INPUT

MARKET FORECAST

# European Business Integration Market, 1996 - 2001

Business Integration Programme - Europe

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# European Business Integration Market 1996–2001

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# Abstract

The European Business Integration (BI) marketplace grew healthily in 1995 and looks set to enter a period of growth unseen since the late 1980's.

Compound growth of above 15% over the next three years will create tremendous opportunity for BI suppliers of all different types, but particularly for those focused on IT user organisation's *business* rather than *technical* agenda.

BI vendors able to translate the technical possibilities of leading business application products and enhanced network infrastructures into business advantage will extend their leadership in this period of great end user demand. Leading BI vendors in this period will gain significant competitive advantage as the European BI marketplace continues to act as an early indicator of change which will impact on other areas of the IT services industry in the coming years.

This report analyses the major trends and dynamics within the European BI market over the next five years.

The report presents findings from a number of comprehensive surveys conducted amongst European IT managers, detailing their requirements for external services assistance and the ways in which these needs will change over the course of the coming year.

The report profiles leading European BI suppliers and provides estimates of the revenues of leading BI vendors at a European level and for 16 individual European country markets. For each country top 10 vendor rankings are provided for each of the following sub-delivery modes which comprise the BI market; Systems Integration, Turnkey Systems, and Professional Services

Lastly, the reports forecasts the growth of these delivery modes for Europe and the 16 country markets over the period until 2001. Variations in growth are provided for different industry sectors and for delivery mode components.

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-3 Italy 292
-4 Germany 293
-5 France 293
-6 Austria 294
-7 Belgium 294
-8 Denmark 295
-9 Eastern Europe 295
-10 Finland 296
-11 Greece 296
-12 Ireland 297
-13 Netherlands 297
-14 Norway 298
-15 Portugal 298
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***Professional Services***


-20 United Kingdom 301
-21 Italy 301
-22 Germany 302
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-26 Denmark 304
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***Turnkey Systems***
-37 Europe 309
-38 United Kingdom 310
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***Systems Integration***
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-131 Belgium 358
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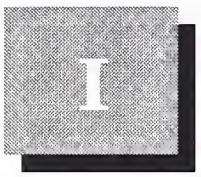


# Introduction

## A Objectives

The European Business Integration (BI) market continued to demonstrate strong demand for external services assistance in 1995.

INPUT's recent research amongst both the supply and demand side of the industry suggests that this growth is set to be exceeded in 1996 and again in 1997.

The BI marketplace is entering a period of growth unseen since the end of the 1980's.

This period of growth is being created by IT user organisation's movement towards "best of breed" business application software packages and towards the new generation of networking technologies which are supporting business processes.

This report monitors the major trends and dynamics which currently are in play in the European Business Integration marketplace and which will shape the nature of competition in this strategically important area over the coming years.

Amongst these major dynamics are the following:

- The delivery of IT services associated with Business Application Software Packages

- The explosive movement towards "network centricity"
- The on-going immediate exploitation of the European -wide telecommunications related opportunity.

This report comments on these trends within the IT user community, sizes IT users' spending on BI related services, analyses revenues BI vendors report from attempting to meet these user requirements, and forecasts the likely changes in these issues over the next five years.

# B
# Scope

This report covers the European Business Integration market. Business Integration, as defined by INPUT, is a "meta" term which reflects the increasingly embedded role technology plays in business processes.

From the point of view of tracking vendor's Business Integration revenues, this meta term has three delivery sub-modes, Systems Integration, Turnkey Systems and Professional services.

This report provides qualitative and quantitative analysis covering all three delivery modes which are described in detail below.

### Systems Integration (SI)

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

The components of a systems integration project are the following:

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

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

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

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

Exhibit I-1

## Products/Services in Systems Integration Projects

*Equipment*

- Information systems
- Communications

*Software Products*

- Systems software
- Applications software

*Professional Services*

- Consulting
  - Feasibility and trade-off studies
  - Selection of equipment, network and software
- Program/project management
- Design/integration
  - Systems design
  - Installation of equipment, network, and software
  - Demonstration and testing
- Software development
  - Modification of software packages
  - Modification of existing software
  - Custom development of software
- Education/training and documentation
- Systems operations/maintenance

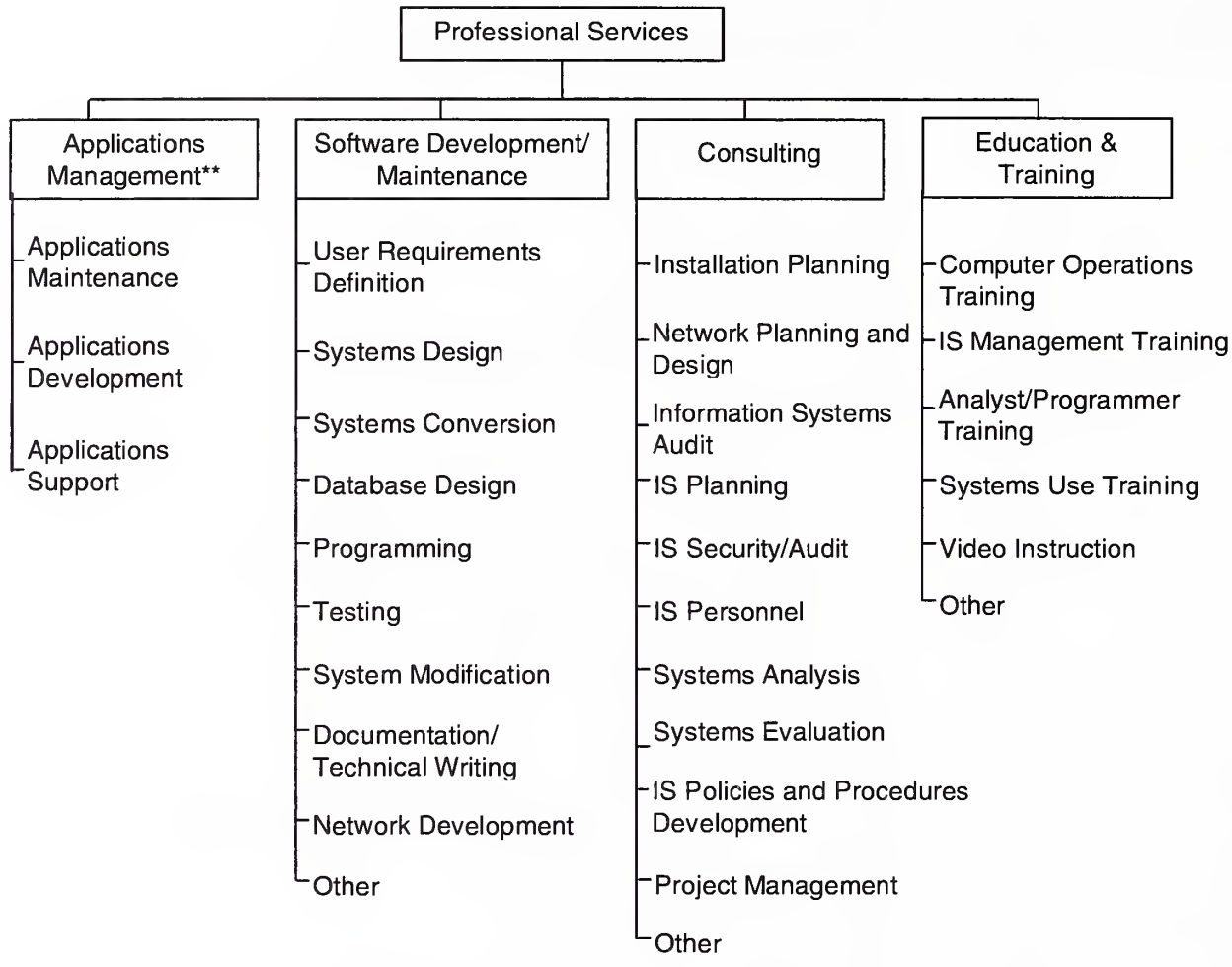
*Other Miscellaneous Products/Services*

- Site preparation
- Data processing supplies
- Processing/network services
- Data/voice communication services

*Source: INPUT*

Exhibit I-2

## Professional Services Market Structure




*Related to computer systems, topics or issues

**Vendor assumes full responsibility on contracted longer-term basis

*Source: INPUT*

### Professional Services

This category includes four submodes: consulting, education and training, software development, and applications management.

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

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

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

- Applications Management: The vendor has full responsibility for maintaining and upgrading some or all of the application systems that a client uses to support business operations and may develop and implement new application systems for the client.

An applications management contract differs from traditional software development as regards the client/vendor relationship. Under traditional software development services, the relationship is project-based. Under applications management it is time-and function-based.

These services may be provided in combination or separately from platform systems operations.

### Turnkey Systems

A turnkey system is an integration of equipment (CPU, peripherals, etc.), systems software and packaged applications software into a single product developed to meet a specific set of user requirements. Value added by the turnkey system vendor is primarily in the software and professional services provided. INPUT categorises turnkey systems into two groups of market sectors as it does for applications software products.

Most CAD/CAM systems and many small business systems are turnkey systems. Turnkey systems utilise standard computers and do not include specialised hardware such as word processors, cash registers, proven control systems, or embedded computer systems for military applications.

Computer manufacturers (e.g. IBM or DEC) that combine software with their own general-purpose hardware are not classified by INPUT as

turnkey vendors. Their software revenues are included in the appropriate software category.

Most turnkey systems are sold through channels known as value-added resellers.

Value-Added Reseller (VAR): A VAR adds value to computer hardware and/or software and then resells it to an end user. The major value added is usually applications software for a vertical or cross-industry market, but also includes many of the other components of a turnkey systems solution, such as professional services, software support and applications upgrades.

Turnkey systems have three components:

- Equipment — computer hardware supplied as part of the turnkey system
- Software products — pre-packaged systems and applications software products

Professional Services — services to install or customise the system or train the user, provided as part of the turnkey system sale.

# C
# Methodology

The research that contributed to this report is derived from the following sources:

- Information supplied by the BI units of IT Services suppliers in response to a questionnaire
- In-depth interviews with 90 major European IT User Organisations. Interviews were conducted with both business and technology executives
- Continuing discussions with leading European BI services organisations
- INPUT's continuous tracking and analysis of the computer software and services market.

## D
## Report Structure

Chapter II provides an Executive Summary which presents key findings from this report.

Chapter III provides details of the European IT user environment taking results from the survey conducted amongst leading IT user organisations. The chapter contains an overview of European market conditions as well as details of user's IT investment plans and future intentions within France, Germany, Italy, and the UK.

Chapter IV looks at the European Business Integration industry (i.e. the supply side of the supply/demand equation), providing an overview of the competitive landscape, rankings of vendors across the three BI sub-delivery modes (i.e. Systems Integration, Turnkey Systems, and Professional Services), and lastly provides snapshots of leading BI vendors.

Chapter V supplies country market analysis and market forecasting for the three BI sub-delivery modes across Europe and 16 individual country markets.

Chapter VI contains the report's "Market Data Base" which contains market sizing and vendor ranking data in US Dollars, Local Currencies, and ECU's.

Chapter VII contains the questionnaires used in compiling this report.

Chapter VIII contains INPUT's definitions of the BI marketplace.

# E
# Related Reports

- Systems Integration Market Europe, 1995 - 2000
- Impact of BPR on Systems Integration, 1995
- The European Business Integration Marketplace, 1995
- Vendor Selection; Process and Criteria, 1996
- Business Integration Opportunities in European Telecommunications, 1996

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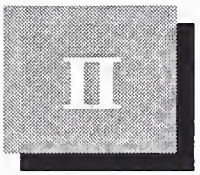



# Executive Summary

## A
## Products and Networks Promise Boom Conditions for Integrators

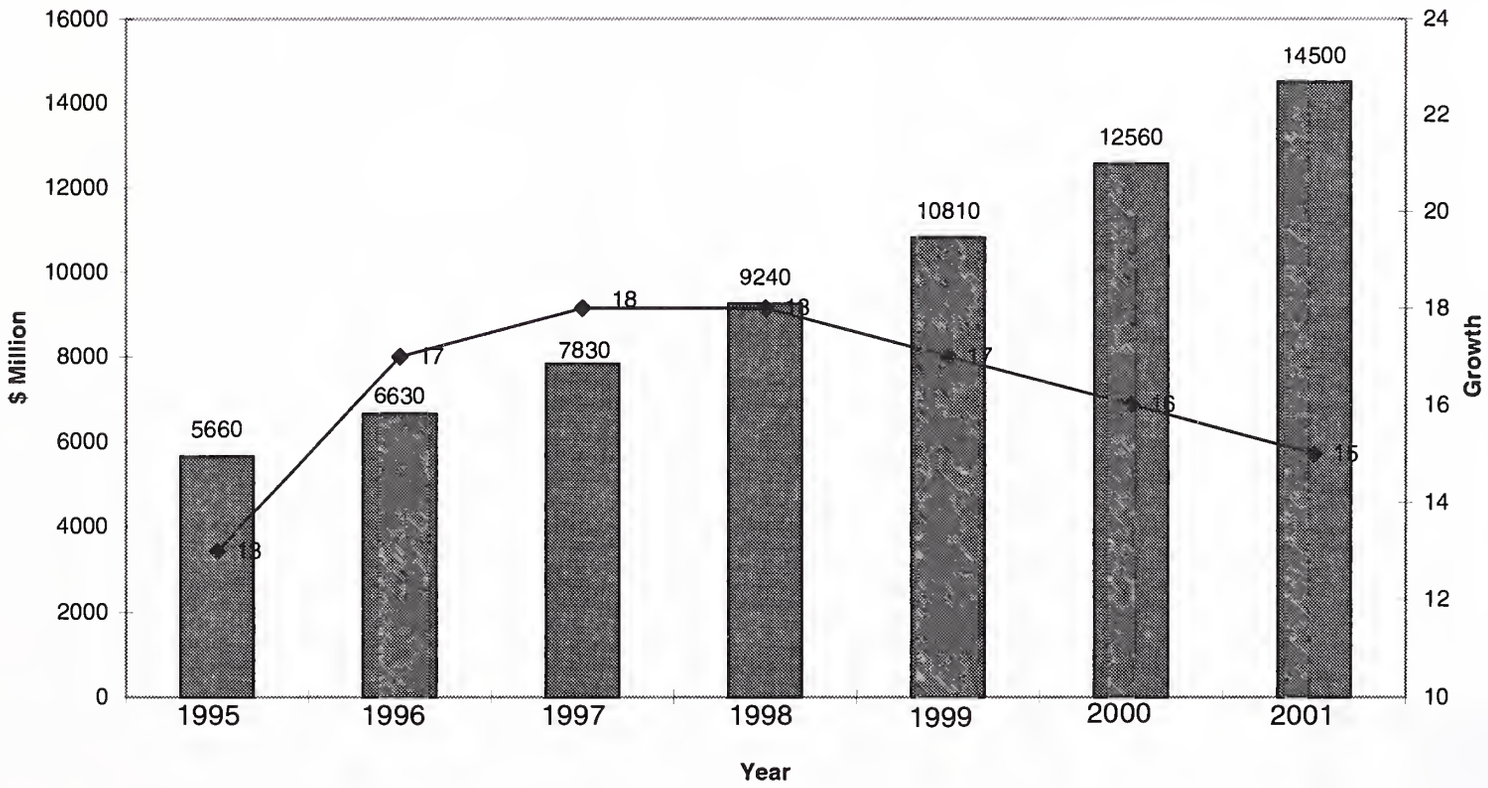
The European Business Integration (BI) market is set to experience a period of major growth over the course of the next three years driven by two key dynamics:

- IT user organisations' adoption of application software products
- The movement towards Internet supported business processes.

Exhibit II-1 provides INPUT's forecast of growth in the European Systems Integration (SI) marketplace for the period 1996-2001.

Exhibit II-1

## European Systems Integration Market and Growth, 1995–2001



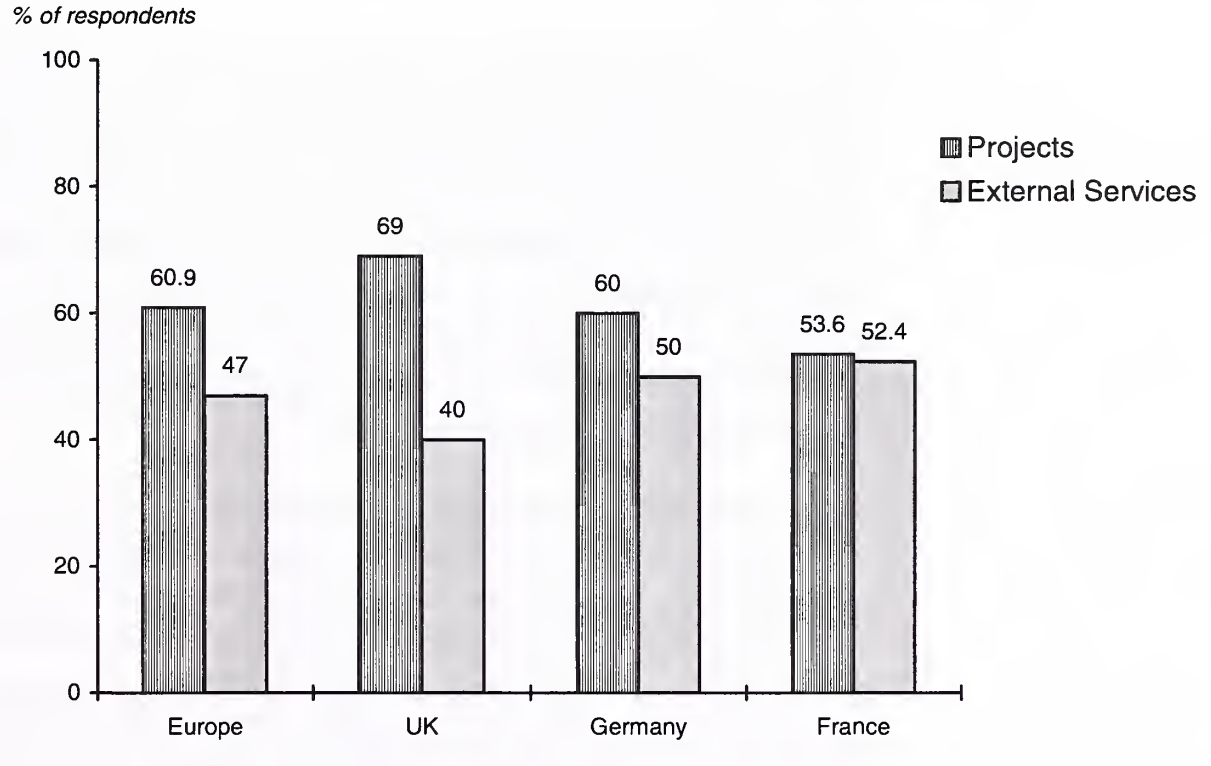

*Source: INPUT*

*Business Integration, as defined by INPUT, is a "meta" term which emphasises the integration of technology into the business environment. From the point of view of tracking IT Services organisation's revenues, this meta term has three delivery modes within it; Systems Integration, Turnkey Systems, and Professional Services. For more discussion of INPUT's Business Integration definitions refer to Appendix B.*

IT User organisations, looking to external IT service providers for assistance in implementing large scale systems development or integration projects, will increasingly require expertise of certain key products and of emerging networking technologies. Research performed for this report indicates that around half of European businesses will seek outside assistance for its large projects as shown in Exhibit II-2.

Exhibit II-2

**Use of External Resources in Planned Projects**




*Sample of 88 European IT User Organisations* *Source: INPUT*

The exhibit shows that 61% of surveyed IT organisations expect to undertake large scale projects in the next year and almost all will engage external assistance.

This period of increased spending by IT user organisations will provide major opportunities for BI vendors who are able to reposition their service offerings around key products and who have heavy duty new generation networking experience.

Exhibit II-3 details the defining characteristics of major developments in the European Business Integration (BI) market over the course of the next year;

- *Product Customization Becoming Key* - Leading vendors are attempting to reconfigure their services offering to now become centered around leading packaged business applications software. Product customization aligned with Rapid Application Development (RAD) methodologies rather than custom development are leading to faster development cycles with reduced risk exposures for both client and supplier

- *Explosive Movement Towards Network Centricity* - Internet technologies represent the most significant wave of new technology since the growth of the PC industry in the early 1980's. The utilisation and ability to be first to market with robust solutions based on HTML standards will be a major competitive arena for leading BI vendors. Internet/Intranet technology will also produce explosive growth opportunities for second and third division professional services firms to move towards challenging the present leading tranche of Integration players

- *Immediate Exploitation of Telecommunications Opportunity* - The challenge for Business Integration wishing to benefit from the undoubted opportunities this marketplace is creating is to identify the different approaches and service requirements required by different types of telecommunications providers and approach these organisations with appropriate offering. What is appropriate to a large, pan-national defensive PTTs is inappropriate to the new breed of aggressive alternative telecommunications providers.

- *Leading Players Continue to Dominate* - Despite the emergence of several new stars such as Cambridge Technology Partners (CTP) in the European BI arena in the last year, the leading suppliers continue to dominate and control the marketplace, mainly through existing account control and established skills in project and consortia management.

Exhibit II-3

## Major Characteristics of European Business Integration Marketplace

- Product Customisation Becomes Key Offering
- Explosive Movement Towards Network Centricity
- Ongoing Exploitation of Telecommunications Opportunities
- Leading Players Continue to Dominate

*Source: INPUT*

## B

## Product Customisation Becomes a Key Offering

The Enterprise Resource Planning (ERP) software marketplace has emerged, in the wake of SAP, as **the** key battleground for Business Integration (BI) firms over the course of the last year.

Systems development centered around enterprise orientated packaged business application software is rapidly becoming an established norm. Such development is supplementing, and in some instances replacing, pure custom development methods of systems building.

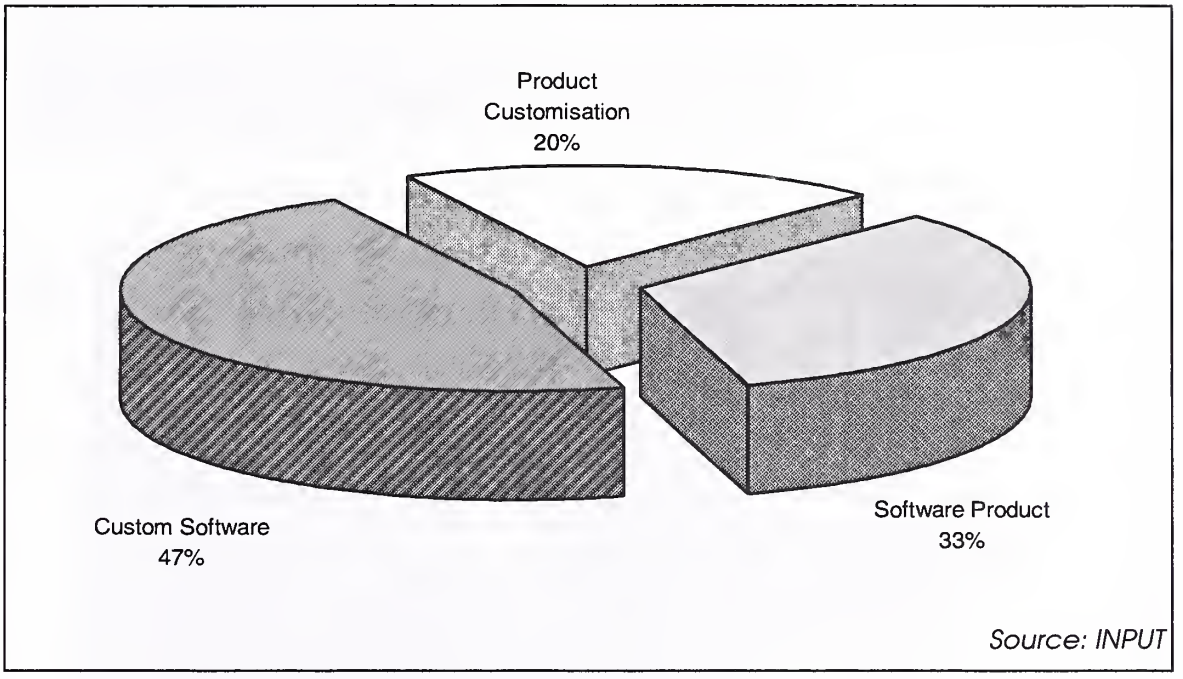
Although most major professional service driven BI firms have developed, or are in the midst of developing, offerings focused on key packages, it is becoming clear that BI organisations face major challenges in reconfiguring skill sets, building the critical mass of these offerings, differentiating them in the eyes of potential clients and ultimately competing profitably in the marketplace.

In the face of these conditions the importance of focus on core competitive domains, as discussed in INPUT's report, *European Business Integration Market, 1995 - Competitive Analysis,* is becoming of even more importance.

Packaged software represented 33% of all business application software installed within the European software and services market in 1995, as shown in Exhibit II-4. This figure has grown from 25% in 1993; INPUT forecasts suggest that this figure will reach 40% by 1997.

Exhibit II-4

**Software Product Type, Europe 1995**
***All Business Application Software $32.6 bn***




*Source: INPUT*

Packaged based systems development projects are quickly becoming the norm when IT user organisations are looking to develop mission-critical, cross-functional IT systems. With the emergence of identifiable leading software packages which support most of the core processes within organisations, the complexities of choices about "buy or build" are being reduced.

