	Limited Services
Technical Training	Partial Services
Change Management	Full Services
Project Management	Full Services

- Decision-Making Process

Decisions on market targets and making bids that included consulting or other services are up to the partners in charge of industry groups in the U.S. and geographic groups outside of the U.S. Specific bids and development projects are the responsibility of partners reporting to group heads or in the case of smaller projects, the responsibility of partners reporting to group heads or the level reporting to partners which includes directors as well as a type of assistant partner (a position that Andersen Consulting has had trouble in defining).



Decisions on steps to be taken or how to conduct assignments are controlled by methodologies and established methods in most cases. Differences of opinion in regard to those steps would be referred to the partners or directors if they could not be resolved by project management.

- Recent Project Wins/Losses And Significance

Recent project wins that have most significance for Andersen Consulting in the use of consulting services are those in which consulting services were integrated with the use of other capabilities to provide clients solutions to problems. The following projects that were won by Andersen Consulting illustrate this.

At UCAR Carbon Co., consultants from the Systems Integration, Change Management Services, and Strategic Services areas won a contract to undertake reengineering of the organization, including corporate restructuring, retraining, and the development of information systems for manufacturing, order processing, and other areas.

For Nissan Motor Co., Systems Integration and Strategic Services personnel won a project to help the client redesign business processes, introducing new technologies, automating dealer communications, and modifying customer services in support of Nissan's new supply chain.

Contacts at Andersen Consulting stated that there have been several significant losses of contracts that could have involved multiple services to other major vendors who used more powerful presentations on consulting capabilities, particularly BPR, than Andersen had. More details were not provided, but Andersen is prepared to compete more aggressively in similar situations.

Additional significant wins by the Strategic Services Group alone or with other units include the following:

- For drug-licenser Astra Merck & Co., helping to create a new standalone company organization structured around six core business processes.
- For KFC, providing a Global Strategic Information Systems Plan, identifying key business processes for reengineering, and developing information systems in support of change.



- For a manufacturer of outdoor power equipment, Andersen Consulting developed and implemented a customer-driven strategic marketing plan and consumer strategy for the future.
- Andersen Consulting helped a public transportation system make the transition from state administration to local control. Andersen planned the transition and designed a new organization.
- For a multi-billion dollar business unit of a major process manufacturer, Andersen Consulting streamlined the supply chain to simplify and speed the flow of products from manufacturer to distributor.
- For a newly merged food products company, Andersen Consulting developed a strategy for integrating operations and information technology of the two previously separate businesses.

Sales of significance by The Change Management Group alone or with other units include the following:

- Assisting to reengineer the entire process of delivering benefits for the U.K. Department of Social Security (DSS) -- from the system used, to the case workers who use it, to the work surrounding the system. The Andersen Consulting team redesigned jobs for tens of thousands of workers and physically altered offices to accommodate the system. Training was provided for all users in support of the migration from a pencil-and paper operation to an automated, network environment. The results include: drop in error rates on assessment from 10% to 2%, efficiency up by 20% annually, higher job satisfaction, and an annual savings to DSS of \$290 million.
- Working with various bread manufacturers and retailers to introduce bread packaging and Western management techniques in Russia as part of a project to privatize the Moscow bread industry.
- Assisting Standard Chartered Bank of Hong Kong to revamp the bank's transaction systems throughout Asia. Andersen developed computer-based training for more than 3,000 employees to offer simulated practice and testing of more than 70 bank functions affected by the new system.



- . Working with Aetna Life and Casualty to help them redesign business processes and jobs to help them meet their goal of providing customer-oriented services. Employees who originally concentrated their efforts on one function were repositioned in customer-focused teams, resulting in a 30% to 40% increase in efficiency and clearly improved customer services.

As part of an SI assignment, Andersen Consulting can deliver IT or even strategic consulting. Through the Systems Integration practice, Andersen Consulting consults and plans, designs and builds complex computer systems, and then integrates them into a client's operations. Project wins of significance that include IT consulting are listed below:

- . Implementing SCRIBE, a computerized election imaging system, for the City of New York. SCRIBE simplifies the voting process by streamlining the poll-worker's job of locating each voter name and eliminating misplaced registration cards. IT consulting to plan the use of imaging as well as strategic consulting were required to plan and design the system implemented by this SI project.
- . A three-year, \$10 million contract with Canada Post Corporation to provide reengineering consulting systems integration, applications, and infrastructure support for Canada Post's postal system involved strategic as well as significant IT consulting in view of the size and architecture of the system involved.
- . Significant IT consulting was required for a three-year, \$2 million contract to design and install an information system to handle the National Marrow Donor Program data base. The system will automate several manual search activities that were analyzed with business consulting techniques.
- . The IT consulting component was a critical part of the systems integration work for Colonial Gas Company on a series of projects totalling \$17 million for a five-year period. The projects will provide the utility with a fully integrated network and application systems architecture selected through IT consulting activities
- . A notable IT consulting assignment was involved with Info 94, a PC network providing visitors and journalists with a direct link to results, schedules, athletes' biographies, and other details for the 1994 Winter Olympics in Lillehammer (Norway).





- Implementing the Tennessee Offender Management Information System (TOMIS), IT consulting was required to analyze and specify an artificial intelligence and knowledge-based system for the Tennessee Department of Correction and the Tennessee Board of Parole.
- IT consulting was required to plan the architecture for client/server technology on a cooperative platform to implement a new Work Management System for BC Gas.
- Both IT and strategic consulting services were used to analyze alternatives and design and implement a Client File System for Allstate, based on an analysis of business operations strategy.
- IT consulting services were used to analyze needs and plan an optical document image processing system for the Ontario (Canada) Ministry of Consumer and Commercial Relations. The system will capture the province's 10 million statistical records. Change management services were utilized in this project.
- A large IT consulting assignment was conducted to help Northwest Airlines integrate artificial intelligence, image processing, workstations, and other technologies to create a system that helps Northwest more accurately track passenger revenue and collect marketing information about customers' travel and spending patterns.
- For Baltimore Gas & Electric, Andersen Consulting engaged in strategic consulting and SI services including IT consulting to analyze needs and create a customer information system that is being marketed to other utilities worldwide as CUSTOMER/1 software.



### 3. MARKET MODEL

- Market Image/Positioning

Andersen Consulting presents an image of a vendor that easily integrates its consulting and information services to provide a solution or markets its consulting services separately as a step toward IT solutions or to produce benefits by themselves.

Strategic Services can provide strategic consulting alone or with other services. Strategic Services helps clients develop market-driven strategies and align their business processes with those strategies in order to deliver value to customers.

Change Management Services, another strategic consulting service of Andersen Consulting, can also provide strategic consulting alone as well as other services. The Change Management Services practice helps organizations manage all elements of change. The philosophy behind change management is that the successful use of new technology depends on an organization's ability to properly position, educate, and motivate its people to employ it. Using methodologies and frameworks for planning, designing, implementing and maintaining change, Andersen Consulting seeks to help organizations develop well-organized, well-informed, highly skilled, and highly motivated people at all levels.

IT Consulting is involved in SI and professional services contracts. It includes the analysis, design and planning work necessary to develop software products to meet customer needs.

Business Process Management assignments often involve IT consulting and occasionally strategic consulting. Business Process Management encompasses data center/network operations, applications management and development, and business processing outsourcing.



- Market Growth

The market growth of consulting work over the last five years is shown in Exhibit 9.

- Customer/client satisfaction strategy

Andersen Consulting utilizes a set of methodologies and procedures in work with clients to ensure satisfaction. The clients for consulting and other work can learn about the methodologies such as Value-Driven Reengineering as described in section B-2, so that they will know exactly what will be done and what the results will be. They can also find out exactly what capabilities Andersen Consulting can bring to consulting and related work by reviewing information such as that shown in section B-2 (specialties) which Andersen Consulting will review with clients. Andersen Consulting has also provided working demonstrations of business problem solutions to illustrate its ability to implement solutions based on consulting work.

- Target Clients/Accounts

Andersen Consulting targets a number of accounts in the vertical markets that it serves for continuing business. These accounts include the following:



## Exhibit 9

### Growth of Consulting Works

Year	Strategic and IT Consulting Revenues	
	<u>U.S.</u>	<u>Worldwide</u>
1992	238	495
1991	200	400
1990	167	305
1989	137	235
1988	90	150





Market (INPUT classification)	Client
Discrete Manufacturing	Timken Black & Decker Caterpillar, Harley Davison Steelcase
Process Manufacturing	Arco Sun Oil & Gas Kraft Foods General Foods Lever Bros. Heinz
Transportation	Northwest Airlines Delta Kuwait Airways
Retail Distribution	Pizza Hut Mercantile Stores
Utilities	Texas Utilities Brooklyn Union Gas Baltimore Gas & Electric Carolina Power & Light Connecticut Natural Gas Florida Power
Telecomm	AT&T Pacific Bell US West Nippon Telephone TDS Telephone
Banking and Finance	BancOne Barclay's Bank Standard Charter Deutsche Terminbourse Stock Exchange of Hong Kong
Insurance	Aetna Allstate Prudential
Health	Voluntary Hospitals of America



### Advertising/Promotion Strategy

The advertising/promotion strategy focuses on the claim that Andersen Consulting can enable clients to be more successful in the use of information technology or in any change or innovation that they are planning. One of Andersen Consulting's most successful ads pictures two companies playing leap frog with the aid of information technology. One frog suddenly takes a giant leap by taking the right step or solution to the right problem at the right time. Andersen consulting uses that last phrase in their promotional book, "Outlook", published in 1994. Promotions and advertisements emphasize that Andersen Consulting can help clients be more successful in making changes including the use of IT by taking advantage of their business orientation, management consulting approach, methodologies and knowledge of IT.

- Specialization

Andersen Consulting covers a broad range of the market for consulting and information services, but takes an approach toward the market that limits or specializes in certain areas.

In strategic consulting services, prime attention is given to BPR (business process reengineering), change management, and business strategies although other types of strategic consulting including organizational and financial planning are done to support assignments.

Andersen Consulting also concentrates on its target vertical market areas in delivering consulting services although its definition of target markets is so broad that almost every possible market could be approached. Based on its market emphasis, less attention could be given to business or consumer services, for instance.



It should be noted that an effort is made to avoid specialization in the delivery of consulting services to accounts, however. Andersen Consulting wants to deliver all the services necessary to bring about the changes that clients need to achieve their potential benefits and that will usually involve SI or professional services as well as consulting services.

- Marketing/Sales Strategy

Advertising, promotions and contact are used to develop interest in large companies and government organizations in the capabilities of Andersen Consulting. Then, an effort is made to arrange presentations and/or visits to test sites for prospects. Whatever interest or need is expressed by prospects, an attempt is made through presentations to take an overall perspective of what can be done to achieve a higher level of success.

Andersen Consulting will not fix its attention on the sale of consulting services, alone, since it is focusing on what is needed to achieve success for a client. When it appears logical or most agreeable to a client to take a consulting step alone or as a first and separate task, consulting services will be sold.

- Sales/Marketing Organization

Sales and marketing responsibility is carried out by the groups responsible for each vertical market. The division of the organization into those groups is illustrated in Exhibit 1.

- Key Success Stories

Success stories that Andersen Consulting has focused on its recent promotions include the following:

A strategic consulting assignment leading to a large SI contract was performed for Australia Telecom in order to make it competitive against worldwide carriers which might invade its market. The strategic consulting component of the assignment involved assessing the current strategic position of Australia Telecom as well as where it wanted to go and how it would get there. This involved rethinking and reengineering its business processes. The steps that were taken together with short term and long term SI projects enabled Australia Telecom to have unique capabilities ready for serving and saving money for long distance customers that could compete successfully against world carriers.



Andersen Consulting joined in a partnership with BancOne Known as TRIUMPH to develop a new credit card processing system that could respond rapidly to change. In addition to the SI project that was involved, it was necessary to develop a model for restructuring operations to achieve greater efficiency and carrying out changes through training to achieve the efficiency. The cost savings and increased profitability that have been achieved through these efforts are the result of the consulting steps undertaken by Andersen Consulting.

When the insurance company, USAA, realized that it was drowning in a sea of paper work, it decided to undertake a consulting study with Andersen Consulting to develop a strategic plan for automation. This plan focused on achieving goals in customer services rather than an overall prescription for automation. That enabled USAA to achieve business benefits more quickly and improve its competitive position rapidly.

The foregoing examples illustrate that Andersen Consulting emphasizes strategic consulting that leads to or is part of larger assignments. There are also notable examples of stand alone consulting, some of which are listed in B-2, Recent Project Wins and Significance.

- Account Management Strategies

Accounts are managed through the activities of partners in charge of the accounts who follow defined strategies for obtaining business and can call upon support capabilities to assist projects at their accounts or to assist customers. The availability of these support capabilities is one of the marketing strengths as well as project strengths of Andersen Consulting. They are listed below:

Andersen Consulting's services are supported through two types of facilities--systems management centers and advanced technology centers--and network management services. This support is used to help market consulting and other services as well as to run studies, models and work that can support consulting assignments or meet needs of client accounts.





#### 4. DELIVERY MODEL

- Global Delivery Strategy

Consulting and other services of Andersen Consulting are delivered globally through offices in 47 countries that report to regional organization units in charge of The Americas, Europe and Africa and Asia.

During 1992, Anderson Consulting created a Quality Leadership Council to help oversee quality initiatives worldwide.

Andersen Consulting also created a Global Management Council, whose mission is to analyze policy issues, review the organization's strategic direction, and ensure that Andersen Consulting's investments are consistent with that strategic direction.

- Number of Offices

There are 151 offices serving clients in 47 countries.

- Management Systems and Organization

The partnership model is used on a worldwide basis. Each office is responsible for selling and servicing accounts that its office is in charge of as well as for operating profitably. The partner in charge of each office is responsible for planning and reporting on activity in his or her office under the guidelines laid down by the managing partner. There are staff and support activities at the home office in Chicago as well as at selected other offices. Those activities can be called upon (or must be called upon to meet certain guidelines such as certain training), and will be expensed out when they are used. The offices report to the chief geographic office for their region. For example, a New York office would report to the Americas regional office. The regional offices report to the home office in Chicago.

- Industry Focus

Sales in each office of Andersen Consulting is carried out by sales people and management devoted to the industry group. Their specific industry targets are defined and limited (certain industry niches are not included) by the industry group as shown below:



## Market Grouping

### **Products**

### **Telecom Industry Group**

## Components

### **Consumer Products**

- Airlines/travel services
- Food retailer and packaged goods manufactures
- Transportation
- Wholesales distribution

### **Industrial Products**

- Aerospace and defense
- Automotive
- Electronic/high-tech
- Heavy equipment/construction
- Consumer manufacturing

### **Process/Energy**

- Chemicals
- Energy
- Metals
- Pulp and paper
- Pharmaceuticals

U.S. inter-exchange carriers

U.S. local exchange carriers

Global carriers

State-owned European and Asian telephone companies

Wireless technologies



## **Government**

### **Agencies**

National government organization and departments

#### **Federal**

##### **State and Local**

- Revenue
- Labor
- Transportation
- Education
- Retirement
- Financial management
- Law enforcement
- Courts
- Corrections
- Humans services
- Lotteries

## **Financial Services**

### **Insurance**

- Life
- Property/Casualty
- Health
- Health management
- Reinsurance, brokerage, and investment management

### **Retail financial services**

- Commercial banks
- Thrifts
- Credit unions
- Finance
- Leasing

### **Financial markets**

- Investment banking
- Brokerage
- Clearance and settlements
- Mergers and acquisitions
- Swaps
- Portfolio management
- Equity products
- Commodities
- Risk management
- Securitization
- Fixed income
- Mortgage
- Off-balance sheet products



## Healthcare

Provider delivery systems (hospitals, multi-hospital system, clinics)

Suppliers

Intermediaries-U.S. only (employer health plans, HMOs, health insurers)

## Utilities

Customer information

Distribution integration

Financial management

Gas management

Materials management

### • Service Lines

AC's method of providing services can integrate the delivery of consulting and other services.

Strategic consulting can be supplied through two activities, Strategic Services or Change Management Services. These activities would use the methodology, Value-Driven Reengineering, described in section , where it was applicable.

- Strategic Services includes competitive and market strategy, organization and change strategy, business operations strategy and information and technology strategy. The last activity can involve IT strategy.
- Change Management Services includes Organization Change, Education and Training, Technology Assimilation, and Integrated Performance Support. Some of these services can involve IT consulting and other professional services as well as strategic consulting.

IT consulting is generally provided through SI and professional services.

IT consulting can also be provided through Business Process Management services which include Data Center and Network Operations, Applications Development and Management and Business Function Outsourcing.





- Resource Allocation

Resources are allocated to consulting services to meet needs. Although there are some personnel that are specialists in software development, networks or other technical areas, many Andersen Consulting staff members can be assigned to consulting or SI/professional services tasks. They have been cross trained to handle a variety of assignments. This is illustrated by the extensive training in Value-Driven Engineering for BPR and change management assignments that has been carried out.

- Organizational Structure

There are both geographical and vertical aspects to organization, although the industry orientation is most important to Andersen Consulting. Personnel are organized geographically within offices under a partnership structure. Partners are responsible for the sales efforts and work activities for industry groups within each office. The sales personnel are assigned to accounts within the industry groups. Staff personnel conducting consulting and information services assignments will be assigned to partners and their staffs handling the accounts and industries involved in assignments. The staff can be assigned to different accounts or industries if needed although they are generally kept busy on assignments in the same industry.

- Centers of Excellence/Expertise

Centers of Excellence/Expertise are used by Andersen Consulting to support services and accounts as well as to sell consulting and other services. They include two types of facilities (system management centers and advanced technology centers) as well as network management services.

Systems management centers are large, mainframe computer facilities that support systems operations services.

Advanced Technology Centers (ATCs) are staffed with technology specialists, workstations, and computer networks to provide client support, marketing support, and research and development. The skills and knowledge of specialists at ATCs can be shared on multiple client projects, as opposed to having resources tied to one long-term engagement.



Andersen Consulting's Network Solutions practice provides a range of network integration consulting services complementing the organization's service lines and industry programs. Network Solutions' scope of services encompasses Business and Network Planning, Network Analysis and Design, and Network Installation.

Network Solutions works with the Business Process Management practice to identify potential outsourcing opportunities, orchestrate outsourcing arrangements, support client network migrations, and identify new network environments to better meet clients' changing information technology requirements.

- Strategic Fit With Other Units/Businesses

There is a close relationship among the consulting services sold by Andersen Consulting since they are all being sold with the same objective in mind, helping a client change to become more successful. The particular consulting service that is sold is chosen as the next logical step to meet that objective. The consulting services must fit together well to meet that strategy.

For the reasons outlined above, the consulting services and SI and professional services sold by Andersen Consulting must also fit together smoothly. Andersen Consulting is not as interested in selling a consulting assignment as they are in selling consulting that will lead or fit together with SI or professional services work.

- Project Management

The average strategic consulting project produces revenues of \$300,000, involves four to five people and takes five months. However, there are many smaller jobs as well as number of larger projects in that average. IT Consulting projects involve an average revenue of \$200,000 and three to four people over a period of four months. However, IT Consulting is seldom billed separately from an SI or professional services project, and they can involve tasks that will not finish until later in a project. There are a number of stand alone IT Consulting jobs that are included in that average as well.

- Billing Rates and Procedures

Personnel charges can vary from about \$800 to \$2000 per day (or higher for certain specialties). Personnel time is collected from personnel on a regular basis and billed monthly in general.



- Project Management Staff

All projects have project managers responsible for the work, standards and procedures and billing time. On large projects, clerical staff may be assigned to help in collecting and handling project and time data.

- Opportunities for Additional Business

Andersen Consulting's approach to business, concentrating on helping customers achieve more success from change, tends to generate additional consulting and other information services business until objectives are achieved. In addition, projects tend to lead customers to think about what can be done next.

## 5. INTELLECTUAL CAPITAL

- Strengths/Weaknesses

One of Andersen Consulting's chief strengths in intellectual capital is the knowledge of industries and industry problems which its staff has gained.

The ability to deliver successful projects must also be classified as a major strength.

Another strength is the knowledge that its staff has about the steps or procedures to be taken to solve client problems or achieve client objectives. Much of this knowledge has been embodied in methodologies that can be followed by personnel.

A major strength is the knowledge that has been gained in the use of information technologies.

The partnership organization is a source of strength and weakness for Andersen Consulting. This organization has resulted in close relationships on projects. However, it is difficult to work with in advancing project personnel toward a partnership position. Andersen has found it difficult to develop a position just below partner.



- R&D Expenditure and Related Items

Andersen Consulting has a strong commitment to technology innovation, which is enabled by its Technology Services organization and by products and facilities sponsored by local offices and other internal groups. AC's technological capabilities are used as arguments to sell consulting as well as its services.

Andersen Consulting's Business Integration Centers are working environments that demonstrate how technology, when integrated with a business vision and advanced management techniques, can change the way business is done.

The centers are used primarily for research and development, training client and internal personnel, and demonstrating technology solutions from Andersen Consulting and articulating vendors of hardware and software.

Business Integration Centers are as follows:

- Atlanta: LOGISTICS 2000 is a working model of a company using advanced technology to integrate sales and customer service, inventory, warehousing, transportation, and strategic plannings..
- Atlanta: PROCESS 2000 shows the benefits of applying process reengineering and technology by focusing on the operations of an innovative chemical manufacturer.
- Chicago: SMART STORE is Andersen's vision of how food retailers can reconfigure the traditional retailing establishment by rethinking the way consumers shop and challenging the retailing industry's notions of how the food retailing industry is applying management and technology. The center incorporates hardware and software from nearly 100 participating vendors.
- Chicago: The Retail Place highlights a consumer-driven retail organization from the sales floor to the distribution center to the corporate office.
- Hospital of the Future--the Health Strategy Center, located in Dallas, uses realistic recreations of health care organizations to show how new approaches to care delivery can help enhance quality and contain costs.





- In early 1993, Andersen Consulting announced it would establish a Technology Integration Center in Palo Alto (CA). The center is designed to provide a forum for integrating the capabilities of key technology and research organizations throughout the Silicon Valley region and provide a common site to build solutions for business problems.
- Technology Services works with local offices and other internal groups to foster innovation. Technology Services is also responsible for researching and developing emerging technologies, establishing standard practices, developing practice methodologies, producing practice aids, and developing all of Andersen Consulting's software products. The organization includes Technology Integration Services—Worldwide which develops emerging technologies for clients. Some of these technologies include client/server technology, telecommunications, artificial intelligence, image processing, and object-orientation. It also disseminates technical specialty skills directly into local offices for client engagements by sending technical experts into the field. Divisions work on many technologies, among them AS/400, Knowledge Systems, Imaging, and New Age Systems (client/server and alternative architectures).

Andersen Consulting has a strong commitment to research and development. Andersen's investment in research and development was \$286 million in 1992, compared to \$276 million in 1991. The Research and Development organization includes CSTaR (Center for Strategic Technology Research), Technology Transfer, and the Methodology Program.

- CSTaR seeks to identify technologies and techniques that solve particular classes of business problems. Areas of current research include corporate knowledge management, decision technology, and software engineering.
- Technology Transfer facilitates the adaptation and take-up of new and emerging technologies.
- Methodology Program works to accelerate the acceptance and use of new technologies.



- Andersen Consulting is expanding its links with Europe's leading universities. At the IMD Business School in Switzerland, Andersen Consulting is a lead sponsor of a research initiative that focuses on the challenges facing manufacturing companies (Manufacturing 2000). Since 1990, Andersen Consulting Spain has organized yearly summer courses in conjunction with Universidad Complutense of Madrid.
- Andersen Consulting is also linked to Northwestern University's Institute for the Learning Sciences, of which Andersen is the founding sponsor, and the Microelectronics and Computer Corp., a cooperative research venture.
- Supplementing these groups' work within Technology Services are the Chief Information Officer (CIO) organization and Andersen Consulting Education.
- The CIO Group focuses on helping everyone in Andersen Consulting build up and share knowledge globally, and to investigate and enable information and knowledge management requirements. Chief among its projects are the development and installation of a firmwide communications and groupware linkup called the Knowledge Exchange.
- Knowledge Exchange is a sophisticated electronic platform that uses Lotus Notes to help Andersen Consulting consultants retrieve and communicate all types of information to help deliver client service. Its goal is to aid in marshalling global resources and tap into the best thinking of local practices.
- Knowledge Exchange is in use in a number of offices now and will be available to all personnel in all 151 offices and 47 countries.
- Skills/Project Practices Database

Andersen Consulting maintains a record of all project practices. Methodologies and procedures are being employed to control, guide and aid work on all projects, which makes it possible to keep track of all project practices as well as the skills that were needed and employed on projects. Andersen Consulting has been able to use this knowledge to repeat or modify phases of projects to meet new situations.



## 6. INFRASTRUCTURE

- IT and Administration Systems

Andersen Consulting uses a number of internal IT capabilities to support personnel and aid in administration of projects. Special training is given to employees to support the use of IT capabilities and internal systems.

- Proprietary Methodologies

As described before, a methodology has been developed to support BPR and change management consulting called Value-Driven Engineering. Methodologies also exist to support SI and professional services assignments including IT consulting activities.

- Communication Systems

AANet is Andersen Consulting's primary telecommunications vehicle for meeting its information needs. In addition, AANet is available to support network outsourcing services. The network spans North America and provides coverage to Europe as well as select regions of Asia.

In addition, Andersen Consulting has formed alliances with INFONET Services Corp. and SigmaNet to penetrate areas AANet does not access.

Andersen Consulting continues to develop its network services capabilities, reflecting the organization's commitment to the network outsourcing market.

- Software/tools

Software Products develops Andersen Consulting's applications products and CASE tools, and supports the Project Eagle initiative.

- Applications products developed and supported by this group range from integrated manufacturing systems to distribution and financial control systems.



- FOUNDATION is Andersen's CASE toolset, and one of the first CASE tools to support delivery of client/server solutions. FOUNDATION offers ongoing support to clients and works on the further development of the FOUNDATION toolset.
- Project Eagle is developing methodologies and tools in support of successful implementation of application software-based systems.

PROCESS/1 is the only planning and execution system engineered and built specifically for process manufacturers using integrated CASE technology and open client/server architecture.

Applications of PROCESS/1 include Customer Service; Enterprise Product Management; Plant Operations; Environmental, Health, Safety, and Training; Quality-Based Costing; and Distribution and Logistics.

- PROCESS/1 supports enterprise-wide customer focus and multinational operations to integrate strategies, people, technologies, and business processes throughout the supply chain--from product development, purchasing and production, to distribution, marketing, and sales.

DCS/Logistics is an on-line, integrated system that supports the customer service, inventory planning and management, and warehouse operations functions of medium-to-large manufacturing and distribution organizations.

DCS/Logistics' nine applications accommodate a variety of distribution styles--centralized or distributed processing, single or multi-warehouses--on either an IBM System/370 or DEC VAX platform. Multilanguage and multicurrency features are also included.

There are currently more than 200 DCS/Logistics installations.

The MAC-PAC/D Family of Products is a specialized, fully intrusted manufacturing enterprise management system for aerospace and defense contractors and other complex manufacturers.