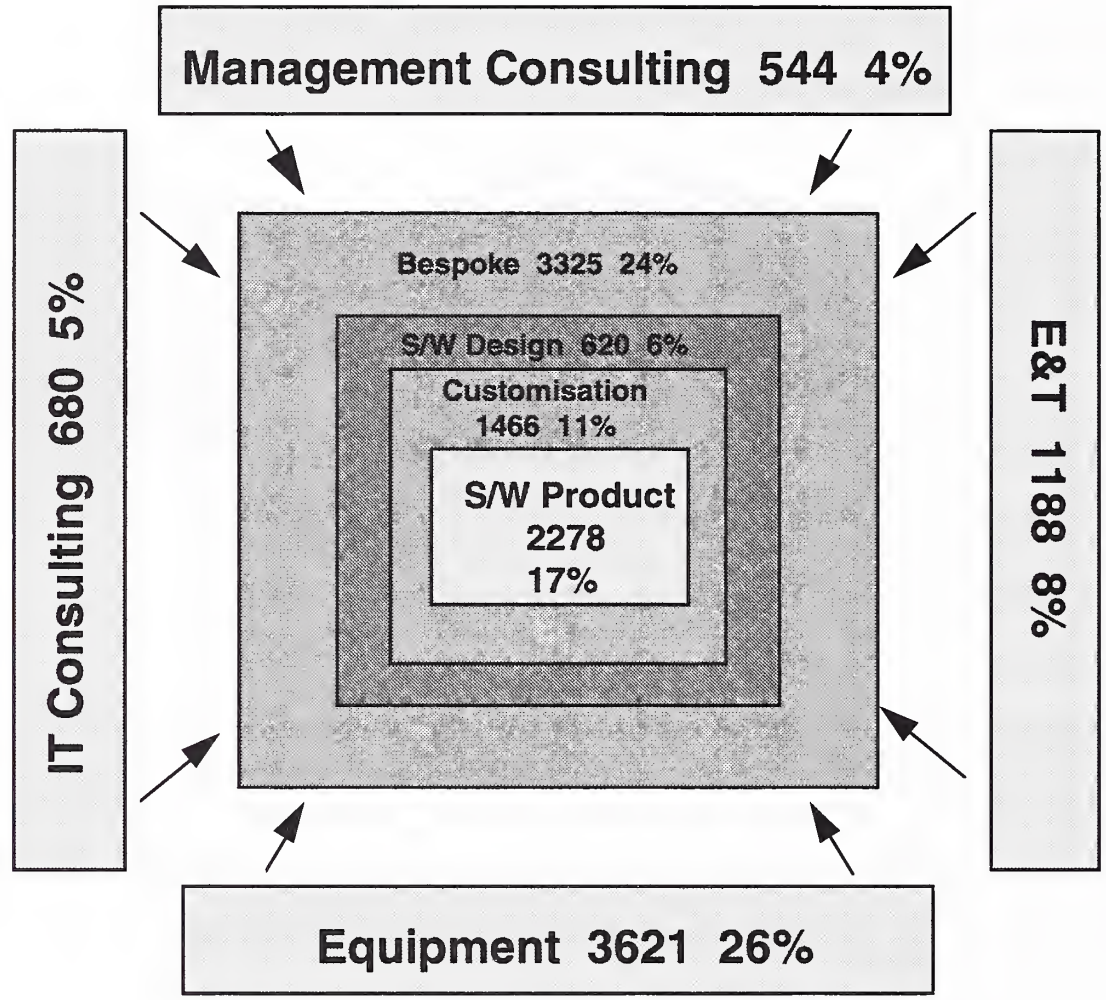
This trend is altering the dynamics of the BI marketplace, blurring further the traditional distinctions between systems integration projects and other contractual approaches such as turnkey projects, in that large systems integration projects are coming to resemble many of the characteristics of turnkey projects.

At present INPUT estimate that product customisation accounts for $6.4bn or 20% of end-user spending on software development. Product customisation will represent 30% of software development related end-user spending by 1998.

Exhibit II-5 illustrates an analytical view of this product driven integration market, using market sizing data for the German Business Integration marketplace in 1995.

Exhibit II-5

## German Business Integration Market, 1995 (Dm & %)




*Source: INPUT*

Within the overall business application software market Enterprise Resource Planning (ERP) software has come to be seen as the high-end area, where both product manufacturers and professional services firms looking to benefit from downstream service requirements are competing most aggressively.

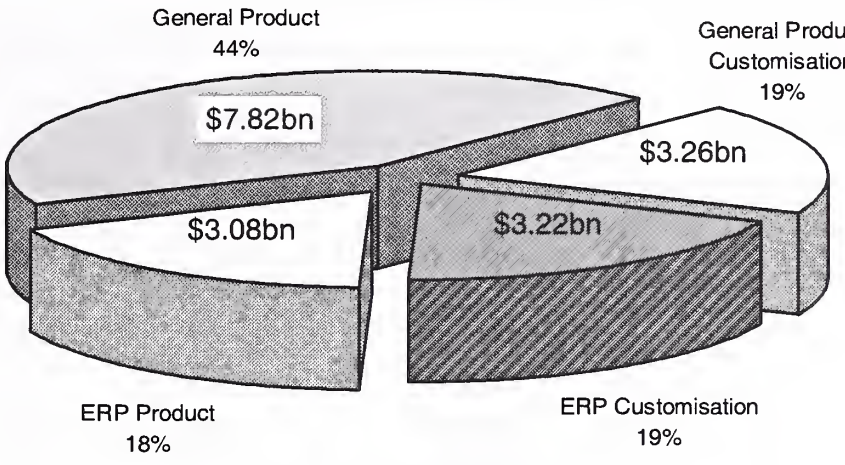
Exhibit II-6 builds on the data in Exhibit II-4 by excluding custom software from the equation and focusing purely on product and customisation and most importantly on ERP software product.

ERP software, software predicated on supporting an organisation's key financial management requirements and extending from there to support

other mission critical business functions, represents $3.81bn, 28% of the overall $11bn software product market in Europe, and 18% of the product *and* product customisation market. ERP customisation, at $3.22bn, is worth more than actual ERP product. This is contrasted with non-ERP product which represents less than half of the value of product.

Exhibit II-6

**Software Product/Customisation, Europe 1995**




*Source: INPUT*

This reflects the ratio of product to services in the SAP third party marketplace, currently estimated to be of the order of $4 of service for every $1 of product.

Exhibit II-7 provides INPUT's estimates of the leading software product vendors in the European ERP market, starkly showing SAP's current dominance.

Exhibit II-7

**Leading ERP Software Vendors, Europe 1995**

| Rank | Vendor | % | $m |
|---|---|---|---|
| 1 | SAP | 21 | 632 |
| 2 | CA | 7 | 216 |
| 3 | SNI | 6 | 185 |
| 4 | Oracle | 4.5 | 139 |
| 5 | SSA | 3 | 92 |
| 6 | Exact | 2.5 | 77 |
| 7 | Baan | 2 | 62 |
| 8 | CGI | 1.5 | 46 |
| 9 | Intentia | 1.5 | 46 |
| 10 | Sage | 1.5 | 46 |
| 11 | D&B | 1 | 30 |
| 12 | JD Edwards | 1 | 30 |
| 13 | KHK | 1 | 30 |
| 14 | Peoplesoft | 1 | 30 |
| 15 | Scala | 1 | 30 |
| 16 | Other | 41 | 1264 |
| | | 100 | 3081 |

*Source: INPUT*

The success ERP products have found over the last two years have forced many BI services vendors to radically examine the nature and health of their IT service offerings. Product based systems development, particularly now aligned with Rapid Application Development (RAD) methodologies, have made old-style, pre "best of breed" approaches appear like the last remnants of the IT industry's "cottage-industry" heritage.

The commercial effects of these trends is also illustrated by the strategy Coopers & Lybrand is now pursuing in the UK and European BI marketplace. Packages are now seen as the "fundamentals" of Coopers' approach to systems development. The concept of having large numbers of

programmers, of attempting to build a "code-shop" beneath a consultancy operation have firmly been abandoned. C&L are now clearly focused on the leading packages (in Coopers' opinion SAP, Oracle, BPCS, followed by D&B, Baan, and Peoplesoft) and are targeting as their key competitive domain their traditional skills sets in IT strategy and project management and consortia management.

This clarity of focus marks the final demise of a chapter of expansion for C&L, amongst may others, which saw IT services vendors attempt to compete along points on the IT systems development buying lifecycle. C&L's retrenchment to core domains, driven by the catalyst of user's preference for best of breed software, is a clear indicator of the direction in which the Business Integration marketplace is presently moving.

## C

## Intranet Integration — Building the IT Platform for the Next Century

Internet technologies represent the most significant wave of new technology since the growth of the PC industry in the early 1980's.

Since the realisation that the Internet can support organisation's own internal business processes, the Intranet has become the new battleground for IT equipment manufactures and services companies.

However, the pace of this new wave of industry development is at present extremely unclear. Some large IT organisations are already using the Intranet to underpin key elements of their business. Others, conscious of the IT industry's track record of propagating fear, uncertainty and doubt, are standing nervously on the sidelines unsure of what direction to take.

IT services organisations, keen to stake an early claim in the shifting sands of Internet development, are at present attempting to understand how the Internet is being used in corporate computing and how the Internet will be used in the future. By gaining an understanding of these intentions IT services organisations can benefit from this once in a decade opportunity.

Exhibit II-8 provides a forecast of UK based Intranet related growth for Business Integration organisations and a segmentation of this opportunity within end-user environments, divided into Multinationals, UK PLCs, Small and Medium Size (SME) organisations and small office, home office (SOHO) organisations.

Exhibit II-8

## UK Intranet Usage, 1995-2000 — Market Segmentation $m

| | 1995 | | 2000 | |
|---|---|---|---|---|
| | % | # | % | # |
| Systems Integration | 100 | 8 | 100 | 510 |
| - Multinational | 70 | 5.6 | 40 | 204 |
| - UK PLC | 30 | 2.4 | 60 | 306 |
| - SME | 0 | 0 | 0 | 0 |
| - SOHO | 0 | 0 | 0 | 0 |
| Professional Services | 100 | 14 | 100 | 1005 |
| - Multinational | 10 | 1.4 | 15 | 151 |
| - UK PLC | 50 | 7 | 35 | 352 |
| - SME | 35 | 4.9 | 45 | 452 |
| - SOHO | 5 | 0.7 | 4 | 40 |
| Turnkey Systems | 100 | 5 | 100 | 488 |
| - Multinational | 20 | 1 | 15 | 73 |
| - UK PLC | 60 | 3 | 60 | 293 |
| - SME | 20 | 1 | 20 | 98 |
| - SOHO | 0 | 0 | 5 | 24 |

*Source: INPUT*

From a competitive perspective the movement towards Internet technologies promises to re-energise a number of BI players, who over in recent years have appeared to be struggling. One of the most prominent of these suppliers is DEC, who having abandoned the expensive move towards competing against the Big Six and Professional Services firms in the high-end management consultancy arena, have retrenched towards a *technical* rather than *business* integration portfolio, focused on certain key vertical markets.

However, Digital's widely acknowledged strengths in distributed development and operations, coupled with the excellent brand recognition Alta Vista has recently gained in Internet conscious environments, have suddenly re-positioned DEC as one of those systems and services vendors potentially "most likely" to harvest real rewards from the dramatic surge towards network-centric computing.

Digital have recently announced a new organisational structure, emphasising multi-vendor capabilities and systems integration offerings, which attempts to leverage services strengths around high performance 64-bit Unix, Windows NT, and Internet connectivity.

Through a judicious mix of luck and judgment Digital could yet re-emerge as a front-runner in the large scale Business Integration (BI) marketplace.

Digital's Internet Services portfolio has three key strands:

- Optimising workplace productivity for the business user, which includes not only users based within the enterprise, but also SOHO (Small Office Home Office) and HOBO (Home Office Branch Office) workers

- Use of AltaVista popularity as a search engine to establish the AltaVista software brand

- Entering the market with a bold, aggressive sustained launch.

The plan to develop the AltaVista brand with the launch of a suite of software products will be key to Digital's Internet/Intranet success. Two sets of AltaVista solutions will be launched in the near future the AltaVista Intranet solution will be launched initially in May 1996, with a progressive launch programme building momentum towards Autumn 1996.

## D

## Telecommunications Opportunity Requires Services Differentiation

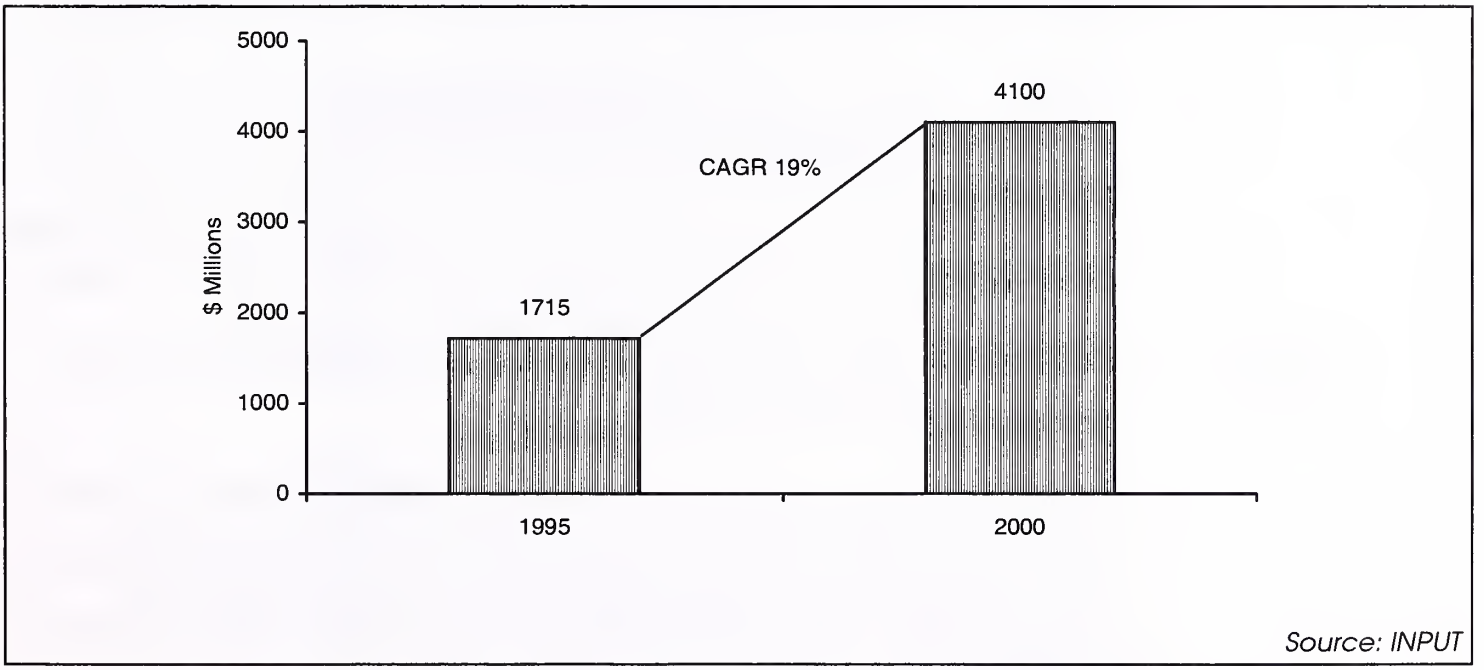
The differing pace of liberalisation across individual country markets and thus new service provision, is creating an extremely fragmented marketplace in which telecommunications organisation's requirements of BI vendors are unfolding at an uneven pace.

The challenge for Business Integration wishing to benefit from the undoubted opportunities this marketplace is creating is to identify the different approaches and service requirements required by different types of telecommunications providers and approach these organisations with appropriates offering. What is appropriate to a large, pan-national *defensive* PTTs is inappropriate to the new breed of *aggressive* alternative telecommunications providers.

Exhibit II-9 provides details of the growth of the Business Integration (BI) marketplace within the European telecommunications industry in the period 1995 to 2000.

Exhibit II-9

**Business Integration Services Growth in the Telecommunications Sector, Europe 1995–2000**




*Source: INPUT*

Introducing new technology to facilitate enhanced customer service and the related infrastructure is extremely complex. At the same time as demand increases technology continues to change rapidly.

Interconnection of networks and interoperability of services and applications is a key objective of telecommunication providers. This aim, of course, play straight into the hands of systems integrators and professional services firms, whose background is in large scale integration projects, and projects which have for some time had a growing component of networking involved.

The complexity of building the networks that are required for the provision of new telecommunications services coupled with technologies shorter product life cycles, and hence greater risk of failure in systems development, will led to increasing calls on skills which are the prime offering of the Business Integration (BI) community.

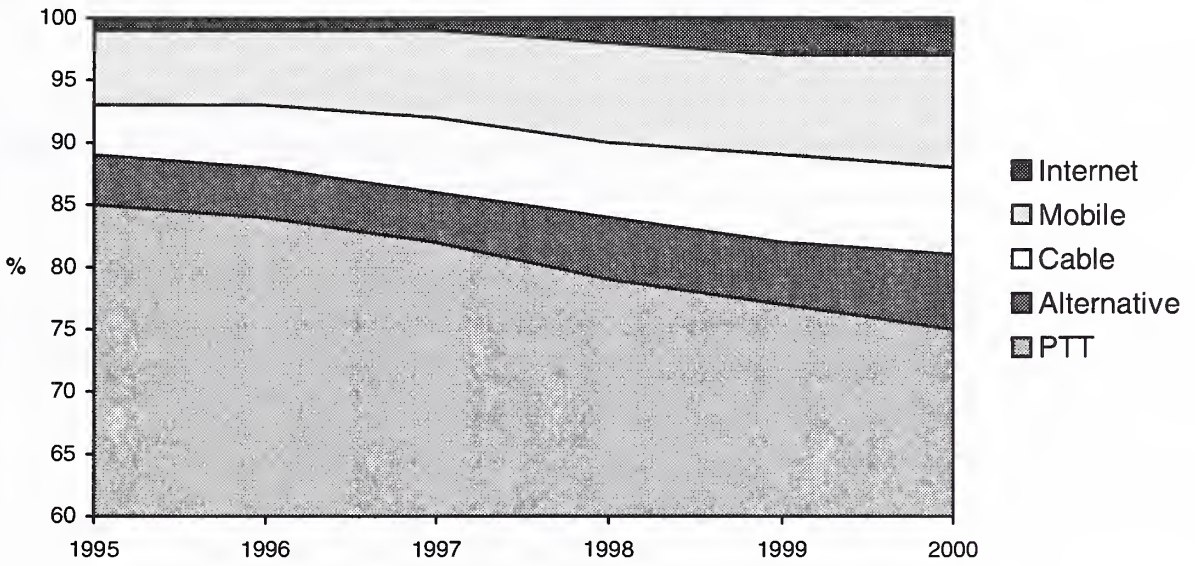
Major investments in a specific application can be outdated very quickly. Some applications can be outdated even before the development is complete. Of course this situation, if handled correctly by BI vendors, will continue to provide great opportunity over the next three to five years.

Across the nations of the European Union there is a wide range of telecommunications service provision. For most countries in north-west Europe there is little growth in voice telephony, though some southern European countries, such as Greece, are thriving as they strive to catch up. The pace at which the underlying technical infrastructure develops across the different country markets however is proving to be largely consistent. Though there are local differences such as the growth of ISDN in Germany, contrasted with switched packet stream networks in France, and leased line strategies in the UK, the degree of per capita telecommunications related investment is on a par between the major country markets within Europe.

Exhibit II-10 analyses the rate at which new types of telecommunication service will penetrate the European marketplace whilst Exhibit II-11 presents a forecast of Business Integration revenue growth related to the five major types of telecommunication service over the course of the next five years.

Exhibit II-10

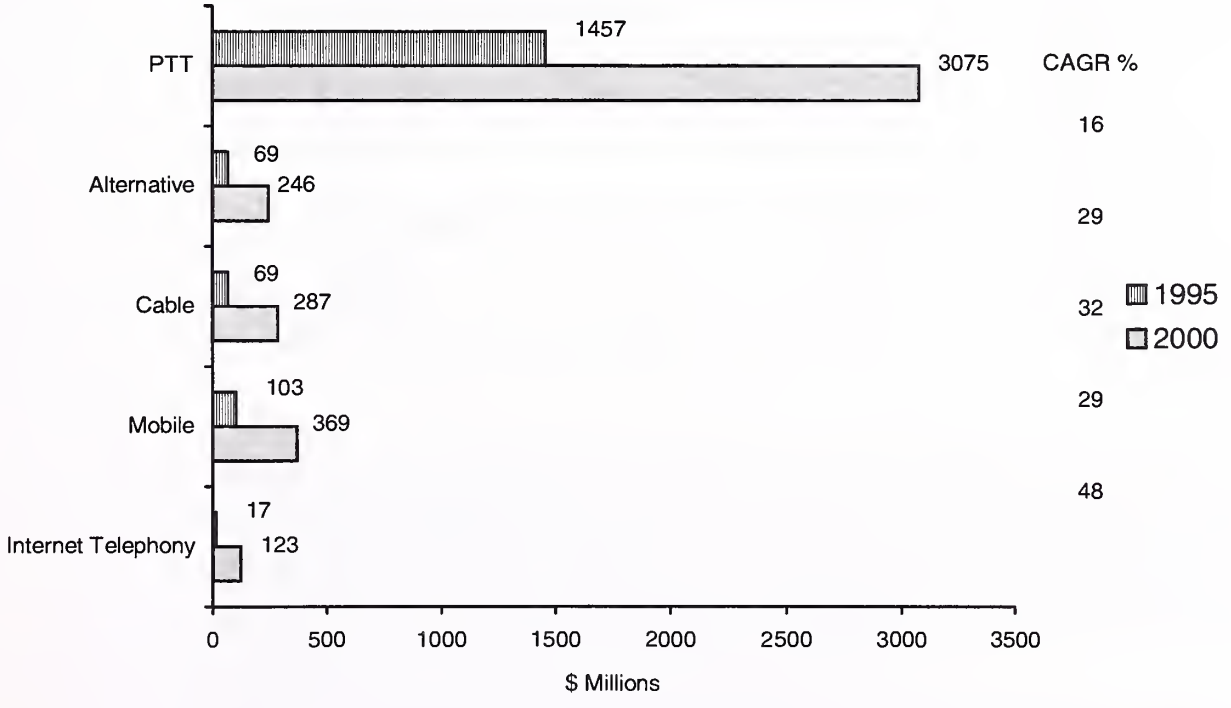
## Telecommunications Penetration Rates, Europe 1995–2000




*Source: INPUT*

Exhibit II-11

## Business Integration Revenues by Telecommunications Type, Europe 1995–2000




*Source: INPUT*

The challenge for Business Integration vendors is to identify the different approaches and service requirements required by different types of telecommunications providers and approach these organisations with appropriate offering.

Succeeding in this period will not be easy however, as the industry transforms and the characteristics of success change. The challenge for service vendors is to understand the impact on the industry and learn how to play the game with new rules.

Huge rewards will be available to those service providers who can flourish amidst the chaos and confusion that the European marketplace will present over the next five years as it reshapes itself.

## E
## Leading Players Continue to Dominate

Andersen Consulting and EDS have, over the last three years, come to be regarded as at the leading edge of competition in the European Business Integration (B I) marketplace through their aggressive focus on a *business* rather than a *technical* agenda and a concentration on extending "thought leadership".

Though this strategy has been extremely successful, research for this report suggests that many of the traditional equipment and systems vendors, and particularly IBM, are still managing to maintain a position, in the eyes of senior European IT executives, as value-added IT services vendors, capable of leading large scale, mission-critical systems development and integration projects. Exhibit II-12 shows the leading Business Integration vendors in Europe in 1995.

Exhibit II-12

**Leading Business Integration Vendors Europe, 1995**

| | Company | BI Revenue ($ million) |
|---|---|---|
| 1 | IBM | 3060 |
| 2 | CGS | 1505 |
| 3 | Digital Equipment Corp | 1280 |
| 4 | Siemens Nixdorf | 1210 |
| 5 | AC | 1040 |
| 6 | EDS | 800 |
| 7 | ICL | 760 |
| 8 | Groupe Bull | 700 |
| 9 | Finsiel | 670 |
| 10 | Sema | 620 |

*Source: INPUT*

Business-led professional services firms, with anti-incumbent IT manager marketing propositions and active in the outsourcing market (forecast by INPUT to capture only 15% of total IT services spending by 2001) face the threat of alienating IT managers who are still largely responsible for large IT project procurement.

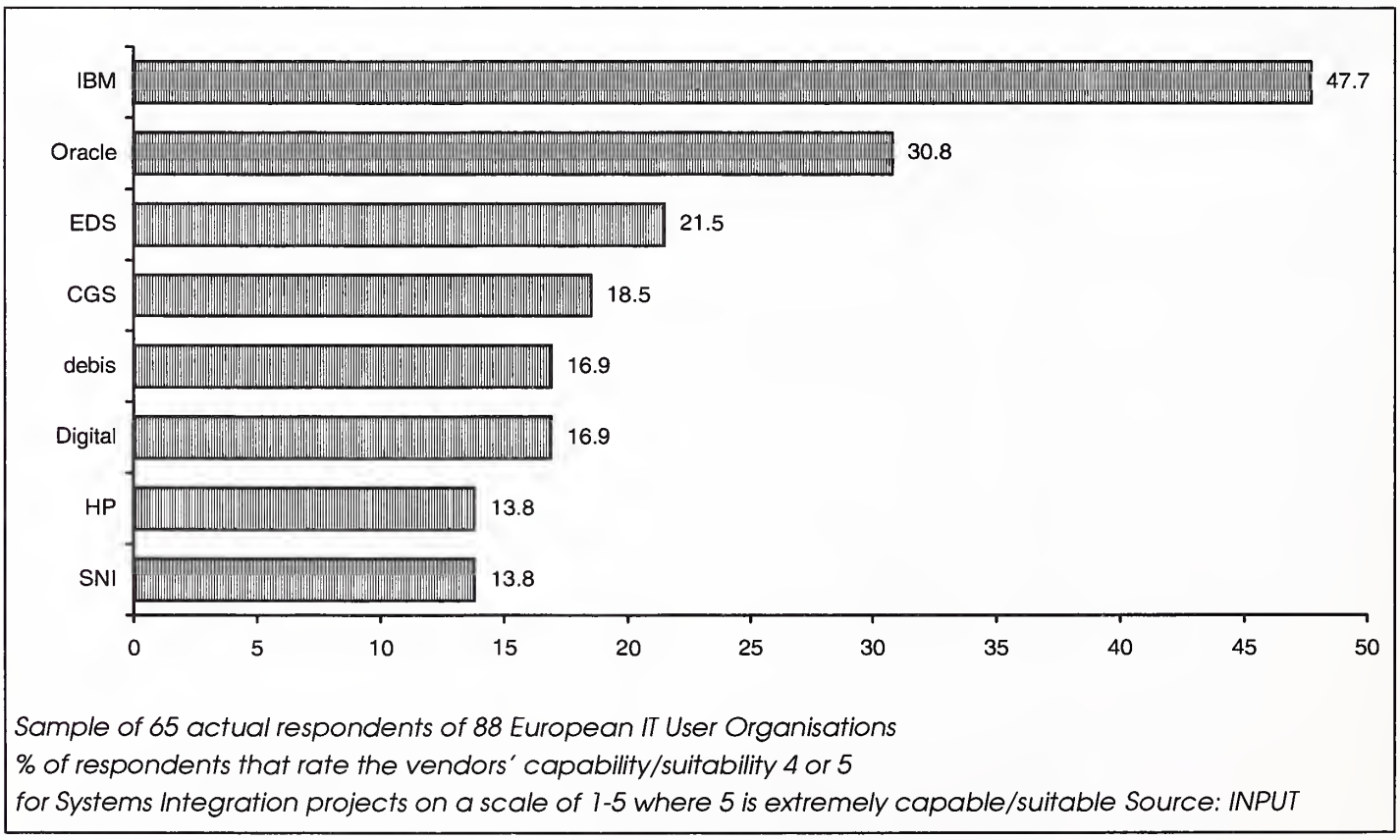
These executives will dictate spending patterns in 85% of a market which will be worth $73bn by the end of the decade.