The MAC-PAC/D Family of Products includes: MAC-PAC/D (manufacturing), IPD (engineering), PROCUREMENT/D (procurement), FACTORY MANAGEMENT/D (shop floor), FINANCE/D (cost accounting), and CAPP/D (process planning) >





MAC-PAC/D, IPD, PROCUREMENT/D, and FINANCE/D run on IBM and DEC mainframes. FACTORY MANAGEMENT/D runs on the Hewlett-Packard open architecture platform and CAP/D runs on IBM and HP workstations.

MAC-PAC for the IBM AS/400 is a fully integrated, on-line manufacturing, distribution and financial system that operates in a single or multiplant environment:

The system supports mixed-mode manufacturers operating in discrete, just-in-time/repetitive, make-to-order, job shop, or a combination of these manufacturing environments. Multilanguage and multicurrency features are also included. Multilanguage and multicurrency features are also included. There are currently more than 800 installations.

Through its Financial Services industry practice, Andersen Consulting and Banc One Financial Services have developed TRIUMPH, an advanced credit card processing system. The software has also been licensed to Barclays Bank PLC of London for in-house use.

#### Client/Server Application Development Tools:

Andersen Consulting's FOUNDATION organization's mission is to provide software development products, services, and methodologies that enable organizations to build applications that span all major software, hardware, and network environments.

FOUNDATION provides two application development solutions -- FOUNDATION for Cooperative Processing (FCP) for developing client/server applications, and FOUNDATION for mainframe-based systems.

FOUNDATION for Cooperative Processing (FCP): The new FCP client/server solution is composed of client/server methodology, development tools, and support services that help high-end departmental and enterprise-wide organizations overcome the barriers for developing systems that operate on disparate hardware platforms and operating systems.

- . FCP is built on a fully relational data base management system that allows networked workgroups of developers to store and reuse defined objects for building client/server applications.
- . The LAN-and object-based repository is integrated with each of the following components of FCP:



FOUNDATION Methods is a field-tested methodology that combines guidance through the processes involved in client/server development with project management guidelines and a proactive quality approach.

FOUNDATION Design incorporates systems analysis and design functions such as Rapid Application Builder; entity-relationship, data flow, and procedure diagrammers; window and screen painters and object detail windows; and powerful tool palettes.

FOUNDATION Production incorporates window editing services for GUI development, provides programs and application program interfaces and interfaces with other GUI software packages.

FOUNDATION Construction generates code from objects created with FOUNDATION Design and stored in the LAN-based relational repository.

FOUNDATION is also a fully-integrated development environment for the creation of mainframe-based information systems and allows integrated application development and execution on multiple platforms and operating systems. FOUNDATION for mainframe-based systems' components include the following:

- METHOD/1 is a LAN-based automated methodology that provides a systems development framework—from information planning to production systems support.
- DESIGN/1 is a LAN-based set of analysis and design tools that automate systems design tasks and techniques to improve productivity and design quality.
- INSTALL/1 is a development environment and application generator for DEC, IBM, and Bull that provides portability and reuse across multiple platforms.
- PLAN/1 is an automated LAN-based tool for information planning and engineering that helps incorporate business strategies for planning systems development projects.

Designware is a cross between packaged software and custom-developed systems applications that provides a jump start on application development. Designware offerings are marketed through Anderson Consulting's industry practices and include:

- CUSTOMER/1, a customer information model for the utilities industry



- . WORK /1, work order management designware for the utilities industry
- . INVEST/1, for institutional investors creating securities accounting and management systems
- . LIFE/1, a suite of products, including planware (software for information planning) and designware, that supports the policy administration needs of life insurance companies.

In order to get clients involved in software research and development, Andersen Consulting also operates ASSIST, a user's group of its applications software and development tools. ASSIST membership is open to any licensed user of Andersen Consulting software products worldwide.

## **7. PEOPLE**

### **. Size of Professional Staff**

The total staff of Andersen Consulting numbers about 27,000. The total number of professionals about 22,800. About 5,700 of these personnel have engaged in consulting work, but a number participated in other assignments as well.

### **. Employee Recruiting/Staffing Strategy**

Andersen Consulting prefers to recruit and train college graduates rather than hire personnel with advanced training although some advanced personnel are hired to meet technical and consulting needs.

### **. Promotion and Turnover**

Promotion is carried out on a definite program so that a new recruit can look forward to a partnership position if he or she carries out assignments as planned. Technical specialists who are hired in mid career are not as likely to be promoted to higher positions.

Turnover is quoted as being below the average of the Big 6, although they are higher, initially, Consultants who are not succeeding in advancing are encouraged to leave after a period of time.

### **. Compensation/Incentives**



The chief incentive for personnel at Andersen Consulting is becoming a partner, which guarantees a high level of pay and bonuses. The compensation of most project personnel is in the \$35 to 80,000 range although some personnel including partners that are assigned. Bonuses can be in the 15 to 40% range for project personnel based on performance.

- Training for Each Level of Professional

As noted in section B-2 on training investments, Andersen Consulting has a well planned training program over time. The program is designed to advance the person in his or her consulting career as well as to supply technical knowledge and skills.

- Internal Development vs Outside Recruiting

Andersen Consulting favors internal development and has intensive programs to meet its needs. However, it will hire people to meet technical or other specialized needs. These people will generally not move on to management positions at the company.

- Profile of Experience/Education for Key Consulting Positions

A college graduate who has been hired and trained by Andersen Consulting and has advanced in position due to superior work on assignments is most likely to achieve key consulting positions. Andersen Consulting is less likely than other firms to look for people with knowledge and reputation in consulting. As a matter of fact, it has been the source of such people for other companies.





## C.

---

### ANALYSIS

#### 1. Core Competencies of Consulting Business

Andersen Consulting does not have all the core competencies of the consulting business. It concentrates on BPR, change management and business strategy consulting. In the first two subjects, it has developed a high level of skills and has well tested methodology to support its work. Its successes in all three areas as well as in occasional other types of consulting has been exceptional. The areas of consulting that it addresses less or not at all include organization and finance.

#### 2. Strengths and Weaknesses

##### • Strengths

- Intensive research on vertical markets of interest such as manufacturing and distribution. This includes analysis of automated systems in operation and their problems as well as analysis of business problem and issues in markets of interest.
- Ability to discuss and demonstrate IT solutions to business problems at test sites. This provides testimony to the success of Andersen Consulting's approach to consulting and SI assignments as well as specific examples of some real world solutions.
- Methodologies that provide a bridge between strategic consulting and planning for projects as well as to control the initiation of SI projects and project management. AC has software products to support these methodologies.
- Management oriented training in client/server and imaging technology and other current subjects that has led to consulting and SI projects.
- Extensive software products that address current problems in manufacturing, utilities, insurance, distribution and a number of other areas.
- Reputation as a successful systems integrator that has managed many complex projects.



- Expertise in certain management consulting skills including change control and BPR
- Weaknesses
  - Andersen Consulting has not attained the consulting stature of McKinsey, Booz or Bain which can result in limitations in selling some jobs.
  - AC does not achieve the revenue per professional of the consulting companies listed above or of some information services firms such as EDS.
  - AC is known for putting a high level of pressure on personnel.
  - AC does not have the technical depth of EDS or CSC.
  - Some personnel are not prepared for assignments.
  - AC is still struggling with career paths for its personnel below the level of partner.

### **3. Key Differentiators**

A large number of strategic and IT consulting assignments that resulted in success and well satisfied clients.

The ability to deliver IT solutions based on consulting work.

The methodologies and procedures that Andersen Consulting has available for conducting its work.

Internal education and technical research.

The ability to use technology to evaluate models, simulate processes or demonstrate approaches to problems in support of consulting work.







**PROFILE: CGS/CGA**

**IBM Consulting Group  
Strategy Department**

**February, 1994**

**Presented by**

**INPUT**

**The Atrium at Glenpointe  
400 Frank W. Burr Blvd.  
Teaneck, NJ 07666  
201-801-0050  
201-801-0441 (fax)**





## Table of Contents

Section	Page
A.Overview	1
1.Executive Summary	1
2.Firm Background	3
B.Details	5
1.Financial Performance	5
2.Strategy	7
3.Market Model	11
4.Delivery Model	14
5.Intellectual Capital	19
6.Infrastructure	20
7.People	21
C.Analysis	23
1.Core Competencies	23
2.Strengths and Weaknesses	24
3.Key Differentiators	25



## CGS/CGA

A

---

### OVERVIEW

#### 1. EXECUTIVE SUMMARY

- Vision Statement

CGS has a vision of creating a transnational computer services and consulting organization which offers a strategic IT capability composed of leading edge information services, knowledge of "sector" (= industry) markets and the consulting services that can link IT strategies to the corporate business strategies of its clients.

- Market Image

CGS/CGA image is not consistent across countries or the information services that it offers. It has an image of a project oriented professional services/SI vendor with many companies in Europe and a small number of companies in the U.S. In the U.S., most users think of CGA as a body shop, supplying contract personnel. The consulting services of Gemini Consulting are thought of as high level, strategic consulting that has been nailed on to CGS/CGA, but not integrated very well, although they have been used to obtain some follow on work for CGS/CGA.

- Core Consulting Competencies

CGS/CGA provides strategic and IT consulting services. The former are supplied by the Gemini Consulting organization. The latter are supplied chiefly together with SI and professional services by the CGS\CGA organization apart from Gemini. The strategic consulting offered by Gemini concentrates mostly on assignments examining business plans and opportunities, competitive analysis and analyses of business processes. The Gemini personnel have also dealt with organization, financial and BPR consulting to a limited extent and



have capabilities that would make it possible for them to address most areas of management consulting.

- Services are offered on a worldwide basis.

- Future Directions

CGS wants to offer its consulting services as well as other services on an integrated basis throughout the world. Efforts are being made to increase the possibility for Gemini Consulting assignments to lead to information services projects.

- Key Highlights

CGS has acquired a strong strategic consulting capability and is trying to use that capability to expand information services jobs and raise the image of the company as a leading vendor.

CGS is one of the largest information services vendors in the world. It has grown through the acquisition of business and the expansion of existing information services business.

During the past few years, the growth of existing business has not met growth targets. Acquisitions have enabled CGS to report revenue growth.

The companies that have been acquired to put together the Gemini Consulting business approach are not being effectively used to developing strategic consulting business that will lead to information services although they have been able to obtain some notable contracts of that type.



## **2. FIRM BACKGROUND**

- **History**

CGA is the U.S. division of CAP GEMINI SOGETI, which was created in 1975, through the merger of three computer consulting firms. These firms, CAP, Gemini and Sogeti had interests in software and professional services. Other firms such as Hoskyns in England were acquired by CGS as it grew to become the largest software and professional services firm in Europe during the last decade. In the 90's, CGS began a drive to increase its management consulting capabilities which resulted in the acquisition of United Research and the MAC Group (based in the U.S.) which were renamed Gemini Consulting. The headquarters of the CGS is in Paris.

- **Key Milestone**

Through growth and acquisitions, CGS reached \$1.7 billion in 1990. Gemini Consulting was launched in 1991 with the acquisition of 3 management consulting firms.

- **Officers**

Serge Kampf, Executive Chairman

Geoff Unwin, President of Regions  
assisted by Jean Paul Figier

Jacques Arnould, President of Sectors  
assisted by Philippe Gluntz

Michel Jalabert, President of Central Functions

The following group of SBA's (strategic business areas) divide the geographic responsibilities for developing and conducting business and the development of knowledge and expertise for vertical markets of greatest interest).

GVP's for SBA 1 (Serving the U.S. and developing specialized knowledge in the Oil and Gas Sector)

Michel Berty, Robert J. Sywolski





**GVP's for SBA 2 (Serving the U.K. and developing specialized knowledge of Financial Services)**

**Tony Fisher, Tony Robinson**

**GVP's for SBA 3 (Serving the Nordic countries and developing specialized knowledge of utilities)**

**Anders Skarin, Christer Ugander**

**GVP's for SBA 4 (Serving The Benelux and developing specialized knowledge of distribution)**

**Chis Van Breugel, Bernd Brix**

**GVP for SBA 5 (Serving Germany and developing specialized knowledge of industry (manufacturing chiefly))**

**Karl Heinz Achinger**

**GVP's for SBA 6 (Serving Ile De France and developing specialized knowledge of telecomm.)**

**Alexandre Haeffner, Andre Sturtz**

**GVP's for SBA 7 (Serving French provinces, Italy, Austria, Switzerland, Spain and developing specialized knowledge of space, air traffic control, railways)**

**Alexandre Haeffner, Gennaro Stasio**

**Central Functions**

**Vincent Grimond Finance**

**Eric Litaud Group Development**

**Jacques Collin Image & Communications**

**Adolfo Cetus Manager Development**

**Wolfgang Schonfeld Quality & Innovation**



- Core Competencies of the Corporation

CGS groups the major competencies of the corporation as:

Consulting including strategic and IT consulting

Project Services which include SI and professional services.

Information Systems Management which includes systems operations, remote processing, applications management and system maintenance.

Education and Training

Software Products which includes methodologies and tools as well as application software products.

## **B.**

---

### **DETAILS**

#### **1. FINANCIAL PERFORMANCE**

- General Financial Performance

The balance sheet is shown in Exhibit 1.

- Five Year Historical Revenue Analysis

Overall revenues for five years are shown in Exhibit 2.

Exhibit 3 shows a global division of business.

A division of revenues by business line is shown in Exhibit 4.

- Operating Results (Margins)

These results are shown in Exhibit 5.



## Exhibit 1A

### Cap Gemini Sogeti Group - Consolidated Balance Sheets at December 31, 1991 and 1992 (in thousands of French francs)

ASSETS	1991	1992
<b>Current assets</b>		
Cash	556 151	550 846
Short-term investments (note IX)	581 849	744 493
Accounts and notes receivable, net (note VI)	3 515 465	3 908 399
Other receivables (note VII)	299 687	369 708
Other current assets (note VIII)	241 132	572 877
Inventories and work in progress, net	41 671	47 904
<b>TOTAL CURRENT ASSETS</b>	<b>5 235 955</b>	<b>6 194 227</b>
<b>Non-current assets</b>		
Investments (note V)	1 774 038	1 762 904
Property, plant and equipment, net of accumulated depreciation (note IV)	703 267	629 212
Intangible assets (note III)	4 622 288	6 829 141
<b>TOTAL NON-CURRENT ASSETS</b>	<b>7 099 593</b>	<b>9 221 257</b>
<b>TOTAL ASSETS</b>	<b>12 335 548</b>	<b>15 415 484</b>
Guarantees given by third parties (note XX)	31 426	40 693

LIABILITIES AND SHAREHOLDERS' EQUITY	1991	1992
<b>Current liabilities</b>		
Financial debt (note XVI)	956 232	899 231
Operating debt (note XVII)	2 509 878	3 396 811
Deferred income taxes (note XVIII)	24 122	23 364
Other current liabilities (note XIX)	142 313	381 298
<b>TOTAL CURRENT LIABILITIES</b>	<b>3 632 545</b>	<b>4 700 704</b>
Convertible bonds (note XIII)	1 525 554	1 525 548
Other long-term liabilities (note XV)	669 601	2 481 933
Minority interests	776 756	1 528 473
<b>Shareholders' equity</b>		
Common stock	1 498 911	1 678 574
Retained earnings	3 672 590	3 571 901
<b>Total shareholders' equity (note X)</b>	<b>5 171 501</b>	<b>5 250 475</b>
<b>Net income for the year</b>	<b>559 591</b>	<b>(71 649)</b>
<b>Total shareholders' equity before appropriation of income</b>	<b>5 731 092</b>	<b>5 178 826</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<b>12 335 548</b>	<b>15 415 484</b>
Commitments (note XX)	3 497 539	3 832 541



## Exhibit 1B

### Cap Gemini Sogeti Group – Consolidated Balance Sheets at December 31, 1990 and 1991 (in thousands of French francs)

ASSETS	1990	1991
<b>Current assets:</b>		
Cash	542 352	556 151
Short-term investments (note IX)	420 028	581 849
Accounts and notes receivable, net (note VI)	3 679 809	3 515 465
Other receivables (note VII)	190 412	299 687
Other current assets (note VIII)	354 069	241 132
Inventories and work in progress, net	48 565	41 671
<b>TOTAL CURRENT ASSETS</b>	<b>5 235 235</b>	<b>5 235 955</b>
<b>Non-current assets:</b>		
Investments (note V)	1 737 236	1 774 038
Property, plant and equipment, net of accumulated depreciation (note IV)	879 196	703 267
Intangible assets (note III)	4 681 670	4 622 288
<b>TOTAL NON-CURRENT ASSETS</b>	<b>7 298 102</b>	<b>7 099 593</b>
<b>TOTAL ASSETS</b>	<b>12 533 337</b>	<b>12 335 548</b>
Guarantees given by third parties (note XX)	110 491	31 426

LIABILITIES AND SHAREHOLDERS' EQUITY	1990	1991
<b>Current liabilities:</b>		
Financial debt (note XVI)	896 480	956 232
Operating debt (note XVII)	2 650 300	2 509 878
Deferred income taxes (note XVIII)	42 149	24 122
Other current liabilities (notes XIX)	426 891	142 313
<b>TOTAL CURRENT LIABILITIES</b>	<b>4 015 820</b>	<b>3 632 545</b>
<b>Debtenture loan (note XII)</b>	<b>587 250</b>	<b>—</b>
Convertible bonds (note XIII)	1 529 110	1 525 554
Other long-term liabilities (note XV)	2 465 023	669 601
Minority interests	790 537	776 756
<b>Shareholders' equity:</b>		
Common stock	1 117 573	1 498 911
Retained earnings	1 405 168	3 672 590
<b>Total shareholders' equity (note X)</b>	<b>2 522 741</b>	<b>5 171 501</b>
<b>Net income for the year</b>	<b>622 856</b>	<b>559 591</b>
<b>Total shareholders' equity before appropriation of income</b>	<b>3 145 597</b>	<b>5 731 092</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<b>12 533 337</b>	<b>12 335 548</b>
Commitments (note XX)	2 276 189	3 497 539





## Exhibit 1C

### Cap Gemini Sogeti Group - Consolidated Balance Sheets at December 31, 1989 and 1990 (in thousands of US dollars)

ASSETS	1989	1990
<b>Current assets:</b>		
Cash	48 521	99 514
Short-term investments (note IX)	203 905	77 069
Accounts and notes receivable, net (note VI)	501 381	675 194
Other receivables (note VII)	29 124	34 938
Other current assets (note VIII)	24 848	64 967
Inventories and work in progress, net	3 757	8 912
<b>TOTAL CURRENT ASSETS</b>	<b>811 536</b>	<b>960 594</b>
<b>Non current assets:</b>		
Investments (note V)	226 128	318 759
Property, plant and equipment, net of accumulated depreciation (note IV)	74 817	161 320
Intangible assets (note III)	227 202	859 022
<b>TOTAL NON CURRENT ASSETS</b>	<b>528 147</b>	<b>1 339 101</b>
<b>TOTAL ASSETS</b>	<b>1 339 683</b>	<b>2 299 695</b>
Guarantees given by third parties (note XX)	23 513	20 274

LIABILITIES AND SHAREHOLDERS' EQUITY	1989	1990
<b>Current liabilities:</b>		
Financial debt (note XVI)	78 220	164 492
Operating debt (note XVII)	384 551	486 294
Deferred income taxes (note XVIII)	4 876	7 733
Other current liabilities (note XIX)	51 425	78 329
<b>TOTAL CURRENT LIABILITIES</b>	<b>519 072</b>	<b>736 848</b>
Debenture loan (note XIII)	107 752	107 752
Convertible bonds (note XIV)	—	280 571
Other long term liabilities (note XV)	214 998	451 020
Deferred income taxes (note XII)	6 091	1 278
Minority interests	2 541	145 052
<b>Shareholders' equity</b>		
Common stock	185 329	205 059
Retained earnings	207 652	257 829
<b>Total shareholders' equity (note X)</b>	<b>392 981</b>	<b>462 888</b>
Net income for the year	96 248	114 286
<b>TOTAL SHAREHOLDERS' EQUITY BEFORE APPROPRIATION OF INCOME</b>	<b>489 229</b>	<b>577 174</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<b>1 339 683</b>	<b>2 299 695</b>
Commitments (note XX)	72 958	417 649



Exhibit 2

# Cap Gemini Sogeti 1992 Financial Results

compared to those of the last 7 years  
(1985 being the first year of quotation on the Paris Stock Exchange)

(in millions of French francs)	1985	1986	1987	1988	1989	1990	1991	1992
<b>CONSOLIDATED REVENUE</b>	<b>2 222</b>	<b>2 936</b>	<b>4 175</b>	<b>5 816</b>	<b>7 055</b>	<b>9 172</b>	<b>10 028</b>	<b>11 884</b>
NET INCOME	134	193	286	403	528	652	585	49
GROUP SHARE	133	193	280	402	525	623	560	(72)
TOTAL DIVIDENDS PAID	39	57	78	110	152	196	262	-
<b>NET PROFITABILITY</b>	<b>6.0%</b>	<b>6.6%</b>	<b>6.8%</b>	<b>6.9%</b>	<b>7.5%</b>	<b>7.1%</b>	<b>5.8%</b>	<b>0.4%</b>
NUMBER OF SHARES	3 262 500	3 534 375	3 891 890	4 570 463	25 251 046 (1)	27 939 313 (2)	37 472 775 (3)	41 964 338 (4)
NET INCOME PER SHARE carried to the number of existing shares on December 31 (in French francs)	41	55	73	88	21 (1)	23 (2)	16 (3)	1 (4)

<b>AVERAGE HEADCOUNT</b> for the period	<b>4 910</b>	<b>6 564</b>	<b>8 908</b>	<b>11 438</b>	<b>12 974</b>	<b>16 489</b>	<b>17 971</b>	<b>21 675</b> (5)
TOTAL NUMBER OF EMPLOYEES as of December 31	5 243	6 858	10 593	12 297	13 540	18 919	16 892	21 374 (5)
PROFESSIONAL STAFF	4 446	5 909	9 003	10 413	11 426	15 542	14 012	17 932 (5)



### Exhibit 3

#### Global Information on Subsidiaries and Investments

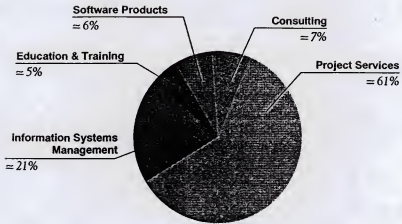
(in thousands of French francs)	Shareholders' equity for the period (income included)	Part of capital held (in %)	Number of shares	Book value of shares	Advances and loans given by the company	1992 Revenue	1992 Income	Dividends received
<b>SUBSIDIARIES</b>								
Cap Sesa Holding S.A.	877 218	99,99	452 311	626 150	—	357 163	276 124	103 579
OGIS Holding S.A.	7 960	99,91	64 940	21 000	—	225	27	—
Cap Gemini Europe Holding S.A.	205 008	100,00	1 999 940	200 937	—	9 809	(29 215)	20 799
Cap Gemini Europe B.V.	1 503 476	100,00	194 101	1 332 748	424 693	3 183	107 816	17 284
Cap Gemini Holding Inc	307 274	100,00	1 000	81 207	—	968 447	(15 003)	—
Hoskyns (data at October 31, 1992)	393 760	69,38	65 692 619	2 328 862	—	1 860 696	41 564	15 953
Cap Gemini Sogeti S.A. University	442	96,80	2 420	486	—	32 430	(8)	—
Cap Programator	983 349	100,00	50	983 349	—	—	—	—
<b>INVESTMENTS</b>								
CISI	344 288	36,00	937 665	247 699	—	1 515 407	(71 698)	1 050
Gemini Consulting Holding B.V.	826 443	34,00	62 900	279 087	—	—	5 162	—
Sema Group	699 947	28,20	25 713 644	915 649	—	3 883 411	256 039	6 184
Others	—	NS	NS	27 659	—	—	—	—

<b>MOVEMENTS IN SHAREHOLDERS' EQUITY</b> (in thousands of French francs)	at 12/31/1991	Allocation of earnings	Common stock increase (note 6)	Other	at 12/31/1992
Common stock	1 498 911	—	179 663	—	1 678 574
Share premium	2 339 067	—	4 149	—	2 343 216
Other retained earnings	293 845	260 466	—	—	554 311
Net income of prior period	522 775	(522 775)	—	—	—
Dividends	—	262 309	—	(262 309)	—
<b>TOTAL</b>	<b>4 654 598</b>	<b>—</b>	<b>183 812</b>	<b>(262 309)</b>	<b>4 576 101</b>



## Exhibit 4

Revenue Breakdown  
by Business Line







## Exhibit 5A

### Consolidated Statements of Income for the Years Ended December 31, 1991 and 1992 (in thousands of French francs)

	1991		1992	
	Amount	%	Amount	%
<b>Total operating revenue</b> (note XXI)	<b>10 028 004</b>	<b>100.0</b>	<b>11 884 386</b>	<b>100.0</b>
Purchases	1 253 048	12.5	1 684 810	14.2
Travel expenses	551 489	5.5	744 501	6.3
Other external charges	1 056 437	10.5	1 084 124	9.1
Local taxes	160 937	1.6	117 269	1.0
Salaries & social charges	5 912 550	59.0	7 385 667	62.1
Goodwill amortization	69 454	0.7	92 084	0.8
Depreciation	271 830	2.7	299 402	2.5
Provisions	27 768	0.3	137 151	1.1
<b>Total operating expenses</b>	<b>9 303 513</b>	<b>92.8</b>	<b>11 545 008</b>	<b>97.1</b>
<b>OPERATING INCOME</b>	<b>724 491</b>	<b>7.2</b>	<b>339 378</b>	<b>2.9</b>
Financial revenue	186 720	1.9	215 935	1.8
Financial expenses	(265 795)	(2.7)	(303 073)	(2.5)
<b>NET FINANCIAL EXPENSES</b>	<b>(79 075)</b>	<b>(0.8)</b>	<b>(87 138)</b>	<b>(0.7)</b>
<b>NET EXCEPTIONAL ITEMS</b> (note XXII)	<b>88 063</b>	<b>0.9</b>	<b>(148 866)</b>	<b>(1.3)</b>
<b>INCOME BEFORE TAXES, EQUITY INTEREST AND MINORITY INTEREST</b>	<b>733 479</b>	<b>7.3</b>	<b>103 374</b>	<b>0.9</b>
Provision for income taxes (note XXIII)	(162 259)	(1.6)	(49 434)	(0.4)
<b>NET INCOME BEFORE EQUITY INTEREST AND MINORITY INTEREST</b>	<b>571 220</b>	<b>5.7</b>	<b>53,940</b>	<b>0.4</b>
Equity in undistributed earnings of affiliates	13 309	0.1	(4 602)	-
Minority interest in net income	(24 938)	(0.2)	(120 987)	(1.0)
<b>NET INCOME</b>	<b>559 591</b>	<b>5.6</b>	<b>(71 649)</b>	<b>(0.6)</b>

### Net Income Per Common Share (in French francs) (note 1-14)

	1991	1992
a) On the basis of average number of shares, options, equity warrants and convertible bonds outstanding:		
• number of shares	35 321 725	38 894 073
• net income per share	17.4	(0.40)
b) On the basis of shares outstanding as of December 31:		
• number of shares	37 472 775	41 964 338
• net income per share	14.9	(1.71)