Despite the scepticism that its IT services strategies have been met with by industry watchers and analysts, IBM is, according to INPUT's research, continuing to convince the crucial part of the market, i.e. IT users or managers, that it is the best placed organisation to assist in large systems development and integration projects.

Exhibit II-13 details European IT managers view of leading Business Integration vendors and shows that 35% of IT managers perceive IBM to be capable or suitable for taking on systems integration or development projects in their organisation. Other highly ranked services vendors with a hardware technology heritage are Digital (16.9%), Hewlett Packard (13.8%) and Siemens Nixdorf (13.8%).

Exhibit II-13

**European IT Managers' Perception of IT Services Vendors (prompted)**




*Sample of 65 actual respondents of 88 European IT User Organisations*
*% of respondents that rate the vendors' capability/suitability 4 or 5*
*for Systems Integration projects on a scale of 1-5 where 5 is extremely capable/suitable Source: INPUT*

Oracle rank second with 23% of respondents, indicating that Oracle has managed to develop a strong image as more than a pure software product organisation, despite some negative publicity in the early 1990s about how "consultancy-heavy" its software products were. Andersen Consulting are mentioned by less than 10% of respondents.

Exhibit II-14 suggests that IT users' perceptions of the services vendors do not mirror actual presence in the market.

Exhibit II-14

**Ranking of Leading European Business Integration Vendors**

| Company | Ranking by BI Revenues | Ranking in IT User Survey |
|---|---|---|
| IBM | 1 | 1 |
| Cap Gemini Sogeti | 2 | 4 |
| Digital Equipment Corp. | 3 | shared 5 |
| Siemens Nixdorf | 4 | shared 7 |
| Andersen Consulting | 5 | 15 |
| EDS | 6 | 3 |
| ICL | 7 | shared 10 |
| Groupe Bull | 8 | shared 10 |

*Source: INPUT*

When equipment vendors started entering the IT services market in earnest, nearly all attempted to implement a full-service, broad-based positioning in the market. However, this approach has proved sustainable only for the largest vendors since resources are otherwise spread too thinly.

Small to medium sized vendors have retrenched into markets and service offerings where they have core strengths and capabilities. For most of the original equipment vendors this has meant redefining their offerings to fit into a technological or "platform based" approach.

Digital is an example of a vendor that has re-thought its market position while IBM, mainly due to its size, has managed to hold on to the broad-based approach. IBM is however still stronger, due to its heritage, at the technological end of the services offerings than in areas such as consultancy relating to corporate strategies.

Combined with its largely still loyal installed base this has contributed to placing IBM so highly in this user ranking. It is likely that IBM would have been lower down the user ranking just a few years ago. However,

success for the company's Integrated Systems Solutions Corp. has increased overall confidence in IBM's ability in IT services.

Local national champions still retain loyalty in local markets; typically each of the three major European countries rank one of their local IT services vendors among the most capable or suitable for systems development or integration projects.

In Germany, debis Systemhaus is in shared second place with Oracle whilst not placed outside of Germany. Siemens Nixdorf also receives a very high rating in Germany but is unmentioned in the rest of Europe.

In France, Groupe Bull is rated equal with IBM and Hewlett Packard. These three vendors all have their core businesses based in hardware technology. Incidentally, major focus areas for French IT operations are currently related to technology issues such as creating new information architecture and developing decentralised systems. However, Groupe Bull and its services arm, Integris, is slightly surprisingly unmentioned in either the UK or Germany.

In the U.K., vendors rated highly by IT executives are a mixture of national companies, such as ICL, and major foreign players like EDS which are rated much lower in the other European countries. This mixed picture may be based on the fact that many, U.S. based vendors such as EDS, have used the U.K. as a bridgehead into Europe. For this reason, many vendors have been established in the U.K. longer than in continental Europe and have carved themselves a stronger position in this country.

Exhibits II-15, II-16, and II-17 show the leading European players in 1995 for the three BI sub-delivery modes, Systems Integration, Professional Services, and Turnkey Systems respectively.

Exhibit II-15

## Leading European Systems Integration Vendors, Europe

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 20.7 | 1170 |
| 2 | Andersen Consulting | 9.5 | 540 |
| 3 | Groupe Bull | 7.9 | 450 |
| 4 | Cap Gemini Sogeti | 6.7 | 380 |
| 5 | EDS | 5.8 | 330 |
| 6 | ICL | 5.3 | 300 |
| 7 | Digital | 4.6 | 260 |
| 8 | Sema | 3.5 | 200 |
| 9 | Siemens Nixdorf | 3.4 | 190 |
| 10 | Logica | 2.7 | 150 |
| | Total Listed | 70 | 3970 |
| | Total market | 100 | 5660 |

*Source: INPUT*

Exhibit II-16

## Leading Professional Services Vendors, Europe 1995

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 5.8 | 1390 |
| 2 | CGS | 4.2 | 1010 |
| 3 | Finsiel | 2.8 | 670 |
| 4 | Digital | 2.7 | 640 |
| 5 | Oracle | 2.4 | 560 |
| 6 | Andersen Consulting | 2.1 | 500 |
| 7 | EDS | 2.0 | 470 |
| 8 | ICL | 1.9 | 460 |
| 9 | Sema Group | 1.8 | 420 |
| 10 | SAP | 1.7 | 400 |
| | Total Listed | 27 | 6520 |
| | Total Market | 100 | 23780 |

*Source: INPUT*

Exhibit II-17

## Leading Turnkey Systems Vendors, Europe 1995

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Siemens Nixdorf | 4.8 | 640 |
| 2 | IBM | 3.7 | 500 |
| 3 | Digitial | 2.8 | 380 |
| 4 | Intergraph | 2.5 | 330 |
| 5 | Olivetti | 1.8 | 240 |
| 6 | Reuters | 1.7 | 230 |
| 7 | Hewlett Packard | 1.4 | 190 |
| 8 | Sligos | 1.0 | 130 |
| 9 | CGS | 0.9 | 115 |
| 10 | Getronics | 0.7 | 90 |
| | Total Listed | 21 | 2845 |
| | Total market | 100 | 13380 |

*Source: INPUT*

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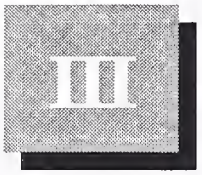


# User Environment

## A
## Europe

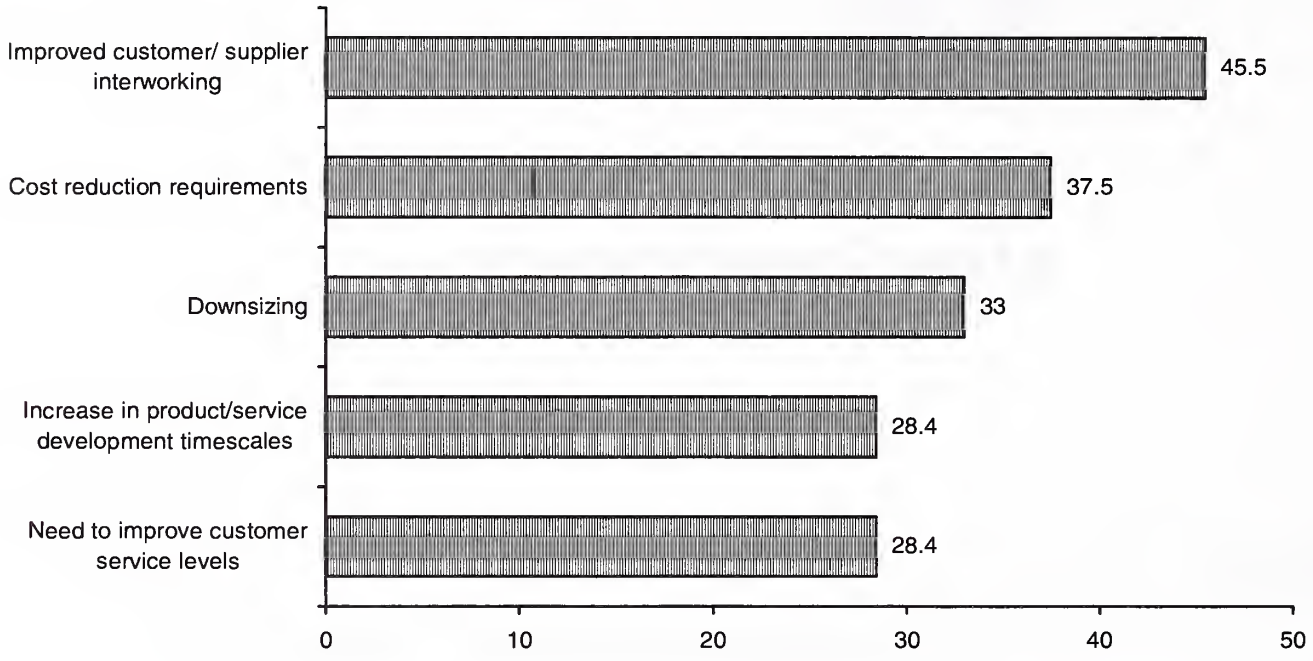
### 1. Increased Emphasis on External Communications

In prior years, INPUT's user survey has shown that IT-user organisations across Europe were mostly concerned by the outlook of continuing high interest rates. However, in this year's survey that issue has slipped to the bottom on the list signalling that optimism has finally entered back into the European business community.

Exhibit III-1 shows the five major commercial pressures that IT-user organisations perceive will most influence their IT operations over the next two years.

Exhibit III-1

## Major Commercial Pressures Facing European Businesses in the Next Two Years




*Sample of 88 European IT User Organisations.*
*% of Respondents rating a pressure of 4 or 5, where 5 is most important on a scale of 1-5.*

*Source: INPUT*

Over the last two years, the need to improve customer service levels has been one of the strongest commercial issues concerning IT executives. In this years survey, only 28% named this as a major challenge compared to 40% in last year's report. Just a few years ago, businesses would focus on customer service level and make sure to spread the message widely that they were doing so. Today, it is a 'must' and most organisations have at this stage already started implementing customer service-related projects.

The new focus area, made possible by the wider use of networks outside the company structure, is internetworking with customers and suppliers. Out of the sample, 46% of interviewed executives named this issue as the most important commercial pressure facing their IT organisation in the next two years. To some extent, this area is a logical extension to the customer service issue. It is a question of making processes more efficient and easier to deal with and improving response time between the company and its business relations – or in other words: improving the company's service levels to the outside world. This development is fuelled by the strong growth in the use of the Internet.

Other major areas that concern IT executives in the future are downsizing and cost reduction requirements. These areas are repetitions from last year's survey where 38% of respondents were concerned about cost and downsizing issues. The issues are less important for executives in the U.K. (28%) than in Germany (43%) and France (41%). This could be an indication that restructuring actions following the recession have already cut deeper in the U.K. than in the other countries. Major commercial pressures for the individual countries are reviewed in more detail in the country-specific parts of this report.

### 2. Increasing Focus on Integrating Business Strategies with IT

Rejuvenating or changing dated IT systems continues to be a focal point for IT operations in the near future. However, it is clear from the responses in the user survey that tying development of new systems closer to business strategies is increasingly at the top of the agenda. It is further one of the key objectives in projects that are already scheduled, as shown by the following snapshot of comments from the survey:

- "Ensure systems meet business needs. Company is very results driven. Customer focus"
- "We have a very dynamic business; always changing...must be able to react"
- "Improving group performance"
- "Business and market changes warrant IT to change"
- "IT must be able to support our expanding business"
- "Efficient information systems are vital to support business success"

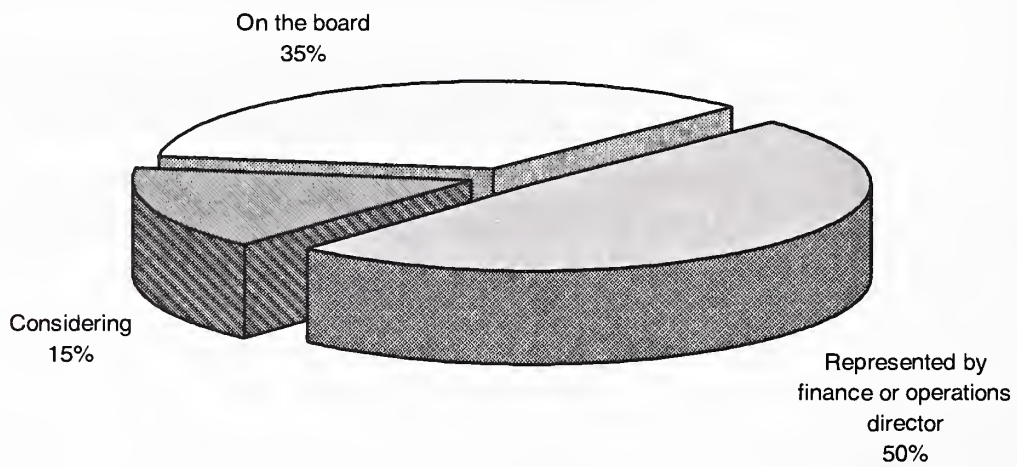
This latter comment is typical of the new views of information technology in relation to corporate strategies. Traditionally, there has been a great divide between "the techies" of the IT department and "the business men" running the company which is a situation closely associated with the glass house era. However, the role of the IT department in the organisation is clearly going through a transformation. For years, IT was mostly used for "bread-and-butter" functions. There is now increasing realisation that utilising IT to support the company's strategic directions is important in a competitive environment.

This realisation is closely connected with a higher awareness of IT issues on the companies' boards. Only by a clear involvement in top level decision from IT directors or equivalent can a company's IT investments provide the optimum payback.

Exhibit III-2 shows the status of representation on the board by IT directors across Europe.

Exhibit III-2

**Representation of IT Operations on Board of Directors**




*Sample of 88 European IT User Organisations* *Source: INPUT*

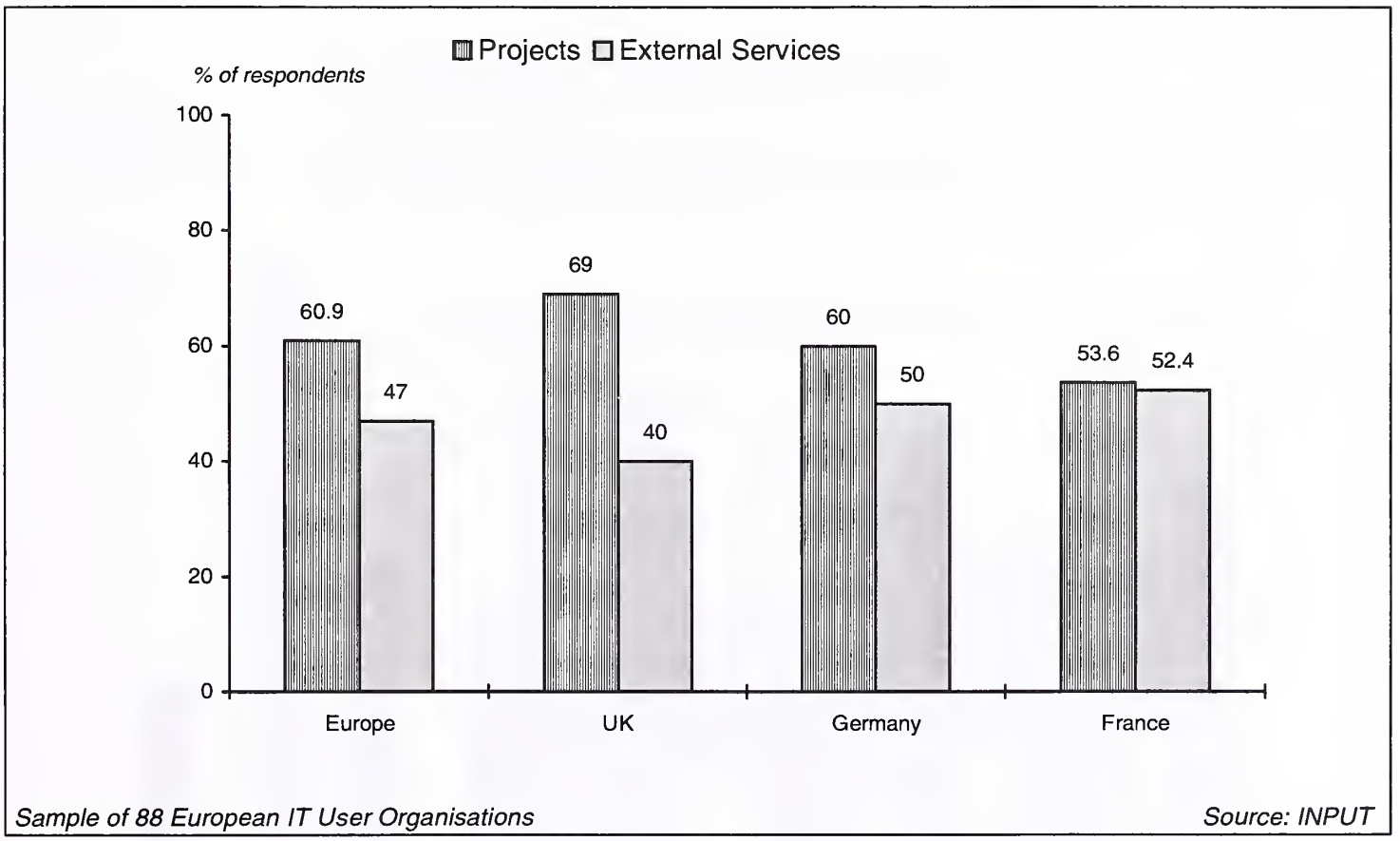
There are major differences in level of representation across the surveyed countries. On an overall European level, 35% of IT organisations are represented directly on the board, while 15% are considering the possibility of direct representation. However, France tops the list with the highest level of direct representation (43%) while only 22% of the surveyed companies in the U.K. had an IT director on the board. This could be a result of the strong cutbacks in the U.K. businesses following the recession. Organisational structures have become significantly flatter than a decade ago and restructuring may have hit the IT organisations stronger in the U.K. than in other parts of Europe. Another reason could be the higher use of outsourcing in the U.K. which may also have influenced the elimination of direct representation. However, some 22% of the U.K. companies are considering direct representation as an option.

### 3. Continued Demand for Assistance from External Service Vendors

Organisations are looking to external IT service providers for assistance in implementing large scale systems development or integration projects and will continue to do so in the near future. Research performed for this report indicates that around half of European businesses will seek outside assistance for its large projects. The research findings are presented in Exhibit III-3.

Exhibit III-3

**Use of External Resources in Planned Projects**




*Sample of 88 European IT User Organisations* *Source: INPUT*

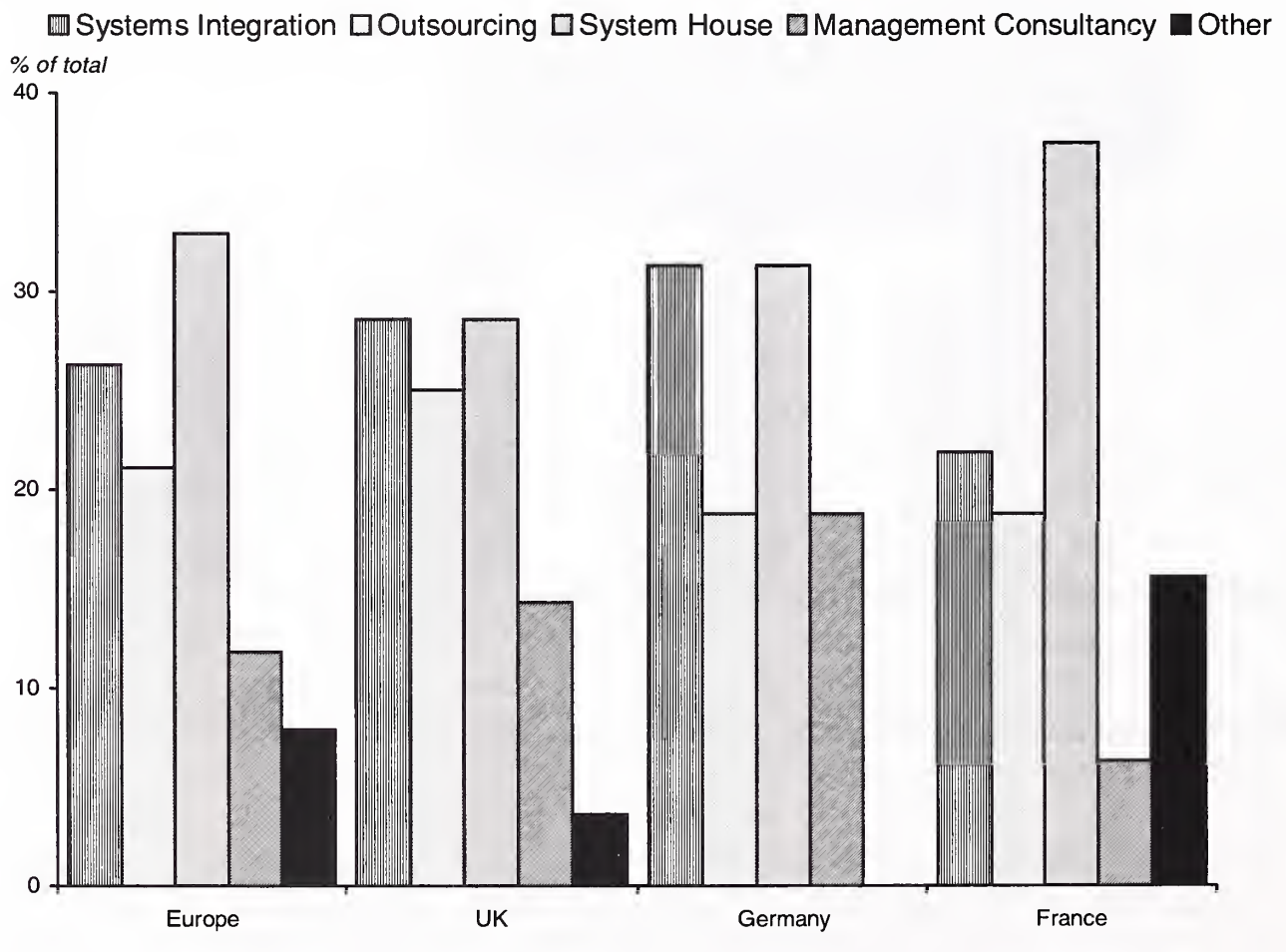
The exhibit shows that 61% of surveyed IT organisations expected to undertake large scale projects in the next year and almost all would engage external assistance. In the U.K. there seems to be a greater degree of self-sufficiency while almost all French organisations would use IT services providers. An explanation for this difference could be that U.K. businesses, due to the recession, have been under financial pressure for longer than their French colleagues. Budget constraints could have forced the self-sufficiency to evolve. Further, in France there has been a long tradition of using external services vendors.

Organisations in all three countries are undertaking complex projects revolving around areas such as networking, groupware, and database development. Germany differs slightly from the other two countries since 50% of German respondents named implementation of SAP applications as top project for the coming year.

Across Europe there is relatively strong variance in the type of external vendors that are most likely to be employed for planned systems integration and development projects. Exhibit III-4 shows the type of external IT service vendor that IT user organisations expect to choose for planned projects.

Exhibit III-4

**Choice of External Service Vendor**




*Sample of 88 European IT User Organisations whereof 29 in the U.K., 30 in Germany and 29 in France*

*Source: INPUT*

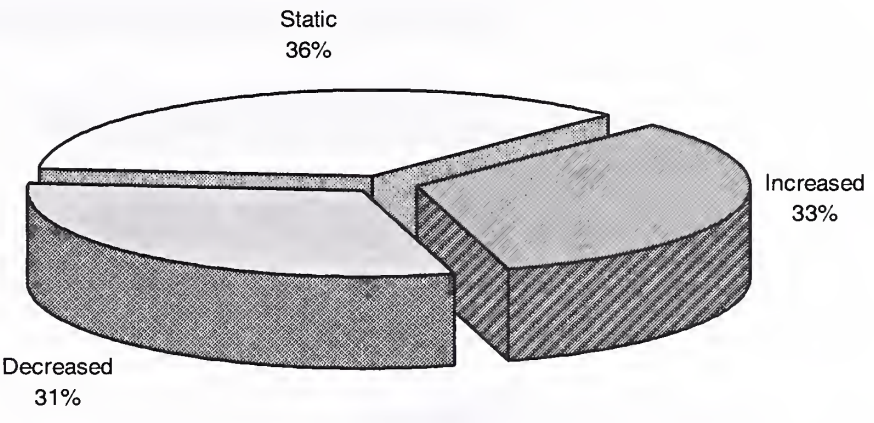
A third of IT organisations across Europe will use Systems Houses for coming external projects. However, in France 38% of respondents would use this type of external services provider. Systems Houses have traditionally been more popular in France than in the other European countries. Many French companies have over the past two decades spun off their DP departments into independent services companies. This development introduced to the market a 'body shopping' mentality which is still prevalent.

A major result from the survey is a confirmation that Outsourcing still has a higher penetration in the U.K. than in the other countries. A quarter of all respondents in the U.K. are planning to use Outsourcing as the solution to large projects in the near future compared with 18% in Europe as a whole.