## Exhibit 5B

### Consolidated Statements of Income for the Years Ended December 31, 1990 and 1991 (in thousands of French francs)

	1990		1991	
	Amount	%	Amount	%
<b>TOTAL OPERATING REVENUE (note XXI)</b>	9 171 830	100.0	10 028 004	100.0
Purchases	1 016 405	11.1	1 253 048	12.5
Travelling expenses	426 052	4.6	551 489	5.5
Other external charges	1 093 037	11.9	1 056 437	10.5
Local taxes	105 302	1.1	160 937	1.6
Salaries & social charges	5 213 836	56.8	5 912 550	59.0
Goodwill amortization	59 621	0.7	69 454	0.7
Depreciation	199 801	2.2	271 830	2.7
Provisions	36 635	0.4	27 768	0.3
<b>TOTAL OPERATING EXPENSES</b>	8 150 689	88.9	9 303 513	92.8
<b>OPERATING INCOME</b>	1 021 141	11.1	724 491	7.2
Financial revenue (note XII)	260 588	2.8	186 720	1.9
Financial expenses	(357 678)	(3.9)	(265 795)	(2.7)
<b>NET FINANCIAL EXPENSES</b>	(97 090)	(1.1)	(79 075)	(0.8)
<b>NET EXCEPTIONAL ITEMS (note XXII)</b>	(36 748)	(0.4)	88 063	0.9
<b>INCOME BEFORE TAXES, EQUITY INTEREST AND MINORITY INTEREST</b>	887 303	9.7	733 479	7.3
<b>PROVISION FOR INCOME TAXES (note XXIII)</b>	(280 109)	(3.1)	(162 259)	(1.6)
<b>NET INCOME BEFORE EQUITY INTEREST AND MINORITY INTEREST</b>	607 194	6.6	571 220	5.7
Equity in undistributed earnings of affiliates	44 377	0.5	13 309	0.1
Minority interest in net income	(28 715)	(0.3)	(24 938)	(0.2)
<b>NET INCOME</b>	622 856	6.8	559 591	5.6

### Net Income Per Common Share

(in French francs) (note 1-3)

	1990	1991
a) On the basis of average number of shares, options, equity warrants and convertible bonds outstanding:		
• number of shares	29 497 139	35 321 725
• net income per share	22.7	17.4
b) On the basis of shares outstanding as of December 31:		
• number of shares	27 939 313	37 472 775
• net income per share	22.3	14.9



## Exhibit 5C

### Consolidated Statements of Income for the Years Ended December 31, 1989 and 1990 (in thousands of US dollars)

	1989		1990	
	Amount	%	Amount	%
<b>TOTAL OPERATING REVENUE (note XXI)</b>	1294 562	100.0	1682905	100.0
Purchases	178 186	13.8	186 496	11.1
Traveling expenses	66 739	5.2	78 175	4.6
Other external charges	102 306	7.9	200 557	11.9
Local taxes	13 741	1.1	19 321	1.1
Salaries & social charges	750 991	58.0	956 667	56.8
Goodwill amortization	11 327	0.9	10 940	0.7
Depreciation	18 127	1.4	36 661	2.2
Provisions	9 470	0.7	6 722	0.4
<b>TOTAL OPERATING EXPENSES</b>	<b>1 150 887</b>	<b>88.9</b>	<b>1 495 539</b>	<b>88.9</b>
<b>OPERATING INCOME</b>	<b>143 675</b>	<b>11.1</b>	<b>187 366</b>	<b>11.1</b>
Financial revenue	32 235	2.5	47 814	2.8
Financial expenses	(36 628)	(2.8)	(65 629)	(3.9)
<b>NET FINANCIAL EXPENSES</b>	<b>(4 393)</b>	<b>(0.3)</b>	<b>(17 815)</b>	<b>(1.1)</b>
<b>NET EXCEPTIONAL EXPENSES (note XXII)</b>	<b>(394)</b>	<b>—</b>	<b>(6 743)</b>	<b>(0.4)</b>
<b>INCOME BEFORE TAXES, EQUITY INTEREST AND MINORITY INTEREST</b>	<b>138 888</b>	<b>10.7</b>	<b>162 808</b>	<b>9.7</b>
<b>PROVISION FOR INCOME TAXES (note XXIII)</b>	<b>48 849</b>	<b>3.8</b>	<b>51 396</b>	<b>3.1</b>
<b>NET INCOME BEFORE EQUITY INTEREST AND MINORITY INTEREST</b>	<b>90 039</b>	<b>7.0</b>	<b>111 412</b>	<b>6.6</b>
Equity in undistributed earnings of affiliates	6 856	0.5	8 143	0.5
Minority interest in net income	(647)	(0.1)	(5 269)	(0.3)
<b>NET INCOME</b>	<b>96 248</b>	<b>7.4</b>	<b>114 286</b>	<b>6.8</b>

### Net Income per Common Share

(in US dollars) (note 1-1)

	1989	1990
a) On the basis of average number of shares, options, equity warrants and convertible bonds outstanding during the year		
— number of shares and equivalents	24 975 758	29 497 139 (*)
— net income per share	3.85	4.17
b) On the basis of shares outstanding as of December 31:		
— number of shares and equivalents	25 251 046	27 939 313 (*)
— net income per share	3.82	4.09



- Projected Growth

CGA has experienced difficulties in the growth of revenue and earnings, in the U.S. lately. CGS has done better, although it's growth in revenue has been fueled to some extent by acquisitions. Growth of CGS will probably average out to a compound growth rate of 8% during the next five years.

- Fee Volume/Revenue from Consulting

Consulting services sold on a stand alone basis or with SI and professional services are included in the figures shown below in Exhibit 6.

---

## Exhibit 6

### Strategy Consulting and IT Consulting revenues

<u>Year</u>	IT Consulting and Strategy Consulting in \$Millions by Year	
	<u>1991</u>	<u>1992</u>
U.S.	*	201
Worldwide	*	782

\* Acquisition made during this time period make estimation difficult.

---

## Related revenues

	SI and Professional Services Systems Development (excluding contract services)	
	<u>1991</u>	<u>1992</u>
U.S.	114	120
Worldwide	790	870





- Typical Consulting Project Revenue

Stand alone strategic consulting contracts (Gemini Consulting) average about \$200,000 to \$400,000 although there are some very large and much smaller assignments undertaken to prepare studies for prospects or clients. IT consulting is usually a part of SI or professional services projects and generally range between \$50,000 to \$150,000 per project, but there are smaller as well as larger contracts.

- Business Development Costs

Business development costs differ for strategic consulting work done by Gemini Consulting and IT consulting done by CGA. Development costs for the latter are often included in development costs for professional services/SI work. An estimate of the average development cost for the aggregate work of both is about 5 to 8% of revenues in total.

- Contract Backlog

The consulting backlog is distributed across a number of offices and stand alone jobs as well as larger contracts. Contacts have estimated that there is about \$15 million of new strategic and IT consulting work on a worldwide basis for CGS, which is ready to be started or in a backlog queue at this time.

## 2. STRATEGY

- Vision

CGS has a vision of aggressively developing information services and management consulting work to the extent that the company will become one of the leading four or five firms devoted to the use of IT among competitors such as EDS, Andersen Consulting, CSC and the services side of IBM.



- Short Term Strategy

CGA and CGS are increasing their focus on obtaining large SI and professional services projects, and are emphasizing increased capabilities in management consulting and vertical market (industry) know how as means of obtaining these contracts. (Contract service is still being marketed however.) Gemini Consulting is attempting to link consulting work to IT projects that CGA or CGS could perform.

- Long Term Strategy

The long range strategy of CGS is to obtain a share of the contracts going to EDS, Andersen Consulting and CSC. That is to obtain, large contracts with management consulting steps leading to large SI jobs that could lead to systems operation opportunities. Large consulting jobs are desirable in themselves, but CGS wants many of these jobs to result in large SI jobs.

- Mergers and Acquisitions

As part of its strategy to bolster management consulting strength, CGS acquired United Research and its share of The MAC Group as well as Gamma International, about three years ago. These three organizations were combined in Gemini Consulting. The German management consulting firm, Gruber, was merged into Gemini Consulting in 1992.

CGS was formed by merging CAP (a Paris based software and consulting firm), Gemini Computer Systems which was based in the U.S., and Sogeti Systems, a European professional services firm. The company has grown through the acquisition of Hoskyns in the U.K. and Sesa. Two other European companies were added during 1992, Programator and Volmac.

- Strategic Alliances

CGA has business partnerships with a group of vendors that enable CGA to perform in prime or subcontractor roles in SI projects. These partnerships or alliances, which provide opportunities for IT consulting work as well as SI development work, include arrangements with IBM, Bull, ATT/NCR, Carleton, Index Technology, Knowledgeware and Bachman.



Strategic alliances of CGS include agreements with three affiliated companies in France: The Bossard Group, CGIP and CISI.

CGS also has a strategic alliance with Daimler Benz that provides among other things, work with the computer services arm of that company.

- Training Investments

CGS and CGA offer comprehensive training in all aspects of professional services and SI work including IT consulting, project management and leadership skills.

A permanent professional training facility that handles education and re-education for CGS is located less than an hour's drive from the Paris headquarters. The facility is also used for meetings and customer activities.

Many people who are hired by CGS or acquired with a company are already trained. This is the case with almost all strategic consulting personnel. Internal training expenses are less as a percent of revenue, as a result, than is the case with leading SI vendors. An estimate of global training costs for CGS personnel is less than \$15 million. The overall expenses for training also include some training for clients.

- Specialties

CGS feels that its specialties include managing large complex projects, handling conversions between different IT systems capabilities, providing data center services, managing projects involving integrated manufacturing technology, and aiding in the use of CASE. CGA/CGS also has a specialized activity involved with improving the quality and productivity of software development. Some of these specialties can include IT consulting.

The conversion activity that was mentioned is also described as reengineering, but it does not address business process reengineering as offered by management consultants. It is concerned with making changes in IT work to take advantage of new capabilities. A variety of BPR consulting is offered through the strategic consulting activities of Gemini Consulting.



A specialty of CGA or CGS is also the ability to provide strategic consulting through Gemini Consulting. This strategic consulting specializes chiefly in "strengthening company strategies" which includes evaluating business opportunities and analyzing competitive strategies. Work is also undertaken to restructure and streamline organizational structures and to revitalize company strategies and staff attitude. These steps can involve aspects of BPR work although the emphasis is on revitalizing rather than reengineering.

- Decision-Making Process

Decisions on the services to be offered, organization and general market targets are made by upper management. The GVP's of each SBA have general decision making authority in a geographic area and over some industry specific resources. Local managers have authority over sales and development assignments in their area with review of decisions made by the GVPs.

- Recent Project Wins And Significance

Recent project wins of significance for CGA and CGS include situations that involved the use of consulting in situations that could lead to SI or professional services work including the following:

A contract that Gemini Consulting won with Bell Atlantic that explored opportunities in new types of businesses as well as opportunities to restructure maintenance operations. This consulting assignment resulted in business decisions to restructure maintenance operations to increase productivity and competitiveness. SI projects were initiated by CGA to support the conclusions.

A contract was concluded by Gemini Consulting with SNET to analyze business opportunities that led to consideration of SI projects to implement recommendations.

GTE awarded Gemini Consulting a contract to analyze business opportunities that offered opportunities for SI or professional services work.

CGA has engaged in IT consulting and follow up SI work on a contract with AT&T that addressed use of RAID storage devices.





### 3. MARKET MODEL

- Market Image/Positioning

CGS presents an image of a vendor of information services that has engaged in sizable projects, but does not have the breadth of experience or the assurance of success that EDS or Andersen Consulting could offer.

- Market Growth

The market growth of consulting work over the last five years is shown in Exhibit 7.

- Customer/client satisfaction strategy

CGS tries to provide its clients with such an image of in-depth capabilities, use of well thought out methodologies, and knowledge of information services and industry markets that the client will be predisposed toward being satisfied. CGS also tries to review work being done on projects to ensure client satisfaction. Consulting projects may not get reviewed however.

- Target Clients/Accounts

CGS addresses a wide range of markets as the following list of organizations illustrates:



## Exhibit 7

### Growth of Consulting Revenues

Year	Strategic and IT Consulting Revenues	
	<u>US</u>	<u>Worldwide</u>
1992	201	782
1991	*	*
1990	52	500
1989	46	460
1988	42	405

\* Acquisitions made during this year make estimates difficult.



<b>Market (INPUT classification)</b>	<b>Client</b>
<b>Discrete Manufacturing</b>	<b>Imprimis Technology Daimler Benz</b>
<b>Process Manufacturing</b>	<b>Organon Lever Bros. UMC Petroleum BP Oil Solvay Chemical</b>
<b>Transportation</b>	<b>French Rail Combined Term. London Buses</b>
<b>Distribution</b>	<b>J.C. Penneys IKEA</b>
<b>Utilities</b>	<b>Consolidated Edison Brooklyn Union</b>
<b>Gas</b>	
<b>Telecomm</b>	<b>GTE Bell Atlantic SNET SIP</b>
<b>Banking and Finance</b>	<b>Bank of Scotland Shearson Citicorp</b>
<b>Insurance</b>	<b>MONY Aetna Phoenix Mutual</b>
<b>State &amp; Local Gov't</b>	<b>New York State</b>
<b>Federal Gov't</b>	<b>NASA</b>



- Advertising/Promotion Strategy

The advertising/promotion strategy uses an educational orientation to inform prospects about the complexity of IT use while emphasizing the broad range of information services and consulting expertise which CGS can offer to clients.

- Specialization

The strategic consulting acquisitions of CGS offer a wide range of strategic consulting capabilities. The consultants in these organization which are all now merged are concentrating most on strengthening the business strategies of clients including steps in improving competitiveness, reorganizing and streamlining organizational structures, and upgrading staff morale.

The IT consulting services support professional services and SI projects including activities to convert work or move work from one platform to another. Information services including IT consulting are also given in support of the SAP manufacturing software products.

CGS is also developing a specialized capability to improve productivity and quality of software development as part of its participation in the European Eureka program. This is providing opportunities to consult with large users about improving their software development.

- Marketing/Sales Strategy

CGA and CGS use advertising and promotions as well as presentations, indirect contacts and sales calls to generate interest in its services including consulting. Sales contacts by sales managers, specialists in industries or consulting are used to try to close business.

In addition, direct contacts by consulting staffs are used to develop and sell strategic consulting business. Sales of strategic consulting by Gemini Consulting make use of impressive graphics and an approach of giving useful information or ideas about what the prospect is interested in to a prospect during the decision process.

- Sales/Marketing Organization

Sales and sales management is organized by region, but CGS can also use direct contact from industry specialists or consulting offices. The consulting staff will generally initiate contact, prepare proposals and handle closing with prospects for strategic consulting.





- Key Success Stories

Success stories that CGA/CGS has focused on in recent promotions include the following:

IKEA, the very successful home furnishings distributor which has spread through Europe and successfully invaded the U.S. market, has found it necessary to develop systems that can be used across national boundaries. CGS won the contract to provide the information services including IT consulting work necessary to plan, design and implement an invoice management system for use in its stores and the stores of subsidiaries in Germany, France, Italy and Switzerland.

For French Rail, Inc., CGS/CGA provided information services including IT consulting to help automate the U.S. ticket reservation and sales system. CGS/CGA helped to plan the system, developed the application software, assisted in selecting hardware to be used and coordinated system implementation.

For Organon, a leading pharmaceutical manufacturer, CGS/CGA provided information services and IT consulting to plan and move business processing work to an in-house data processing facility.

IT consulting as well as information services were used to plan and carry out the relocation of computing centers for UMC petroleum corporation.

- Account Management Strategies

Although accounts are managed by sales representatives and managers, consulting personnel may take advantage of ideas or chance meetings to establish a separate point of contact. Industry specialists can also contact accounts, but they would be more likely to coordinate contact with the MDUs (Market Development Units) of the sales organization.

#### 4. DELIVERY MODEL

- Global Delivery Strategy

There are 7 strategic business areas, SBAs, that divide up responsibility for sales and performance of jobs on a global basis. One is located in the U.S. and has responsibility for CGS sales in this country. It is essentially, the CGA operation.



Gemini Consulting maintains separate offices, and coordination of activities and contacts at companies are handled through CGA in the U.S. and other offices of CGS abroad.

The SBAs are divided into divisions which contain the operating units, branches, MDUs or Marketing Development Units, and SCs or skill centers that handle work. Sales is handled by MDUs and production by SCUs. The branch is an administrative office.

The SBAs also divide up responsibility for vertical markets. That means that an SBA in one area will have a staff that can be used by SBAs in other areas. The SBA in the U.S. has responsibility for the oil and gas industry. If the SBA in Northern Europe has need for an oil and gas specialist to help recommend or develop a system for a client, they may have to request that a specialist from the U.S. office visit them.

There are about 21,500 employees and 19,000 professionals working for CGS on a worldwide basis.

- Number of Offices

There are about 40 branch offices worldwide in 15 European countries and the U.S. as well as offices of consulting organizations that are part of Gemini Consulting.

- Management Systems and Organization

Within each of the 7 SBAs that are responsible for sales and production, there are up to 7 divisions that have branches, market development units and skill centers. The SBAs manage all activities in their areas and take guidance from and report to presidents of regions and sectors (vertical markets). The sales and production performance is managed by the president of regions, and the activities of the vertical market units in each SBA is managed by the president of sectors. The two presidents report to the chairman, Serge Kampf, as does the president of central functions such as finance and group development.



- Industry Focus

The relative importance of vertical markets to CGS is shown in the following exhibit:

Vertical Market Served by CGS	Percentage of Revenue in 1992
Manufacturing	12%
Banking & Finance	19%
Insurance	12%
Communications	22%
Government	7%
Distribution and Transportation	25%
Other	3%

- Services

CGA/CGS offers professional and SI services, systems operations outsourcing, application and systems software products, some processing and network services, and strategic consulting services. The professional services include IT consulting.

Strategic consulting is comprised chiefly of strategic business consulting and organization consulting. These services are packaged into an offering called Business Transformation for some clients. It includes revitalization of a company's strategies (strategic business consulting), restructuring and reorganizing the company, and renewing the company's culture.

IT consulting is sometimes provided by the strategic consulting group, Gemini Consulting, although it is generally provided through SI and professional services of CGS.



- Resource Allocation

The strategic consulting group, Gemini Consulting, has their own resources and staff. It is estimated that their total personnel resources account for about 4% to 5% of the CGS staff count. IT consulting needs are met out of the skill centers that report to SBAs through division and branch operations which are responsible for professional and SI services.

- Organizational Structure

The strategic consulting unit, Gemini Consulting is a separate company from CGS although there is close coordination with CGS on some assignments and an attempt by Gemini to develop work for CGS/CGA. Gemini is composed of separate consultancy locations reporting to a CEO with some contact among offices on jobs. The separate offices have maintained much of the organizational structure that they had when they were separate organizations. The MAC Group has its separate library and research functions in Cambridge, MA.

The IT consulting capabilities are part of the support staffs helping to plan and implement application systems for accounts as described in the preceding item.

- Centers of Excellence/Expertise

One center is considered to be CGS University where both learning and relearning take place as well as review of new technologies and business practices on a seminar basis.

Each of the 7 SBAs are charged with maintaining a level of excellence in vertical markets of interest to CGS.

Some of the consultancy offices maintain areas of excellence and expertise in certain vertical markets and business techniques.

- Strategic Fit With Other Units/Businesses

The strategic consulting organization, Gemini Consulting, is organizationally separate from CGS/CGA, but an effort is made to coordinate contacts and work. This has been successful in some situations such as work for Bell Atlantic and SNET where strategic consulting work led to information services work. However, the strategic consulting offices are driven chiefly by their desire to maintain a fast pace of growth and the personal earnings that can





accrue from that. This means that there is not a very effective fit between strategic consulting and the other units.

- Project Management

The strategic consulting projects differ between consulting offices, but set between \$200,000 to \$400,000 in general although there are larger and smaller projects. An average of 2 to 3 people work on projects, but outside consultants may be used on a temporary, part time basis. Projects take 2 to 5 months on the average.

IT consulting activities involve an average revenue between \$50 to \$150,000 and 2 to 4 people and take 2 to 3 months. Some projects can be much larger or very small. IT consulting is almost never billed separately from an SI or professional services project, and they can involve tasks that will not finish until later in a project.

- Billing Rates and Procedures

Personnel charges can vary from about \$600 to \$1500 per day (or higher for certain specialties). Personnel time is collected from personnel on a regular basis and billed at the end of a project or at intervals if the project is long or strategic consulting is involved.

- Project Management Staff

IT consulting projects have project managers responsible for overseeing the work, standards and procedures and time spent. A senior person is designated to lead strategic consulting projects.

- Opportunities for Additional Business

The strategic consulting group is looking for opportunities to add consulting work to present assignments, but they are not always alert to the possibilities for information services work. The project groups handling IT consulting are more prepared to look for opportunities for additional information services including IT consulting work.



## 5. INTELLECTUAL CAPITAL

### • Strengths/Weaknesses

A major strength of CGS/CGA is the stature of the management consultants that have been acquired for Gemini Consulting. Several of these practices have been growing at a rate of over 30% per year during the past few years.

The experience that CGA/CGS has had on information services projects over a long period of time is also an asset.

Another CGA/CGS strength is the knowledge of some industries and industry problems which its staff has gained, and which is now being gathered in vertical market groups reporting to SBAs.

The effort that CGS takes to be sensitive to the different cultures that it deals with has been a strength in some situations.

The approach that CGS/CGA is using for Gemini Consulting which keeps them quite organizationally separate from ongoing information services activities appears to be a weakness.

The reputation that CGA has as a body shop in the U.S. can inhibit work.

### • R&D Expenditure and Related Items

CGS has a commitment to spend 5% of its revenues on research and development. A specialist unit, Cap Gemini Innovation, is in charge of research into new technologies and steps for making them available in the corporation. These steps could enhance the ability of CGS to offer IT consulting.

CGS has also set a goal of doubling productivity in 5 years through steps in software engineering, man-machine communication and knowledge engineering. These steps could also enhance the ability of CGS to offer IT consulting.



The steps in software engineering involve tools to model and improve processes such as Process WEAVER which aims to improve group rather than individual productivity, the improvement of a workbench capability known as PERFORM, and steps to make it possible to reuse software, and work on "middleware" which can facilitate the development of working application systems.

The strategic consulting offices carry on some research activities on business problems including the maintenance of large libraries of research materials.

- Skills/Project Practices Database

CGS/CGA maintains some records of project practices on large projects to aid in similar efforts in the future. Methodologies and procedures are employed to control, guide and aid work on IT projects including IT consulting. The strategic consulting business, to a great extent, is dependent on the experience of lead personnel.

## 6. INFRASTRUCTURE

- IT and Administration Systems

CGS/CGA utilizes limited internal IT capabilities to support personnel, gather information on activities and aid in administration. Some information is still collected chiefly on a manual basis. Worldwide training is given to administrative and some management employees to support the use of IT capabilities and internal systems.

- Proprietary Methodologies

CGS/CGA utilizes its own methodologies on projects, but they are similar to others employed in the industry. Special software engineering methodologies and tools are utilized to speed up development and control quality of IT projects. Non proprietary IT capabilities are used by the consulting groups to enhance the quality of deliverables.

- Communication Systems

CGS/CGA has network capabilities supporting its international operations as well as specialized network capabilities developed for clients.



- Software/tools

CGA/CGA has been developing a group of tools which are aimed at improving productivity and quality. One of these tools is a groupware product which promotes group rather than individual productivity. It facilitates communication between team members and coaches them through a development methodology. This tool which was developed through participation in the European Eureka ESF Program is called PROCESS WEAVER.

The workbench software product of CGS is called PERFORMANCE. It embodies the PERFORM methodology and quality system which helps to define entities and guide work on projects.

CGS has three software products available (Reboot, Proteus and Score) that facilitate reuse of application software.

A software product that provides "middleware" capability to aid application software design and development is under development.

CGS/CGA also has application software products available for a number of vertical markets including banking and finance, manufacturing, communications, transportation and other markets.

## **7. PEOPLE**

- Size of Professional Staff

There are about 21,500 employees and 20,000 professionals on a worldwide basis.

- Employee Recruiting/Staffing Strategy

CGS/CGA acquires many personnel together with the companies that they work for. Although, CGS hires and trains college graduates, some personnel with advanced training are hired or acquired to meet technical and consulting needs. This has particularly been the case with consulting, where a group of companies and their staff have been acquired.





- Promotion and Turnover

There are plans for advancement and promotion at CGS which would address IT consulting as well as all other information services personnel. However, some high level managers have been hired from outside which limits opportunities for members of the staff.

There has been more turnover at CGS/CGA than at Andersen Consulting or EDS according to contacts at CGA.

Advancement at the strategic consulting offices is based primarily on performance and possibly on short term performance at times.

It is too early in the history of Gemini Consulting to analyze turnover. There are multiple companies and offices to consider.

- Compensation/Incentives

The compensation for the staff engaged in strategic consulting ranges in general from \$80,000 to \$150,000 plus bonuses with a small number of strategic consultants receiving higher base compensation and some receiving less.

- Training for Each Level of Professional

As noted in section B-2 on training investments, CGS has a comprehensive training program, but it does not address all the needs of consulting personnel. As the staff handling IT consulting and other information services is advanced, there are courses addressing management and leadership as well as technical topics. Courses aimed at strategic consulting skills and advancement are not available. Gemini Consulting provides this type of training mostly through on the job experience, at present.

- Internal Development vs. Outside Recruiting

CGS encourages internal development, but is prepared to hire or acquire capabilities. Many of the advanced information services capabilities that the company has gained, were acquired. The management consulting expertise that is offered through Gemini Consulting was acquired.

There has more of an effort to develop information services people through internal development during the last few years, however, since this offers more economy according to contacts.



- Profile of Experience/Education for Key Consulting Positions

Key strategic consulting positions are occupied chiefly by people who have degrees from universities recognized for their business schools, and who have more than 4 years experience in selling and performing management consulting work. Generally, these candidates have worked at big 6 or consulting firms.

Candidates for positions that will involve IT consulting work are personnel with a college degree and more than 3 years of information services experience.

## **C.**

---

### **ANALYSIS**

#### **1. Core Competencies of Consulting Business**

Gemini has personnel with a range of strategic consulting competencies including the ability to handle strategic business and organizational consulting which Gemini wishes to specialize in as well as knowledge of other management consulting work and a general knowledge of IT capabilities. These people also have an ability to make strong presentations and sell business. These are capabilities which Andersen Consulting and EDS consultants have.

CGS has personnel with the extensive experience in information services that is needed to perform IT consulting based on its extensive project work.



## 2. Strengths and Weaknesses

### • Strengths

- Experience and reputation of the firm in information technology projects.
- Intensive knowledge of some vertical markets such as manufacturing, banking and communications.
- High level strategic consulting personnel available through Gemini Consulting.
- Large international organization with substantial business in Europe.
- A large training facility, research budget and software tools to support business presence.
- Software products that address current problems in manufacturing, banking, communications distribution and other areas.

### • Weaknesses

- CGS/CGA is thought of by many companies including clients as a body shop,
- CGS/CGA is not encouraging Gemini Consulting to build up its BPR strengths. Andersen Consulting and EDS are both doing this since BPR can generate sizable SI business.
- The way that CGS has organized their strategic consulting services will not encourage sufficient promotion of other CGS business including IT consulting or other information services.
- CGA has not been growing very rapidly during the past 2 years. It has not been generating sufficient interest in its capabilities as an SI vendor.