Generally, user organisations are very split on the development in their spending on external resources as illustrated in Exhibit III-5.

Exhibit III-5

**Development in Spending on External IT Services**




*Sample of 88 European IT User Organisations* *Source: INPUT*

While a third of all respondents said that their budget for external services was increasing, 31% reported a decline in external spending. Relating these responses to the 14% growth rate in the total systems integration market for Europe, it indicates that the users that expect to increase spending on external services control a relatively larger proportion of total spending than the remaining respondents. There is a strong geographic bias in the responses.

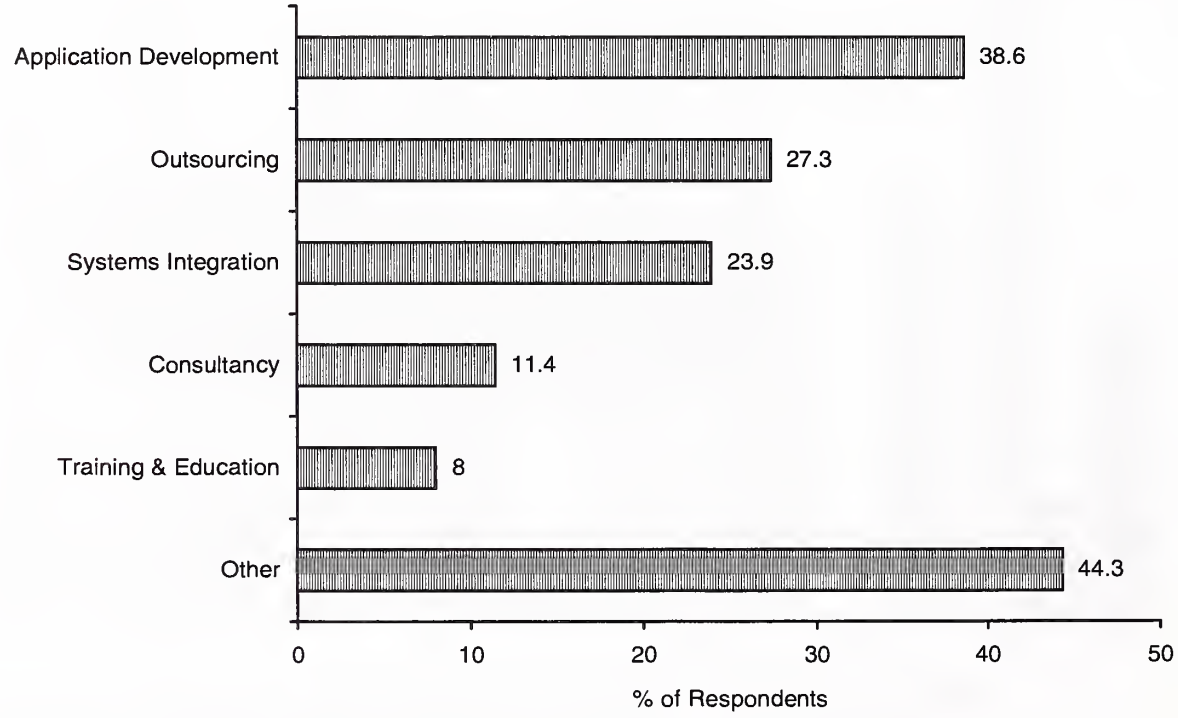
Only 20% of German IT organisations reported an increase in spending on external services, compared with 37% in the U.K. and 41% in France. The German market has traditionally been characterised by heavy usage of in-house IT staff and procurement of complete or packaged solutions. As mentioned earlier, German IT organisations named implementation of SAP products as top priority for the coming year. These two factors could indicate that German companies will bring the necessary skills for these projects in-house.

### 4. Application Development is High Priority for IT User Organisations

Questioned on how they would prioritise their external IT spending, almost 40% of the European IT executives participating in INPUT's survey gave Application Development high priority. Another high-scoring priority was Outsourcing. Exhibit III-6 illustrates the highest priorities for IT user organisations.

Exhibit III-6

**Priorities for External IT Spending**




Sample of 88 *European IT User Organisations.*
*% of Respondents rating a priority of 4 or 5, where 5 is highest on a scale from 1-5*

*Source: INPUT*

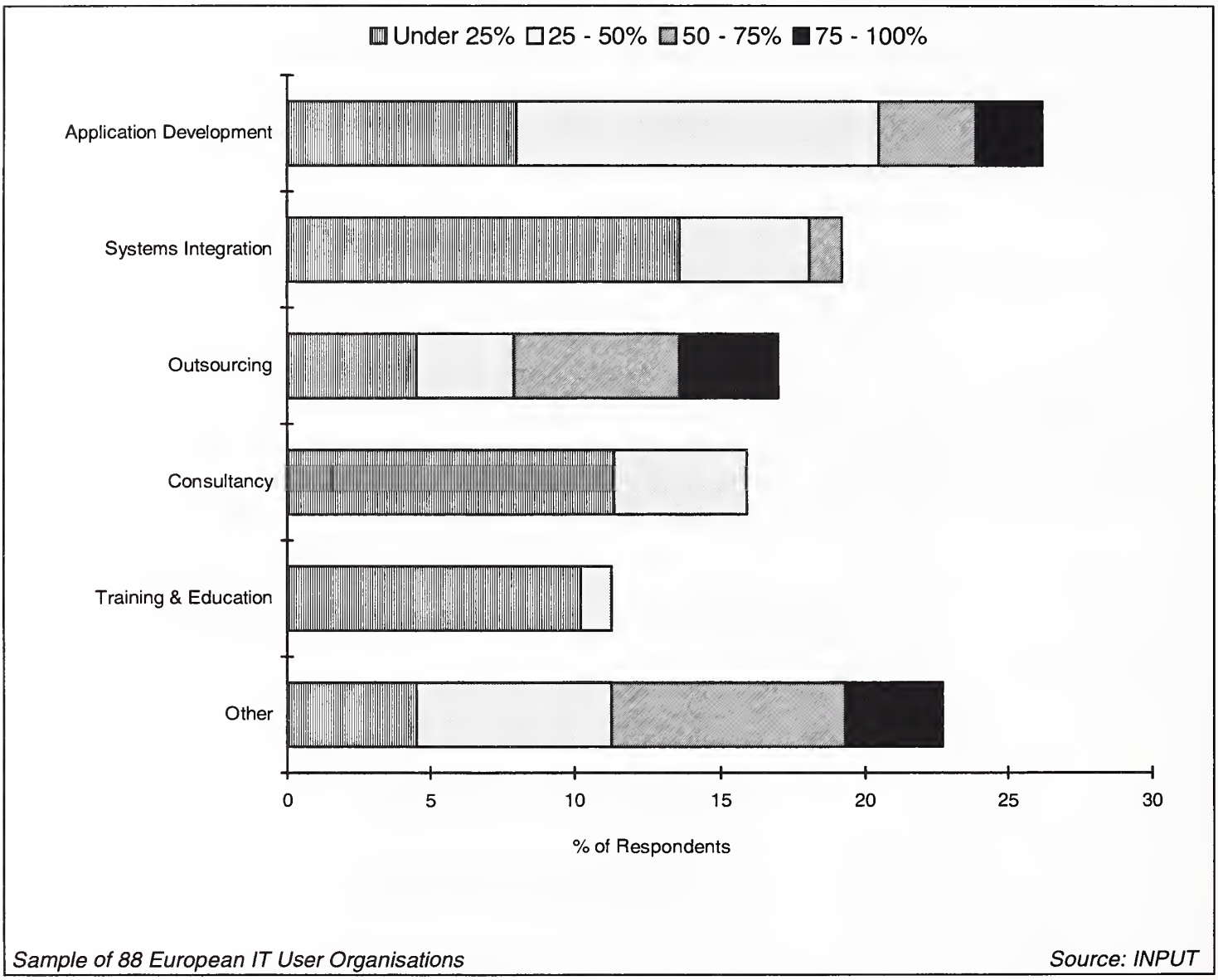
It is significant that 44% of the IT user organisations gave higher priority to areas other than the services named in the exhibit. Of the respondents 17% mentioned support services and maintenance as top of their priorities; 14% prioritised investments in hardware and software, while 13% of the respondents will spend most of their external budgets on datacommunication products and services. With this split of the "other" category, application development is by far the highest priority for European IT user organisations.

Exhibit III-7 confirms that IT executives prioritise application development highly. The exhibit shows the proportion of the organisations' budgets that are spent on various external services.

Some 18% of all respondents use more than 25% of their external IT budget on applications development with 6% spending more than half of the budget on this account. Outsourcing is the activity that most respondents mention as taking a large part of the external budget. Almost 10% of the respondents spend more than 50% of their budget on outsourcing. However, an explanation for this is that organisations tend to outsource large parts — or almost all — of their operations as a matter of policy.

Exhibit III-7

## Proportional Spending of External IT Budget




*Sample of 88 European IT User Organisations* *Source: INPUT*

Exhibit III-7 also reflects the high priority that IT user organisations place on other activities than the mentioned services. Support & Maintenance was the most often mentioned activity with 17% of respondents naming this as a priority. Other areas were hardware and software (14%) and datacommunications & networking (11%). Only 3% mentioned Internet or Intranet activities. However, the proportion of spending on these activities is set to grow over the next few years.

As mentioned earlier European IT users named increasing communications to suppliers and customers as the major commercial pressure for the near future. A large part of this communication will almost certainly make use of the Internet. A majority of European IT

organisations are somehow working with or testing out Internet and Intranet technologies. As these activities mature and companies increasingly explore the adherent possibilities, the requirement and spending on related external services will increase.

### 5. IT Infrastructures are High on the Agenda for European Businesses

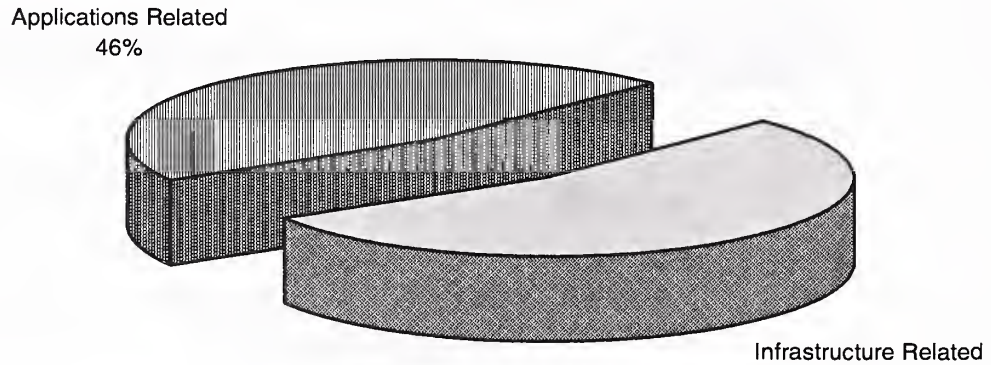
IT user organisations have in recent years been occupied with adapting "inward-facing" technology to reengineered business processes. However, they are now increasingly looking outwards and adapting their use of technology to new demands relating to interaction with partners, customers and business contacts.

A major factor in this whole development is the convergence of telecommunications and information technology which is to some extent led by the development of the Internet. As businesses realise the efficiency and competitiveness that can be achieved by better and smarter communications to the outside world, there is no turning back from the world of network-centric computing. However, to fully embrace this development the IT user organisations must undertake some major projects reshape their IT infrastructure

Exhibit III-8 details the current focus of major development or integration projects as reported by European IT executives. The exhibit shows that 54% of projects are infrastructure related, compared with 47% last year. This clearly supports the trend towards a focus on communication with the outside world as discussed above.

Exhibit III-8

## Focus of Current Development/Integration Projects

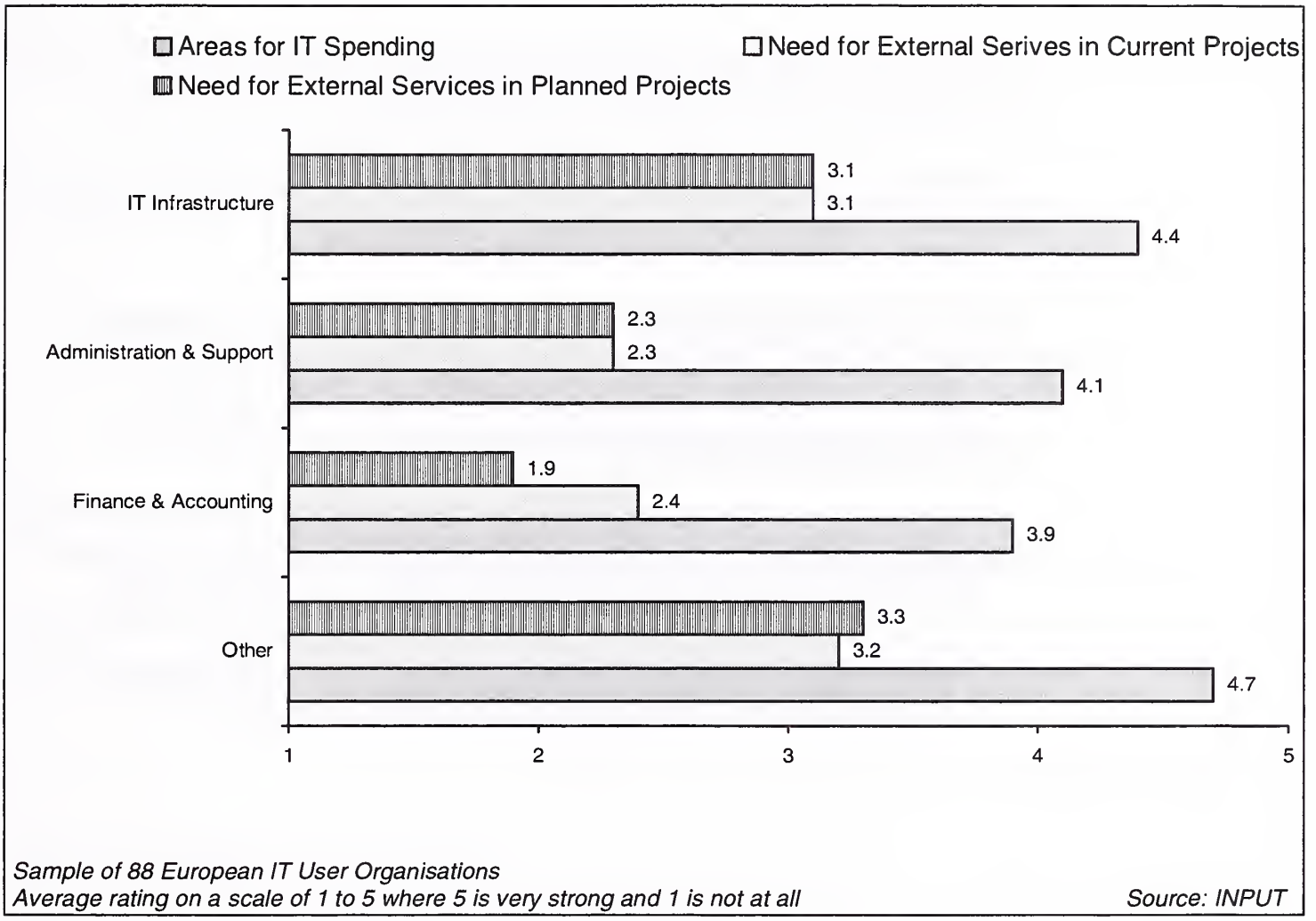



*Sample of 88 European IT User Organisations* *Source: INPUT*

This trend is further supported when IT executives are asked what specific business processes their IT spending is directed towards as depicted in Exhibit III-9.

Exhibit III-9

**Areas with Highest IT Spending and Most Need for External Services**




*Sample of 88 European IT User Organisations*
*Average rating on a scale of 1 to 5 where 5 is very strong and 1 is not at all* *Source: INPUT*

Exhibit III-9 shows that the 88 surveyed IT user organisations placed an importance level of 4.4 on IT infrastructure on a scale where 5 is very important. It also shows that for both current and planned projects IT executives expressed a reasonably strong need for external services in this area. The major areas mentioned in the 'Other' category are Internet, electronic mail and groupware which all typically are cross-functional and could arguably be grouped together with IT Infrastructure.

### 6. IT Operations Continue Focus on Integration

During the past few years — to some extent triggered by the recession that hit Europe — businesses have realised that fiercer competition and cost pressures have been forcing them to re-think the way they operate. Business Process Reengineering is part of the movement to increase

efficiency of organisations and IT departments are to a large extent aware that they need to be part of this reengineering activity.

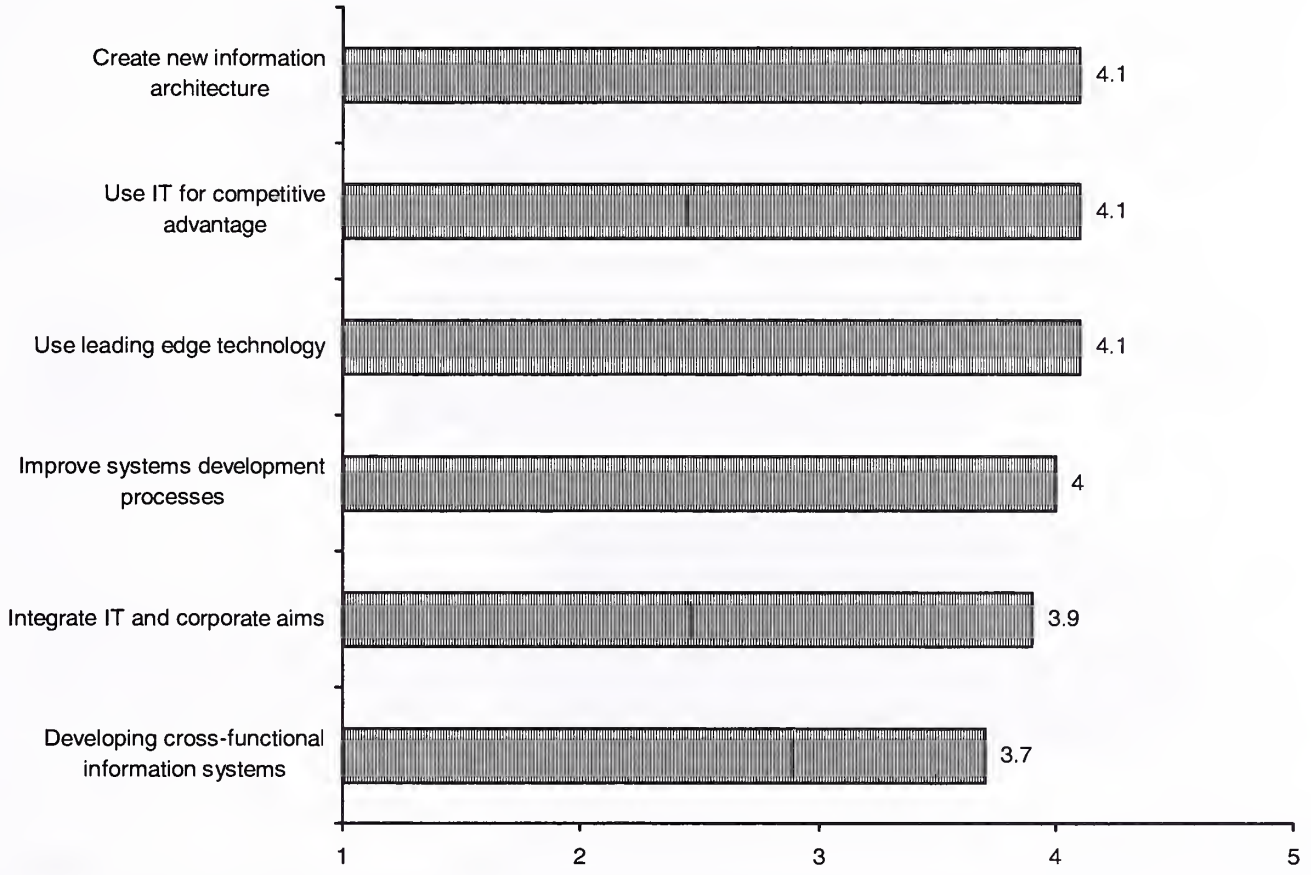
Reengineering projects have also been part of IT operations' quest to find justification for their existence. One obvious justification can be the wealth of data that exists in a company's IT systems. However, the challenge is to access this data and turn it into useful information. It is widely acknowledged that a company that can do this in an intelligent manner has an edge over its competitors.

As a result, one of the major focus areas for IT operations is to explore ways to use IT for competitive advantage both by exploiting existing systems and developing better methods for capturing essential information in the future.

Because it is now more widely acknowledged that information technology can provide input to front-line services and not just support bread-and-butter functions, IT operations will play a more central role in the business in the future. Current research which is detailed in Exhibit III-10 supports this argument. European IT executives name integration of IT with corporate aims one of their strongest focus areas.

Exhibit III-10

## Current Focus of IT Operations

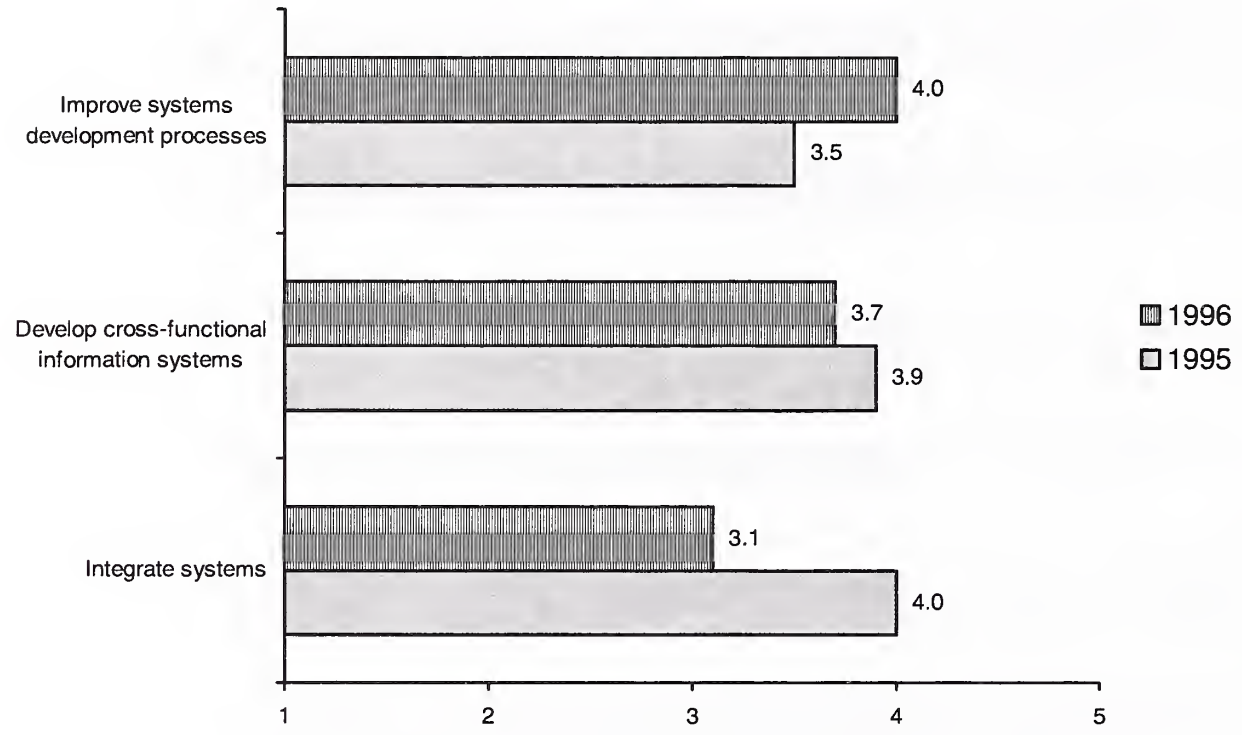



*Sample of 88 European IT user Organisations*
*Average rating on a scale of 1 to 5 where 5 is very strong focus and 1 is not at all* *Source: INPUT*

Comparing IT operations' current focus areas with last years data brings forth an interesting picture as illustrated in Exhibit III-11. Last year, IT executives mentioned integrating systems as their most important focus area. Generally, this year's focus areas seem to be more at a strategic than a technical level, such as the earlier discussed issues of competitive advantage and integration of IT with corporate aims.

Exhibit III-11

## Development in Focus Areas for IT Operations




*Samples of 88 European IT User Organisations in 1996 and 90 in 1995.*
*Average rating on a scale of 1-5 where 5 is very strong focus and 1 is not at all*

*Source: INPUT*

### 7. Increasing Popularity for Value-based Contracts

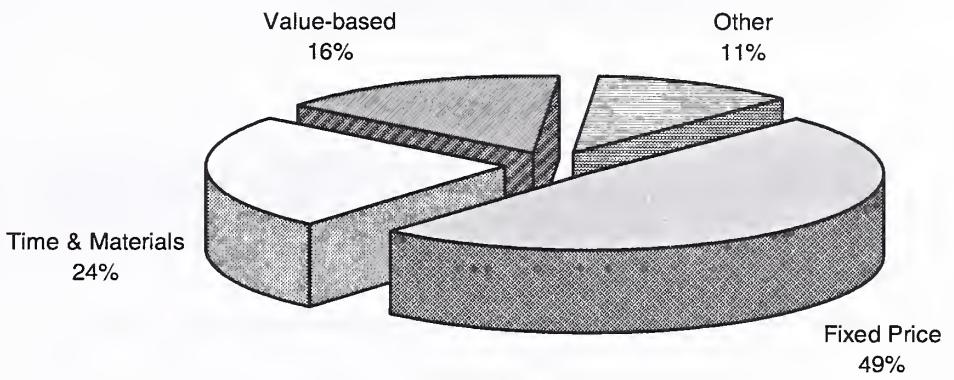
Over the past few years, INPUT's research has consistently shown that fixed price contracts were by far the preferred contract types among the European user community. However, value based pricing has been lurking in the background waiting for a breakthrough which has finally come, according to this year's survey of IT executives. Survey results are detailed in Exhibit III-12.

A move towards value based pricing is a logical development both from a user and a vendor point of view. Most user organisations have experienced some project that either over-ran the project time or did not at the end deliver the expected results. By demanding value based contracts, IT executives are signalling that they expect a certain amount of risk sharing from their integration partners. From a vendor perspective, the completion of a successful value based project can reap high bonuses in a time were margins are typically under pressure. Further, if users are demanding it, vendors may find that they have to

have the ability to offering this type of contract. A vendor without this type of pricing on its palette may signal to the market that it is less confident of bringing business benefits to projects. However, the major difficulty in value based contracts is to identify tangible measures of success. Therefore it may be that not all projects are suitable for this contract approach.

Exhibit III-12

**Users' Preferred Approaches to Large Scale Systems Development or Integration Contracts**



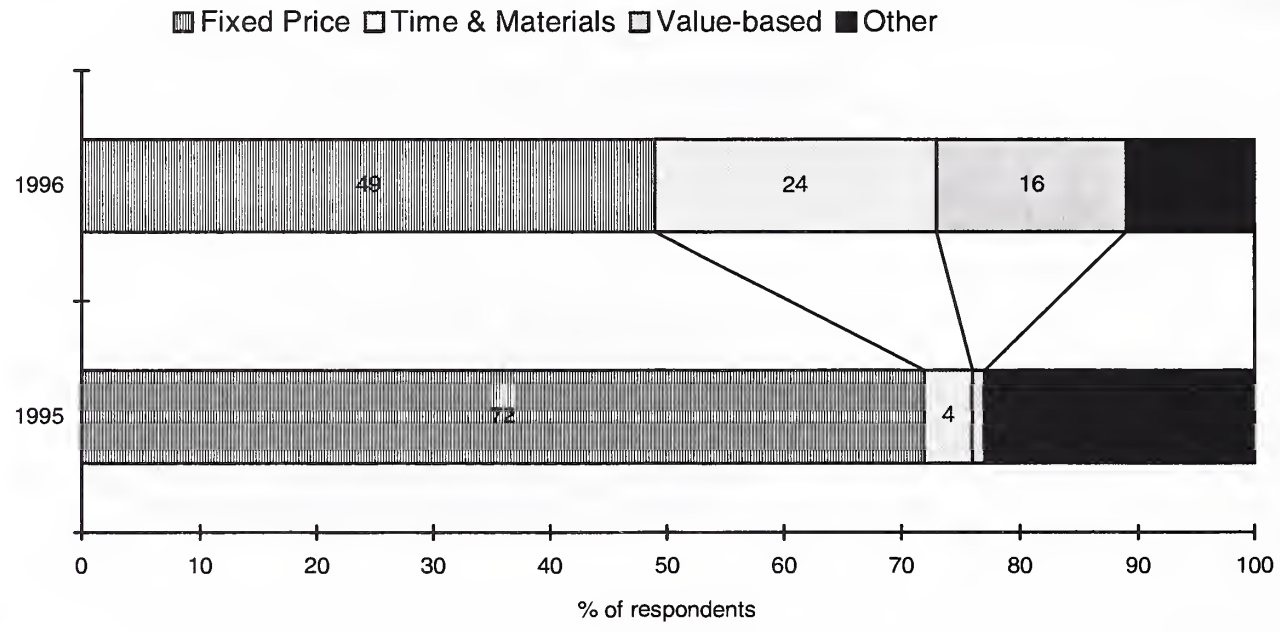

*Sample of 88 European IT User Organisations* *Source: INPUT*

Exhibit III-13 shows the changes in IT users' contract preferences since 1995. Fixed pricing has clearly become less popular while time & materials based, as well as value based contracts, have increased significantly. Time & materials based contracts are usually associated with less-developed IT services markets, such as the Nordic countries and Austria. However, the economic pressure across Europe has over the past five years placed many companies under financial pressure. There is much more focus now on running lean organisations, even in countries that are slowly returning to growth economies. For most IT executives, there is now a strong focus on cost reduction and often also the realisation that the IT department must be able to demonstrate a value-for-money approach to its operations and special projects. By using time & material based contracts, IT executives are in reality buying flexibility and the possibility of abandoning projects where assumptions change or required benefits do not seem to be obtainable. From a vendor perspective, time &

material based contracts do not carry the inherent risk of having underestimated the complexity or cost of a project and thereby facing squeezed margins or, in the worst instance, losses on projects.

Exhibit III-13

**Changes in Preferred Contract Approaches to Large Scale Systems Development/Integration**




*Sample of 88 European IT User Organisations in 1996 and 90 in 1995* *Source: INPUT*

Exhibit III-13 shows that in last year's survey 72% of IT user organisations favoured fixed price contracts compared to 49% this year. Time & materials based contracts were 4%, while only 1% preferred value based contracts.

## 8. Users Defy the Critics: IBM is Seen as a Services Vendor

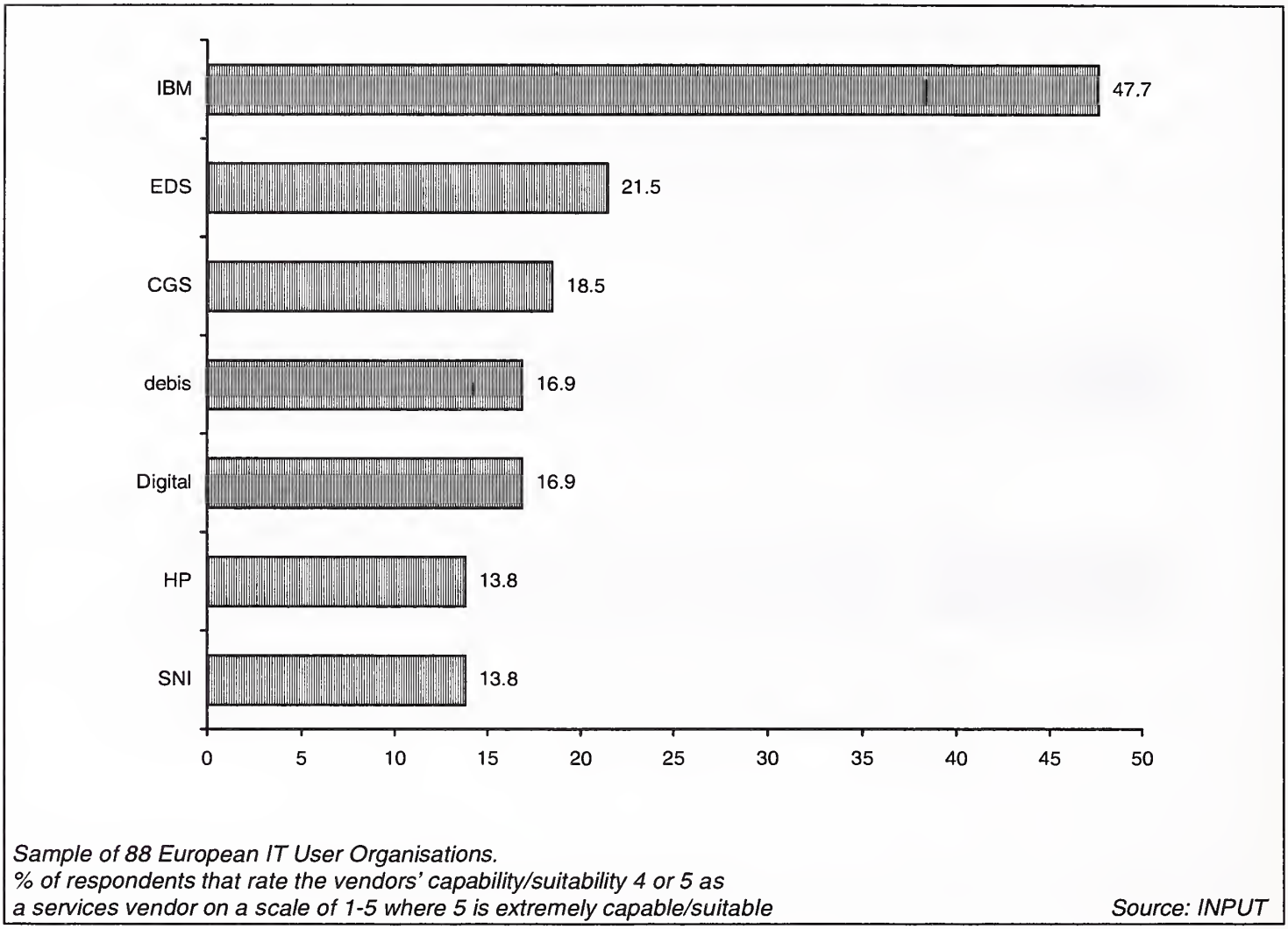
Since many of the traditional IT equipment vendors ran into financial difficulties in the late 1980s, they have almost all tried to move into the IT services market. In some cases, such as Unisys and ICL, they have to a large extent positioned themselves predominantly as services vendors while others, such as Digital Equipment Corporation, have continued to have a strong product focus parallel to its services business. The repositioning process has worked for some but not all.

One company, that for some time had its strategies in the IT services market met with scepticism by industry watchers and analysts, is IBM. However, according to INPUT's research it seems that IBM has convinced the crucial part of the market: the IT users.

In this year's survey, INPUT asked IT managers to rate IT services vendors according to how capable or suitable they would perceive them to be for the IT user organisations' future systems development or integration projects. Exhibit III-14 details the number of European respondents that rated the vendors 4 or 5 on a scale where 5 is perceived as extremely capable or suitable and 1 is no perception. Only vendors that received a 4 or 5 rating from more than 10% of respondents are detailed.

Exhibit III-14

## European IT Managers' Perception of IT Services Vendors (prompted)




*Sample of 88 European IT User Organisations.*
*% of respondents that rate the vendors' capability/suitability 4 or 5 as a services vendor on a scale of 1-5 where 5 is extremely capable/suitable*

*Source: INPUT*

Exhibit III-14 shows that 35% of IT managers perceived IBM to be capable or suitable for taking on systems integration or development projects for their organisation. Oracle ranks second with 23% of respondents. However, it is surprising that vendors such as Andersen Consulting and ICL are mentioned by less than 10% of respondents. Exhibit III-15 shows the leading business integration vendors in Europe in terms of revenues compared with the ranking in the user survey.

Exhibit III-15

## Ranking of Leading European Business Integration Vendors

| Company | Ranking by BI Revenues | Ranking in IT User Survey |
|---|---|---|
| IBM | 1 | 1 |
| Cap Gemini Sogeti | 2 | 4 |
| Digital Equipment Corp. | 3 | shared 5 |
| Siemens Nixdorf | 4 | shared 7 |
| Andersen Consulting | 5 | 15 |
| EDS | 6 | 3 |
| ICL | 7 | shared 10 |
| Groupe Bull | 8 | shared 10 |
| Finsiel | 9 | not mentioned |
| Sema | 10 | shared 12 |

*Source: INPUT*

Exhibit III-15 shows that the IT users' perceptions of the services vendors do not mirror the actual activities in the market. There are some factors to be aware of that will influence the user ranking of vendors.

INPUT's survey was directed towards IT managers or executives and not business executives and the respondent's organisational role is likely to influence the outcome of the ranking. IT services vendors differ widely in the level of a clients' corporate organisation that they primarily target and where their strengths lie in terms of services offerings.

When the equipment vendors started entering the IT services market in earnest, nearly all attempted to implement a full-service, broad-based positioning in the market. However, this approach is only sustainable for the largest vendors since resources will otherwise be spread too thinly. Small to medium sized vendors have retrenched into markets and service offerings where they have core strengths and capabilities. For most of the original equipment vendors this meant redefining their offerings to fit into a technological or platform based approach. Digital is an example of a vendor that has re-thought its market position while IBM, mainly due

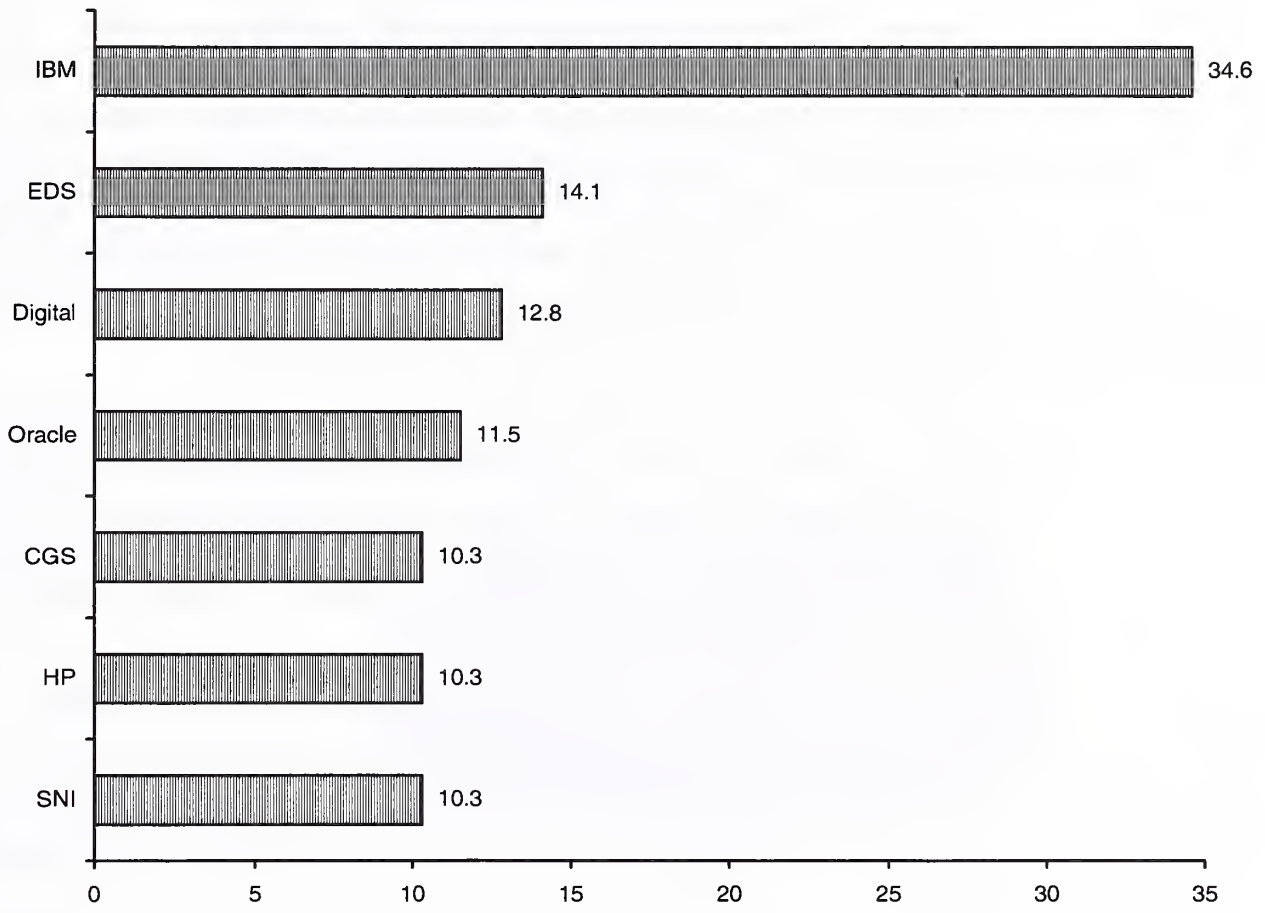
to its size, has managed to hold on to the broad-based approach. Still, because of its heritage, IBM is stronger in the technological end of the services offerings than in areas such as consultancy relating to corporate strategies. Combined with a large loyal installed base this has contributed to bringing IBM in top of the user ranking. It is likely that IBM would have been lower down the user ranking just a few years. However, success for the company's Integrated Systems Solutions Corp. has increased the overall confidence in IBM's ability in the IT services market.

On the other side of the equation are companies such as Andersen Consulting. The low ranking of Andersen Consulting in the user survey is surprising until the background is more closely examined. Historically, Andersen Consulting has addressed organisations more on a business level than a technical level. To some extent this is probably based in the company's origin in the accountancy environment. Andersen Consulting has made the transition into offering services relating to technological issues but there is still a strong legacy that places it comfortably in the boardroom. Its services offerings also places the company higher up the value chain with strong areas in Business Process Reengineering and even consulting on operational or corporate strategy.

While Exhibit III-14 is based on a prompted question encompassing the top 24 European BI vendors, an unprompted question produced much the same picture. The European IT managers were asked the following question: "Can you list any vendors you consider capable or suitable to assist your organisation with systems development or integration projects?". The result of this part of the survey is detailed in Exhibit III-16.

Exhibit III-16

## European IT Managers' Perception of IT Services Vendors (Unprompted)




*Sample of 78 actual respondents of 88 European IT User Organisations*
*% of respondents listing vendors as suitable or capable of assisting their organisations with systems development or integration projects*

*Source: INPUT*

An unprompted survey places IBM even further ahead of the other IT services vendors. Clearly, part of the explanation is that IBM has a very strong brand name, developed through decades. However, as the question was to list vendor perceived as capable or suitable for actual projects. A key question is on what premises European IT users decide which vendors are suitable and which are not.

Research performed by INPUT in the past year shows that the most important factor is the existing relationship with vendors. With its huge installed base, IBM has a head start over many of its competitors. Even users that have had a less successful experience with a vendor are more likely to choose the same vendor again than employ an unknown service provider. The reason is probably that users apply the "better the devil

you know" principle but a change of vendor may also have an inherent admission that it could have been the wrong choice the first time around. It seems that account control is as important as ever.

However, IT users apply other criteria to the selection process. Price and the vendor's commercial stability certainly play a part in the user's decision processes but so does the intangible quantity: company culture. A good match between the client's and the vendor's company culture is important in many situations. It is of course more important in projects that are outside the purely technical aspects of an installation. This criterion is very hard to define and measure but relates closely to user perception.

Vendors are also increasingly expected to have an understanding of their clients' specific industries. It is therefore becoming even more crucial for the small to medium-sized vendors to define tightly their key vertical markets. Demonstration of in-depth industry knowledge and experience can be the deciding factor in the client's ultimate vendor selection.

### 9. IT User Organisations' Utilisation of Key Technologies

The following exhibits illustrate the degree of utilisation of key technologies in European IT user organisations. The utilisation is measured on a scale of using, implementing, piloting, researching and not active.

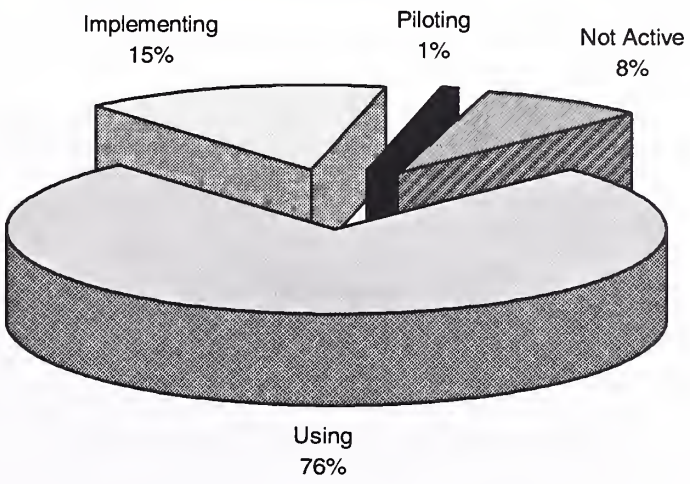
The exhibits are mainly concerned with 'hot' technologies and ignores areas such as utilisation of LANs, which is now used by 99% of European organisations and being implemented by the remaining organisations. Client/Server technology is now in use in 53% of European businesses and only 4% of respondents are reporting no activity at all in the area.

This past year there has been much hype surrounding Sun's Java third-generation development language. The survey shows that there is probably good basis for this. Despite being a relatively young technology, Java has already moved from the professional software development environment and into IT user organisations. In Europe, 48% of IT operations report that they are in some way involved with Java. Although only 3% are using the technology, 21% are either implementing or piloting and 24% are researching Java. Considering what the IT operations reported as their current focus areas, the interest in Java is not surprising. The language is strong on Internet development (internetworking with suppliers and customers) and cross-platform development and deployment.

Exhibit III-17 shows the European IT users' activity level in wide-area networks (WANs). There has been a strong development in this area in the past year. In 1995, 66% of IT users had implemented WANs while 10% were in the implementation phase. This year three quarters of all IT user organisations are using WANs while 15% are in the process of implementing the technology. The strong development in WANs is closely related to the surge in convergence between telecommunications and information system technologies, driven by business needs for communication and internetworking.

Exhibit III-17

**European IT Users' Current Utilisation of Wide Area Networks**

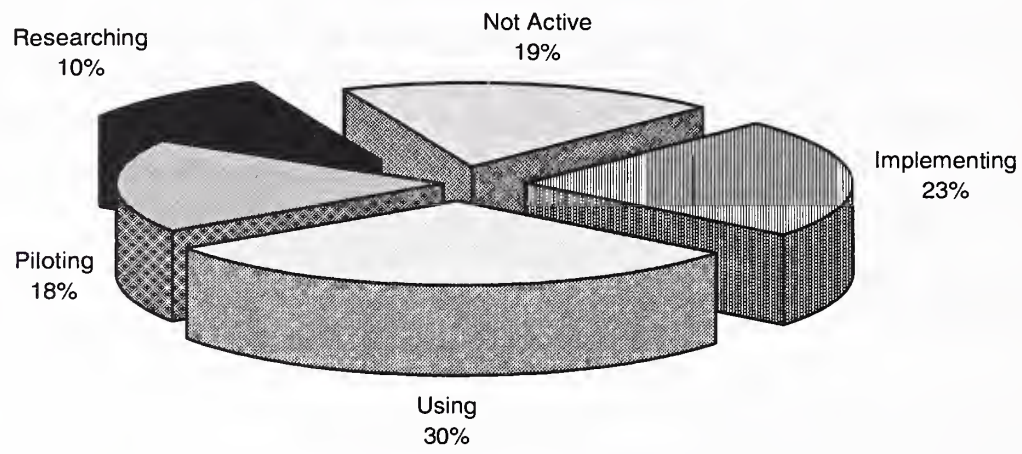



*Sample of 88 European IT User Organisations* *Source: INPUT*

Since groupware technology hit the market more than five year's ago the rate of deployment has been steady but not very fast. However during the past year, IT user organisations have increasingly embraced the technology. As detailed in Exhibit III-18, less than a fifth of all users report that they have no activity in the areas at all compared with 36% in 1995. Almost a quarter of all IT user operations are implementing groupware compared with only 8% in 1995. In the second quarter of 1996, Lotus Development Corp. reported that it had sold more seats of its Notes product than it had ever before. If this strong growth continues, non-active IT operations will be few a year from now.

Exhibit III-18

## European IT Users' Current Utilisation of Groupware

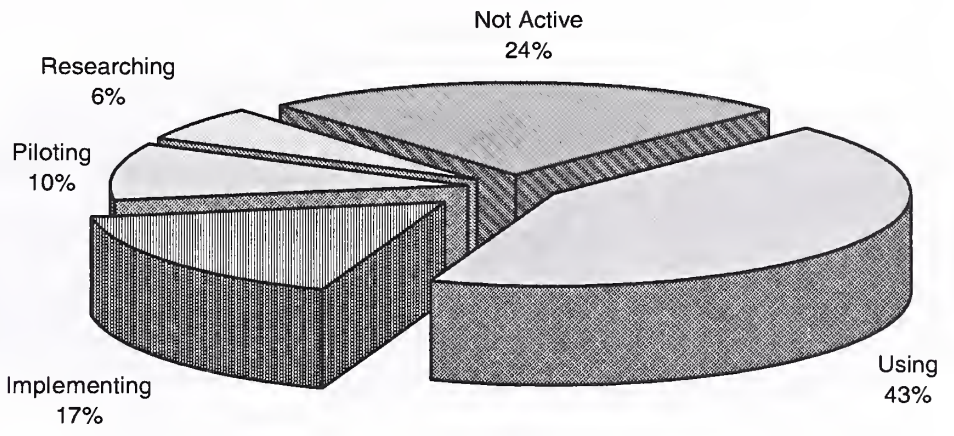



*Sample of 88 European IT User Organisations* *Source: INPUT*

Only a couple of years ago, the Internet was widely regarded as a technology not applicable to serious business environments. However, this has changed. As Exhibit III-19 shows, 43% of European IT operations are using the Internet while 17% are implementing the technology. North America has been ahead of Europe in embracing the Internet for business applications. A recent study performed by INPUT in North America showed that most IT user organisations believed that the Internet would have the highest impact on Sales & Marketing activities, such as advertising, quotations, channel selection and channel relations; and on general customer service. These findings relate closely to European IT users' increased focus on internetworking with customers and suppliers.

Exhibit III-19

## European IT Users' Current Utilisation of Internet

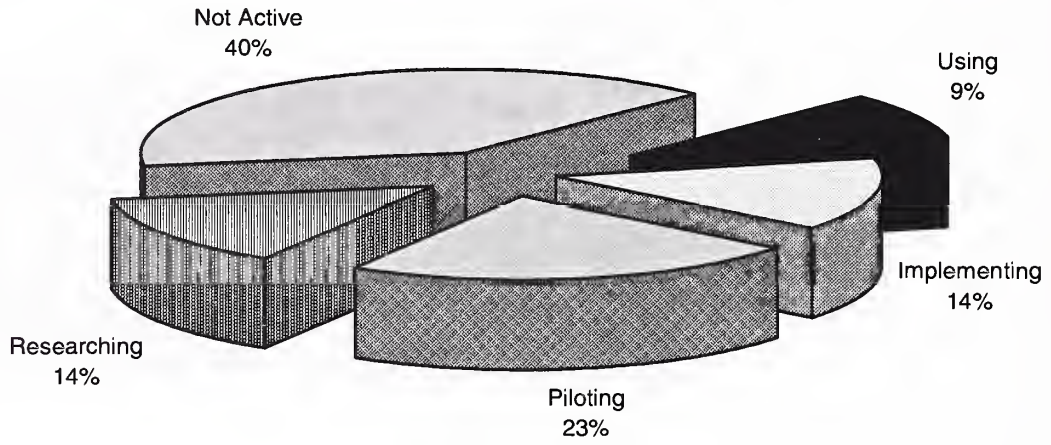



*Sample of 88 European IT User Organisations* *Source: INPUT*

As a subset of the Internet technology concerning companies' internal communication structure, the Intranet is naturally lagging behind. However, the Intranet, which is a combination of the technology of wide area networks and the Internet, is a logical next step. Exhibit III-20 shows the current utilisation of Intranets in European IT user organisations. Although the phrase "Intranet" was only coined within the last two years, 60% of European IT operations are already active in this technology. It seems that the rate of acceptance is much faster than it was for the Internet. While businesses where hesitant about how to best make use of the Internet, the Intranet has a more distinctly defined business use; improvement of communication and sharing of information internally and with selected business partners.