### **3. Key Differentiators**

- The size and international business of CGS.
- The experience in information services projects.
- The consulting skills and reputation of Gemini Consulting
- In depth knowledge of some industries.
- Alliances with powerful firms who can supply complementary IT capabilities.









**PROFILE: DIGITAL EQUIPMENT**

**IBM Consulting Group  
Strategy Department**

**February, 1994**

**Presented by**

**INPUT**

**The Atrium at Glenpointe  
400 Frank W. Burr Blvd.  
Teaneck, NJ 07666  
201-801-0050  
201-801-0441 (fax)**



## Table of Contents

Section	Page
A. Overview	1
1. Executive Summary	1
2. Firm Background	3
B. Details	5
1. Financial Performance	5
2. Strategy	7
3. Market Model	10
4. Delivery Model	14
5. Intellectual Capital	8
6. Infrastructure	19
7. People	20
C. Analysis	21
1. Core Competencies	21
2. Strengths and Weaknesses	21
3. Key Differentiators	22



## Digital Equipment Corp.

### A.

---

## OVERVIEW

### 1. EXECUTIVE SUMMARY

- Vision Statement

Digital Equipment Corporation's product vision influences its vision of how to use consulting and information services. Its product vision is to provide open, leadership, client/server systems that deliver customer solutions. Its service vision is to help deliver customer solutions through the use of consulting expertise and SI/professional services together with its open, client/server hardware and software technology.

- Market Image

Digital Equipment has the image of a large vendor of computing technology that has a high level of hardware and software technology and network capabilities and many past successes in meeting systems needs in a number of industries, but which may need to catch up in methods of delivering solutions.

- Core Consulting Competencies

Digital provides strategic and IT consulting services chiefly together with SI and professional services to almost every major vertical market group. Efforts have been made to use strategic consulting on a stand alone basis as a means of initiating relations or getting on an inside track at accounts. The strategic consulting services offered have consisted chiefly of strategic business planning services, helping clients plan what business goals should be addressed with IT.





IT consulting is provided together with SI or professional services to clients.

Services are offered on a worldwide basis.

- **Future Directions**

Digital has been exploring the consulting services offered by management consultants and big 6 firms and is trying to offer similar services and, to some extent, similar methods of conducting work. Digital has also started to build up strategic consulting and BPR capabilities and will expand this work in the future.

- **Key Highlights**

Digital Equipment has a large number of information services jobs which include IT consulting work as well as some strategic consulting work. Digital's volume of total consulting work rank it just below the industry leaders. Projections of the growth of consulting work are at a compound rate of over 13%.

Digital makes a sizable investment in training for its employees including some training in consulting skills, but its training in consulting is definitely below the training which big 6 firms and management consultants offer.

The mission and strategies of Digital Equipment are based on having consulting expertise to address the problems of clients with.

The approach that is taken with consulting business may not lead to additional work.

The financial condition of DEC can hamper the growth of consulting activities.



## 2. FIRM BACKGROUND

### • History

Digital Equipment has been in business as a computing equipment manufacturer for 36 years and was originally known as a supplier of small computers for technical applications. DEC was credited with the introduction of the minicomputer for business applications in the 1970's, and made successful inroads into banking and other business areas in the 1980's. During the 1980's, third party and DEC software products aided DEC to advance to one of the top positions in the sale of computing systems, but the company has followed Unisys and IBM into a period of losses.

During the last five years, DEC has developed and promoted professional services and SI capabilities to stimulate sales since it felt that these services were increasing in importance and many of the vendors offering these services did not deliver them with DEC hardware. DEC has supplemented these services with consulting services during the last two to three years since the delivery of consulting services has become the first step towards an information services project in many situations.

### • Key Milestones

Key milestones and periods are mentioned in the above material.

### • Officers

Robert P. Palmer President and CEO

Gresham T. Brebach Jr. VP, Digital Consulting

Lawrence P. Cabrinery VP, Components/Peripherals

R.E. Caldwell VP, Semiconductor Operations

Bobby A. Choonavalla VP, General International

Charles F. Christ VP, Storage Business Unit

William R. Demmer VP, Computer Systems Group

Richard M. Farrahar VP, Human Resources

Samuel Fuller VP, Research



Russell Gullotti VP, United States Area

Winston R. Hindle Jr. VP, Quality, Ethics

Ilene B. Jacobs VP and Treasurer

John E. Klein VP, Consumer, Power and Trans. Unit

Paul G. Kozlowski VP, Communic., Educat., and Media Business Unit

Edward Lucente VP, Worldwide Sales and Marketing

Frank McCabe VP, Discrete Manuf. and Defense Business Units

Edward B. McDonough VP, Manufact. and Logistics

Vincent Mullarkey VP and Corporate Controller

Enrico Pesatori VP and General Manager, PC Unit

Richard Poulsen VP, Europe

John J. Rando VP, Multivendor Customer Services

Bruce J. Ryan VP, Financial, Profess., and Public Services Business Unit

Willow B. Shire VP, Health Industries Bus. Unit

Peter J. Smith VP, Sales, Market. and Ops. Europe

Adriana Stadecker VP, Executive Operations

William Steul VP, Finance and CFO

William D. Strecker VP, Engin., and Chief Technical Officer



The preceding list illustrates that there are personnel in charge of products, geographical sales offices and industry targets, as well as an officer in charge of consulting for Digital.

- Core Competencies of the Corporation

In addition to developing leading minicomputers and workstations together with strong network capabilities, DEC has developed client/server technology and become one of the leading providers of information services including SI, professional services and software products. The volume of SI and professional services work that it carries out, has led to an increasing volume of IT consulting services, but the amount of strategic consulting that DEC performs is still small and could not be considered a core competency.

## **B.**

---

### **DETAILS**

#### **1. FINANCIAL PERFORMANCE**

- General Financial Performance

The balance sheet is shown in Exhibit 1.

- Five Year Historical Revenue Analysis

Overall revenues for five years are shown in Exhibit 2. DEC has had problems in sales in the last two years, and several graphs that reflect on this situation are shown in Exhibit 2B.

Exhibit 3 shows the split of revenues geographically.

A division of revenues by vertical markets is shown in Exhibit 4.

- Operating Results (Margins)

These results are shown in Exhibit 5.

- Projected Growth

As noted, DEC has suffered difficulties in the growth of revenue and earnings, lately. It may take DEC another year or two to do the





## Exhibit 1

(in thousands)

	July 3, 1993	June 27, 1992
<b>Assets</b>		
<b>Current Assets</b>		
Cash and cash equivalents (Note A) . . . . .	\$ 1,643,195	\$ 1,337,172
Accounts receivable, net of allowance of \$110,764 and \$129,686 . . . . .	3,020,252	3,594,268
Inventories (Note A) . . . . .		
Raw materials . . . . .	331,506	264,871
Work-in-process . . . . .	502,200	495,632
Finished goods . . . . .	921,434	853,531
Total inventories . . . . .	1,755,140	1,614,034
Prepaid expenses and deferred income taxes (Note C) . . . . .	463,928	575,364
<b>Total current assets . . . . .</b>	<b>6,882,515</b>	<b>7,120,838</b>
<b>Property, Plant and Equipment (Note A)</b>		
Land . . . . .	363,264	372,989
Buildings . . . . .	1,887,211	1,871,710
Leasehold improvements . . . . .	532,369	592,971
Machinery and equipment . . . . .	4,410,586	4,835,454
Total property, plant and equipment . . . . .	7,193,430	7,673,124
Less accumulated depreciation . . . . .	4,015,139	4,103,422
<b>Net property, plant and equipment . . . . .</b>	<b>3,178,291</b>	<b>3,569,702</b>
Other assets (Notes A, C, D and J) . . . . .	889,537	593,769
<b>Total assets . . . . .</b>	<b>\$10,950,343</b>	<b>\$11,284,309</b>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current Liabilities</b>		
Bank loans and current portion of long-term debt (Note F) . . . . .	\$ 21,335	\$ 49,061
Accounts payable . . . . .	822,434	1,041,300
Income taxes payable (Note C) . . . . .	57,614	63,725
Salaries, wages and related items . . . . .	556,151	551,727
Deferred revenues and customer advances (Note A) . . . . .	1,138,323	1,208,635
Restructuring reserve (Note E) . . . . .	738,989	1,546,904
Other current liabilities . . . . .	583,868	644,696
Total current liabilities . . . . .	3,918,714	5,106,048
Deferred income taxes (Note C) . . . . .	-	23,033
Long-term debt (Note F) . . . . .	1,017,577	41,636
Postretirement benefits (Note G) . . . . .	1,128,653	1,182,658
<b>Total liabilities . . . . .</b>	<b>6,064,944</b>	<b>6,353,375</b>
<b>Commitments (Note H)</b>		
<b>Stockholders' Equity (Notes K, L and M)</b>		
Common stock, \$1.00 par value; authorized 450,000,000 shares; issued 135,489,805 shares and 130,008,231 shares . . . . .	135,490	130,008
Additional paid-in capital . . . . .	2,851,960	2,692,444
Retained earnings . . . . .	1,937,627	2,282,688
Treasury stock at cost; 497,551 shares and 2,193,014 shares . . . . .	(39,678)	(174,206)
<b>Total stockholders' equity . . . . .</b>	<b>4,885,399</b>	<b>4,930,934</b>
<b>Total liabilities and stockholders' equity . . . . .</b>	<b>\$10,950,343</b>	<b>\$11,284,309</b>

The accompanying notes are an integral part of these financial statements.

5A

## Exhibit 2

(dollars in millions except per share data and stock prices)

	1993	1992	1991	1990
<b>Revenues</b>				
Product sales	\$ 7,588	\$ 7,696	\$ 8,299	\$ 8,146
Service and other revenues	6,783	6,235	5,612	4,797
Total operating revenues	14,371	13,931	13,911	12,943
<b>Costs and Expenses</b>				
Cost of product sales, service and other revenues	8,631	8,132	7,278	6,795
Research and engineering expenses	1,530	1,754	1,649	1,614
Selling, general and administrative expenses <sup>1</sup>	4,447	6,181	5,572	4,521
Operating income/(loss)	(237)	(2,136)	(588)	13
Interest income	64	96	113	142
Interest expense	51	39	45	31
Income/(loss) before income taxes and cumulative effect of change in accounting principle	(224)	(2,078)	(520)	124
Provision for income taxes	27	232	97	50
Net income/(loss) <sup>2</sup>	\$ (251)	\$ (2,796)	\$ (617)	\$ 74
Net income/(loss) per share <sup>2A</sup>	\$ (1.93)	\$ (22.39)	\$ (5.08)	\$ .59
Weighted average shares outstanding (in millions)	130	125	122	125
<b>Financial Position</b>				
Inventories	\$ 1,755	\$ 1,614	\$ 1,595	\$ 1,538
Accounts receivable, net of allowance	\$ 3,020	\$ 3,594	\$ 3,317	\$ 3,207
Net property, plant and equipment	\$ 3,178	\$ 3,570	\$ 3,778	\$ 3,868
Total assets	\$10,950	\$11,284	\$11,875	\$11,655
Long-term debt	\$ 1,018	\$ 42	\$ 150	\$ 150
Stockholders' equity	\$ 4,885	\$ 4,931	\$ 7,624	\$ 8,182
Stockholders' equity per share <sup>2</sup>	\$ 36.19	\$ 38.58	\$ 61.18	\$ 66.76
<b>General Information and Ratios</b>				
Current ratio	1.8:1	1.4:1	2.0:1	2.3:1
Quick ratio	1.2:1	1.0:1	1.4:1	1.6:1
Working capital	\$ 2,964	\$ 2,015	\$ 3,777	\$ 4,332
Investments in property, plant and equipment	\$ 529	\$ 710	\$ 738	\$ 1,028
Depreciation	\$ 699	\$ 733	\$ 772	\$ 759
Total debt as a percentage of total debt plus equity	17.5%	1.8%	2.2%	2.0%
Operating income/(loss) as a percentage of revenues	(1.7)%	(15.3)%	(4.2)%	.1%
Income/(loss) before income taxes as a percentage of revenues	(1.6)%	(14.9)%	(3.7)%	1.0%
Effective tax rate	12.0%	11.2%	18.8%	40.0%
Net income/(loss) as a percentage of revenues	(1.7)%	(20.1)%	(4.4)%	.6%
Net income/(loss) as a percentage of average stockholders' equity	(5.1)%	(44.5)%	(7.8)%	.9%
Net income/(loss) as a percentage of average total assets	(2.3)%	(24.1)%	(5.2)%	.7%
Number of days sales of accounts receivable outstanding	69	83	76	86
Inventory turns	5.1	5.1	4.6	4.3
Number of employees at year-end—regular	89,900	107,900	115,100	116,900
Number of employees at year-end—other	4,300	5,900	5,900	7,100
Stockholders at year-end	86,611	99,644	98,023	92,934
Common stock yearly high and low sales prices	\$49-30	\$72-33	\$87-45	\$103-70



## Exhibit 2 - A

1989	1988	1987	1986	1985	1984	1983
\$ 8,190	\$ 7,541	\$ 6,254	\$ 5,103	\$ 4,530	\$ 3,804	\$ 2,828
4,552	3,934	3,135	2,487	2,156	1,780	1,444
12,742	11,475	9,389	7,590	6,686	5,584	4,272
6,242	5,468	4,514	4,282	4,087	3,379	2,606
1,525	1,306	1,010	814	717	631	472
3,639	3,066	2,253	1,665	1,432	1,179	831
1,336	1,635	1,612	829	450	395	363
124	144	122	116	63	41	61
39	38	45	88	82	35	13
1,421	1,741	1,689	857	431	401	411
348	435	552	240	(16) <sup>a</sup>	72	127
\$ 1,073	\$ 1,306	\$ 1,137	\$ 617	\$ 447	\$ 329	\$ 284
\$ 8.45	\$ 9.90	\$ 8.53	\$ 4.81	\$ 3.71	\$ 2.87	\$ 2.50
127	132	133	131	124	115	113
\$ 1,638	\$ 1,575	\$ 1,453	\$ 1,200	\$ 1,756	\$ 1,852	\$ 1,354
\$ 2,965	\$ 2,592	\$ 2,312	\$ 1,903	\$ 1,539	\$ 1,527	\$ 1,125
\$ 3,646	\$ 3,095	\$ 2,127	\$ 1,867	\$ 1,731	\$ 1,511	\$ 1,340
\$10,668	\$10,112	\$ 8,407	\$ 7,173	\$ 6,369	\$ 5,593	\$ 4,541
\$ 136	\$ 124	\$ 269	\$ 333	\$ 837	\$ 441	\$ 93
\$ 8,036	\$ 7,510	\$ 6,294	\$ 5,728	\$ 4,555	\$ 3,979	\$ 3,541
\$ 66.12	\$ 59.47	\$ 49.87	\$ 44.54	\$ 38.43	\$ 34.42	\$ 31.42
2.9:1	2.9:1	3.4:1	4.9:1	4.9:1	3.8:1	3.9:1
1.9:1	2.0:1	2.4:1	3.5:1	2.8:1	1.9:1	2.0:1
\$ 4,501	\$ 4,516	\$ 4,377	\$ 4,223	\$ 3,694	\$ 3,001	\$ 2,377
\$ 1,223	\$ 1,518	\$ 748	\$ 564	\$ 572	\$ 452	\$ 419
\$ 659	\$ 516	\$ 435	\$ 384	\$ 315	\$ 253	\$ 203
2.0%	3.6%	4.2%	5.9%	15.7%	10.3%	3.0%
10.5%	14.2%	17.2%	10.9%	6.7%	7.1%	8.5%
11.2%	15.2%	18.0%	11.3%	6.4%	7.2%	9.6%
24.5%	25.0%	32.7%	28.0%	(3.7)% <sup>a</sup>	18.0%	31.0%
8.4%	11.4%	12.1%	8.1%	6.7%	5.9%	6.6%
13.8%	18.9%	18.9%	12.0%	10.5%	8.7%	8.5%
10.3%	14.1%	14.6%	9.1%	7.5%	6.5%	6.6%
76	75	78	79	75	83	82
3.9	3.6	3.4	2.9	2.3	2.1	2.1
118,400	113,900	103,000	88,300	83,000	79,800	68,100
7,400	7,600	7,500	6,400	6,000	5,800	4,900
99,084	103,162	99,379	76,860	68,810	44,389	40,903
\$122-86	\$199-99	\$174-82	\$94-46	\$63-39	\$61-33	\$65-32

<sup>a</sup>Includes restructuring charges of \$1,500M in 1992, \$1,100M in 1991 and \$550M in 1990.

<sup>b</sup>Per share data adjusted to reflect two-for-one stock split in May 1986.

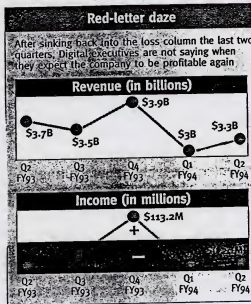
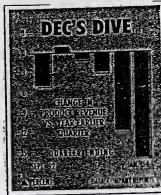
<sup>c</sup>See Note A of Notes to Consolidated Financial Statements.

<sup>d</sup>Includes elimination of DISC taxes of \$63M accrued prior to 1984.

<sup>e</sup>In fiscal year 1992, net loss and net loss per share include the cumulative effect of change in accounting principle of \$485M and \$3.89, respectively.



## Exhibit 2 - B







### Exhibit 3

Note B - *Geographic Operations*

(in thousands)

Year Ended	July 3, 1993	June 27, 1992	June 29, 1991
<b>Net Revenues</b>			
<b>United States:</b>			
Unaffiliated customer sales .....	\$ 5,219,276	\$ 5,154,159	\$ 5,586,492
Inter-area transfers .....	1,793,832	1,900,455	2,200,684
	<u>7,013,108</u>	<u>7,054,614</u>	<u>7,787,176</u>
<b>Europe:</b>			
Unaffiliated customer sales .....	6,973,709	6,751,222	6,216,746
Inter-area transfers .....	633,935	520,953	278,544
	<u>7,607,644</u>	<u>7,272,175</u>	<u>6,495,290</u>
<b>Canada, Asia, Americas, Pacific Rim:</b>			
Unaffiliated customer sales .....	2,178,384	2,025,491	2,107,766
Inter-area transfers .....	1,378,870	1,168,956	1,269,327
	<u>3,557,254</u>	<u>3,194,447</u>	<u>3,377,093</u>
<b>Eliminations .....</b>	<b>(3,806,637)</b>	<b>(3,590,364)</b>	<b>(3,748,555)</b>
<b>Net revenues .....</b>	<b>\$14,371,369</b>	<b>\$13,930,872</b>	<b>\$13,911,004</b>
<b>Income/(Loss)</b>			
United States .....	\$ (363,454)	\$ (1,971,032)	\$ (976,651)
Europe .....	12,446	(184,951)	474,180
Canada, Asia, Americas, Pacific Rim .....	115,091	68,313	142,622
Eliminations .....	(1,384)	(48,001)	(228,536)
	<u>(237,301)</u>	<u>(2,135,671)</u>	<u>(588,385)</u>
Operating loss .....	63,831	96,176	113,221
Interest income .....	50,837	38,517	44,556
Loss before income taxes and cumulative effect of change in accounting principle .....	<u>\$ (224,307)</u>	<u>\$ (2,078,012)</u>	<u>\$ (519,720)</u>
<b>Assets</b>			
United States .....	\$ 4,202,395	\$ 4,766,206	\$ 5,124,445
Europe .....	4,910,165	5,195,715	4,706,122
Canada, Asia, Americas, Pacific Rim .....	1,730,754	1,854,167	1,576,413
Corporate assets .....	1,444,259	1,183,387	1,728,955
Eliminations .....	(1,337,230)	(1,715,166)	(1,261,230)
<b>Total assets .....</b>	<b>\$10,950,343</b>	<b>\$11,284,309</b>	<b>\$11,874,702</b>



## Exhibit 4

### Division of Revenues by Vertical Markets

<u>Vertical Market</u>	<u>Percentage of Revenues</u>
Discrete Manufacturing	14
Process Manufacturing	5
Banking and Finance	14
Insurance	10
Telecommunications	9
Distribution	7
Health	5
Federal Government	14
State/Local/Provincial	12
Other	9



## Consolidated Statements of Operations

## Exhibit 5

(in thousands except per share data)	Year Ended		
	July 3, 1993	June 27, 1992	June 29, 1991
<b>Revenues (Notes A and B)</b>			
Product sales . . . . .	\$ 7,587,994	\$ 7,696,029	\$ 8,298,515
Service and other revenues . . . . .	6,783,375	6,234,843	5,612,489
<b>Total operating revenues . . . . .</b>	<b>14,371,369</b>	<b>13,930,872</b>	<b>13,911,004</b>
<b>Costs and Expenses (Notes A, G and K)</b>			
Cost of product sales . . . . .	4,464,445	4,248,118	3,905,355
Service expense and cost of other revenues . . . . .	4,166,946	3,883,705	3,373,025
Research and engineering expenses . . . . .	1,530,119	1,753,898	1,649,380
Selling, general and administrative expenses . . . . .	4,447,160	4,680,822	4,471,629
Restructuring charges (Note E) . . . . .	-	1,500,000	1,100,000
<b>Operating loss . . . . .</b>	<b>(237,301)</b>	<b>(2,135,671)</b>	<b>(588,385)</b>
Interest income . . . . .	63,831	96,176	113,221
Interest expense . . . . .	50,837	38,517	44,556
<b>Loss before income taxes and cumulative effect of change in accounting principle . . . . .</b>	<b>(224,307)</b>	<b>(2,078,012)</b>	<b>(519,720)</b>
Provision for income taxes (Notes A and C) . . . . .	27,023	232,000	97,707
<b>Loss before cumulative effect of change in accounting principle . . . . .</b>	<b>(251,330)</b>	<b>(2,310,012)</b>	<b>(617,427)</b>
Cumulative effect of change in accounting principle, net of tax (Note C) . . . . .	-	485,495	-
<b>Net Loss . . . . .</b>	<b>\$ (251,330)</b>	<b>\$ (2,795,507)</b>	<b>\$ (617,427)</b>
<b>Per Share (Note A)</b>			
Loss before cumulative effect of change in accounting principle . . . . .	\$ (1.93)	\$ (18.50)	\$ (5.08)
Cumulative effect of change in accounting principle . . . . .	-	(3.89)	-
<b>Net Loss per Share (Note A) . . . . .</b>	<b>\$ (1.93)</b>	<b>\$ (22.39)</b>	<b>\$ (5.08)</b>
Weighted average shares outstanding (Note A) . . . . .	130,409	124,864	121,558

The accompanying notes are an integral part of these financial statements.



restructuring that is necessary to return to a period of continuing growth. As a result, overall growth of revenues will probably not rise above a compound growth rate of 4% during the next five years.

- Fee Volume/Revenue from Consulting

Consulting services sold on a stand alone basis or with SI and professional services are included in the figures shown below in Exhibit 6

---

**EXHIBIT 6**

**Strategy Consulting and IT Consulting revenues**

Year	IT Consulting and Strategy Consulting in \$Millions by Year	
	1991	1992
U.S.	161	185
Worldwide	340	395

---

**Related revenues**

	SI and Professional Services Systems Development	
	1991	1992
U.S.	300	339
Worldwide	840	955

- Typical Consulting Project Revenue

Stand alone strategic consulting projects tend to be in the \$100,000 to \$200,000 range although there are smaller assignments undertaken to prepare studies for prospects or clients. IT consulting is often a part of SI or professional services projects and generally ranges between





\$100,000 to \$200,000 per project, but could be smaller as well as larger.

- Business Development Costs

Business development costs for strategic consulting work include expenses for developing these services and using them in general ways to support other DEC business. An estimate of the development cost would mostly reflect the cost for IT consulting since it is much larger. The cost for IT consulting is a share of the expense for obtaining professional services and SI jobs in most cases. The estimate of development cost is about 6 to 9% of revenues in total.

- Contract Backlog

Since the consulting backlog is distributed across a number of offices and some stand alone jobs as well as larger contracts, the backlog is hard to estimate. Contacts have estimated that there is at least \$25 million of new strategic and IT consulting work ready to be started or in a backlog queue.

## 2. STRATEGY

- Vision

Digital Equipment's vision is focused on helping its customers develop solutions to business problems through a leadership approach to products that includes an open system and client/server approach that will provide investment protection and multivendor integration and through the services necessary to achieve solutions. The services include SI and professional services as well as strategic and IT consulting.

- Short Term Strategy

Point out to corporations and organizations looking for solutions to business problems that DEC provides all the services necessary to achieve these solutions including consulting together with high level technology that is economic and can work with the equipment and solutions of other vendors.

There have been problems with the focus on user solutions in relation to the desire of DEC to sell Alpha AXP computers that have thrown the short term strategy into question, however.



- Long Term Strategy

The long range strategy of DEC is to maintain technological leadership while developing the strength in information services and consulting that can not only deliver business solutions to clients but enable them to see the benefits that the use of DEC's technology can bring to their information technology plans. This strategy encompasses developing SI capabilities and consulting services which are competitive with the leading vendors of these services, as well as selling DEC's computing products.

- Mergers and Acquisitions

Investments have been made in companies that DEC has relations with such as MIPS, Stratacom, Consilium, and Quest. See the detail for these companies in relation to the alliances described below.

- Strategic Alliances

Strategic alliances and marketing agreements with vendors include arrangements with the following:

Cray Research Cross license and technical exchange

Tandy To market Tandy computers

Olivetti To market Olivetti products

MIPS Risc chip technology license

NTT DEC was selected by NTT to be part of its consortium on computer architecture standards

Stratacom To market and use their WAN product

Consilium To utilize their manufacturing shop floor software and compatible products.

Engineering Automation Joint venture for process industry

Quest License for use of their ceramic technology

Philips To aid in providing solutions for financial, municipal, health care, distribution and business services markets



Alliances of Digital Equipment include many arrangements with software vendors such as Comtex Systems and Data Architects where the professional services company works together with DEC to plan and implement application systems.

- Training Investments

Digital Equipment offers a number of training courses for personnel that concentrate chiefly on technical knowledge and skills. Skills are also taught that aid in IT consulting, and some training has been introduced for strategic consulting assignments. An estimate of the overall training investment of DEC by contacts was a total amount in excess of \$250 million.

- Specialties

DEC's capabilities for networking application is at a high level.

DEC provides rapid prototyping capabilities that can test concepts.

DEC has developed strong capabilities for various vertical markets.

- Decision-Making Process

Decisions on services and general market targets are made by upper management. Sales management makes decisions regarding account assignments and approves proposals for systems and services. Sales representatives and management make contacts that can lead to sales of systems and services. Personnel with appropriate experience in consulting will make decisions on supplying and pricing those services.

In some circumstances, consultants would be involved in initial contact, but sales management would generally become involved in decision making for the supply of services.

Decisions on conducting assignments are controlled by established methods and directions from supervisors in most cases.

- Recent Project Wins And Significance

Recent project wins that have most significance for Digital Equipment in the use of consulting services are those in which consulting services were utilized in situations where DEC eventually won contracts for equipment, software and services. The following projects that were won by DEC illustrate this.



Installation of DEC VAX systems at Bankers trust to handle front office trading needs. Consulting services were utilized to plan the means of addressing this business need.

Installation of DEC VAX systems and software products to meet the needs for manufacturing and distribution at Toy R Us. The IT planning provided by DEC contributed heavily to the use of DEC products.