Exhibit III-20

## European IT Users' Current Utilisation of Intranet

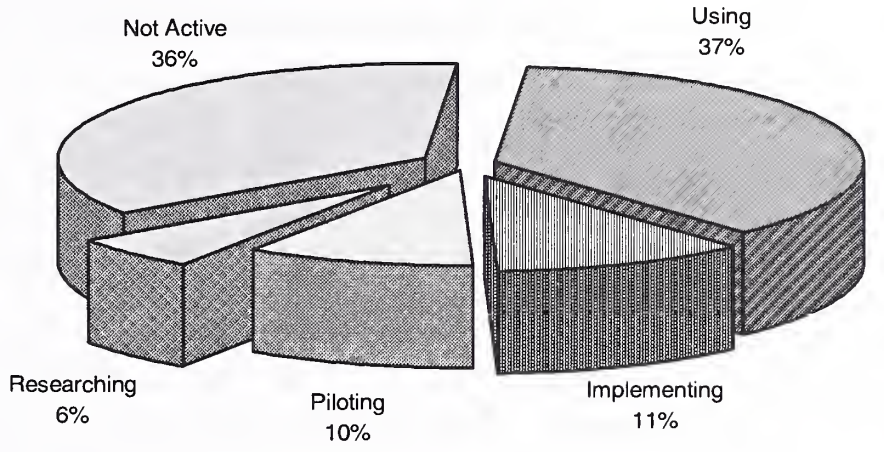



*Sample of 88 European IT User Organisations* *Source: INPUT*

Object oriented technology (OO) is slowly making its way onto European IT operations' agendas. However, there has been a significant increase in operations using the technology from last year's survey. Exhibit iii-21 shows that 37% of European IT organisations are using OO compared with 25% in 1995. Nevertheless there are still more than a third of the users that are not active in the technology. One explanation for the slow up-take of OO is that it is not easy to adopt and needs careful consideration to ensure that OO does not just pave the way for a new type of legacy system. These factors combined with a continuous discussion about standards among OO vendors can have influenced users to adopt a 'wait-and-see' attitude.

Exhibit III-21

## European IT Users' Current Utilisation of Object Oriented Technologies

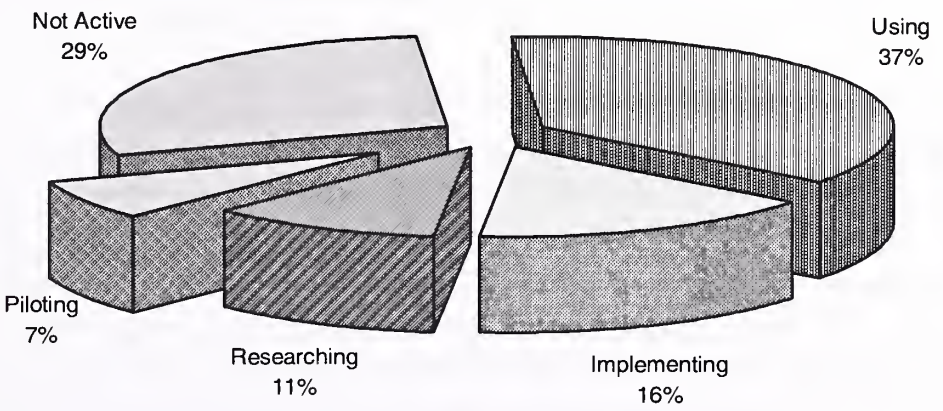



*Sample of 88 European IT User Organisations* *Source: INPUT*

Another 'hot' technology is rapid application development tools. IT user organisations are under increasing pressure to deliver solutions to shorter time frames and lower costs, influenced both by commercial pressures and by shortened technology life cycles. Exhibit III-22 details European IT users' utilisation of Rapid Application Development (RAD) tools.

Exhibit III-22

## European IT Users' Current Utilisation of Rapid Application Development Tools




*Sample of 88 European IT User Organisations* *Source: INPUT*

The exhibit shows that 37% of users are using RAD and less than a third have no activity in the area at all. The use of RAD and associated techniques will continue to grow. RAD is the type of technology that once successfully adopted will set new standards for development time and in turn increase competitive pressures on non-adopters.

# B
# France

## 1. Times of Unrest in French Economy

The French economy has continued its unsteady path in the past 12 months. Between April and October 1995, the gross domestic product (GDP) was virtually stagnant and even fell slightly in the final quarter of the year. So far 1996 has been just as varied with 1.2% growth in GDP in the first quarter and almost zero growth in the second.

Volatility in the French economy is related to its dependence on trade unions. Unions have been reluctant to accept the government's measures for downsizing the public sector: privatisations, spending cuts and restructuring.

Privatisation which has figured on the French government's agenda for some years is slowly moving forward. The government has already spun off some of its stake in Groupe Bull and is in the middle of passing bills to remove France Telecom's monopoly. However, the liberalisation of the telecommunications sector is a EU directive and although the process of privatising this sector has meant job losses, protests have been relatively scarce. The trade unions may have realised that at the end of the day it would be a lost cause.

Attempts to privatise other sectors have proved much more difficult. The most spectacular was the 24-day national strike accompanying the streamlining of the SNCF in preparation for privatisation. It must be assumed that the government will go forward more carefully in the future - although it at the same time is under real pressure to bring down public expenditure and deficit.

It is not all gloom. There are also positive signs that could signal a return to a growth economy. In the first quarter of 1996, industrial investments increased 3.1% over the same period in 1995. Further, there has been a steady downwards trend in interest rates providing for low-cost financing that could play a part in fuelling industrial expansion. However, a large part of France's businesses continues to restructure. The resulting large-scale job losses could make it hard to bring the confidence back into an economy that already has an unemployment rate of 11.8%. Nevertheless this is a prerequisite for the government to reach its forecast of 2.8% gross domestic product growth in 1997.

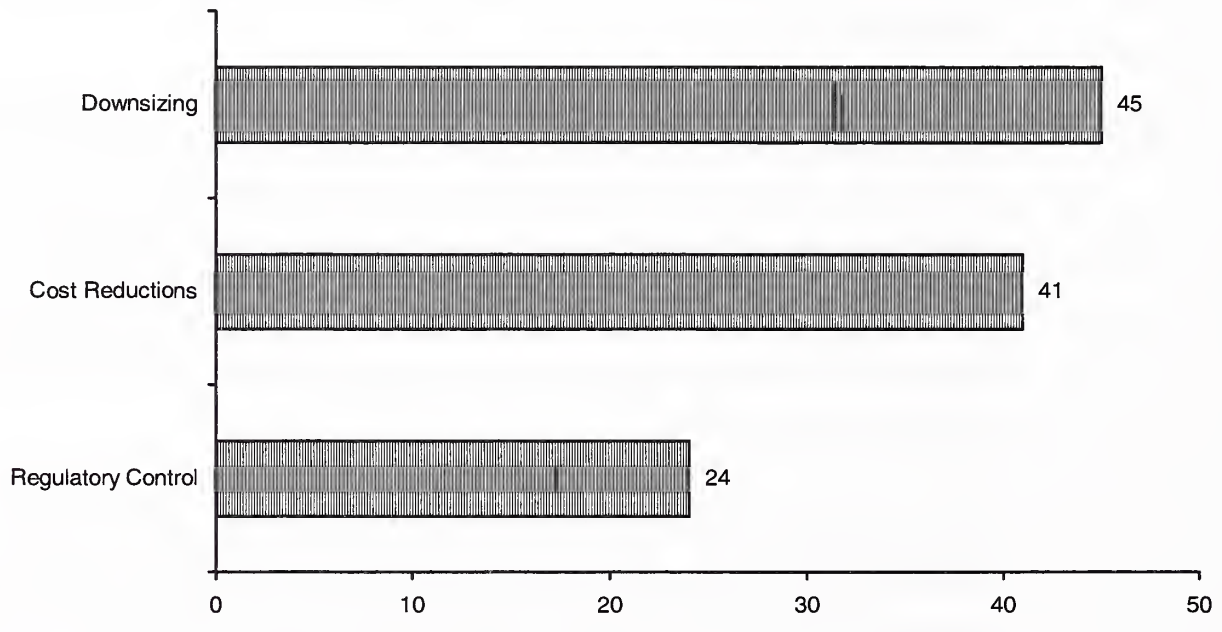
## 2. IT Organisations Feel the Pressure of the Economy

Naturally, the unstable economic climate is reflected in the priorities and objectives of the business community. While on a European level the major commercial pressures facing IT executives are to improve customer and supplier interworking, pressures on French IT user organisations are of a much more mundane nature.

According to INPUT's research, French IT executives believe that their operations will mainly be influenced by issues concerning downsizing, cost reduction or regulatory control as detailed in Exhibit III-23.

Exhibit III-23

**Major Commercial Pressures Facing French Businesses in the Next Two Years**




*Sample of 29 French IT User Organisations. % of respondents rating a pressure of 4 or 5, where 5 is most important on a scale of 1-5*

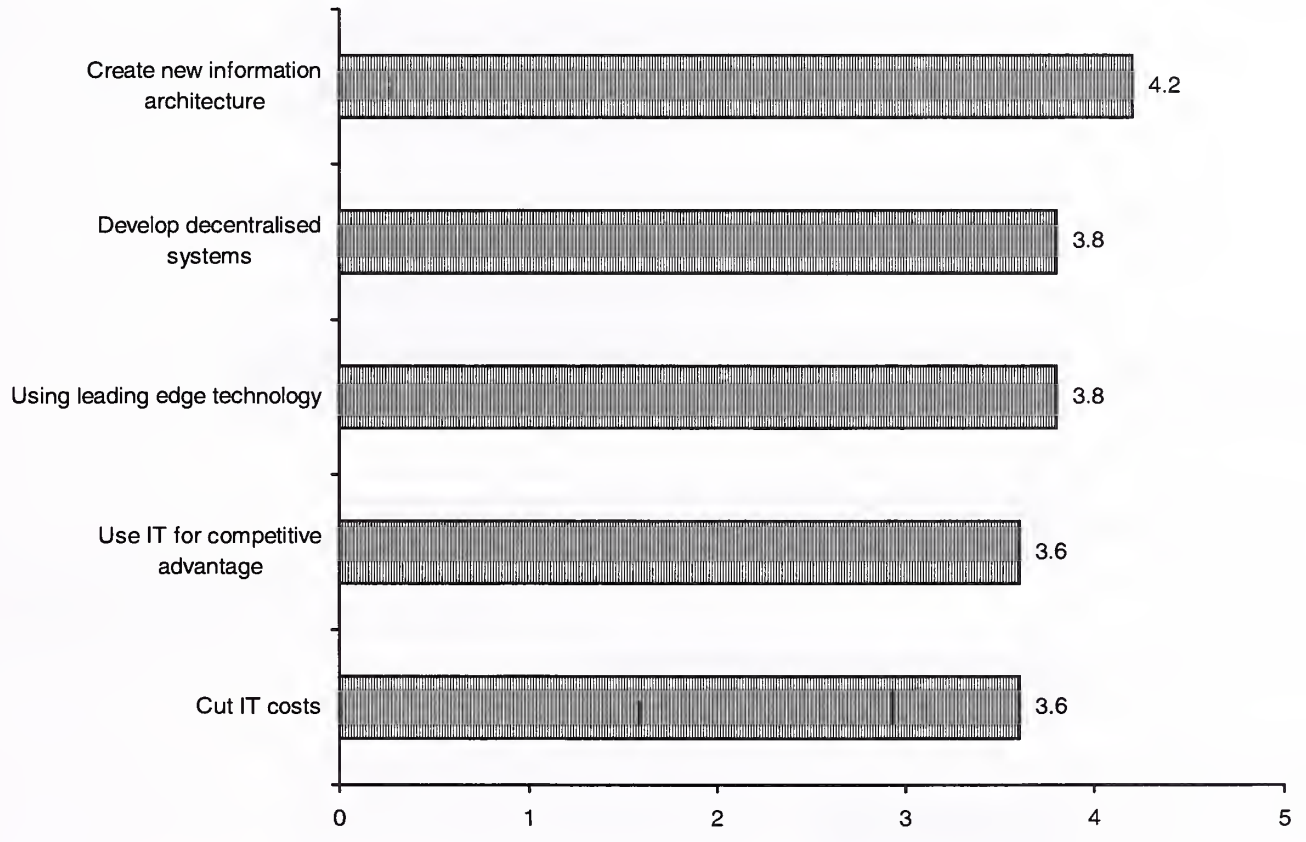
*Source: INPUT*

The results portrayed in the exhibit indicates that French IT executives are concerned with the general state of the economy and its influence on their operations to a larger extent than a year ago. In 1995, two thirds of respondents named improvement of customer service as the highest pressure but this has fallen to only 14% this year. Today's topics are very much related to the measures imposed by the government to bring the economy back on track.

Related to IT managers' perceptions of the pressures imposed on them from the outside are the actual areas on which they focus their operations. These pressures are reflected in the areas on which the French IT operations are focused. Exhibit III-24 shows the French IT operations' major focus areas.

Exhibit III-24

**French Organisations' Current IT Operational Focus**




*Sample of 29 French IT User Organisations. Average rating on a scale of 1-5 where 5 is very strong and 1 is not at all*

*Source: INPUT*

Most of the focus areas are related to technologies as was the case in last year's survey. However this year, reducing IT costs has become a major priority for the IT user operations as French companies are facing tighter budgets and restructuring actions.

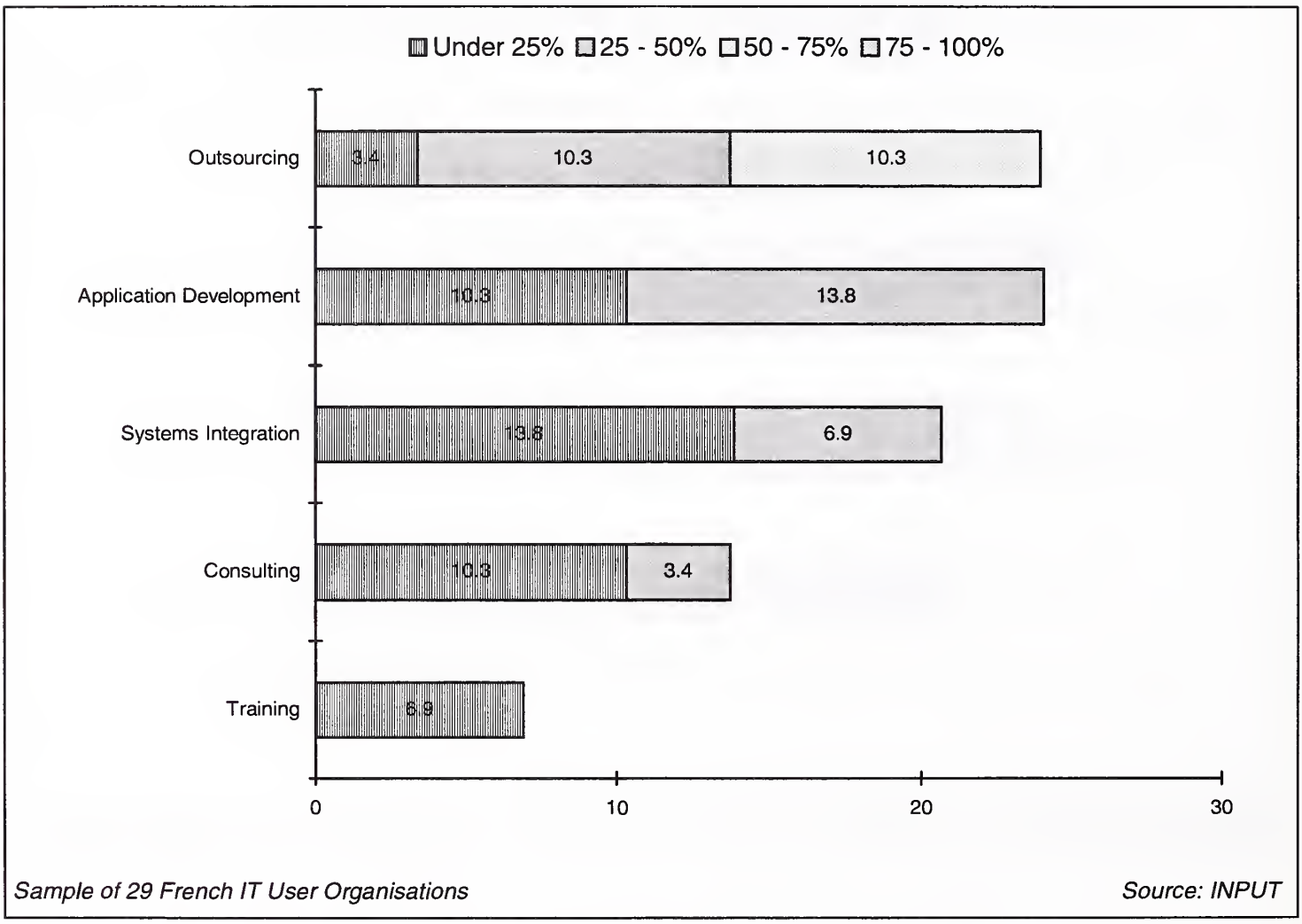
On a European level, IT executives reported that a large share of their external IT budgets would be spent on application development. In France there seems to be increased focus on outsourcing which may be related to the focus on cutting IT costs. French IT executives are having

to explore all possibilities for running more cost effective operations, including outsourcing all or part of the IT operations.

Exhibit III-25 details how the French IT user organisations spend their external IT budgets. The exhibit shows that 14% of respondents spend more than 25% of their external budget on application development while 20% spend more than a quarter of their budget on outsourcing.

Exhibit III-25

**Proportional Spending of External IT Budget**

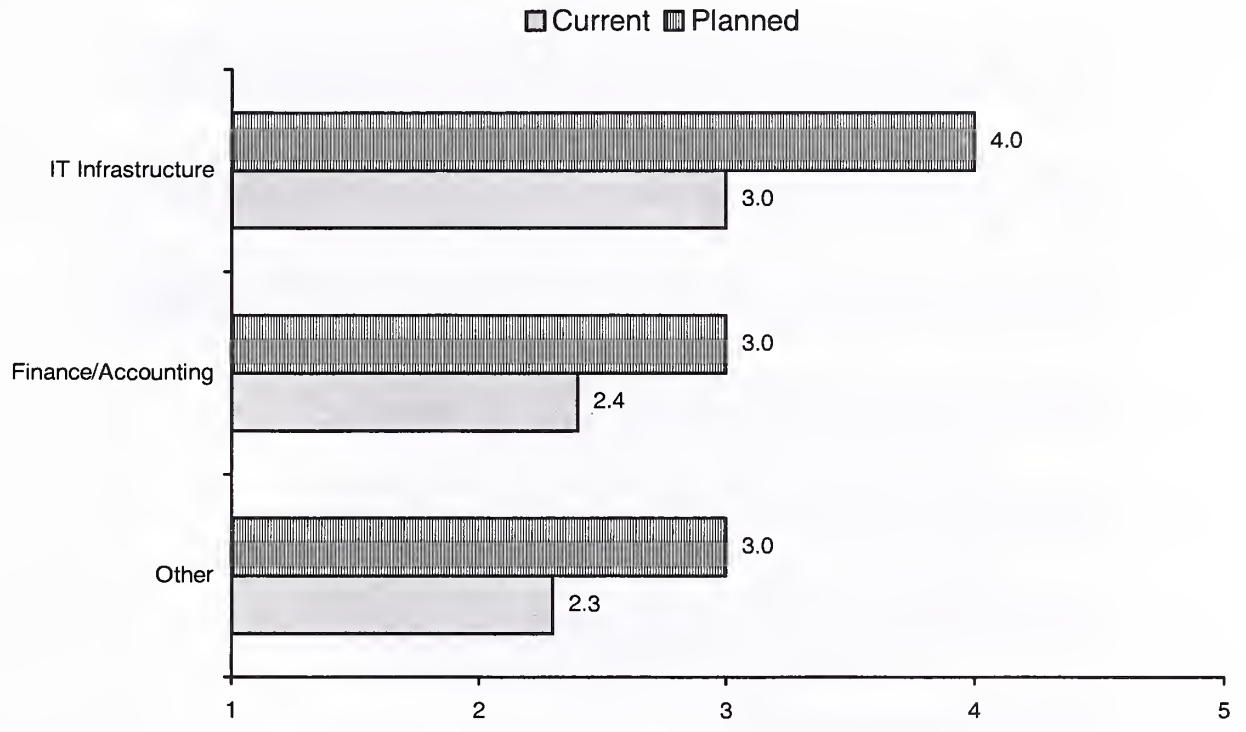



*Sample of 29 French IT User Organisations* *Source: INPUT*

Exhibit III-26 details the areas where French IT executives report that they most require external assistance for current and planned projects.

Exhibit III-26

## Areas with Highest Need for External Service




*Sample of 29 French IT User Organisations. Average rating on a scale of 1-5 where 5 is very strong and 1 is not at all*

*Source: INPUT*

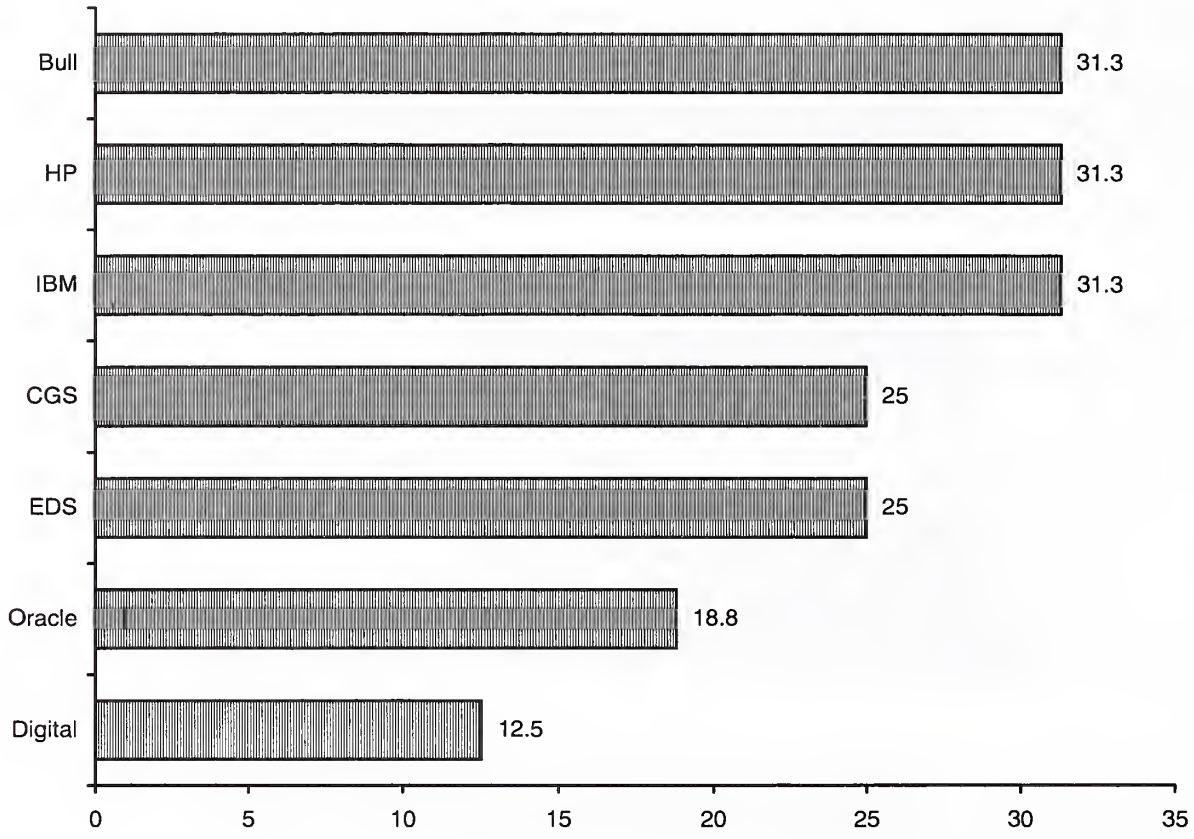
IT infrastructure is the area where French IT user operations are most likely to employ external resources followed by finance and accounting projects. IT executives further mention areas such as desktop services and networking as areas where they will need external assistance. These areas, as well as comments indicating that decisions on where to prioritise external spending, are still to be taken are illustrated in the category 'Other'.

### 3. Perception of IT Services Vendors

On a European level, IBM was more often than its competitors perceived by IT managers as suitable or capable of undertaking planned projects. France is the only country where IBM is only sharing the top ranking. Exhibit III-27 details French IT managers' perception of IT services vendors. Only vendors that received the top two ratings from more than 10% of respondents are illustrated.

Exhibit III-27

## French IT Managers' Perception of IT Services Vendors (prompted)




*Sample of 16 actual respondents. % of respondents rating vendors' capability/suitability 4 or 5 as a services vendor on a scale of 1-5, where 5 is extremely capable/suitable*

*Source: INPUT*

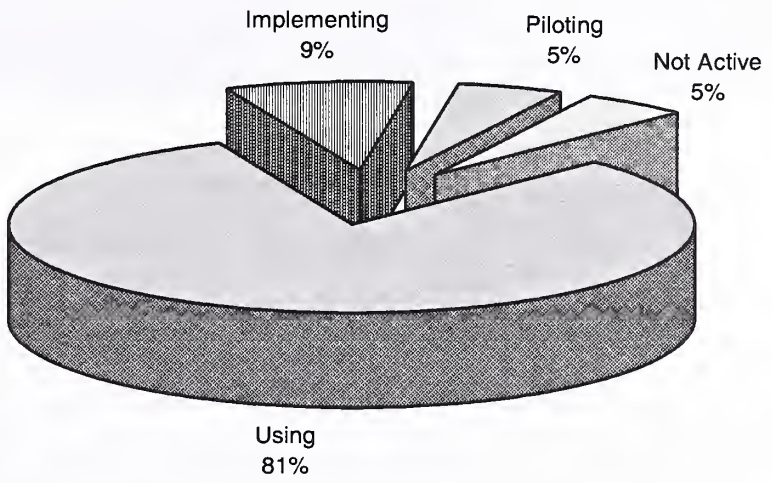
IBM, Groupe Bull, and Hewlett Packard are on the same level in the IT managers' perception of capability or suitability. It is perhaps not surprising that these companies all have their basis in the technology market draw top position considering French IT operations' areas of focus. The common denominator was technology and vendors will be ranked according to their capabilities on that point. Further, referring to an earlier discussion of the subject, IT managers generally take a technological rather than business view of which resources are required for projects.