Use of DEC systems at Kaman, Inc. the planning required for this distribution system was a key contribution of DEC.

Use of DEC VAX system in money transfer and cash management applications at Chase Bank were heavily dependant on DEC consulting.

### **3. MARKET MODEL**

- **Market Image/Positioning**

DEC presents an image of a leading vendor of information technology products that offers the most current technology, open systems and client/server products, together with a high level of services including SI and professional services as well as consulting.

- **Market Growth**

The market growth of consulting work over the last five years is shown in Exhibit 7.

- **Customer/client satisfaction strategy**

DEC is focusing marketing and service attention on customers and their industries. DEC also utilizes approaches to work and methodologies that were developed to guaranty satisfaction. There are also tools that aid in ensuring satisfaction with application systems developed for clients such as the rapid prototyping product that allows ideas to be tested before proceeding with implementation.

- **Target Clients/Accounts**

DEC has taken a broad approach across many industries in targeting clients and accounts for product and services sales as shown by the following list:





## Exhibit 7

### Growth of consulting work

<u>Year</u>	<u>Worldwide strtegic and IT Consulting work</u>
1993	430
1992	395
1991	345
1990	300
1989	270



<b>Market (INPUT classification)</b>	<b>Client</b>
<b>Discrete Manufacturing</b>	Toys R Us Eastman Kodak Volkswagen Yamaha Hughes Rockwell Collins Raytheon Boeing
<b>Process Manufacturing</b>	DuPont CEPSA (petrochem) ICI Americas Tetra Laval Goodyear
<b>Transportation</b>	Sabena Zim America
<b>Retail Distribution</b>	Damon
<b>Wholesale Distribution</b>	Kaman
<b>Telecomm</b>	Pacific Bell Deutsche Telecom Optus Comm. British Telecom MCI
<b>Banking and Finance</b>	Bankers Trust Chase Bank Fleet Bank ICC, Israel
<b>Insurance</b>	GAK Aetna Phoenix Mutual
<b>Business Services</b>	
<b>Health</b>	St. Jude Hospital Hamilton Hospital Children's Hospital



	Take Care
Education	M.I.T. Emory Univ.
State & Local Gov't	CA State Gov't Mass. State Gov't
Federal Gov't	U.S. Census U.S. Navy Dep't

- Advertising/Promotion Strategy

The advertising/promotion strategy focuses on serving customers in target industries with high level technology from DEC together with the consulting and information services necessary to deliver economic solutions.

- Specialization

DEC addresses a broad range of the market for consulting and information services together with IT products, and focuses attention on the needs of prospects for vertical market solutions. However, DEC is not attempting to deliver a full range of consulting services. DEC wants to deliver the set of services that will help to gain equipment or SI business.

Consulting services that are offered are chiefly strategic planning services that help customers plan business objectives and select applications that will achieve those objectives. There is also interest in developing BPR work since this leads to SI contracts and the use of equipment.

DEC also delivers IT consulting services as a part of projects, chiefly.

- Marketing/Sales Strategy

DEC uses advertising and promotions as well as presentations to generate interest in its products and services, but utilizes an extensive contact program by sales representatives and management to obtain most business. Technical and service specialists including consulting personnel are called upon when it appears appropriate or prospects express interest in certain services. Contact may be initiated by



consulting and other service personnel under some circumstances, but contacts are coordinated with sales management.

- Sales/Marketing Organization

Sales and sales management is organized by region, but DEC has built up an industry oriented marketing staff to steer and support sales. by vertical market.

- Key Success Stories

Success stories that DEC has focused on in recent promotions include the following:

Digital consultants worked with Du Dupont and three of its business partners to develop a quick response business model that enabled the participants to reduce inventory and processing costs through multi company integration of processing work.

Digital Equipment helped CEPESA to conduct strategic and technological planning across 20 mission critical business units so that requirements could be developed for all necessary laboratory, processing and oil movement areas as well as planning, scheduling, purchasing, maintenance, inspection, security, engineering, transport, refinery administration, and export-import. This requirements work allowed a systems to be selected from available products that would meet CEPESA needs.

For Yamaha, an information technology strategic plan was developed that would guide Yamaha on its investment plans for future technology to support its design and manufacturing plans. The first step of this plan is being implemented, which will provide Yamaha with a single IT framework to support design and engineering applications.

Consultants from Digital helped Volkswagen analyze business processes and interlinked process chains with the objective of shortening and optimizing these chains. Better cross functional integration was achieved in the systems that resulted.





- Account Management Strategies

Accounts are managed through activities of sales representatives and managers together with aid from industry specialists. The primary focus on deciding what to do for accounts can be handled by these industry specialists together with aid from consulting although the account representative is responsible for making sure that quotas are met for the sale of products. The sales responsibility flows uphill to Lucente, who has been charged with selling hardware systems. This can cause tension with the industry sales people, although the objective is to take advantage of their skills and ability to drive business and make sure that solutions are delivered.

#### 4. DELIVERY MODEL

- Global Delivery Strategy

Sales, industry support and consulting and information services are delivered globally through sales subsidiaries in Canada, Europe, South and Central America, Asia and the Pacific Rim, direct sales from the parent and sales through VAR's.

There are about 40,000 professionals and 1000 third party vendors involved in DEC activities on a worldwide basis.

There are 14 customer support centers and 6 Desktop Expertise Centers to support customer or sales needs throughout the world.

- Number of Offices

There are about 1100 engineering, research, manufacturing, sales, and service facilities in about 85 countries.

- Management Systems and Organization

The sales, products, industry support and services organizations as well as other functions report uphill to office, regional and national managers and to the home office units in MA and NH. Sales management, reporting up to Lucente, is responsible for the sale and support of accounts.



- Industry Focus

DEC has developed a customer/industry orientation to supplement its regional sales organization. The industry specialists and consulting office can be called upon to help sell solutions. The specific industry targets that are emphasized are listed below:

#### Market Emphasis

The industry or vertical market emphasis that DEC has recently established is illustrated by the organization of units under vice presidents for the following groupings:

- Discrete Manufacturing and Defense
- Manufacturing and Logistics
- Consumer, Process, Transportation
- Communications, Education and Media
- Health Industries

Another indicator of the industry or vertical market emphasis of DEC is shown by an analysis of the markets that DEC obtains information services revenues (vs. equipment) from. These include:

Larger sources of information services and consulting revenue

- Banking and Finance
- Discrete Manufacturing
- Federal Gov't

Moderate to large sources of revenue

- Process Manufacturing
- State & Local
- Insurance

Smaller sources of revenue

- Wholesale



- Utilities
- Health
- Retail
  
- Service Lines

DEC offers computing and network equipment, application and systems software products, some processing and network services, professional and SI services, outsourcing or systems operation services, and strategic consulting services. DEC is emphasizing SI in particular among information services since it can drive the sale of equipment systems.

Strategic consulting is comprised chiefly of activities to help customers scope the strategic business objectives that need to be met with information technology plans. This could include planning to develop or upgrade an infrastructure as well as plans to take advantage of technology to meet business goals. Consulting in relation to BPR picked up at the end of last year and will become a larger concern of DEC in the future since it is having an impact on SI business.

IT consulting is generally provided through SI and professional services.

- Resource Allocation

The consulting area has a staff that can address a limited amount of needs, but can be supplemented with outside personnel or alliances to support studies. IT consulting needs are met out of the support pool that handles professional and SI services.

- Organizational Structure

Although there is an organizational function handling strategic consulting, it operates through the geographic units managing contacts with accounts and prospects just as the industry groups support accounts. The IT consulting capabilities are part of the support staffs helping to plan and implement application systems for accounts.



- Centers of Excellence/Expertise

There are 14 Customer Support Centers and 6 Desktop Expertise Centers providing sources of Excellence and Expertise for DEC customers and prospects on a world wide basis. In addition, many of DEC's alliances and subsidiaries also have their own capabilities to provide sources of expertise.

- Strategic Fit With Other Units/Businesses

Due to the philosophy of account support, there should be a close relationship between the consulting services offered by DEC and other services and products offered by DEC. However, the consulting office has responded to contacts from some companies with activities that were not in support of DEC sales goals for equipment. There is an effort to control such contact more in the future.

- Project Management

There is no average experience with strategic consulting projects through 1993. Although a group of assignments was reported to be in the \$100,00 to \$200,000 range. Many of the assignments of strategic consulting have been activities tacked on to SI projects to provide consulting on business objectives that was necessary to proceed with the SI project. This consulting was valuable, but it was not provided as a consulting project. It was part of the SI project.

IT consulting activities involved with the planning for an SI project involve an average revenue between \$50 to \$200,000 and 2 to 4 people and take 2 to 3 months. Some projects can be much larger or very small. IT consulting is almost never billed separately from an SI or professional services project, and they can involve tasks that will not finish until later in a project.

- Billing Rates and Procedures

Personnel charges can vary from about \$600 to \$1500 per day (or higher for certain specialties). Personnel time is collected from personnel on a regular basis and billed at the end of a project or at intervals if the project is long.

- Project Management Staff

All projects have project managers responsible for overseeing the work, standards and procedures and time spent. Clerical staff may assist in collecting and handling project and time data.





- Opportunities for Additional Business

DEC's approach to assignments focuses more attention on achieving the objectives of projects or a client's near term needs than on longer term business goals. The consulting group tries to deal with longer term considerations, but their approach is diluted with the attention given to delivering equipment and services to clients. This does not support efforts to obtain additional business, but some DEC clients are anxious to have DEC gain additional opportunities to support their decision for DEC, and this helps to promote additional business.

## 5. INTELLECTUAL CAPITAL

- Strengths/Weaknesses

A major strength of DEC is the knowledge that personnel have in the use of computing technology and networks.

The ability to consult on business problems, rapidly formulate requirements for application systems that will meet business objectives and deliver solutions is a major strength.

Another DEC strength is the knowledge of some industries and industry problems which its staff has gained, and which is now being gathered in industry or vertical market groups.

DEC has developed and acquired consulting strengths that can conduct strategic consulting work.

The organizational approach that DEC is using to bring consulting expertise to clients can aid many clients but has weaknesses in terms of finding large consulting opportunities.

The emphasis that DEC places on developing and installing the most advanced technology detracts from the image of a vendor interested chiefly in solutions. It also makes it difficult for consultants to take directions that would be most in support of consulting business.

### R&D Expenditure and Related Items

Digital Equipment has a strong commitment to technology. DEC is highly interested in taking steps that will be in the forefront of information technology (eg, 64 bit RISC technology).



R&D is carried out in equipment, networking, software product, industry application and service areas. The entire budget R&D is not aggregated, but is in excess of \$750 million.

There is an effort to address the areas of consulting that are of greatest interest in relation to the use of information technology and services. Consequently, investment has been made to acquire and train personnel in BPR since this consulting activity is beginning to have an impact on SI projects and resulting use of IT.

- Skills/Project Practices Database

DEC maintains records of project practices on many large projects to aid in similar efforts in the future. Methodologies and procedures are being employed to control, guide and aid work on all projects.

## 6. INFRASTRUCTURE

- IT and Administration Systems

DEC utilizes internal IT capabilities to support personnel, gather information on activities and aid in administration. Worldwide training is given to employees to support the use of IT capabilities and internal systems.

- Proprietary Methodologies

DEC utilizes its own methodologies on projects, but they are similar to others employed in the industry. Special methodologies and tools are utilized to support pilot programs, rapid prototyping and use of client/server technology.

- Communication Systems

DEC has network capabilities supporting its international operations as well as specialized network capabilities developed with or for clients such as the Australian network recently completed.

- Software/tools

There are tools such as the rapid prototyping tool that can test concepts which have been utilized by the consulting office. There are an assortment of development, aids database products and tools that DEC has which have been utilized to develop systems.



## 7. PEOPLE

- Size of Professional Staff

There are over 40,000 professionals including over 900 trained program managers worldwide.

- Employee Recruiting/Staffing Strategy

Although, DEC hires and trains college graduates, some personnel with advanced training are hired to meet technical and consulting needs. This has particularly been the case with consulting.

- Promotion and Turnover

There is a definite plan to ensure advancement and promotion, but this program is not fully applicable to consulting due to the hiring programs used to staff this function.

It is too early in the history of the consulting group to analyze turnover. There has been more than was originally anticipated. The personnel handling IT consulting have shown an increase in turnover lately as a result of the difficulties in business that DEC has been encountering.

- Compensation/Incentives

The compensation for staff engaged in strategic and IT consulting ranges from \$40,000 to \$80,000 with a small number of strategic consultants receiving higher amounts according to contacts at DEC.

- Training for Each Level of Professional

As noted in section B-2 on training investments, DEC has a large training program, but it does not address all the needs of consulting personnel.

- Internal Development vs. Outside Recruiting

Although DEC favors internal development, it has been necessary to hire personnel from the outside to meet needs for strategic consulting. IT consulting is chiefly supplied by personnel that have gone through DEC training programs.



---

**Related revenues**

	SI and Professional Services Systems Development	
	<u>1991</u>	<u>1992</u>
U.S.	500	576
Worldwide	570	755

Revenues for the Consulting Services Group are quoted as \$274 million for the U.S. and \$124 million for non U.S. business, but these totals are said to include systems and professional services work as well as consulting. In addition, the revenues do not include some IT consulting. Consequently, results for consulting and related business have to be recalculated.

- **Typical Consulting Project Revenue**

Stand alone strategic and BPR consulting assignments tend to be in the \$250,000 to 800,000 range although there are many smaller assignments undertaken as a first phase for other consulting work or SI/professional services contracts. The average consulting contract is felt to be about \$300,000 in size, although many of the contracts being counted consist of multiple contracts that were aggregated together although they were authorized separately. EDS feels that they should be counted together since they involved related work for the same customer.

IT consulting is almost always a part of SI or professional services projects and generally ranges between \$150,000 to \$400,000 per project. Again, there may be an initial consulting step that costs less, which is tacked on to the project which follows.

- **Business Development Costs**

Business development costs for consulting work is shared with other work to a great extent, particularly for IT consulting work. BPR consulting bears the cost of special presentations





and work of M. Hammer. EDS does not have sufficient experience to know what this cost will be over time. On a net basis, the overall development cost is estimated to be between 5% and 8%, allowing for both the start up costs for strategic consulting and the lower costs for ongoing IT consulting work.

- **Contract Backlog**

The consulting backlog is distributed across a number of offices and stand alone jobs as well as larger contracts. In addition, effort hasn't been undertaken to aggregate the consulting work from some of the longer contracts. Discussions with contacts have resulted in an estimate of at least \$60 million of consulting work in a backlog status.

## **2. STRATEGY**

- **Vision**

EDS has a concept of creating a lasting value for its customers in the application of information technology to meet varying objectives. It attempts to do this by offering consulting and information services that offer the highest level of IT and business capabilities and expertise available.

- **Short Term Strategy**

EDS emphasizes its strengths in the knowledge and use of IT as the reason major corporations should seek its aid in planning for and using IT. EDS notes that it offers a high level of consulting including BPR that can be necessary for achieving success in the use of IT, but it feels that the primary strength that is needed by a vendor of consulting or information services is knowledge and experience in IT. EDS has used the phrase "agent of change" in its annual report to call attention to its ability to bring about change in organizations through the application of IT and consulting.

EDS also has a strategy of approaching certain companies with presentations on how they can improve revenue or competitive capabilities through the use of IT. The presentations spell out what EDS can accomplish through consulting and information services.

Advertisements and brochures as well as presentations stress that clients of EDS can achieve value in the use of IT, through the consulting and information services of EDS and its range and depth in IT knowledge and expertise.



- Long Term Strategy

EDS is building up its image and strength as a management consultant as well as one of the major IT vendors. EDS has elevated the status of consulting in its organization and now has an organization unit, EDS consulting, that has BPR and business strategy capabilities. EDS has recruited heavily from McKinsey, Booz Allen, and big 6 firms to build up the strength of this organization. In addition, an agreement was reached with M. Hammer to obtain his aid for sales and evangelizing work with prospects and customers of BPR assignments.

Although EDS is strengthening its long term capability to perform management consulting, its objective is to perform consulting that will lead to information services work. Also, EDS feels that knowledge of the potential of IT is needed to perform BPR and other consulting since new IT developments can make new ways of organizing business processes possible. It has funded a research project at M.I.T. to explore this topic further.

- Mergers and Acquisitions

The following activities illustrate the high level of interest that EDS has in acquiring capabilities or market share.

In May 1993, EDS announced an agreement to purchase BEI Golembe, a leading financial industry consulting firm, from BEI Holdings, Ltd. BEI Golembe, with 100 employees, is headquartered in Atlanta and has operations in Europe as well as in the U.S.

In April 1993, EDS Canada acquired JWP/Businessland Canada, provider of desktop integration services and after-sale support to large corporate customers.

- JWP/Businessland will now operate as EDS Canada, Technical Products Division (TPD Canada), providing market development, product management, warehousing, personal computer integration, and desktop value-added services to the Canadian marketplace.

Approximately 60 JWP/Businessland employees will be transferred to EDS Canada.

EDS has recently acquired the ownership rights to the products and methodologies formerly offered by First Pinnacle of Dallas.



- First Pinnacle, a consulting firm specializing in the financial services industry, has provided a variety of consulting services to more than 50 clients, including Mellon, Home Savings, and Barnett Banks.
- The company's products and services include a PC-based productivity system that helps financial institutions schedule personnel in transaction-drive areas more effectively; structured consulting methodologies geared toward improving financial performance; and a PC-based loan pricing model for loan officers in commercial and consumer lending.

In December 1992, EDS acquired mbp Software and Systems, a subsidiary of the Hoesch Chemicals Group and Germany's oldest information technology service and software company. Terms of the acquisition were not disclosed.

- mbp had about 570 employees at the time of the acquisition and annual revenue of about \$82 million (U.S.).
- mbp specializes in systems integration in the steel, chemical, manufacturing, and energy markets, as well as public authorities.

In November 1992, EDS acquired one of its outsourcing clients, Cummins Cash and Information Services (CCIS), a subsidiary of Cummins Engine Company.

- CCIS which provides card-based payment systems for truckers to purchase fuel and other goods and services, has been an EDS client since 1990.
- The acquisition brings approximately 1,900 trucking customers and 15,000 truck stops, banks, and retail locations in to the EDS customer base.

In October 1992, EDS acquired a 2% equity interest in mainframe software vendor 4th Dimension Software Ltd. of Costa Mesa (CA).

During the first half of 1992, EDS purchased the Shopper's Automatic Money Network (\$AM) from Citicorp. The network consists of 248 ATMs located in major retail locations throughout central and northern New Jersey and the Greater New York metropolitan area. \$AM generates more than 1.2 million transactions per month.



In August 1992, acquired a substantial portion of the assets of Atlanta-based US TeleData, provider of operator and telemarketing services to various industries.

In February 1992, EDS acquired a 19.9% equity interest in Japan Systems K.K., a publicly held corporation providing systems integration, software development, communications systems, and hardware to the Japanese market. The company serves customers in a range of industries, including manufacturing, utility, telecommunications, and financial, as well as government.

In January 1992, EDS acquired Energy Management Associates, Inc. (EMA) of Atlanta (GA) and its subsidiary, AER\*X, a Washington, D.C.-based emissions trading consulting firm.

- EMA, founded in 1975, provides planning software and regulatory and management consulting to the electric and gas utilities industry. Products include both strategic and operational planning systems and detailed forecasting and budgeting systems.
- EMA has more than 150 customers in the U.S., Australia, Japan, the U.K., and Ireland.
- At the time of the acquisition, EMA had over 200 employees. It now operates as a division of EDS with responsibility for developing the utility business.

In November 1991, EDS completed the acquisition of McDonnell Douglas System Integration Company (MDSI).

- MDSI, with over 2,000 employees and worldwide revenue of \$398 million in 1990, provides systems integration, professional services, and CAD software products.
- Included in the MDSI acquisition are the Unigraphics Design System (GDS) product lines and shape Data, a solids modeling research, development, and engineering company based in Cambridge, England.

In October 1991, EDS acquired Creative software Systems, Inc. (CMS) of Toms River (NJ). CMS provides information management services to the cable TV industry, including subscriber and financial management systems, bill processing, and mailing services. Clients included more than 150 multiple-system operators and independent operators worldwide.





In August 1991, EDS acquired SD-scicon, an international systems integration, professional services, and processing firm based in the U.K.

- Strategic Alliances

EDS engages in a number of joint ventures, agreements and alliances that include companies in a wide range of industries as shown below. Consulting, professional services, systems integration, and/or systems operation services are invested in these joint activities or their clients by EDS.

Joint ventures with: Sony, Hughes Aircraft, 3Com, Compaq, Orion, Pritzker, Olivetti, Telefonica, China Management System, Lucky Goldstar, CAMI Automotive, STM (Korea), Hitachi Data Systems, Apple Computer and Emperion

Joint Development with AT&T, IBM, Sun Microsystems, France Telecom, and CADAM.

Agreements with Interpractice Systems, Hewlett Packard, Intergraph and CGI Systems.

An equity agreement was entered into by EDS and CLS Corp., the nation's largest independent loan servicer, whereby EDS and CLS will jointly market loan services including application processing, credit approval decision making, payment processing, collection support, and customer services functions. These services, which are offered to financial services providers, require consulting and system development or modification by EDS.

- Training Investments

EDS has an Employee Development Office that conducts worldwide training for in industry and technical subjects as well as in leadership development. It is not possible to differentiate the training given to employees that are occupied chiefly in consulting, but the overall investment for employee training amounts to over \$250 million annually.

The point must be made however, that EDS has a different approach toward training and indoctrination. New recruits, from college generally, are assigned to customer accounts for 12 to 18 months before they go through an intense 10 week training program that some compare to boot camp. During this training, course work in



programming, IT consulting, and the EDS method of conducting projects is taught, and graduates are given a certificate. Specialized courses are taken when needed at later dates.

Staff members that are now conducting IT consulting and some strategic consulting jobs have gone through the same type of training that those active in other information services tasks went through. Since many of the staff members active in strategic consulting were recently hired from the outside, there is less experience with the training needed for this area.

- Specialties

EDS can provide a presentation on the use of BPR consulting by M. Hammer, one of the best known authorities on the use of BPR.

EDS can perform specialized IT consulting services that will explore the steps that a company would have to take with its existing IT work and software to enable the company to take advantage of the systems operations and processing services that EDS can offer at its centers.

EDS also offers an approach toward value pricing that ensures that clients will receive value from an assignment. This has been offered in situations involving IT consulting as part of SI or professional services contracts, but it might also be offered in relation to BPR assignments.

There are specialized capabilities of EDS apart from consulting such as the Unigraphics area that are made use of to perform a number of tasks in support of other activities.

- Decision-Making Process

Plans are developed and approved by the executives in each vertical group on target accounts and business objectives. These are used to guide the offices and teams making specific bids or staffing projects and ongoing activities. Specific actions can be taken that are outside of a person's area of authority or responsibility by project leaders or managers to get a job done as pointed out by Tom Peters in his book, Liberation Management. EDS acts as though it's a large collection of project teams that are all acting in a free wheeling way to get projects done. The project managers or leaders are accountable for project success, but they can find ways to get sufficient authority to make decisions or carry on actions that are necessary to get the job done. Training and practice assignments have helped to teach staff members on how to proceed with assignments.



- **Recent Project Wins And Significance**

Recent project wins that have most significance for EDS in the use of consulting services are those in which consulting services preceded or were integrated with the use of other capabilities to achieve the objectives of clients. The following projects that were won by EDS illustrate this:

EDS has provided consulting services for significant sales to the Banking and Finance Market in the following situations:

- In early 1993, U.S. Bancorp, the largest bank holding company in the Northwest, selected EDS to plan for and install its Strategic Banking System throughout its branch system.
- EDS is consolidating item processing and back-office services for San Francisco-based First Nationwide Bank under a three-year agreement. First Nationwide has been an EDS customer since 1980.
- EDS is supplying full-service information technology and data processing support to United New Mexico Financial Corp. EDS will acquire the bank's data center and convert the company's existing banks and all future acquisitions to EDS'integrated banking system. EDS will also provide ATM processing and gateway services.
- EDS is providing planning, systems management, development and conversion support to Bank One, Texas.
- EDS is providing planning and information services for Security Corporation's four affiliate banks, migrating their two existing systems to an EDS system and providing remote item processing for all locations.
- First Interstate Bank of Southern Louisiana has renewed a long-term agreement with EDS to include item capture, bulk filing, cash letter preparation, and automation of the office environment and loan documentation area with LAN and optical storage capabilities.

Recent significant insurance and health care wins include the following situations:



- IT consulting and information services were extensively used to install advanced membership and claims systems and a management data base information reporting system for Blue Shield of California.
- Planned and developed a new, integrated medical information system for HMOs and large group practices for InterPractice Systems, a joint venture between EDS and the Harvard Community Plan of Brookline (MA).
- EDS was awarded its largest contract ever in the health and benefits area (extending a 2-year relationship) and the second-largest commercial contract in company history--by Blue Cross and Blue Shield of Massachusetts. Under the 10-year, systems management agreement, EDS assumed responsibility for all IT planning and services.
- EDS won a contract with Group Health Cooperative of Puget Sound, the nation's second largest staff-model HMO, to plan and develop a software license and service contract for a managed care administrative system to support membership, billing, provider management, authorization management, and claims processing.
- EDS was awarded a 3-year contract with Blue Cross and Blue Shield of Texas to upgrade its Medicare claims processing system and provide ongoing consulting and maintenance.
- EDS won a contract to design an imaging and intelligent character recognition (ICR) system for Sanus Corp. Health System, a managed care company. This is the first imaging and ICR agreement EDS has signed with an HMO and builds on EDS' existing imaging and ICR installations at several Blue Cross and Blue Shield Plans.
- EDS won a contract to design and provide a dedicated services to Emperion Corporation, a benefits administration and managed care services company that specializes in helping employers control their health care costs.
- EDS won contracts with Bruno's Inc., owner of 253 food stores; McRae's, a family-owned regional department store retailer; Smith's Food and Drug Centers; and Montgomery Ward & Co. to design and develop





Significant wins in telecommunications include:

- A six-year systems integration contract with Video Cable Communication (VCC) of Buenos Aires to plan, design and develop a systems solution for VCC's information management and billing needs
- A long-term agreement with long distance telecommunications provider Advanced Telecommunications Corporation (ATC) to plan and provide a range of operator services. The agreement complements an existing contract under which EDS oversees the operation of ATC's billing system.
- A multiyear contract to design and develop services to install a satellite television network for Multimedia Marketing Networks
- A six-year contract to plan and design a system to provide switch tape processing, bill production and mailing of customer invoices for regional interexchange carrier Business Telecom Inc.
- A two-year consulting and services agreement with Venezuela's national telephone company

Significant transportation industry wins include the following:

- In early 1993, EDS was awarded a ten-year information technology agreement with Carnival Airlines to plan and design a method to provide services from EDS' Shared Airline Reservation System and Phoenix Flight Planning System. EDS will manage the voice and data networks required to support the systems.
- EDS was awarded a five-year contract from Air Aruba to plan and provide capabilities of the SHARES Airline Passenger Processing System, network management, and a dedicated data telecommunications network.

Significant wins in energy and utilities industries include the following:

- EDS and Date Marine Systems Limited were awarded a contract by British Petroleum Exploration to provide information technology support services and offshore communications.
- A 10-year agreement with Washington Water Power to provide IT consulting, application development, processing, system maintenance, and information center support



- A contract with IES Industries, a utility holding company whose principal subsidiaries include Iowa Electric Light and Power and Iowa Southern Utilities, to design and provide services.