### 4. Deployment of New Technology

Exhibit III-28 shows French users' level of activity in Wide-Area Networks (WANs). Only 5% of IT users are not involved in WANs while 81% are already using the technology. This is a large increase from last year where 50% where using WANs and 40% were not active at all.

Exhibit III-28

**French IT Users' Current Utilisation of Wide Area Networks**

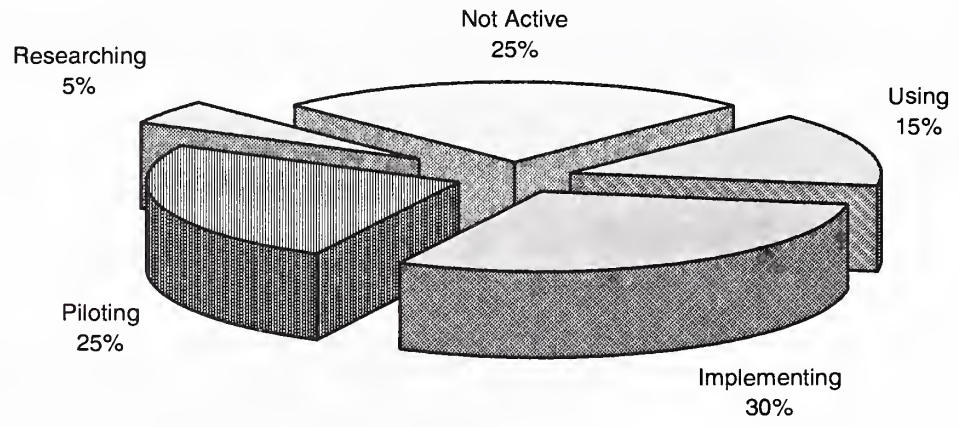



*Sample of 29 French IT User Organisations* *Source: INPUT*

Exhibit III-29 show the activity level relate to groupware in France. While on a European level, 30% of IT user operations reported that they were using groupware applications only 15% of French IT users have deployed the technology. However, 30% are implementing and 25% are piloting groupware which should result in a large proportion of users in the near future.

Exhibit III-29

## French IT Users' Current Utilisation of Groupware

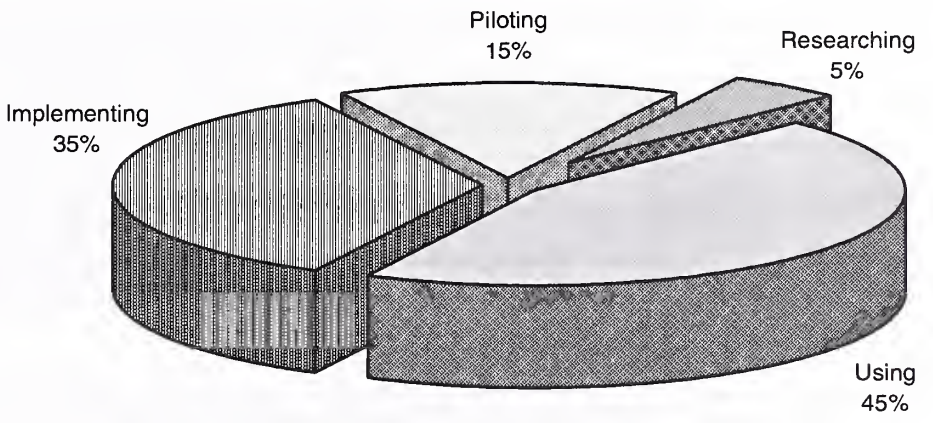



*Sample of 29 French IT User Organisations* *Source: INPUT*

Exhibit III-30 shows the utilisation of Internet in French IT user organisations. Of the respondents, 45% reported that their organisations were already using the Internet, much on the level of 43% across Europe. However, French IT managers differed from the rest of Europe in that they all reported activity in Internet if only researching deployment of the technology. On a European level, 24% of respondents reported no activity on Internet technology. While the difference seems daunting, an explanation can perhaps be found in the Minitel which France has had for a number of years, and which may have paved the way for acceptance of the concept of the Internet.

Exhibit III-30

## French IT Users' Utilisation of the Internet

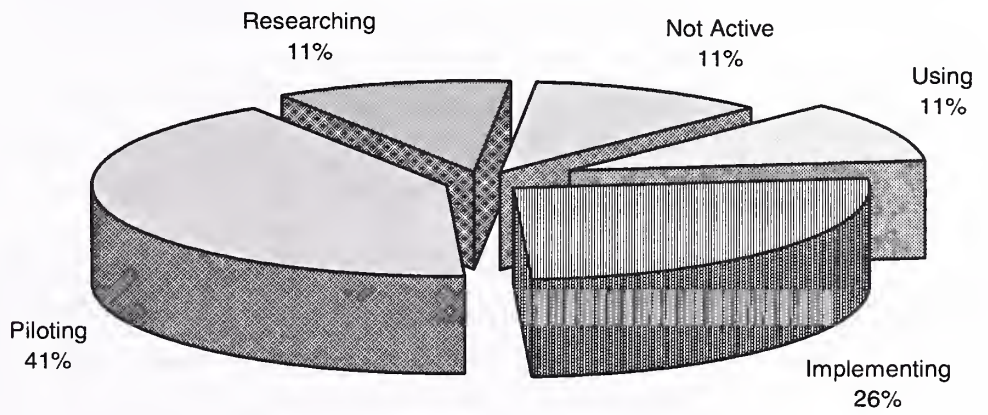



*Sample of 29 French IT User Organisations* *Source: INPUT*

The same picture evolves when examining the level of utilisation of the Intranet in France. As shown in Exhibit III-31, the proportion of respondents that are using Intranet technology is in line with the European level of 9%. However, 26% are implementing the technology against 14% across Europe and 42% are piloting Intranets. In Europe as a whole, 23% of IT user operations are running Intranet pilots.

Exhibit III-31

## French IT Users' Utilisation of Intranet




*Sample of 28 French IT User Organisations* *Source: INPUT*

# C
# Germany

## 1. Germany Facing Unfamiliar Economic Situation

The German economy has been a model of stability and prosperity for decades; low unemployment rates, low interest rates, stable gross domestic product (GDP) growth and controlled inflation. However, unification has made its mark on the German economy. It has proved to be a major and expensive task to bring the old East Germany to the level of the rest of Germany, in such areas as standard of living and infrastructure.

Generally, it is an indication of how strong the German economic model has been that it has taken this long before trouble has really emerged. However, trouble is now looming. Germany has experienced the first fall in real GDP since 1993 and record unemployment. In June this year, the unemployment rate was 10.3% compared with 9.4% last June. The government is predicting only 0.75% growth in real GDP for 1996 compared with 1.9% in 1995.

Chancellor Kohl has proposed budget cuts to bring the German economy back on track again. In April, Kohl announced government spending reductions by more than $46 billion in 1997. It is further planned to introduce a public sector pay freeze for one to two years and a cut-back on elements of Germany's extensive health and welfare system to the tune of around $13 billion in 1997. Needless to say, Kohl's plans were not welcomed by the trade unions which are influential in Germany.

At the end of the day, the German government has to deliver and bring its budget deficit back to less than 3% of GDP in 1997. If not, one of the European countries that have most strongly been rallying for a single currency will not be able to live up to the targets defined in the Maastricht Treaty regarding entry into the economic and monetary union.

Underlining the difficulties, a recent six-months survey performed by the German chambers of industry and commerce (DIHT) on its 25,000 members showed that a third of western German companies expected business to worsen. In the fourth quarter of 1995, investment in equipment was down by 0.6% in real terms over 1994. The DIHT now expects investment in equipment to decline by 2% in real terms this year. Whatever investment that happens is more likely to be related to rationalisation than to be of expansive nature. However, if the government manages to find enough savings to follow through on

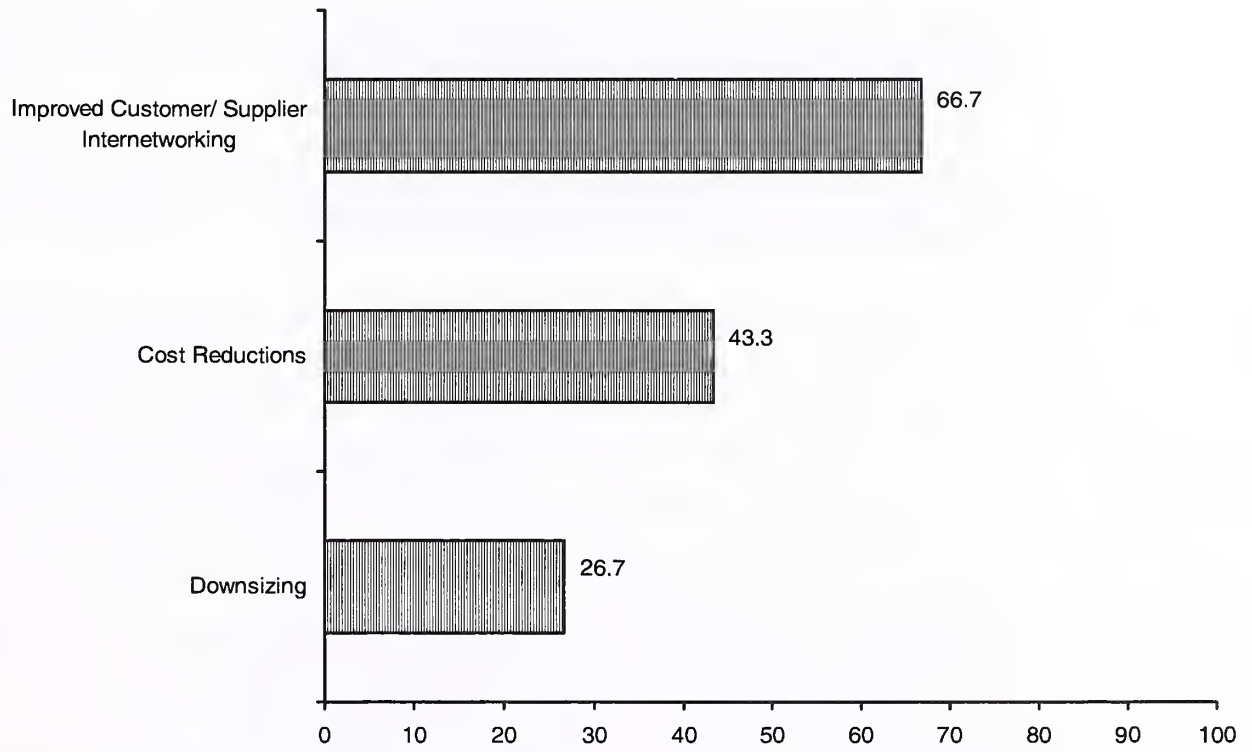
proposed reductions in tax rates, there may still be a resurge in investments in the next couple of years.

### 2. German Businesses Come to Terms with a Weak Economy

In INPUT' survey last year, almost 80% of German IT executives reported that their main concern was high interest rates. However, this year the state of the German economy, which is on the border of recession, has brought other pressures. These are detailed in Exhibit III-32.

Exhibit III-32

**Major Commercial Pressures Facing German Businesses in the Next Two Years**




*Sample of 30 German IT User Organisations. % of respondents rating a pressure of 4 or 5, where 5 is most important on a scale of 1-5*

*Source: INPUT*

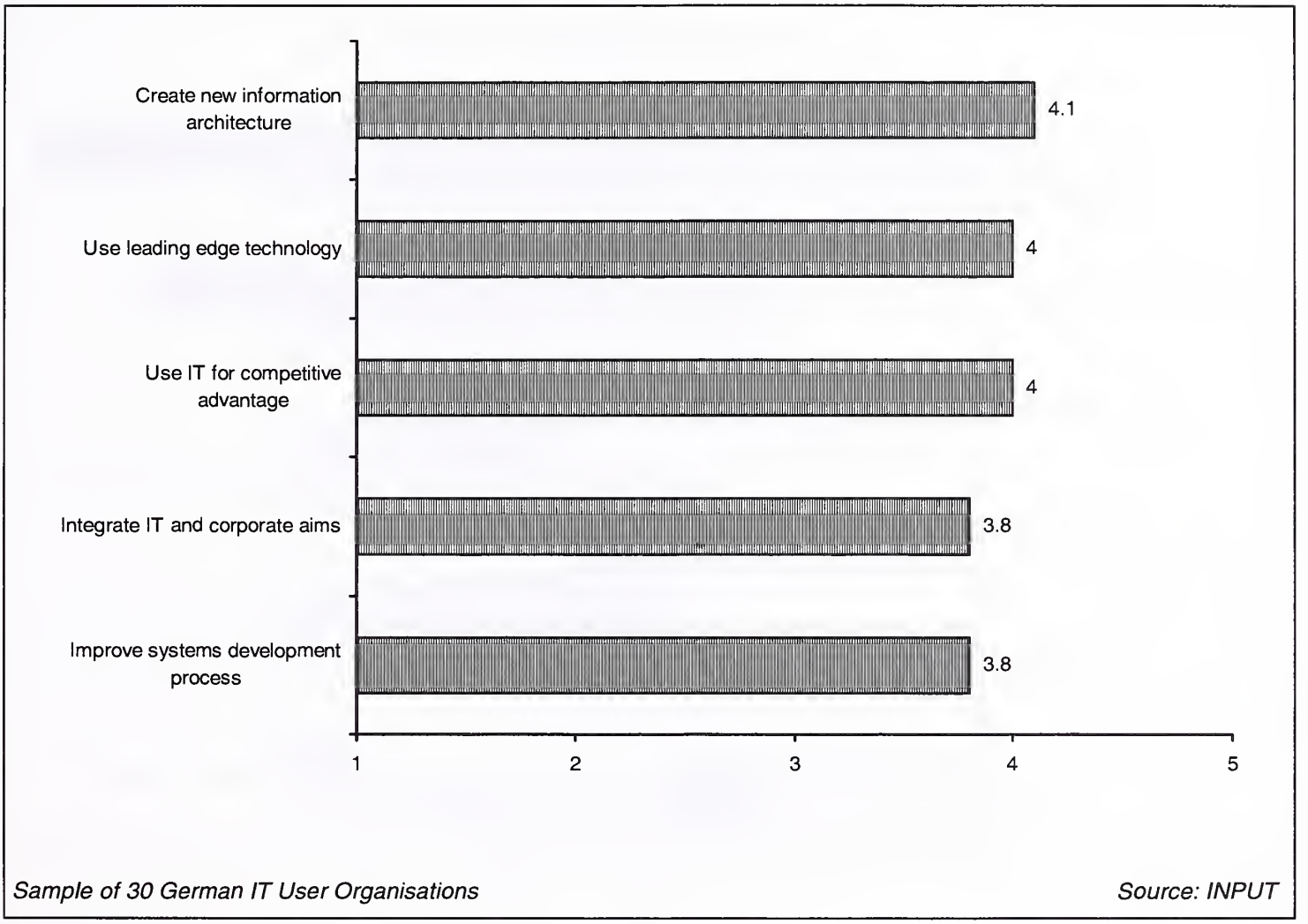
German IT executives report that in the next two years the business climate will be influenced by cost reductions and downsizing issues. This is clearly related to the changes that are taking place in the German economy and influenced by the government's economic plans. However, IT executives also believe that there will be increasing pressures to improve the way companies communicate and do business with customers and suppliers. So despite expectations of a worsening business climate and awareness of increasing pressures to downsize and reduce costs, the IT executives main concern is of a strategic/technological nature.

When analysing the actual activities that are on the agenda for IT operations, the same pattern applies. The major focus areas for German IT operations, which are detailed in Exhibit III-2, fall into two categories, technological and business strategy. On the technological side, IT operations are focusing on using leading edge technology, improving system development processes and creating a new information architecture. On a more strategic level, IT operations are focusing strongly on integrating IT with the company's corporate aims and using information technology in ways that will provide the company with a competitive advantage.

These focus areas differ greatly from the survey a year ago. German IT operations were then mostly involved in technological activities, such as integrating systems and using leading edge technology. The fact that business related issues figure so highly in the priorities for IT executives is perhaps the best sign for recovery for the German economy. It shows that although there are negative expectations for the economy, German companies are still operating with business models based on growth and competitiveness rather than contraction. This attitude to the economic problems is maybe not surprising. German economy and production have been so strong compared to the rest of Europe over the past three to four decades that there must be a deep-rooted belief that Germany will also ride off this storm.

Exhibit III-33

## German Organisations' Current IT Operational Focus

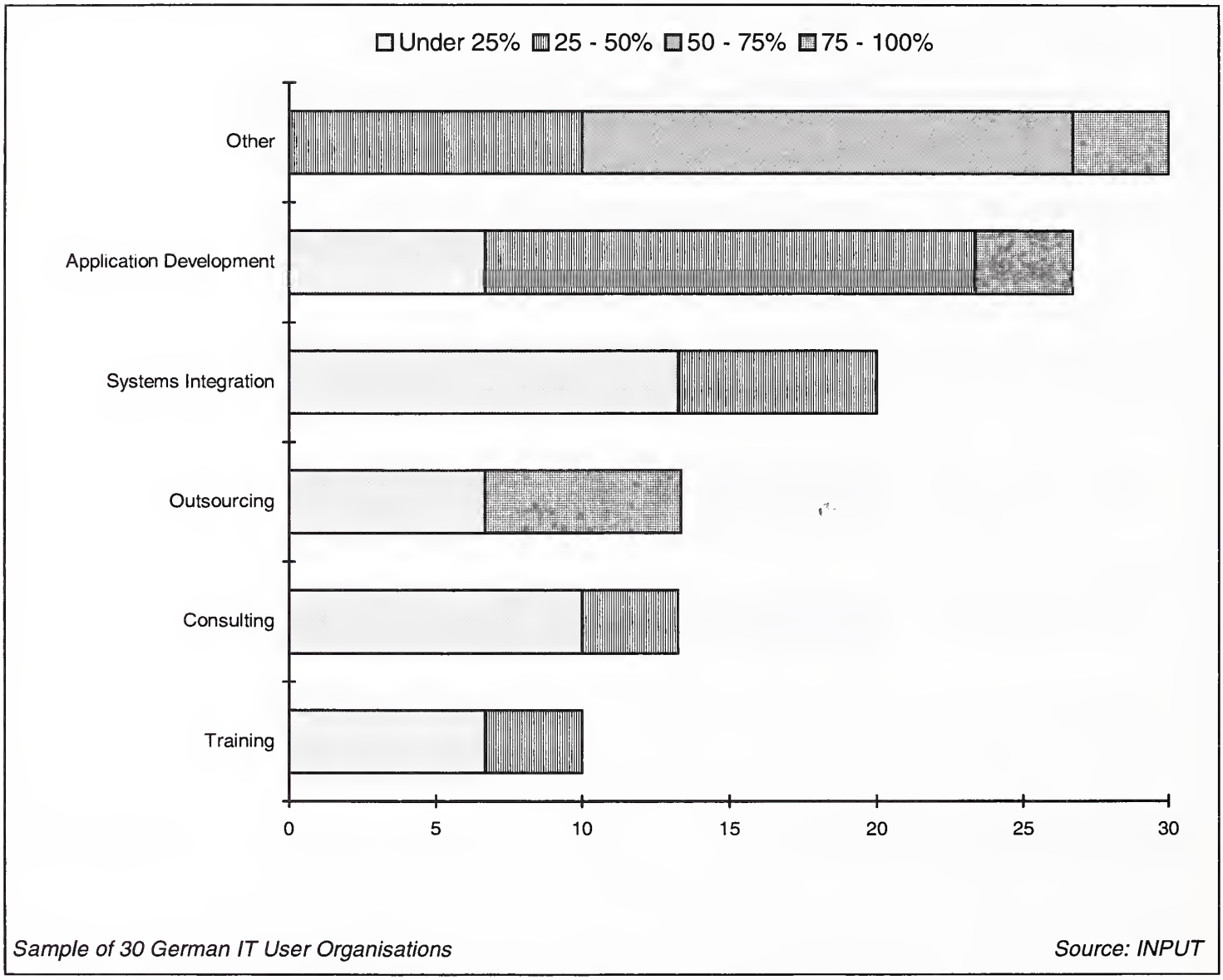



*Sample of 30 German IT User Organisations* *Source: INPUT*

Across Europe, IT user organisations reported that a large part of their external IT budget would be geared towards applications development. This picture also emerges when looking only at German businesses. However, in one significant area Germany stands apart from the rest of Europe. Of the IT operations, 20% reported spending more than 50% of their budget on other areas than surveyed. A closer analysis indicates that German IT operations spend a large part of external budgets on datacommunication services and packaged software, notably SAP. Exhibit III-34 illustrates the proportional spending for the budgets.

Exhibit III-34

## Proportional Spending of External IT Budget

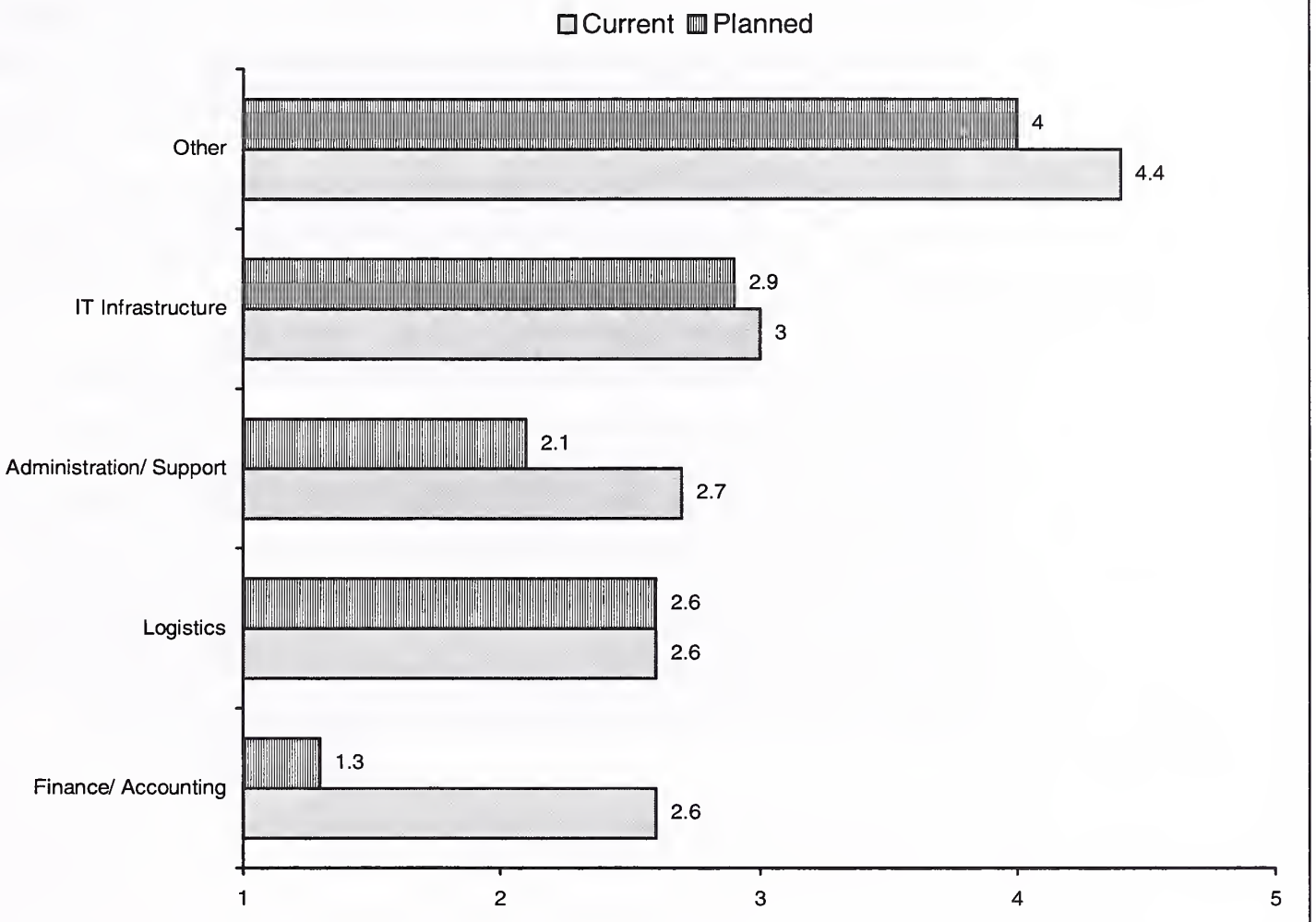



*Sample of 30 German IT User Organisations* *Source: INPUT*

Exhibit III-35 show the functional areas where German IT executives report to have the highest need for external service.

Exhibit III-35

## Areas with Highest Need for External Service




*Sample of 30 German IT User Organisations* *Source: INPUT*

Exhibit III-36 shows that IT operations will mostly be requiring external services in future projects relating to IT infrastructure and logistics. However, there is a range of other activities where the German IT operations will employ external resources (category 'Other'). The most often mentioned projects in this category are of a cross functional nature, such as groupware and network installations. About a third of respondents named SAP R/3 as the application the IT operations would implement over the next year. It must be assumed that a large part of the external assistance required in planned projects will relate to these implementations.