Manufacturing wins of significance include:

- A systems development contract from Allied Signal to plan, design, develop and implement a system that provides worldwide access to information on suppliers, contracts, parts and commodities using a client/server-based repository.
- A 10-year agreement from Bethlehem Steel Corp. to plan and manage all of Bethlehem Steel's computer and communications operations—from process and control computers on the plant floor to the mainframe systems that run the accounting and finance operations.
- EDS was awarded a contract with Del Monte Foods to provide all planning, applications enhancements, information processing, and telecommunications management.
- EDS won a contract with Baxter Diagnostics to plan, develop, test, and implement a quality management system.
- EDS was selected by Nestle USA to plan and manage the migration of Nestle's corporate data processing center from Los Angeles to Tempe.
- EDS has a 10-year contract valued at \$100 million with Signetics Company of Sunnyvale (CA), a subsidiary of North American Philips Corporation to handle all information services, IT consulting and operations.

Recent international contract examples of significance include the following:

- In April 1993, EDS and Kooperativa Furbundet (KF), the fifth largest business conglomerate in Sweden, announced an agreement in principle by which EDS will become KF's primary IT services supplier under a 10-year outsourcing relationship. EDS will be taking over KF's IT services, including IT consulting and operations, a business with 1992 revenues of \$98 million and nearly 600 employees.
- In Britain, EDS-Scion won a contract with London Underground Limited to provide consulting and technical support to the centrally



controlled, train-arrival and service-status system for London Underground's Central Line.

- In Spain, EDS signed an agreement with Deutz-Diter, Spanish subsidiary of German Diesel engine producer Klockner-Humboldt-Deutz AG, to plan and implement an integrated manufacturing system that includes production, commercial, and financial modules.
- In Europe, EDS won the largest systems management contract awarded in 1992 in France. EDS will plan, develop, maintain, and operate warehouse, logistics, and distribution applications for Mory TNTE, the road freight and transportation subsidiary of the Novalliance Group
- EDS was awarded a 10-year agreement with Australia-based Southern Cross Airlines Holdings Ltd. to manage reservations, financial, and flight operation systems and telecommunications for Southern Cross' new carrier, Compass Airlines. Work includes consulting and planning for improvements.
- EDS was selected by Polska Telefonii Komorkowa to plan, design and provide the information management and billing system for Poland's national cellular network.

Significant General Motors work includes:

- A contract to plan, design, install and operate GM's large private digital telecommunications network.
- A long-term agreement to provide all computer information and communications services (including consulting) for GM's North American Operations activities.
- A contract to implement GM's Product Description System for all North American vehicle platforms. For the first time in GM's history, vehicle assembly specifications are now common at these locations due to EDS consulting and services.
- An agreement to plan and provide card processing and network communications services to Household Credit Services and GM in support of GM's new multipurpose credit card.



### 3. MARKET MODEL

- Market Image/Positioning

EDS presents an image of a vendor that has a high level of capability in the use of IT as well as consulting capabilities.

EDS tries to position itself as the vendor to consider first for large organizations that are considering major changes in business that will involve the use of IT. EDS will point out that it has the consulting and information services know-how necessary to achieve results and create value for clients.

The Consulting Services activity will provide strategic consulting including BPR alone or with other services to achieve the various objectives of clients. EDS stresses that these and all its services can help clients take steps toward the changes that will bring them business benefits or increased value.

IT Consulting will be provided alone or with SI and professional services contracts. It includes the analysis, design and planning work necessary to develop software products and utilize hardware and networks to meet customer needs.

Systems operations planning and assignments often involve IT consulting and occasionally strategic consulting to plan for and utilize data center/network operations, applications management and development, and business processing and outsourcing services.

- Market Growth

The market growth of EDS consulting work over the last five years is shown in Exhibit 7.

- Customer/client satisfaction strategy

The methods that EDS utilizes in planning for and reviewing work on client assignments is planned to ensure satisfaction. Personnel try to work closely with clients and "live" at their companies. The company training and indoctrination has helped them to develop this approach to work. In addition, EDS has developed industry capabilities and cross industry knowledge of applications like payroll or skills like imaging that meet reception with clients. Clients are made to feel that they are meeting people who know what they are doing.





**Exhibit 7**

**Market Growth of  
EDS Consulting Business  
Total Consulting Business**

	<u>U.S</u>	<u>Worldwide</u>
1992	296	382
1991	235	295
1990	200	230
1989	170	192
1988	145	165

01A

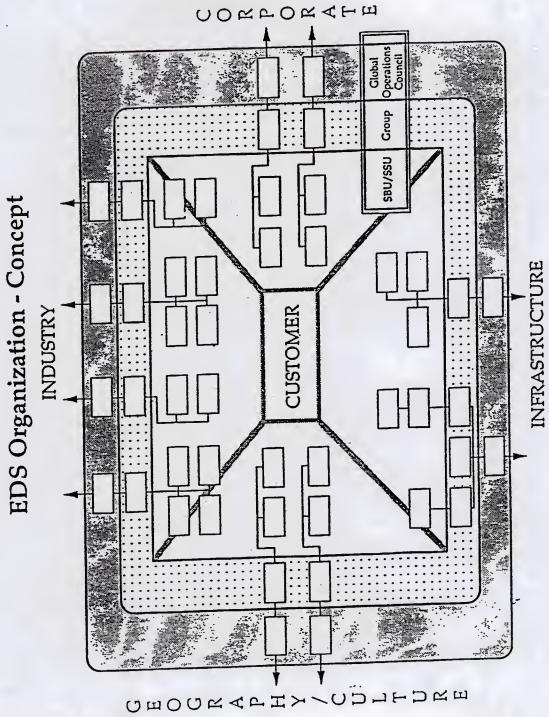
The company organization has been redrawn to illustrate the concept that customers are at the center of groups devoted to their industries, their location or geography, the corporate organization and the infrastructure of EDS as shown in Exhibit 8.

Finally, EDS management is highly conscious of being successful in terms of meeting client objectives on projects, and project managers who don't meet that goal are weeded out rapidly.

- Target Clients/Accounts

EDS targets a number of accounts in the vertical markets that it serves for continuing business. The following list illustrates the wide range of markets and types of companies that EDS provides information and consulting assignments to:





22A

Market (INPUT classification)	Client
Discrete Manufacturing	Cummins Engine Signetics General Motors Motorola Prince Manufacturing Chris Craft
Process Manufacturing	National Steel Anchor Glass Bethlehem Steel Cyprus Minerals Westmoreland U.S. Borax and Chemical Del Monte
Transportation	Continental Virgin Atlantic America West
Retail Distribution	McKesson Drug Montgomery Ward
Utilities	Washington Water Power IES Services
Telecomm	Western Union Neodata Advanced Telecom MCI
Banking and Finance	Fidelity, Bank (NJ) Chase Bank Continental Bank
Insurance	BC/BS National Heritage
Health	Interpractise Systems Baxter Diagnostics
Federal Govt	U.S. Navy (Many Offices) Civil Aviation Authority





State & Local Govt

Chicago  
Michigan DSS  
Beijing Municipal Services

Miscellaneous

Meredith Construction

- Advertising/Promotion Strategy

The advertising/promotion strategy of EDS emphasizes that it can produce value for customers through consulting and information services because it has developed the highest level of IT expertise and knowledge available as well as methods that can produce results. EDS also characterizes itself as a company that knows how to deal with change, one that is able to help clients take advantage of business and IT change to achieve objectives or create value.

- Specialization

EDS addresses a broad range of the market for consulting and information services, but has developed specialization in certain capabilities and market areas.

In strategic consulting services, prime attention is given to BPR (business process reengineering). Attention is also given to business strategic planning. Other types of strategic consulting including organizational and financial planning have been done to support assignments. Attempts are not made to specialize in selling strategic consulting to clients unless prospects have approached EDS with that service in mind. EDS tends to approach all prospects as though their business situation and needs must be explored first and an array of services including consulting, SI, professional services and systems operations should be considered as means of achieving objectives.

EDS will address all vertical market areas but it has more concentration in certain areas. There is a concentration of activities and organization supporting certain vertical markets as well as a means of addressing cross industry markets. The vertical market emphasis is shown below:

- Marketing/Sales Strategy

EDS uses advertising, promotions and contact to develop interest in large companies and government organizations for the use of its services, but EDS will also approach likely candidates for services



with specific plans for improving revenues, increasing productivity or gaining competitive capabilities.

If an organization contacts EDS or responds to contacts, EDS will respond with presentations and plans for follow up steps, analyses of objectives, review of present IT facilities and organizations and other steps designed to develop a working relationship. Presentations will stress the industry knowledge and IT capabilities of EDS and success stories in similar situations. Where interest in BPR is shown or BPR seems needed, EDS will attempt to arrange a presentation on the subject.

Where consulting is called for as the first step of assignments, marketing and sales strategy will focus on an analysis of business planning as well as architecture and applications planning. As part of its business planning, EDS will recommend an analysis of business process design to identify the applications and activities best suited to meet corporate goals.

- Sales/Marketing Organization

Sales and marketing responsibility for the business of each strategic business unit or SBU (EDS has 38) is included in the responsibilities of the SBU together with systems and operations. There are consultants and managers in each SBU responsible for developing or generating more business from accounts as well as personnel that are selling or attempting to get a small project or project step started with target accounts.

The overall organization has business development groups in each geographical unit as well as market development units in each SBU to assist in planning and carrying out sales and marketing activities.

- Key Success Stories

Success stories that EDS has released information on or mentioned in recent promotions include the following:

At McKesson Drug, EDS conducted consulting work to identify and describe in detail, the target for IT work, more accurate response to customer orders. IT consulting and SI services were them utilized to select and develop a technological approach for materials tracking that would meet business needs. The approach that was developed that utilizes radio and IT technology is felt to be the most advanced systems of its type.



Strategic and IT consulting were also employed in a project for Del Monte where one of the objectives was to improve the overall business processes that utilized computing systems. The processes were analyzed and reorganized, business objectives were developed and applications specified to achieve those objectives. This project not only enabled Del Monte to upgrade its use of IT substantially, it provided Del Monte means of forecasting exactly when goods would be delivered, eliminated some distribution costs, and provided substantial reduction in operating costs.

Another illustration of the successes that EDS has had is found in the project carried out for Bethlehem Steel where BPR and other strategic consulting was carried out. The project enabled Bethlehem Steel to integrate plant and corporate activities and implement a business information planning process. In addition, the inventory of IT capabilities and applications was upgraded considerably and substantial improvements were made in work processes. IT consulting as well as information services were utilized to accomplish these results.

The foregoing examples illustrate that EDS is very interested in strategic consulting that leads to or is part of larger assignments. Stand alone consulting assignments are often carried out as a means of starting to work with a prospect that has the potential for additional work, particularly SI or systems operations work.

- Account Management Strategies

Accounts are managed through the SBU's that have sold and managed projects for them. However, EDS has organized its business structure so that accounts may have interaction with any of the support services, industry or cross industry knowledge or technological capabilities available in the company. In effect, the account or customer is in the middle of the EDS structure as shown in Exhibit 8. This structure tends to support account management and initiation of additional work with customers.



#### 4. DELIVERY MODEL

- Global Delivery Strategy

EDS delivers consulting and other services globally through offices in 30 countries that report to regional organization units as shown in the table in Exhibit 9.

- Number of Offices

There are offices in 30 countries and all 50 states that can sell or be involved in the delivery of consulting work.

- Management Systems and Organization

The SBU's are responsible for business development, sales and sales support, products and services and the profitability of their units as well as the planning needed to meet goals. SBU's must work with other SBU's and Strategic Support Units (SSU's) to obtain the resources, products and services needed to meet customer needs.

Group executives are responsible for the five year business plans that guide SBU's and the systems and activities that coordinate marketing and selling functions, quality and customer satisfaction. In the Industry, Infrastructure, and Corporate Components of the organization, (see Exhibits 10 and 11), group executives are responsible for developing strategy for their functions. In the Geography/Culture components, group executives are responsible for the strategies within their defined geographical areas.

- Industry Focus

There is a heavy industry focus at EDS. Industry SBU's carry out sales and delivery of services to assigned accounts in the U.S. The SBU's operating under geographic groups orient their work by industry and call upon industry SBU's to aid them when necessary. Specific industry emphasis is shown in the SBU's listed in Exhibit 11.

Cross industry units or horizontal SBU's are also part of the EDS organization. They offer capabilities in such areas as AI, telecommunications and payment processing. These units are not staff groups, however. They must generate and perform projects to survive. There are also "Center of Service" groups that attempt to instill capabilities in SBU's. They must align themselves with industry SBU's to become involved in projects.





## Exhibit 9

### Geographical Organization

<u>Area</u>	<u>Subareas</u>
Americas	U.S. Canada Mexico South America Central America
Europe	North Europe U.K. Benelux Scandinavia Central Europe Germany Southern Europe France Spain Italy
Asia/Pacific	Japan Korea Australia and New Zealand Taiwan Hong Kong China Singapore

27A

## Exhibit 10

ELECTRONIC DATA SYSTEMS CORPORATION  
ORGANIZATION COMPONENTS

COMPONENT	GROUP	UNIT(S)
Infrastructure	Administration	Chief Information Office; Employee Administration; Purchasing; Real Estate
	Business Development	Americas; Asia/Pacific and Japan; Europe
	Centers of Service	Core Capabilities; Electronic Commerce; Shared Services; Technical Products; Unigraphics
	Consulting	—
	Customer Business Services	Account Services; Field Services
	Employee Development	Compensation; Industry Training; Leadership Development; Quality; Staffing; Technical Development
	Infrastructure Engineering	Applied Engineering; Core Engineering
	Market Development	Marketing; Marketing Support; Sales Leadership; Strategic Planning
	Operating Services	Operating Services—Client/Server; Operations; Operations—Europe
Research & Development	—	
	Technology Architecture	Infrastructure Planning; Systems & Methods; Technology Architecture—Client/Server
Corporate	Audit; Communications & Public Affairs; Controller; Government Affairs; Legal; Tax; Treasurer	—

1000

27B

## Exhibit 11

ELECTRONIC DATA SYSTEMS CORPORATION  
ORGANIZATION COMPONENTS

COMPONENT	GROUP	UNIT(S)
Industry	General Motors	Planning and Integration; GM Europe; Advanced Technology; Powertrain and Delco Electronics; North American Vehicle Sales and Marketing; Dealer Systems; Worldwide Components; Operations and Staffs Support; Allison Transmission, AGT, and Electro-motive; N.A. Passenger Car & Truck Platforms; Regional Support Centers
	Manufacturing	Manufacturing and Distribution; High Technology
	Financial	Large Financial Institutions; Small Financial Institutions; GMAC
	Transportation	Transportation
	Communications	Communications
	Energy	Energy
	Insurance	Health; Property & Casualty; Life
Geography/Culture Americas	U.S.	Government—Federal; Government—Military; Government—State and Local; Commercial Services
	Non U.S.	Canada; Mexico; South and Central America
Geography/Culture Europe	Europe—Central	Germany
	Europe—North	U.K.; Benelux and Scandinavia
	Europe—South	France; Spain and Italy
Geography/Culture Asia/Pacific	Japan	Japan
	Asia/Pacific	Korea; Australia and New Zealand; Taiwan; Hong Kong; China; Singapore

(continued)



There is now a Consulting Group that can assist SBU's in selling or supplying strategic consulting or can attempt to generate consulting services in coordination with industry units.

- Service Lines

EDS offers strategic consulting as well as IT consulting services. EDS can offer these services together with other services or on a separate stand alone basis.

Strategic consulting services offered by EDS include BPR and strategic business planning. BPR is the chief service offered at the present time. EDS has also supplied other types of strategic consulting including organization and financial planning and change management. Also, allies have been called upon to aid in the supply of a wider line of strategic consulting services.

IT consulting is generally provided together with SI and professional services, although stand alone projects have been carried out to establish relations with prospects.

IT consulting can also be provided in the delivery of systems operation services when it is necessary to analyze the IT resources of customers and the steps that will be necessary to move their work to an EDS facility.

- Resource Allocation

Resources are allocated from the Consulting Services group to meet needs of SBU's. Although there are some personnel that are specialists in software development, networks or other technical areas, many EDS staff members can be assigned to consulting or SI/professional services tasks. They have been cross trained to handle a variety of assignments.

- Organizational Structure

There are both industry and geographical aspects to organization, as shown in Exhibits 10 and 11, although the chief orientation of EDS is toward industry support. Personnel are organized in SBU's, SSU's, corporate or infrastructure units reporting to groups as shown in these exhibits. Exhibit 8 shows how these units fit together to carry on business.





- Centers of Excellence/Expertise

Centers of Service provide a high level of expertise in new areas such as imaging. These centers must align themselves with industry units to become involved in projects where they can provide their expertise to clients. Horizontal SBU's also provide expertise in certain areas such as telecommunications or AI, but they must generate business to survive. EDS tries to make areas of expertise become involved in projects rather than staff support in most cases.

The Consulting Services Group is a center of expertise for strategic consulting services, particularly BPR, as well as a participant in projects.

There are also 20 Information Processing Centers and 84 data centers that strive to provide excellence in systems operations services as well as in support to various customer or sales needs.

The EDSNET global network can also be thought of as a center of expertise in telecommunications technology.

- Strategic Fit With Other Units/Businesses

There is a close strategic fit between the consulting services sold by EDS and information services work since they are all sold as part of a single concept, helping a client create value through the use of EDS services. The consulting services must be selected that will help clients make meaningful steps toward meeting that goal.

Unless they are sold together as parts of a project, the consulting services and other information services must also be selected, sold and performed so that they will help a client achieve a meaningful goal to meet the business objectives of EDS.

- Project Management

The average strategic consulting project produces revenues of \$300,000, involves about 4 people and takes 3 to 4 months. There are many larger ones as well as short jobs that are done as small stand alone jobs to initiate work at a target account. IT consulting projects generally involve an average revenue of \$250,000 and 4 to 5 people over a period of 4 months.



However, IT consulting is often billed together with SI or professional services work, and it can involve tasks that will not finish until later in a project. Also, there are stand alone IT consulting jobs that are done as initial tasks with customers that have a small fee. They may involve a review of IT capabilities, problems with existing systems or the effect of new technologies on existing IT work.

- **Billing Rates and Procedures**

Personnel charges can vary from about \$850 to \$2000 per day (or higher for certain specialties) for consulting and other work. Personnel time is collected from personnel on a regular basis and billed monthly unless arrangements are made to charge at the end of project phases or projects.

- **Project Management Staff**

All projects have project managers or leaders responsible for the work, standards and procedures and billing time. The person in charge of a project may be working in the capacity of project manager although he or she is not recognized as such in the organization. The SBU is in charge of project staffing. SSU and administrative staff can be called on to aid with technical and administrative work.

- **Opportunities for Additional Business**

EDS has an outlook that leads to additional business. Their representatives and professionals are always thinking of next steps that can help clients achieve more value through their use of IT.

In many cases, a customer will start with a consulting step that will develop ideas about the objectives that can be achieved. This step usually leads to more consulting work or projects that involve consulting and other services.

## **5. INTELLECTUAL CAPITAL**

- **Strengths/Weaknesses**

EDS states that one of its chief strengths in intellectual capital is the knowledge of industries and industry problems which its staff has gained.

EDS also feels that it has one of the highest levels of IT knowledge and expertise in information services including IT consulting that a vendor can deliver.



EDS has developed a high level of strategic consulting capability through hiring people from McKinsey and other consultants and big 6 firms.

The ability of its personnel to deliver successful projects must also be classified as a major strength.

Another major strength is the knowledge that its staff has about the steps or procedures to be taken to solve client problems or achieve client objectives. This knowledge is more of a personal capability than the procedures and methodologies of EDS.

The organization in SBU's is a source of strength for EDS. It helps to support the project oriented mentality of EDS personnel, which enables them to respond rapidly to opportunities.

- R&D Expenditure and Related Items

EDS has a Research and Development Group which is concerned with new developments in information technology as well as in techniques for using this technology or the delivery of information services. This Group has been involved in the introduction of client/server technology, the use of imaging, research on software engineering and object oriented techniques, and investigation of parallel processing capabilities.

EDS also utilizes its Centers of Service to participate in research and development activities in support of services that are being offered to clients.

- Skills/Project Practices Database

In performing BPR and other strategic consulting, EDS intends to utilize best-practices databases (which are referred to internally as Repositories of Best-Practice). EDS intends to become the leader in the use of this capability, and has already developed two such databases, one for the automotive industry (based on experience at GM) and one for the aerospace industry.



In addition to the internally developed databases, EDS has contracted to utilize external best-practice databases from the following sources

- American Productivity and Quality Center, Houston
- National Center for Manufacturing Practices (NMCP), Ann Arbor, Michigan
- Iacocca Institute, Lehigh, PA
- Inter-Matrix, Chicago
- Navy, Pentagon, Washington, D.C.

EDS utilizes the influence of GM to inquire about best-practices databases and gain the cooperation of best-practices companies.

## **6. INFRASTRUCTURE**

### **• IT and Administration Systems**

An outline of the infrastructure of EDS is shown in Exhibit 10. EDS utilizes internal IT capabilities to support personnel and aid in administration of projects, but also relies on training that employees have received to guide them. EDS encourages employees to find ways around some procedures if it helps to achieve objectives.

### **• Proprietary Methodologies**

A Business Information Planning methodology helps identify critical business needs and create the functional processes to meet them. These processes allow multiple disciplines to coordinate efforts effectively and consistently.

A Systems Life Cycle methodology directs the development and operation of information systems. This methodology incorporates the experience that EDS has gained in 30 years into a systematic process that has been reliable in achieving results.

A Computer-Aided Platform Engineering tool automates the process of identifying and integrating the best combination of technologies for a specific business need. This tool is based on research in an extensive evaluation laboratory in the R&D Group and experience with many implementations.





- Communication Systems

EDS has an extensive global network EDSNET that integrates many of its separate communication capabilities.

- Software/tools

EDS has an extensive library of systems software capabilities including its own DBMS and communication software products for some equipment as well as some specialized software engineering tools. EDS also has special capabilities developed to aid with project assignments as described above in Proprietary Methodologies.

EDS has developed a large set of capabilities for its major market areas including manufacturing, banking, insurance, health care and transportation. Many of these capabilities are running at EDS processing centers.

EDS also owns an extensive set of CAD/CAM capabilities through acquisition of the Unigraphics operation.

## **7. PEOPLE**

- Size of Professional Staff

The total staff of EDS amounts to about 80,000. The total number of professionals is about 75000. About 12000 of these personal have engaged in consulting work, but a number of those participated in other assignments as well

- Employee Recruiting/Staffing Strategy

EDS recruits and hires college graduates chiefly, but will hire personnel with experience to meet needs. This is what has been done to build up the strength of the Consulting Services Group. New personnel are generally put on assignments with experienced EDS personnel in order to ensure that the EDS approach to jobs is taken. Recruits from college are usually given experience at sites before they are given any training.



- Promotion and Turnover

Promotion is not carried out on a definite program although personnel who are performing well are likely to be promoted. The promotion may be delayed while the person is being tested on critical assignments. An EDS person knows that this can result in more recognition.

Turnover is higher than with Andersen Consulting or other members of the big 6, but EDS wants to cull out the people who will not give that extra measure.

- Compensation/Incentives

EDS personnel that conduct IT or strategic consulting work can have annual salaries between \$45 to 100,000 or even higher if executives become involved in important strategic considerations. Bonuses of 20 to 35% can be paid to the professionals on assignments.

- Training for Each Level of Professional

As noted in section B-2 on training investments, EDS has a combination of a set training course for new college and less experienced recruits and advanced training when it is desirable. The initial program is rigid, but there is flexibility in training thereafter. Some of the courses that are taken in technical and leadership training are designed for advanced personnel.

- Internal Development vs. Outside Recruiting

EDS favors internal development to some extent but is ready to use outside recruiting to meet needs as was shown in its hiring of experienced consultants for the Consulting Group.

- Profile of Experience/Education for Key Consulting Positions

A college graduate who has been hired and trained by EDS and has been successful in challenging assignments is most likely to advance in position. However, where there has been a need to bring in people from the outside, they may be given a chance to move up if they absorb the EDS method and culture.



## C.

---

### ANALYSIS

#### 1. Core Competencies of Consulting Business

Andersen Consulting does not have all the core competencies of the consulting business. It concentrates on BPR including business process design, strategic business planning and change management to some extent. In the first two subjects, it has acquired a high level of skills. The areas of consulting that it addresses less or not at all include organization planning and finance.

#### 2. Strengths and Weaknesses

##### • Strengths

Ability to maintain a high growth rate. EDS generates an image of a company that continues to be successful because it knows what it is doing

High level of knowledge and expertise available for vertical markets of interest including manufacturing, financial/banking, government and insurance.

Ability to put together a high level of consulting expertise in BPR.

High level of technical expertise in many areas of IT including network use, client/server technology and imaging.

Ability to demonstrate IT expertise and working solutions to many business problems at test sites.

Dedication of personnel on project assignments.

Extensive software products that address current problems in manufacturing, banking, government and insurance applications.

Reputation as a successful systems integrator that has managed many complex projects.



- Weaknesses

Possibility of a sale or merger.

Contractual arrangements with GM.

Inventory of mainframe systems and software that is owned by EDS.

Pressure of company methods and way of conducting business on technical staff.

A feeling that some prospects get about the ability of EDS to take charge of their planning.

### **3. Key Differentiators**

A very large number of well satisfied clients.

The delivery of very complex solutions to business problems that required consulting and IT expertise.

The depth of knowledge that EDS has about selected industry markets, their problems and IT solutions.

The depth of knowledge that EDS has about IT technology.

The ability to get tremendous productivity out of a project staff.

The ability to get productivity out of non project groups by stimulating or driving them to get involved in projects. This keeps research and new development costs lower.









**PROFILE: HEWLETT PACKARD**

**IBM Consulting Group  
Strategy Department**

**February, 1994**

**Presented by**

**INPUT**

**The Atrium at Glenpointe  
400 Frank W. Burr Blvd.  
Teaneck, NJ 07666  
201-801-0050  
201-801-0441 (fax)**







- Profile of Experience/Education for Key Consulting Positions

The profile includes two types: a college graduate who has been hired and trained by DEC fills most IT consulting jobs; and a recruit from a big 6 or consulting firm that has consulting expertise and some IT knowledge fills most strategic consulting positions.

## C.

---

### ANALYSIS

#### 1.

#### Core Competencies of Consulting Business

DEC does not have all the core competencies of the strategic consulting business. It has capabilities in business strategy consulting and BPR. There is also knowledge in change management and other subjects among the staff members.

DEC has strength in IT consulting based on its extensive project work.

#### 2. Strengths and Weaknesses

- Strengths
- Reputation of the firm for knowledge of sophisticated solutions to computing and network problems.
- Intensive knowledge of vertical markets of interest such as manufacturing and banking.
- High level consulting personnel available to discuss problems and steps to undertake.
- Ability to demonstrate complex business applications of IT.
- Methodologies to test possible IT solutions and to develop solutions to business problems.
- Capabilities to support use of client/server solutions to business problems.





- Extensive software products that address current problems in manufacturing, utilities, insurance, distribution and a number of other areas.
- Reputation as a successful systems integrator that has managed many complex projects.
- Weaknesses
  - DEC does not have the consulting stature of Andersen Consulting or the consulting firms such as McKinsey, Booz or Bain which can make it difficult to sell some consulting jobs. DEC has a capability that can help in situations where it is likely to sell products.
  - DEC is not investing in BPR capabilities in the way that EDS has done. EDS will obtain BPR business due to the level of investment and the program that have been undertaken.
  - The strategic consulting services of DEC are not organized and operating as a separate business venture. AC does not achieve the revenue per professional of the consulting companies listed above or of some information services firms such as EDS.
  - DEC is in a difficult financial position. Earnings must be increased for product systems, and that will make it difficult for DEC to invest the time and effort needed to get consulting going the most effective way. The emphasis will have to be on aiding the sales of product systems when possible.

### 3. Key Differentiators

- The IT technical strength and knowledge of DEC.
- In depth knowledge of some industries.
- Network capabilities
- Size of information services business
- Ability to deliver complex solutions



**PROFILE: EDS**

**IBM Consulting Group  
Strategy Department**

**February, 1994**

**Presented by**

**INPUT**

**The Atrium at Glenpointe  
400 Frank W. Burr Blvd.  
Teaneck, NJ 07666  
201-801-0050  
201-801-0441 (fax)**



## Table of Contents

Section	Page
A. Overview	1
1. Executive Summary	1
2. Firm Background	3
B. Details	6
1. Financial Performance	6
2. Strategy	10
3. Market Model	21
4. Delivery Model	27
5. Intellectual Capital	30
6. Infrastructure	32
7. People	33
C. Analysis	35
1. Core Competencies	35
2. Strengths and Weaknesses	35
3. Key Differentiators	36



## EDS

A.

---

### OVERVIEW

#### 1. EXECUTIVE SUMMARY

- Vision Statement

EDS creates lasting value for its customers through the use of consulting and information services to meet varying objectives that involve the application of IT. In performing this work, EDS is dedicated to providing the highest level of IT and business knowledge and expertise that is available.

- Market Image

EDS has the image of a very knowledgeable and successful vendor in the sale and delivery of information services and particularly outsourcing that will solve business problems through the use of information technology. During the last year, EDS has added to that image to the extent that the company is now thought of as offering a broader range of consulting services, and particularly BPR, to aid in the use of information technology.

- Core Consulting Competencies

EDS provides strategic and IT consulting services on a stand alone basis and together with SI and professional services to all vertical market groups. Strategic consulting is composed chiefly of BPR work at the current time. It will probably amount to over 75% of strategic consulting work in 1994.





Consulting and other services are offered on a worldwide basis from offices in 30 countries, although the major volume of consulting work has been in the U.S.

EDS focuses its chief attention in marketing and performing consulting services and other business on a set of market targets. The chief market targets for non GM business include manufacturing, financial services, insurance, telecommunications, health and government. These targets account for over 85% of domestic business.

- Future Directions

EDS has taken significant steps to strengthen its BPR capabilities through a hiring program for personnel experienced in BPR and the negotiation of an alliance with Michael Hammer, a popular speaker, consultant and author on BPR. He will be used to stimulate sales of BPR consulting and evangelize prospects and customers who have questions or doubts about BPR projects. This is similar to the arrangement Hammer had with CSC until he terminated the contract.

Further research is being carried out on image processing, software engineering, client/server technology and object oriented software by EDS to meet the needs of IT consulting and other information services work.

EDS also has strength as an agent of change (a phrase that has been used in an EDS annual report) in the use of new information technology and business innovation or reengineering.

- Key Highlights

EDS has a large number of jobs and volume of consulting work, and projections of its growth in consulting work are at a compound rate of over 16%.

The steps that EDS has taken to establish the Consulting Services activity should result in growth of BPR and other strategic consulting work. In addition, the large and growing volume of information services work guarantees continuing growth of IT consulting.

The steps that EDS has taken to build up its consulting business include hiring experienced consultants from leading consulting and big 6 organizations and establishing a relationship with M. Hammer that will aid getting business.



The mission and strategies of EDS are well suited to further development of consulting business since they are focused on helping organizations gain increased values or a higher level of success through changes.

## 2. FIRM BACKGROUND

- History

EDS was launched as a company by Ross Perot about thirty years ago, and it became one of the largest providers of information services in the world before it was acquired by General Motors in 1984. The service that it became most known for and remains the leader in is outsourcing. This service has enabled EDS to establish a number of state of the art computing centers throughout the world.

EDS operates as an independent subsidiary of GM, and GM is its largest single customer. Its revenues from GM are not generally counted in comparing business with other vendors since this business is captive. There have been discussions recently about between GM and other companies about buying EDS, but no arrangement is believed to be under consideration at this time.



- Key Milestones

In 1962, Ross Perot established EDS, and in 1984, GM acquired full control of EDS. In 1992, EDS earned more from non GM sources than from GM.

- Officers

Lester M. Alberthal, Jr.\* Chairman, President, CEO

John R. Castle, Jr.\* Senior Vice President, Secretary

Paul J. Chiapparone\* Senior Vice President

Gary J. Fernandes\* Senior Vice President

Joseph M. Grant\* Senior Vice President, CFO

J. Davis Hamlin\* Senior Vice President

Jeffrey M. Heller\* Senior Vice President

Dean Linderman\* Senior Vice President

G. Stuart Reeves\* Senior Vice President

John A. Bateman Vice President

Jurgen Berg, Vice President

Larry L. Bryant, Vice President

James P. Buchanan, Vice President

Helmut W. Burger, Vice President

J. Coley Clark, Vice President

D. Gilbert Friedlander, Vice President, General Counsel

John R. Harris, Vice President

Joseph W. Holmes, Vice President

Gilbert E. Hurley, Vice President

Claiborne H. Johnson, Jr., Vice President



Henry E. Johnson, Vice President  
Alice H. Lusk, Vice President  
Robert McCashin, Vice President  
Gary B. Moore, Vice President  
John J. Muscarella, Vice President  
George C. Newstrom, Vice President  
Jose O. Ofman, Vice President  
Gary L. Rudin, Vice President  
Glen D. Self, Vice President  
Robert N. Sharpe, Vice President  
Frank L. Stoneking, Vice President  
Barry W. Sullivan, Vice President  
Anthony E. Weynand, Vice President  
John W. Wroten, Jr., Vice President  
William P. Benac Treasurer  
H. Paulett Eberhart Controller

\* designates directors of EDS

• Core Competencies of the Corporation

EDS has been recognized as the leading vendor of outsourcing (systems operation) services as well as one of the leading firms in the delivery of SI services. Almost-one half of its business is from systems operation services and about 30% is from SI business. As part of its information services business, EDS also markets professional services, turnkey systems and processing services. EDS also provides consulting services as a part of SI and professional services assignments as well as on a stand alone basis.





EDS supplies equipment from IBM, Hitachi Data Services and other vendors as part of its SI services. More of the equipment involved in contracts now involves client/server technology, but much of the business that EDS has, is involved with the use of mainframe technology.

## **B.**

---

### **DETAILS**

#### **1. FINANCIAL PERFORMANCE**

- **General Financial Performance**

The most recently issued balance sheet is shown in Exhibit 1. The balance sheet for 1993 may not be available for several months.

- **Five Year Historical Revenue Analysis**

Overall revenues for five years are shown in Exhibit 2. Exhibit 3 shows the split of revenues geographically.

A division of revenues by vertical market for U.S. markets is shown in Exhibit 4, below and 4A in a graphical form.



# Exhibit 1

As of and for the Years Ended December 31,

<i>(in millions, except per share amounts)</i>	1992	1991	1990	1989	1988
<b>Operating results</b>					
Revenues	\$8,218.9	\$7,099.0	\$6,108.8	\$5,466.8	\$4,844.1
Cost of revenues	6,205.8	5,415.1	4,639.0	4,168.6	3,749.5
Selling, general and administrative	969.3	761.9	663.0	605.2	500.0
Interest expense	43.0	28.3	18.1	12.7	5.2
Provision for income taxes	365.3	330.7	291.8	245.0	205.3
Cumulative effect of accounting change	—	(15.5)	—	—	—
<b>Separate Consolidated Net Income</b>	<u>\$ 635.5</u>	<u>\$ 547.5</u>	<u>\$ 496.9</u>	<u>\$ 435.3</u>	<u>\$ 384.1</u>
<b>Per share data</b>					
<b>Earnings Attributable to GM Class E</b>					
Common Stock on a Per Share Basis before cumulative effect of accounting change	\$1.33	\$1.17	\$1.04	\$0.90	\$0.79
<b>Earnings Attributable to GM Class E</b>					
Common Stock on a Per Share Basis after cumulative effect of accounting change	\$1.33	\$1.14	\$1.04	\$0.90	\$0.79
<b>Cash Dividends Per Share of GM Class E</b>					
Common Stock	\$0.36	\$0.32	\$0.28	\$0.24	\$0.17
<b>Financial position</b>					
Property and equipment, net	\$1,720.7	\$1,551.6	\$1,197.1	\$1,083.1	\$1,076.6
Operating and other assets	2,245.8	2,206.0	1,651.8	1,377.2	1,000.0
Current assets	2,157.0	1,945.6	1,716.4	1,457.9	1,339.4
Current liabilities	1,903.1	2,396.7	1,653.9	1,494.5	1,377.2
Noncurrent debt	561.1	281.9	285.1	326.4	401.9
Expenditures for property and equipment	639.0	673.2	514.8	382.5	300.5
Stockholder's equity	3,063.4	2,610.3	2,181.8	1,763.6	1,403.9
Total assets	6,123.5	5,703.2	4,565.3	3,918.2	3,416.0

## STOCK DATA

Title of Class: GM Class E common

Number of Shareholders of Record as of December 31, 1992: 393,068

Ticker Symbol: GME

## TRANSFER AGENT AND REGISTRAR

First Chicago Trust Company of New York

30 West Broadway, New York, New York 10007-2192

## INDEPENDENT AUDITORS

KPMG Peat Marwick

Dallas, Texas

*EDSNET and Unigraphics are registered marks of Electronic Data Systems Corporation*

*IXplus and Property View are trademarks of Electronic Data Systems Corporation.*

*The EDN 1992 Annual Report was produced by EDS Corporate Communications.*

6A

## Exhibit 2

ELECTRONIC DATA SYSTEMS CORPORATION

INPUT

ELECTRONIC DATA SYSTEMS CORPORATION  
 FIVE-YEAR FINANCIAL SUMMARY  
 (\$ millions, except per share data)

ITEM	FISCAL YEAR				
	1992	1991	1990	1989	1988
Revenue	\$8,218.9	\$7,099.0	\$6,108.8	\$5,466.8	\$4,844.1
• Percent increase from previous year	16%	16%	12%	13%	9%
Income before taxes	\$1,000.8	\$893.7	\$788.7	\$680.3	\$589.4
• Percent increase from previous year	12%	13%	16%	15%	12%
• Gross margin	12%	13%	13%	12%	12%
Net income	\$635.5	\$547.5	\$496.9	\$435.3	\$384.1
• Percent increase from previous year	16%	(a) 10%	14%	13%	19%
• Net margin	8%	8%	8%	8%	8%
Earnings per share (b)	\$1.33	\$1.14	\$1.04	\$0.90	\$0.77
• Percent increase from previous year	17%	10%	16%	17%	17%

(a) Includes \$15.5 million in charges for the cumulative effect of a change in the method of accounting for income taxes.

(b) Restated to reflect a 2-for-1 stock split declared on February 3, 1992.

A further breakdown of 1992, 1991, 1990 revenue follows (\$ millions):

REVENUE SOURCE	FISCAL YEAR		
	1992	1991	1990
Systems and contracts			
• Outside customers	\$4,806.7	\$3,666.3	\$2,787.5
• GM and subsidiaries	<u>3,348.5</u>	<u>3,362.2</u>	<u>3,234.2</u>
	\$8,155.2	\$7,028.5	\$6,021.7
Interest and other	\$63.7	\$70.5	\$87.1
<b>TOTAL</b>	<b>\$8,218.9</b>	<b>\$7,099.0</b>	<b>\$6,108.8</b>

EDS management attributes 1992 revenue increases to the following:

- Business with non-GM customers rose 31% during 1992 and accounted for 59% of total revenue, compared with 52% of total revenue in 1991 and 47% of total revenue in 1990.

6B

## Exhibit 3

### Geographic Segments

The following presents information about the Company's operations in different geographic areas (in millions):

As of and for the Year Ended December 31, 1992				
	U.S.	Europe	Other	Total
Systems and other				
contracts revenue				
GM and subsidiaries	\$2,562.9	\$ 546.5	\$239.1	\$3,348.5
Outside customers	<u>3,693.6</u>	<u>828.3</u>	<u>284.8</u>	<u>4,806.7</u>
Total systems and other				
contracts revenue	<u>\$6,256.5</u>	<u>\$1,374.8</u>	<u>\$523.9</u>	<u>\$8,155.2</u>
Operating income	<u>\$ 773.3</u>	<u>\$ 131.3</u>	<u>\$ 75.5</u>	<u>\$ 980.1</u>
Identifiable assets	<u>\$4,750.3</u>	<u>\$1,008.7</u>	<u>\$364.5</u>	<u>\$6,123.5</u>

As of and for the Year Ended December 31, 1991				
	U.S.	Europe	Other	Total
Systems and other				
contracts revenue				
GM and subsidiaries	\$2,620.2	\$501.6	\$240.4	\$3,362.2
Outside customers	<u>3,006.4</u>	<u>457.9</u>	<u>202.0</u>	<u>3,666.3</u>
Total systems and other				
contracts revenue	<u>\$5,626.6</u>	<u>\$959.5</u>	<u>\$442.4</u>	<u>\$7,028.5</u>
Operating income	<u>\$ 687.8</u>	<u>\$107.8</u>	<u>\$ 55.9</u>	<u>\$ 851.5</u>
Identifiable assets	<u>\$4,498.2</u>	<u>\$960.1</u>	<u>\$244.9</u>	<u>\$5,703.2</u>

As of and for the Year Ended December 31, 1990				
	U.S.	Europe	Other	Total
Systems and other				
contracts revenue				
GM and subsidiaries	\$2,561.9	\$439.8	\$232.5	\$3,234.2
Outside customers	<u>2,378.5</u>	<u>226.7</u>	<u>182.3</u>	<u>2,787.5</u>
Total systems and other				
contracts revenue	<u>\$4,940.4</u>	<u>\$666.5</u>	<u>\$414.8</u>	<u>\$6,021.7</u>
Operating income	<u>\$ 575.5</u>	<u>\$ 77.2</u>	<u>\$ 67.0</u>	<u>\$ 719.7</u>
Identifiable assets	<u>\$3,812.2</u>	<u>\$555.7</u>	<u>\$197.4</u>	<u>\$4,565.3</u>





---

**Exhibit-4**

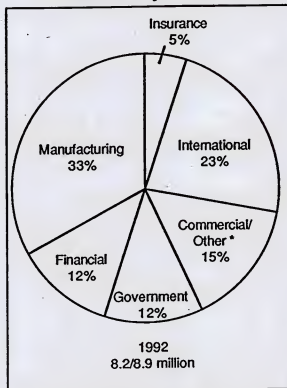
Market	<u>1992</u>		<u>1991</u>	
	Revenue \$ Mill	Percent of Total	Revenue \$ Mill	Percent of Total
Manufacturing	2710	33	2880	36
Financial Services	990	12	1040	13
Government	990	12	800	10
Insurance	410	5	320	4
International Markets (Not broken down)	1890	23	160	8
Other/ Commercial	1230	15	1360	17

Market	<u>1990</u>		<u>1989</u>	
	Revenue \$ Mill	Percent of Total	Revenue \$ Mill	Percent of Total
Manufacturing	2505	41	2240	41
Financial Services	915	15	820	15
Government	610	10	600	11
Insurance	305	5	330	6
International Markets (Not broken down)	1100	18	820	15
Other/ Commercial	670	11	655	12



## Exhibit 4 A

### Revenue by Market Sector



\* Commercial/other primarily includes health services, retail trade, energy, communications, and transportation

7A

## Exhibit 5

As of and for the Years Ended December 31,

<i>in millions, except per share amounts)</i>	1992	1991	1990	1989	1988
<b>Operating results</b>					
Revenues	\$8,218.9	\$7,099.0	\$6,108.8	\$5,466.8	\$4,844.1
Cost of revenues	6,205.8	5,415.1	4,639.0	4,168.6	3,749.5
Selling, general and administrative	969.3	761.9	663.0	605.2	500.0
Interest expense	43.0	28.3	18.1	12.7	5.2
Provision for income taxes	365.3	330.7	291.8	245.0	205.3
Cumulative effect of accounting change	—	(15.5)	—	—	—
<b>Separate Consolidated Net Income</b>	<u>\$ 635.5</u>	<u>\$ 547.5</u>	<u>\$ 496.9</u>	<u>\$ 435.3</u>	<u>\$ 384.1</u>
<b>Per share data</b>					
Earnings Attributable to GM Class E					
Common Stock on a Per Share Basis					
before cumulative effect of					
accounting change	\$1.33	\$1.17	\$1.04	\$0.90	\$0.79
Earnings Attributable to GM Class E					
Common Stock on a Per Share Basis					
after cumulative effect of					
accounting change	\$1.33	\$1.14	\$1.04	\$0.90	\$0.79
Cash Dividends Per Share of GM Class E					
Common Stock	\$0.36	\$0.32	\$0.28	\$0.24	\$0.17
<b>Financial position</b>					
Property and equipment, net	\$1,720.7	\$1,551.6	\$1,197.1	\$1,083.1	\$1,076.6
Operating and other assets	2,245.8	2,206.0	1,651.8	1,377.2	1,000.0
Current assets	2,157.0	1,945.6	1,716.4	1,457.9	1,339.4
Current liabilities	1,903.1	2,396.7	1,653.9	1,494.5	1,377.2
Noncurrent debt	561.1	281.9	285.1	326.4	401.9
Expenditures for property and equipment	639.0	673.2	514.8	382.5	300.5
Stockholder's equity	3,063.4	2,610.3	2,181.8	1,763.6	1,403.9
Total assets	6,123.5	5,703.2	4,565.3	3,918.2	3,416.0

### STOCK DATA

Title of Class: GM Class E common

Number of Shareholders of Record as of December 31, 1992: 393,068

Ticker Symbol: GME

### TRANSFER AGENT AND REGISTRAR

First Chicago Trust Company of New York

30 West Broadway, New York, New York 10007-2192

### INDEPENDENT AUDITORS

KPMG Peat Marwick

Dallas, Texas

*EDSNET and Unigraphics are registered marks of Electronic Data Systems Corporation.*

*IXplus and Property View are trademarks of Electronic Data Systems Corporation.*

*The EDS 1992 Annual Report was produced by EDS Corporate Communications.*



- Operating Results (Margins)

A table of operating results for EDS is shown in Exhibit 5.

- Projected Growth

EDS has maintained a high rate of growth for non GM business for the last five years, generally between 25 and 32% except for 1990 when it was 17%. but GM business has pulled overall growth down to the 15 to 20% level. Although non GM business is increasing over time and lessening the impact of the growth rate of GM business, INPUT estimates the impact of competition on non GM business and limits of growth at GM will keep the compound growth rate about 17% over the next five years.

- Fee Volume/Revenue from Consulting

Consulting services sold on a stand alone basis or with SI and professional services are included in the figures shown below in Exhibit 6. Consulting services can be included in SI and professional services contracts, even when the consulting services were sold as a separate step leading to a SI or professional services contract.

---

**Exhibit 6**

**Strategy Consulting and IT Consulting revenues**

<u>Year</u>	<u>IT Consulting and Strategy Consulting in \$ Millions by Year</u>	
	<u>1991</u>	<u>1992</u>
U.S.	240	296
Worldwide	280	382





## Hewlett Packard

A

---

### OVERVIEW

#### 1. EXECUTIVE SUMMARY

- Vision Statement

HP makes basic contributions in information technology products and services that apply innovation to customer needs.

- Market Image

HP has an image of a company that combines the ability to deliver current computing technology in workstations and client/server systems with the ability to find out what a substantial group of prospects and present customers are looking for in products and services

- Core Consulting Competencies

HP provides IT consulting services together with the professional services that it offers to clients and dealers. A small portion of the support that HP provides as IT consulting is strategic consulting in nature.

Services are offered on a worldwide basis.

- Future Directions

There are no definite plans to establish a strategic consulting group although the group handling IT consulting will expand strategic consulting activity.



By 2000, HP expects 70% of the demand for its products and services to come from outside the U.S.

· Key Highlights

HP is one of the leading manufacturers of IT equipment in the world and has developed a large set of information services to support equipment sales.

As part of its information services business, HP has developed strong IT consulting capability.

HP has obtained business at a number of leading companies around the world.

## **2. FIRM BACKGROUND**

· History

Hewlett Packard was founded in 1939 as a manufacturer of electronic measurement and other equipment. It became a well known manufacturer of electronic calculators and computer printers before turning its attention to computers. During the last decade, its growth in minicomputer and workstation production placed the firm among the top computer manufacturers in the world. HP has also continued to make electronic measurement and medical equipment.

HP has been an innovator in computing equipment, employing a number of newer technologies in its equipment offerings including RISC technology, the use of object oriented software capabilities, color X stations, the use of Novell NetWare on RISC platforms, and the use of clusters of HP workstations with Supercomputers. HP has also been an innovator in marketing, making effective use of VARs to market its equipment and software products. In support of this business and direct sales customers, HP has developed a sizable information services business that has education and training, software development and IT consulting capabilities.

· Key Milestones

At the end of the last decade, worldwide earnings went above \$1 billion. Orders for computer products went above \$10 billion in 1991.

A voluntary severance program went into effect in 1993 to improve profitability.



· Officers

David Packard	Chairman of the Board
Lewis E. Platt	President and CEO
Richard A. Hackborn	Executive Vice President of computer product organize
William E. Terry	Executive Vice President of Measurements
Robert P. Wayman	Executive Vice President of Finance and Administration
James L. Arthur	Senior Vice President and GM Worldwide Customer Support
Alan D. Bickell	Senior Vice President and Managing Director Geographic Operations
Franco Mariotti	Senior Vice President and Director Europe, Middle East and Africa
Richard W. Anderson	Vice Pres. and General Mgr. Microwave and Communications
Edward W. Barnholt	Vice Pres. and General Mgr.
Richard E. Belluzzo	Vice Pres. and General Mgr. Inkjet Products Group
Joel S. Birnbaum	Vice Pres. Research and Development
S.T. Jack Brigham III	Vice Pres. Corp Affairs and General Counsel
Douglas K. Carnahan	Vice Pres. and General Mgr. Printing Systems Group
William F. Craven	Vice Pres. and General Mgr. Components Group



Robert J. Frankenberg	Vice Pres. and General Mgr. Personal Info. Prod. Group
Dieter Hoehn	Vice Pres. and General Mgr. Analytical Products Group
Benjamin L. Holmes	Vice Pres. and General Mgr. Medical Products Group
Michael C. Leavell	Vice Pres. and General Mgr. Integrated Systems Group
Richard S. Love	Vice Pres. and General Mgr. Computer Manufacturing
Franz Nawratil	Vice Pres. and Manager Worldwide Sales and Marketing Computer Systems
F.E. Peterson	Vice President Personnel
Charles W. Richion	Vice Pres. and Mgr. Strategic Third Parties Computer Systems Org.
Willem P. Roelands	Vice Pres and Gen. Mgr. Computer Systems Organization
Frederic N. Schwetmann	VP Circuit Technology
Raymond A. Smelek	VP and GM Mass Storage
Richard C. Watts	VP. and Mgr. Worldwide Sales, Dist., Support
Raymond Cookingham	Controller
George F. Newman, Jr.	Treasurer





The list of officers reflects a product manufacturing oriented company.

- Core Competencies of the Corporation

HP feels that its major competencies are in applying innovation to computing technology and marketing and other products and in ascertaining what prospects and clients want. The innovation in marketing refers to the use of third party sales including VAR channels as well as research on client and prospect needs.

One of HP's major competencies is also in manufacturing new, quality technology at a low price.

HP has developed competencies in a number of technologies including RISC, networks, UNIX and object oriented capabilities.

HP has a competency in supporting its marketing channels, direct and through VARs, with a high level of support.

Information services capabilities are also a competency of HP.

## **B. DETAILS**

### **1. FINANCIAL PERFORMANCE**

- General Financial Performance

Balance sheets are shown in Exhibit 1.

- Five Year Historical Revenue Analysis

Revenues and earning for five years are shown in Exhibit 2.

Exhibit 3 shows the split of revenues globally.

A division of revenues by vertical markets is shown in Exhibit 4.

- Operating Results (Margins)

These results are shown in Exhibit 5.



## Exhibit 1A

### Consolidated Balance Sheet Hewlett-Packard Company and Subsidiaries

October 31 In millions except par value and number of shares	1992	1991
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 641	\$ 625
Short-term investments	394	495
Accounts and notes receivable	3,497	2,976
<b>Inventories:</b>		
Finished goods	1,271	1,100
Purchased parts and fabricated assemblies	1,334	1,173
Other current assets	542	347
<b>Total current assets</b>	<b>7,679</b>	<b>6,716</b>
<b>Property, plant and equipment:</b>		
Land	402	390
Buildings and leasehold improvements	2,994	2,779
Machinery and equipment	3,196	2,792
<b>Total</b>	<b>6,592</b>	<b>5,961</b>
Accumulated depreciation	(2,943)	(2,616)
<b>Total</b>	<b>3,649</b>	<b>3,345</b>
Long-term receivables and other assets	2,372	1,912
	<b>\$13,700</b>	<b>\$11,973</b>
<b>Liabilities and shareholders' equity</b>		
<b>Current liabilities:</b>		
Notes payable and short-term borrowings	\$ 1,384	\$ 1,201
Accounts payable	925	686
Employee compensation and benefits	913	837
Taxes on earnings	490	381
Deferred revenues	449	375
Other accrued liabilities	933	583
<b>Total current liabilities</b>	<b>5,094</b>	<b>4,063</b>
Long-term debt	425	188
Other liabilities	633	210
Deferred taxes on earnings	49	243
<b>Shareholders' equity:</b>		
Preferred stock, \$1 par value (authorized: 300,000,000 shares; issued: none)	-	-
Common stock and capital in excess of \$1 par value (authorized: 600,000,000 shares; issued and outstanding: 250,824,000 in 1992 and 251,547,000 in 1991)	874	1,010
Retained earnings	6,625	6,259
<b>Total shareholders' equity</b>	<b>7,499</b>	<b>7,269</b>
	<b>\$13,700</b>	<b>\$11,973</b>

The accompanying notes are an integral part of these financial statements.

5A

## Exhibit 1B

### Consolidated Balance Sheet Hewlett-Packard Company and Subsidiaries

October 31 In millions except par value and number of shares	1990	1989
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 1,077	\$ 906
Accounts and notes receivable	2,883	2,494
Inventories:		
Finished goods	1,008	966
Purchased parts and fabricated assemblies	1,084	981
Other current assets	458	384
<b>Total current assets</b>	<b>6,510</b>	<b>5,731</b>
<b>Property, plant and equipment:</b>		
Land	385	337
Buildings and leasehold improvements	2,567	2,315
Machinery and equipment	2,613	2,330
	5,565	4,982
Accumulated depreciation	(2,364)	(2,089)
	3,201	2,893
Long-term receivables and other assets	1,684	1,451
	<b>\$11,395</b>	<b>\$10,075</b>
<b>Liabilities and shareholders' equity</b>		
<b>Current liabilities:</b>		
Notes payable and short-term borrowings	\$ 1,896	\$ 1,341
Accounts payable	660	642
Employee compensation and benefits	773	748
Taxes on earnings	257	309
Deferred revenues	347	256
Other accrued liabilities	510	447
<b>Total current liabilities</b>	<b>4,443</b>	<b>3,743</b>
Long-term debt	139	474
Other liabilities	189	164
Deferred taxes on earnings	261	248
<b>Shareholders' equity:</b>		
Preferred stock, \$1 par value (authorized: 300,000,000 shares; issued: none)	-	-
Common stock and capital in excess of \$1 par value (authorized: 600,000,000 shares; issued and outstanding: 244,085,000 in 1990 and 237,644,000 in 1989)	739	459
Retained earnings	5,624	4,987
<b>Total shareholders' equity</b>	<b>6,363</b>	<b>5,446</b>
	<b>\$11,395</b>	<b>\$10,075</b>

The accompanying notes are an integral part of these financial statements.  
Certain amounts have been reclassified to conform to the 1990 presentation.

5B

October 31	1988	1987
In millions except par value and number of shares		
<i>Assets</i>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 800	\$2,145
Short-term investments	118	500
Accounts and notes receivable	1,860	1,561
Inventories:		
Finished goods	680	480
Purchased parts and fabricated assemblies	798	637
Other current assets	164	167
<b>Total current assets</b>	<b>4,420</b>	<b>5,490</b>
<b>Property, plant and equipment:</b>		
Land	320	275
Buildings and leasehold improvements	2,052	1,883
Machinery and equipment	1,958	1,761
	4,330	3,919
Accumulated depreciation and amortization	(1,814)	(1,591)
	2,516	2,328
Other assets	561	315
	<b>\$7,497</b>	<b>\$8,133</b>
<i>Liabilities and shareholders' equity</i>		
<b>Current liabilities:</b>		
Notes payable and short-term borrowings	\$ 507	\$ 979
Accounts payable	486	364
Employee compensation and benefits	635	488
Taxes on earnings	390	423
Deferred revenues	202	150
Other accrued liabilities	350	331
<b>Total current liabilities</b>	<b>2,570</b>	<b>2,735</b>
Long-term debt	61	88
Other liabilities	157	134
Deferred taxes on earnings	176	154
<b>Shareholders' equity:</b>		
Preferred stock, \$1 par value (authorized: 300,000,000 shares; issued: none)	-	-
Common stock and capital in excess of \$1 par value (authorized: 600,000,000 shares; issued and outstanding: 234,218,000 in 1988 and 257,251,000 in 1987)	234	776
Retained earnings	4,299	4,246
<b>Total shareholders' equity</b>	<b>4,533</b>	<b>5,022</b>
	<b>\$7,497</b>	<b>\$8,133</b>





## Exhibit 2A

### Consolidated Statement of Earnings Hewlett-Packard Company and Subsidiaries

For the years ended October 31 In millions except per share amounts	1992	1991	1990
Net revenue:			
Equipment	\$12,354	\$11,019	\$10,214
Services	4,056	3,475	3,019
	<u>16,410</u>	<u>14,494</u>	<u>13,233</u>
Costs and expenses:			
Cost of equipment sold	6,625	5,634	5,072
Cost of services	2,533	2,224	1,921
Research and development	1,620	1,463	1,367
Selling, general and administrative	4,228	3,963	3,711
	<u>15,006</u>	<u>13,284</u>	<u>12,071</u>
Earnings from operations	1,404	1,210	1,162
Interest income and other income (expense)	17	47	66
Interest expense	96	130	172
Earnings before taxes and effect of accounting change	1,325	1,127	1,056
Provision for taxes	444	372	317
Earnings before effect of accounting change	881	755	739
Transition effect of accounting change, net of taxes	332	-	-
Net earnings	<u>\$ 549</u>	<u>\$ 755</u>	<u>\$ 739</u>
Earnings per share before effect of accounting change	\$ 3.49	\$ 3.02	\$ 3.06
Transition effect per share of accounting change, net of taxes	1.31	-	-
Net earnings per share	<u>\$ 2.18</u>	<u>\$ 3.02</u>	<u>\$ 3.06</u>

The accompanying notes are an integral part of these financial statements.  
See discussion of the 1992 change in accounting for retiree medical benefits on page 38 of this report.



## Exhibit 2B

### Consolidated Statement of Earnings Hewlett-Packard Company and Subsidiaries

For the years ended October 31 In millions except per share amounts	1990	1989	1988
Net revenue:			
Equipment	\$10,214	\$ 9,404	\$ 7,709
Services	3,019	2,495	2,122
	<u>13,233</u>	<u>11,899</u>	<u>9,831</u>
Costs and expenses:			
Cost of equipment sold	5,072	4,513	3,494
Cost of services	1,921	1,578	1,338
Research and development	1,367	1,269	1,056
Selling, general and administrative	3,711	3,327	2,859
	<u>12,071</u>	<u>10,687</u>	<u>8,747</u>
Earnings from operations	1,162	1,212	1,084
Interest income and other income (expense)	66	65	135
Interest expense	172	126	77
	<u>1,056</u>	<u>1,151</u>	<u>1,142</u>
Earnings before taxes	317	322	326
Provision for taxes	<u>739</u>	<u>829</u>	<u>816</u>
Net earnings	\$ 3.06	\$ 3.52	\$ 3.36
Net earnings per share			

The accompanying notes are an integral part of these financial statements.



### Exhibit 3A

In millions	1992	1991	1990
<b>Net revenue</b>			
<b>United States:</b>			
Unaffiliated customer sales	\$ 7,212	\$ 6,390	\$ 6,025
Interarea transfers	3,720	3,223	2,816
	<u>10,932</u>	<u>9,613</u>	<u>8,841</u>
<b>Europe:</b>			
Unaffiliated customer sales	6,083	5,378	4,764
Interarea transfers	649	411	286
	<u>6,732</u>	<u>5,789</u>	<u>5,050</u>
<b>Other areas:</b>			
Unaffiliated customer sales	3,115	2,726	2,444
Interarea transfers	1,120	731	635
	<u>4,235</u>	<u>3,457</u>	<u>3,079</u>
<b>Eliminations</b>	<u>(5,489)</u>	<u>(4,365)</u>	<u>(3,737)</u>
	<u>\$16,410</u>	<u>\$14,494</u>	<u>\$13,233</u>
<b>Earnings from operations</b>			
United States	\$ 1,220	\$ 1,191	\$ 1,069
Europe	308	292	363
Other areas	372	224	281
Eliminations and corporate	(496)	(497)	(551)
	<u>\$ 1,404</u>	<u>\$ 1,210</u>	<u>\$ 1,162</u>
<b>Identifiable assets</b>			
United States	\$ 7,309	\$ 6,487	\$ 6,124
Europe	3,869	3,314	3,074
Other areas	2,026	1,711	1,708
Eliminations and corporate	496	461	489
	<u>\$13,700</u>	<u>\$11,973</u>	<u>\$11,395</u>

Net revenue from sales to unaffiliated customers is based on the location of the customer. Interarea transfers are sales among HP affiliates principally made at market price, less an allowance primarily for subsequent manufacturing and/or marketing costs. Earnings from operations and identifiable assets are classified based on the location of the company's facilities.

Identifiable corporate assets, which are net of eliminations, comprise primarily cash, property, plant and equipment, and other assets, and aggregate \$2,889 million in 1992, \$2,634 million in 1991 and \$2,786 million in 1990.



## Exhibit 3B

### Geographic Area Information

The company operates in a single industry segment: the design, manufacture and service of measurement and computation products and systems.

Net revenue, earnings from operations and identifiable assets, classified by the major geographic areas in which the company operates, are as follows:

In millions	1990	1989	1988
<b>Net revenue</b>			
<b>United States:</b>			
Unaffiliated customer sales	\$ 6,025	\$ 5,561	\$ 4,763
Interarea transfers	2,816	2,634	2,064
	<u>8,841</u>	<u>8,195</u>	<u>6,827</u>
<b>Europe:</b>			
Unaffiliated customer sales	4,764	4,131	3,304
Interarea transfers	286	271	250
	<u>5,050</u>	<u>4,402</u>	<u>3,554</u>
<b>Other areas:</b>			
Unaffiliated customer sales	2,444	2,207	1,764
Interarea transfers	635	601	457
	<u>3,079</u>	<u>2,808</u>	<u>2,221</u>
	<u>(3,737)</u>	<u>(3,506)</u>	<u>(2,771)</u>
<b>Eliminations</b>	<u>\$13,233</u>	<u>\$11,899</u>	<u>\$ 9,831</u>
<b>Earnings from operations</b>			
United States	\$ 1,069	\$ 881	\$ 858
Europe	363	359	235
Other areas	281	379	325
Eliminations and corporate	(551)	(407)	(334)
	<u>\$ 1,162</u>	<u>\$ 1,212</u>	<u>\$ 1,084</u>
<b>Identifiable assets</b>			
United States	\$ 6,065	\$ 5,875	\$ 4,668
Europe	3,074	2,532	1,998
Other areas	2,014	1,365	986
Eliminations and corporate	242	303	206
	<u>\$11,395</u>	<u>\$10,075</u>	<u>\$ 7,858</u>





## Exhibit 4

### Revenue by Vertical Group

<u>Vertical Market Group</u>	<u>Percent of 1992 Revenue</u>
Manufacturing	38
Federal, State and Local Gov't	16
Services- Distribution, Financial, Business	14
Health and Education	11
Other	21



## Exhibit 5

### Selected Financial Data Hewlett-Packard Company and Subsidiaries Unaudited

For the years ended October 31  
In millions except per share  
amounts and employees

	1992	1991	1990	1989	1988	1987
U.S. orders	\$ 7,569	\$ 6,484	\$ 6,143	\$ 5,677	\$ 4,780	\$4,262
International orders	9,192	8,192	7,342	6,483	5,290	4,117
<b>Total orders</b>	<b>\$16,761</b>	<b>\$14,676</b>	<b>\$13,485</b>	<b>\$12,160</b>	<b>\$10,070</b>	<b>\$8,379</b>
Net revenue	\$16,410	\$14,494	\$13,233	\$11,899	\$ 9,831	\$8,090
Earnings from operations	\$ 1,404	\$ 1,210	\$ 1,162	\$ 1,212	\$ 1,084	\$ 905
Earnings before effect of accounting change	\$ 881	\$ 755	\$ 739	\$ 829	\$ 816	\$ 644
Net earnings	\$ 549	\$ 755	\$ 739	\$ 829	\$ 816	\$ 644

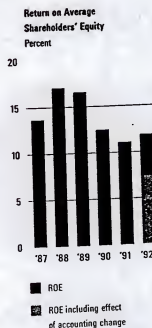
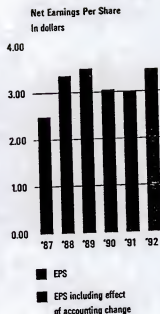
Per share:

Earnings before effect of accounting change	\$ 3.49	\$ 3.02	\$ 3.06	\$ 3.52	\$ 3.36	\$ 2.50
Net earnings	\$ 2.18	\$ 3.02	\$ 3.06	\$ 3.52	\$ 3.36	\$ 2.50
Cash dividends	\$ .725	\$ .48	\$ .42	\$ .36	\$ .28	\$ .23

At year-end:

Total assets	\$13,700	\$11,973	\$11,395	\$10,075	\$ 7,858	\$8,547
Employees	92,600	89,000	92,200	94,900	86,600	82,300

See discussion of the 1992 change in accounting for retiree medical benefits on page 38 of this report.





· Projected Growth

Over the next 5 years, the revenues of HP should increase at a compound rate of about 11%. HP will maintain its ability to upgrade the use of technology, but competition in the computing equipment business will increase. The rate of growth for information services including IT consulting will be about 13%.

· Fee Volume/Revenue from Consulting

Consulting services sold on a stand alone basis or with SI and professional services are included in the figures shown below in Exhibit 6

### Exhibit 6

#### Strategy Consulting and IT Consulting revenues

<u>Year</u>	<u>IT Consulting and Strategy Consulting in \$Millions by Year</u>	
	<u>1991</u>	<u>1992</u>
U.S.	48	55
Worldwide	105	120

---

#### Related revenues

	<u>SI and Professional Services Systems Development</u>	
	<u>1991</u>	<u>1992</u>
U.S.	116	133
Worldwide	254	290

· Typical Consulting Project Revenue



Almost all consulting work consists of IT consulting projects done on a stand alone basis or with other information services work. IT consulting is usually a part of SI or professional services projects and generally range between \$100,000 to \$150,000 per project, but there are smaller as well as larger contracts.

- Business Development Costs

Business development costs for consulting work are usually included in development costs for professional services/SI work. An estimate of the average development cost that could be allocated to IT consulting work is about 4 to 6% of information services revenues in total.

- Contract Backlog

The IT consulting backlog is distributed across a number of offices and accounts. Contacts have estimated that there is about \$10 million of new IT consulting work ready to start on a worldwide basis for HP.

## 2. STRATEGY

- Vision

HP has a vision of using its ability to rapidly incorporate new technology in its products and services together with its skill in finding out what users want from information technology to maintain a leading position in the information technology business. This vision would include being sensitive to information services needs and meeting them with expanding services capabilities.

- Short Term Strategy

HP is concentrating most of its attention on the software and network capabilities that its users and prospects need or are interested in. Other information services including IT consulting are being used chiefly in a supportive role to help gain business.

- Long Term Strategy

The long range strategy of HP is to develop a more intensive relation with users that will enable HP to play a more important role in planning. This will require an upgrade of information services and IT consulting.

- Mergers and Acquisitions





In 1992, HP acquired the worldwide computer systems and services business of TI.

In 1992, HP also acquired Colorado Memory Systems.

HP acquired the workstation business of Apollo Computer in the recent past.

- Strategic Alliances

HP has a long term joint venture in Japan, Yokogawa-Hewlett Packard that opened a new facility in Kobe in 1992 for computing as well as test and measurement systems and medical products. It was named the best advanced facility in Japan by the Japan Economic Journal.

HP and Novell have an agreement under which HP became the RISC platform to run NetWare.

HP is collaborating with Oki Electric in the development of integrated computer and telecommunications solutions.

HP and Convex have an agreement under which HP is running workstation clusters together with Convex supercomputers.

HP is working with a group of computer manufacturers to promote a standard RISC technology across a range of solutions.

HP has an alliance with IBM for the supply of network products.

- Training Investments

HP provides internal training in services needed to support product sales as well as in its products, in technologies of interest, and in leadership. Trainees will gain insight in the software and hardware products sold by HP but there is not full training in software development, project management and IT consulting topics. Most of that training is gained externally.

There are 40 learning centers around the world used for clients and internal training.

Internal training expenses are less as a percent of revenue, than is the case with leading SI vendors. An estimate of global training costs for HP personnel is about \$20 million.



- Specialties

HP feels that its specialties include implementing large network systems and client/server technology (HP refers to LANs and server systems rather than client/server usually). HP also states that one of its recently developed specialties is downsizing or replacing mainframe systems.

HP also points out that it has specialties in electronic measurement and medical systems.

- Decision-Making Process

Decisions on the products and services to be offered, organization and general market targets are made by upper management. The geographic organization controls operations around the world. Sales management and representatives have authority over sales planning, contact and closing.

- Recent Project Wins And Significance

Recent project wins of significance for HP include the following:

A contract with Mobil to provide the software and hardware support for use of the new R3 SAP manufacturing and distribution software systems. This required IT consulting as well as software development to implement. HP should obtain contracts to support this application system at a number of other sites.

Systems installed at Ciba-Geigy to handle drug development, an important application at the present time.

Contracts with AT&T to install communications equipment and systems, which could lead to many other opportunities in communications.

A contract with Deutsche Bundespost which will involve \$125 million worth of workstations and associated equipment.



### 3. MARKET MODEL

- Market Image/Positioning

HP presents an image of a vendor of information technology that knows how to incorporate new technology in its products and services, offer quality and economy in its products, and find out what its prospects and clients really need.

- Market Growth

The market growth of consulting work over the last five years is shown in Exhibit 7.

- Customer/client satisfaction strategy

HP makes an effort to survey its customers to find out what they need in IT products and services and to pick up general information that can be of aid in service. An effort is also made to ensure that VARs can obtain back up support from HP.



## Exhibit 7

### Growth of Consulting Work

<u>Year</u>	<u>IT and Strategic Consulting Revenues Worldwide</u>
1992	120
1991	105
1990	95
1989	85
1988	76

10A



· Target Clients/Accounts

HP addresses a wide range of markets, but with some gaps in coverage as shown by the following list of client/accounts:

Market (INPUT classification)	Client
Discrete Manufacturing	Levi Strauss Oki Electric American Standard Union Camp Knight Ridder Westinghouse Hanson Industries Gerber Scientific
Process Manufacturing	Ciba-Geigy Mobil Hoechst Perdue U.S. Sugar Baltimore Spice
Distribution	Discount Corp. Tom's Foods
Utilities	Pea River Electric
Telecomm	AT&T France Telecom GTE
Insurance	Mutual of New York Sun Life
Business Services Interpublic	
Health	Cedars-Sinai Northside Hospital



Education

University of Pittsburgh  
Univ. of CA at Berkeley  
Rutgers  
Community College  
Jacksonville Univ.

Government

NASA  
U.S. Armed Forces Institute  
Maryland Dept. of Education  
Maryland Dept. of Revenue  
Rockville City  
Frederick County  
City of Louisville

· Advertising/Promotion Strategy

The advertising/promotion strategy emphasizes the technological resources and knowledge of HP and involvement in new uses of technology with major companies as well as the dedicated service and support which HP has provided for clients. The ability to provide information services and IT consulting to aid prospects and clients is noted in some ads.

· Specialization

HP stresses its specialized capabilities in communication, the use of open systems to facilitate interconnection of multi vendor equipment, the ability to downsize mainframe workloads and support complex or challenging applications of computing technologies. These specializations could all require IT consulting services to plan and implement.

· Marketing/Sales Strategy

HP uses advertising, demonstrations and promotions as well as presentations to develop interest. Contacts from VARs or directly from HP will be used to follow up and close business.

· Sales/Marketing Organization

Sales and sales management personnel are staffed by region, but the sales organization for computing systems related business reports to a separate senior executive from the managing director for regional operations. There is also a separate office for third party sales.



- Key Success Stories

Success stories that HP has focused on in recent promotions include the following:

In order to solve critical problems during surgery, the University of Pittsburgh asked HP to join in the research for a computing system that would meet needs. HP used a team of technicians and IT consultants to analyze the problem and recommend and install a multimedia solution.

HP planned and designed a worldwide system for ITT Sheraton to use for reservations and property management. Part of the solution is a means for obtaining rapid support of any worldwide location from HP.

For a surgical, intensive care unit at Cedars-Sinai, HP designed a solution that would integrate patient data from multiple sources.

- Account Management Strategies

Accounts are generally managed through activities of sales representatives and managers, but there is a Global Sales Program (GSP) ready to support customers who need service from people who know their languages and culture. The GSP works with other sales teams at HP. Special support services can also be assembled to aid accounts.

#### 4. DELIVERY MODEL

- Global Delivery Strategy

HP provides sales, support and information services aid globally through regional offices. Executives in charge of particular functions including computing systems sales, support and other products and services on a global basis monitor activities. Support, such as described above from GSP, can be called upon to support global delivery.

- Number of Offices

There are about 600 sales and support offices including distributorships in 110 countries.



· Management Systems and Organization

Regional offices around the world coordinate sales and support activities as well as administration. Computer systems and other sales groups, as well as support and service are managed by executives in charge of each function, from headquarters. HP uses automated reporting from regional locations to head office functions.

· Industry Focus

HP has specialized experience and more business in some vertical markets, but has not divided its organization to reflect industry volume. Market interest has shaped its focus on certain industries. The relative volume of business is reflected in the following list:

Market Emphasis

Vertical Market Group	Estimated Percentage of 1992 Revenue
Manufacturing	38
Finance/Insurance	3
Distribution	7
Health	5
Education	6
Government	16
Business and Engin. Services	4
Other	21

· Service Lines

In addition to computing, electronic measurement, medical and network equipment, HP offers the following services lines: information services including application and systems software, professional services, SI, customer services and network services. The professional and SI services include IT consulting, education/training and software development. A small portion of the work done by the IT consulting group is strategic consulting in nature.





The strategic consulting that is performed consists of strategic business planning and process analysis.

IT consulting is often delivered together with other SI and professional services.

- Resource Allocation

The services staff in regional offices and headquarters performs IT consulting when requested by sales or contracted for by users through sales or services contacts. The use of services staff is allocated to sales activities.

- Organizational Structure

There is not an organizational unit handling consulting as there is in EDS, CGS and DEC. The sales units in regional offices and headquarters sell IT consulting services to support sales of computing systems. Units of services personnel in regional and headquarters locations perform information services work including IT consulting to support new sales or present customers.

Telemarketers are also used to contact customers and sell and arrange for the delivery of services.

- Centers of Excellence/Expertise

There are HP Labs and customer support facilities at various locations around the world. The laboratories help to develop new capabilities for HP systems such as the multimedia capabilities developed for surgery at the University of Pittsburgh and the network capabilities developed for AT&T.

HP upgraded the level of support available to customers when the Corporate Business Systems products were released in 1992 by introducing the level of excellence in service expected by corporate mainframe customers in its customer support facilities according to contacts at HP.

- Strategic Fit With Other Units/Businesses

The provision of IT consulting is well integrated with other services and HP products since the consulting is provided by the same groups providing other services to accounts. This type of integrated support may limit the level of consulting that can be provided, but the work fits together with the rest of the HP business.



- Project Management

The average experience with consulting projects involves the use of IT consulting together with other information services to support sales or changes in the use of HP products by customers. Occasionally, these assignments will include some strategic consulting as part of the IT consulting assignment.

IT consulting activities involve an average revenue between \$30 to \$150,000 and two to three people and take two to three months. Some projects can be much larger or very small. IT consulting is almost never billed separately from an SI or professional services project. IT consulting can involve tasks that will not finish until other work in a project is complete.

- Billing Rates and Procedures

Personnel charges can vary from about \$500 to \$1000 per day (or higher for certain specialties). Personnel time is collected from personnel on a regular basis and billed at the end of a project in general.

- Project Management Staff

Projects have leaders or project managers responsible for overseeing the work, standards and procedures and time spent.

- Opportunities for Additional Business

HP does not try to obtain additional services business including consulting, by itself as a sales effort, but sales representatives focus on whether client needs are being met, and this will usually generate additional services and product business.

## 5. INTELLECTUAL CAPITAL

- Strengths/Weaknesses

A major strength of HP is the knowledge that personnel have in computing technology and networks.

The ability to consult on IT problems and formulate possible solutions is also a strength.

Another strength is the knowledge of some industries and industry problems which its staff has gained.



The organizational approach that HP is using to bring services and expertise to clients in general can help to develop some solutions, but is limited in solving complex business problems.

HP has a technical image that can inhibit the use of the company to address problems that focus on complex business issues.

- R&D Expenditure and Related Items

HP has a strong commitment to technological research and to surveys of customer needs. In 1992, \$1.6 billion was spent on R & D.

A number of joint ventures are undertaken that involve joint R&D tasks such as work on networks with AT&T and work on a standardized approach to the use of RISC with a group of vendors.

- Skills/Project Practices Database

HP maintains records of project practices on some large projects to aid in similar efforts in the future. Methodologies and procedures are being employed to control, guide and aid work on all projects.

## 6. INFRASTRUCTURE

- IT and Administration Systems

HP utilizes internal IT capabilities to support personnel, gather information on activities and aid in administration. Worldwide training is given to employees to support the use of IT capabilities and internal systems.

- Proprietary Methodologies

HP utilizes methodologies on projects, but they are similar to others employed in the industry.

- Communication Systems

HP has worldwide network capabilities supporting its international operations as well as specialized network capabilities developed to support clients.



- Software/tools

HP has specialized software tools to aid network development as well as OpenView, its network and systems management software. There are also specialized applications for certain industries such as a laboratory management system.

## **7. PEOPLE**

- Size of Professional Staff

There are about 89,000 people, worldwide. The number of professionals engaged in information services including IT consulting numbers about 12,000. (VARs also perform this type of work for HP clients)

- Employee Recruiting/Staffing Strategy

HP hires and trains college graduates as well as hiring some personnel with advanced training.

A number of the personnel handling information services including IT consulting have been hired with experience.

- Promotion and Turnover

There is a definite plan to ensure advancement and promotion. There is an Accelerated Development Program that helps to train managers and ensures that minority employees will have a chance to qualify for senior positions.

Turnover at HP is below industry average for personnel in SI and professional services companies who offer consulting services according to contacts.

There has been a retirement incentive program during the past few years to improve performance.

- Compensation/Incentives

The compensation for staff engaged in IT consulting generally ranges from \$40,000 to \$80,000 with a small number of personnel members receiving higher amounts according to contacts at HP.





- Training for Each Level of Professional

As noted in section B-2 on training investments, HP has a well developed training program, but it does not address all the needs of consulting personnel.

- Internal Development vs. Outside Recruiting

Although HP favors internal development, some personnel have been hired from the outside to meet needs for information services including IT consulting.

- Profile of Experience/Education for Key Consulting Positions

The profile is generally a college graduate who has been hired and trained by HP to handle information services assignments including IT consulting although some staff members have been hired from the outside to meet needs.

## **C.**

---

### **ANALYSIS**

#### **1. Core Competencies of Consulting Business**

HP does not have all the core competencies of the strategic consulting business. It has been able to provide some aid with strategic business consulting and process analysis during IT consulting assignments.

HP has strength in IT consulting based on its extensive project work.

#### **2. Strengths and Weaknesses**

- Strengths
  - Reputation of the firm for delivery of sophisticated and economic technological solutions to computing and network problems.
  - Knowledge of some vertical markets of interest such as manufacturing and local government.
  - Selection of open system and network support software alternatives that provide market opportunities.



- Dedicated services and IT consulting personnel available to discuss problems and steps to undertake.
- Capabilities to support downsizing and use of client/server solutions to business problems.
- Availability of software products that address some areas of manufacturing, utilities, insurance, distribution, government and other markets.
- Reputation as a systems integrator that has managed complex projects.
- Weaknesses
  - HP does not have a consulting stature that can compete with the stature of large SI firms let alone Andersen Consulting, EDS or the consulting firms such as McKinsey, Booz or Bain. HP has to count on its reputation in computing systems and some applications and vertical markets to attract clients. IT consulting and information services work are used to support sales.
  - HP is not investing in strategic consulting capabilities including BPR despite its interest in downsizing work from mainframes.
  - The consulting services of HP are not organized and supported so that a higher level of capability will develop.

### 3. Key Differentiators

- The IT technical capabilities and knowledge of HP.
- The innovation of HP in utilizing RISC, open systems capabilities, and NetWare. HP takes steps that help it to obtain product and services business.
- Knowledge of some industries.
- Alliances with other IT firms who can supply consulting skills as well as complementary technical knowledge.
- Internal technical research.
- Installations at a number of organizations, throughout the world.