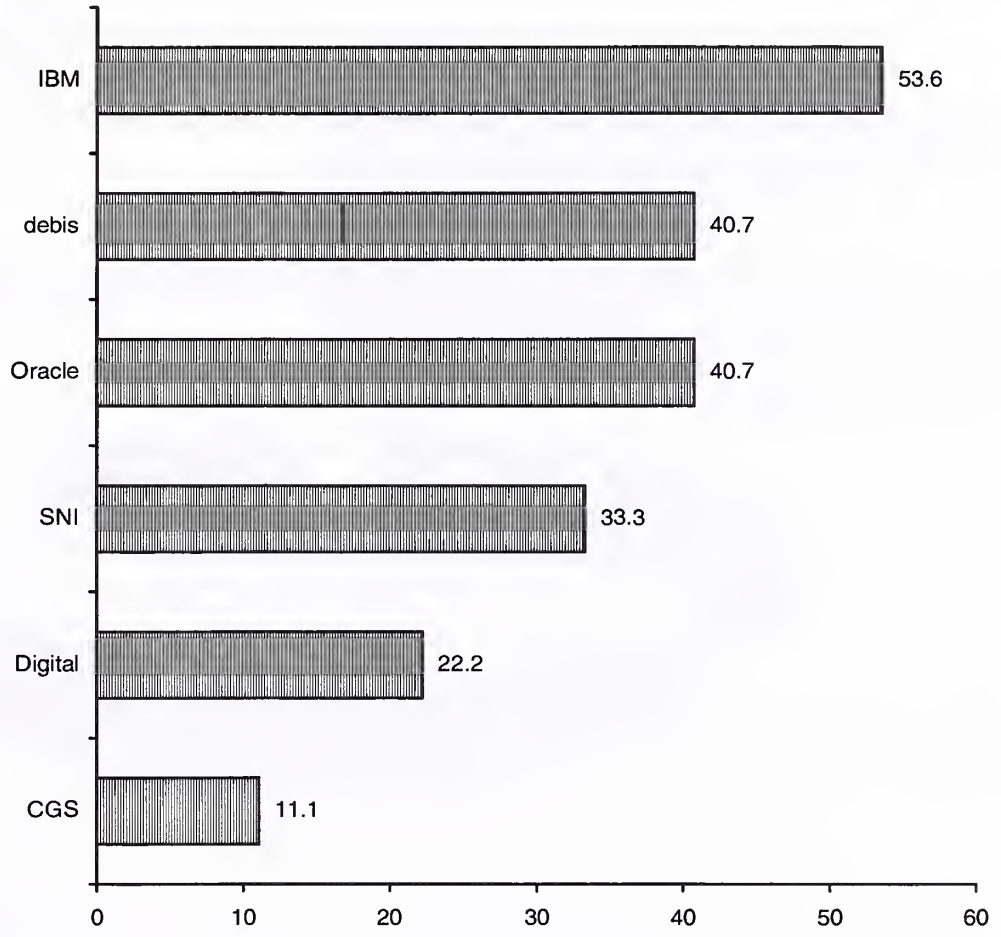
### 3. Perception of IT Services Vendors

As part of the survey, IT executives were asked how capable or suitable they perceived the individual IT services vendors to be for undertaking planned projects in the user operations. IBM is the vendor that was most often named on a European level (by 35% of respondents) and is even more significantly in the lead in the German part of the survey. Based on a sample of 27 IT executives that were prepared to rate IT services vendors, 56% found that IBM would be suitable for their organisation. Exhibit III-35 shows the IT services vendors that were rated as capable or suitable by more than 10% of respondents.

German IT executives rank two national services vendors, Siemens Nixdorf and debis Systemhaus, among their top choices for planned projects thereby placing these vendors on the European ranking. Otherwise, the ranking is in line with the European ranking. While the French IT executives seemed to favour hardware technology-based IT services vendors, German IT executives lean towards more software or application based vendors. This matches well with the result in Exhibit III-35 which showed that a large part of German IT operations' external budgets will be directed towards application development projects.

Exhibit III-36

## German IT Managers' Perception of IT Services Vendors (prompted)




*Sample of 27 Actual Respondents*

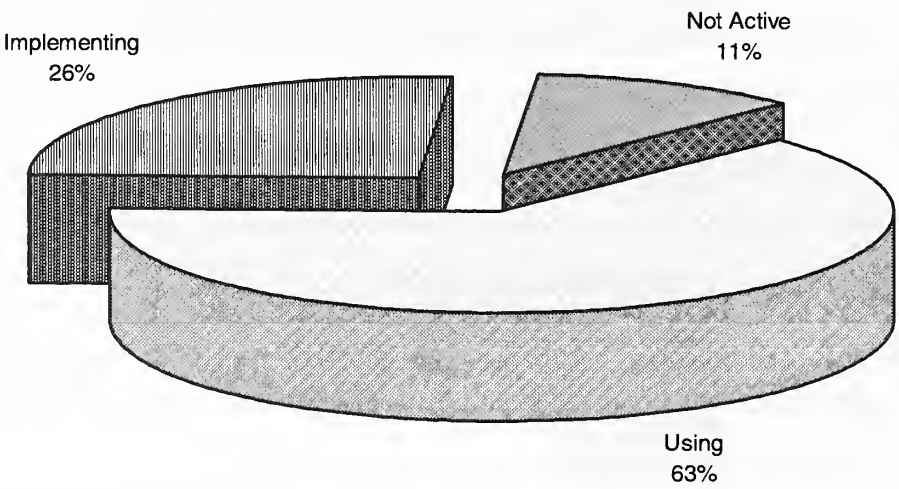
*Source: INPUT*

## 4. Deployment of New Technology

Exhibit III-37 shows German IT user organisation's current activity levels in wide area networks (WAN). In last year's survey, almost a quarter of respondents were not active in this technology compared with only 11% this year. Nearly two thirds of IT users are already using WANs, while 26% are an implementation phase.

Exhibit III-37

**German IT Users' Current Utilisation of Wide Area Networks**

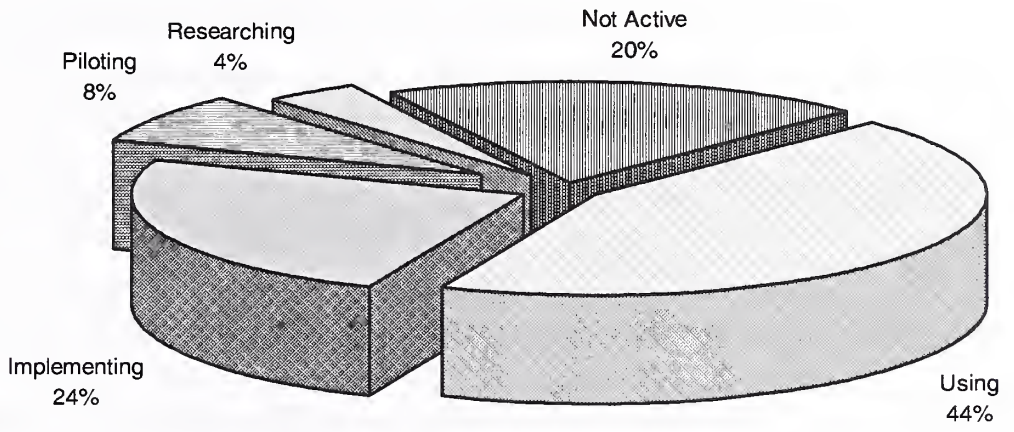



*Sample of 30 German IT User Organisations* *Source: INPUT*

Exhibit III-38 details German IT users' utilisation of groupware. The deployment of groupware in Germany is at the front of the wave compared with the general level in Europe. Of all respondents 80% are somehow involved in the technology, with 44% already using groupware and 24% implementing it. While 80% are also active on a European level only 30% are currently using groupware and 23% are implementing the technology.

Exhibit III-38

## German IT Users' Current Utilisation of Groupware

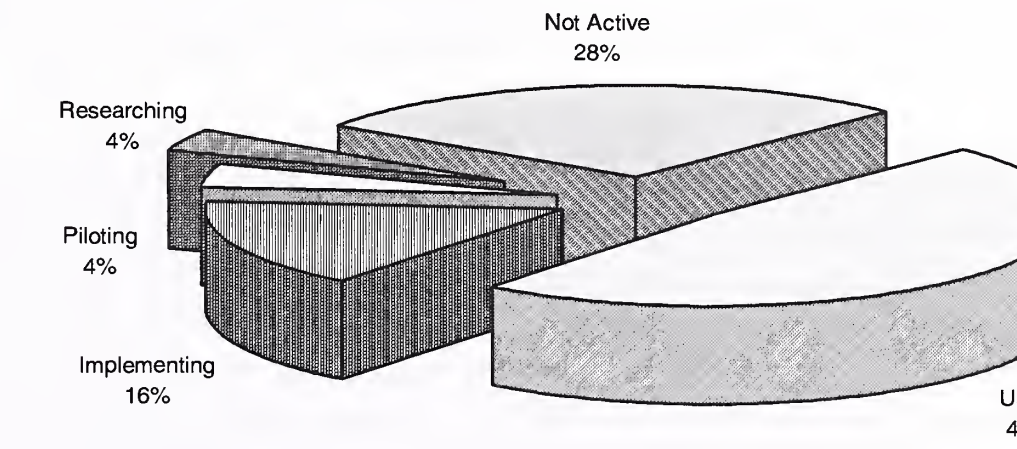



*Sample of 30 German IT User Organisations* *Source: INPUT*

German IT user operations are also slightly above the European average for Internet usage. As shown in Exhibit III-39 almost half of German businesses are using the Internet, compared with 43% in Europe, while 28% are not active at all.

Exhibit III-39

## German IT Users' Current Utilisation of the Internet



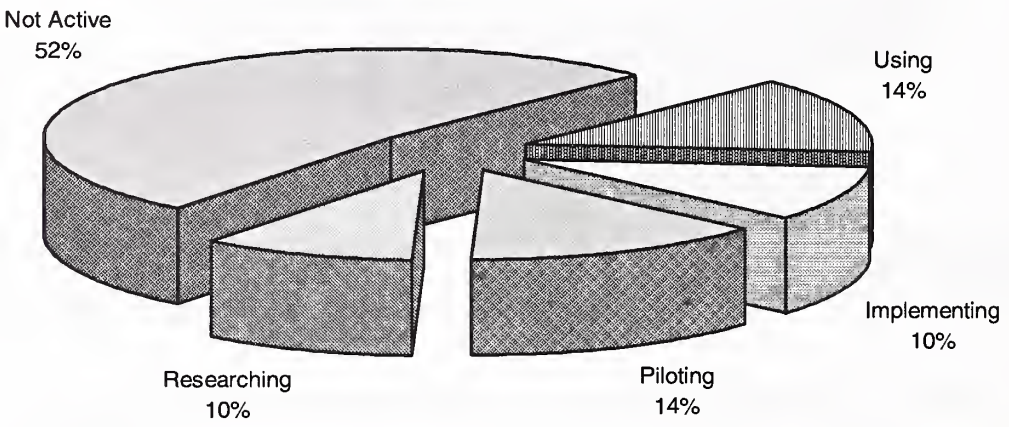

*Sample of 30 German IT User Organisations* *Source: INPUT*

In the utilisation of intranets German IT user organisations are slightly ahead of the rest of Europe. Some 14% of German respondents reported that they were using intranets and 10% were implementing the technology compared with 9% and 14% of European IT operations respectively. However, again a larger part of the German IT users had no activity in the technology (52%) than for Europe in general (40%).

These findings combined with the utilisation of the Internet could indicate that Germany has had a larger number of early adopters of these two technologies while the rest of the IT user operations are lagging behind. Since German IT executives mostly named SAP implementations and application development as their priorities it is likely that the adoption will not increase significantly in the coming year.

Exhibit III-40

**German IT Users' Current Utilisation of the Intranet**




*Sample of 30 German IT User Organisations* *Source: INPUT*

# D
# United Kingdom

## 1. Recovery not as Fast as Expected

While many countries in continental Europe are facing economically unstable conditions, the British government has now for a while been proclaiming that the U.K. was well out of the recession. However, the economy still shows some signs of weakness.

In the 1995 Budget, the government predicted a 3% growth in GDP but at the recent Summer Economic Forecast the growth rate has been lowered to 2.5%. There are other factors that are taking some of the shine off the recovery and stopping the economic expansion the government had predicted. Despite increasing exports the trade gap has widened due to rising imports. The manufacturing sector has performed worse than expected with output growth only 1.25% or half of the Budget forecast. Further, consumer spending has fallen short of the predicted 3.5% in the Budget.

Adding to the problems of the British economy is a major shortfall in tax revenues. This has caused the government to increase public sector borrowing requirements (PSBR) by £4.5 billion or 20% over the original budget. At the same time, the forecasted PSBR for 1997-98 was increased by 50% or £8 billion. However, the government remains confident that the economy will soon rebound, kick-started by buoyant consumer spending.

## 2. Users' Attention Turns from Restructuring to Competitive Use of IT

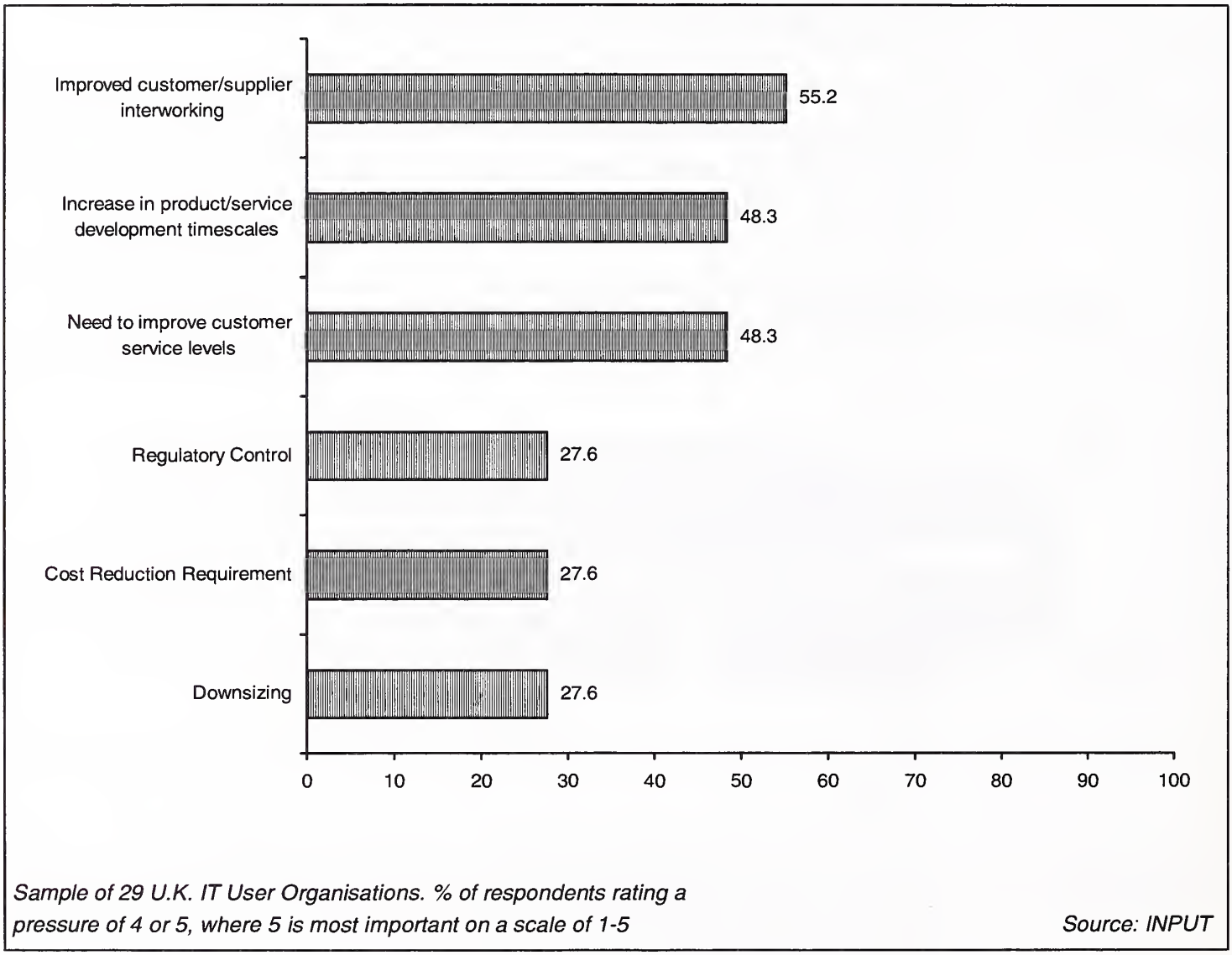
Up until last year, British companies continued to report that commercial pressures were mostly related to cost cutting and restructuring exercises. However, this spell now finally seems to be broken. According to INPUT research, IT executives in the U.K. are primarily concerned with commercial issues relating to doing business with suppliers and customers in a smarter and more competitive manner. More than half of all respondents named "Improved customer/supplier interworking" as the major commercial pressure for the next two years, as illustrated in Exhibit III-1. Related to this issue is the need to improve customer service levels which was mentioned by 44% compared with 26% a year ago.

Regarding financial issues, U.K. IT executives seem to feel that the pressure to reduce cost is less strong than 12 months ago. Around 28%

has this as a concern compared with 46% in last year's survey. An explanation is that U.K. businesses have been through restructuring processes for the past five years and now expect to have come through the worst.

Exhibit III-41

**Major Commercial Pressures Facing U.K. Businesses in the Next Few Years**



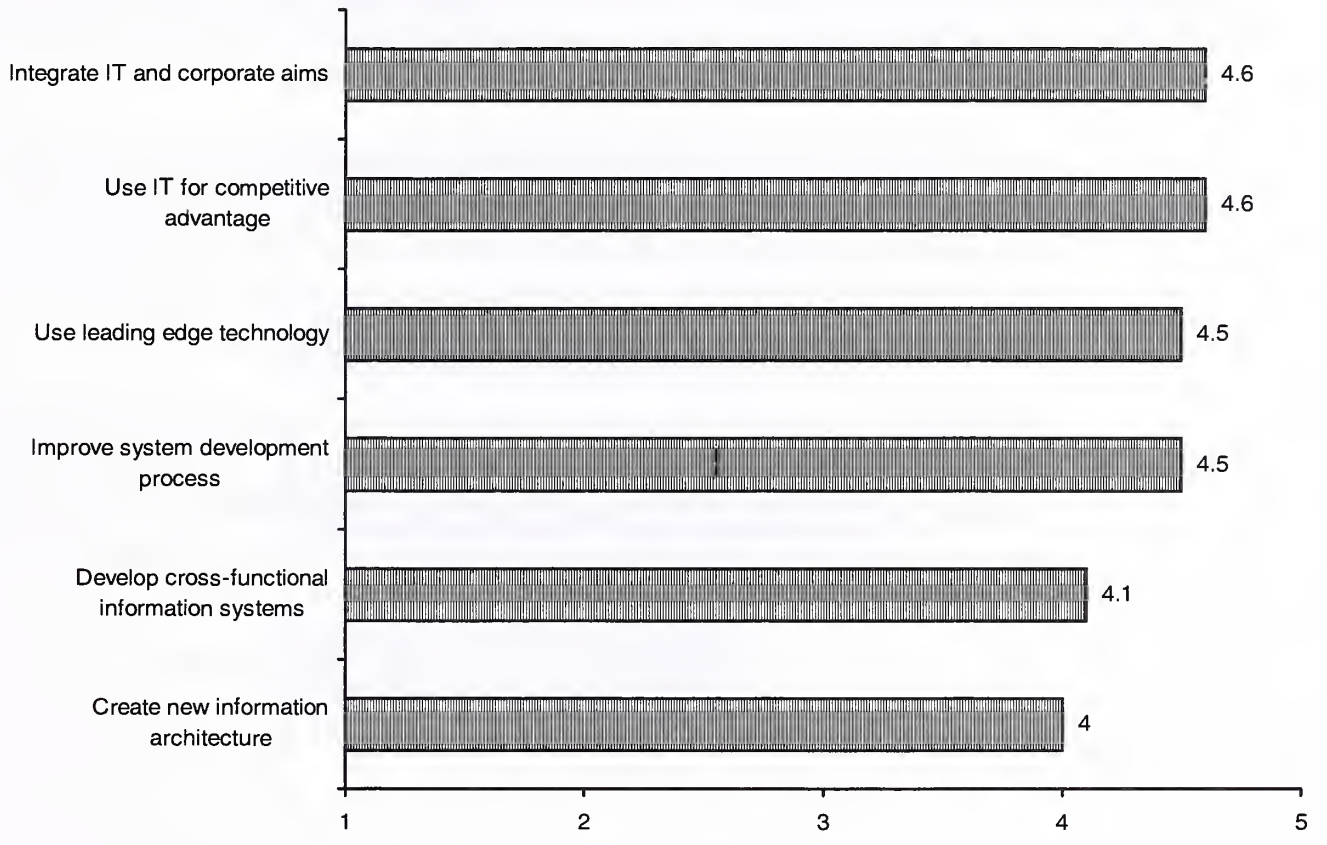

*Sample of 29 U.K. IT User Organisations. % of respondents rating a pressure of 4 or 5, where 5 is most important on a scale of 1-5*

*Source: INPUT*

The same more optimistic view is found in the focus of IT operations as illustrated in Exhibit III-42.

Exhibit III-42

**U.K. Organisations Current IT Operational Focus**




*Sample of 29 U.K. IT User Organisations* *Source: INPUT*

In last year's survey, IT user organisations were mainly concerned with activities on a more functional level such as developing cross-functional information systems and improve systems development processes. While these areas continue to receive high attention, IT executives are now also reporting strong focus on more top-level and strategic areas such as integrating IT and corporate aims.

Focusing the IT operation's projects on more strategic areas is a sign that businesses are planning for growth rather than retrenching their activities. The strong focus on using IT for areas that will provide the organisation with competitive advantage is for many companies an indication of a total rethink of business models. It can also be seen as a result of the high level of business process reengineering over the past couple of years.

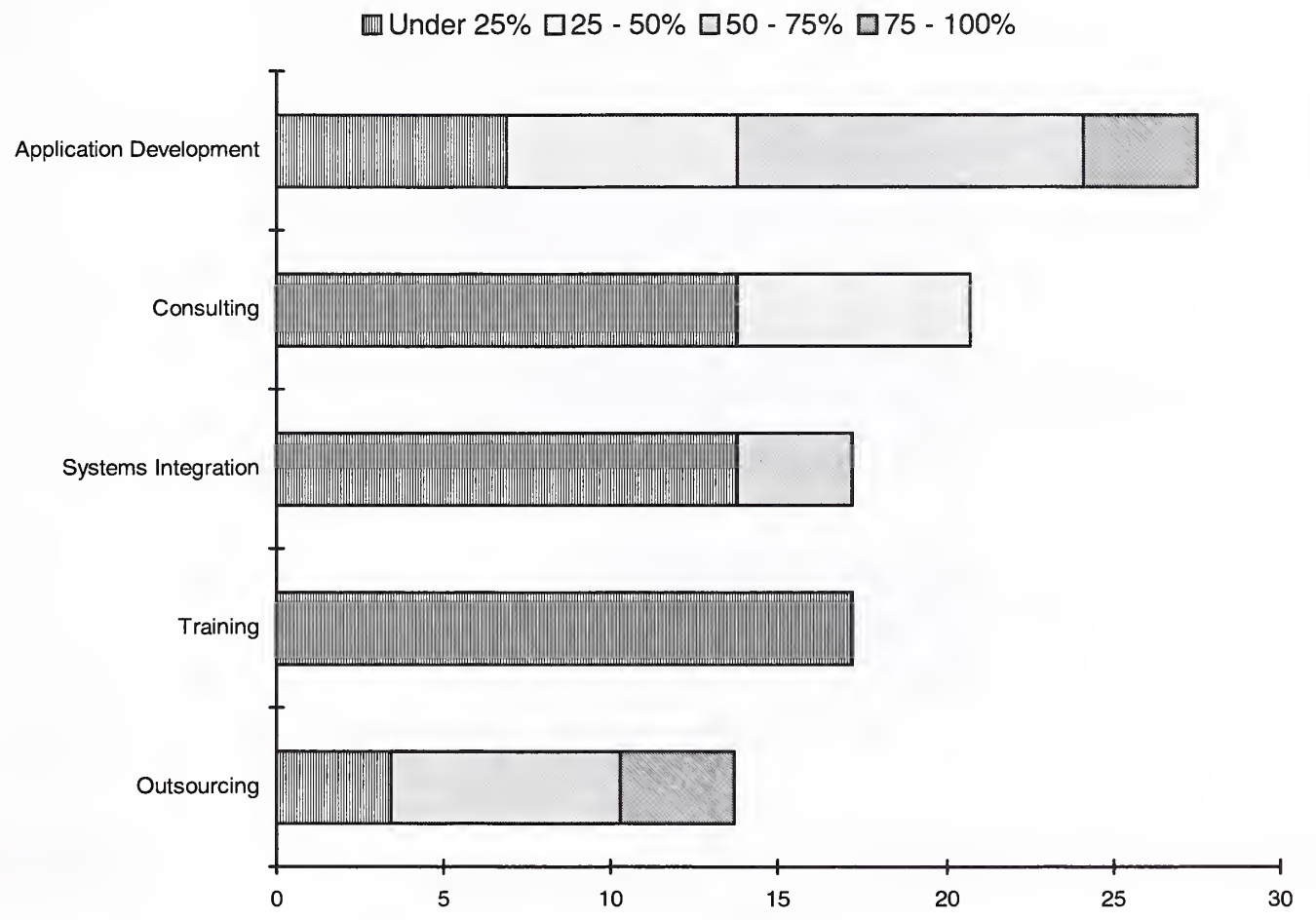
Exhibit III-43 details the external services on which U.K. IT operations spend their budgets. Compared with a European view of this issue there are few differences, but where there are they are significant differences. The exhibit indicates that U.K. IT operations spend a larger part of their budgets on applications development than European operations on average. Almost 17% of respondents reported that they spend more than 50% of their budgets on this activity while only 6% spend that much in Europe as a whole.

High expenditure on applications development is closely related to IT organisations' focus on top-level issues. Projects aimed at using IT for competitive advantage and supporting the company's overall strategies and objectives will involve the development of new and improved applications to ensure these targets are reached.

Outsourcing is another area that accounts for a large part of external IT budgets. More than 10% of respondents spend over 50% of their budgets on this type of service. Around 3% spend between 50-75% of their budgets on systems integration while 21% of respondents spend less than 50% of the budget on consulting services.

Exhibit III-43

## Proportional Spending of External IT Budget

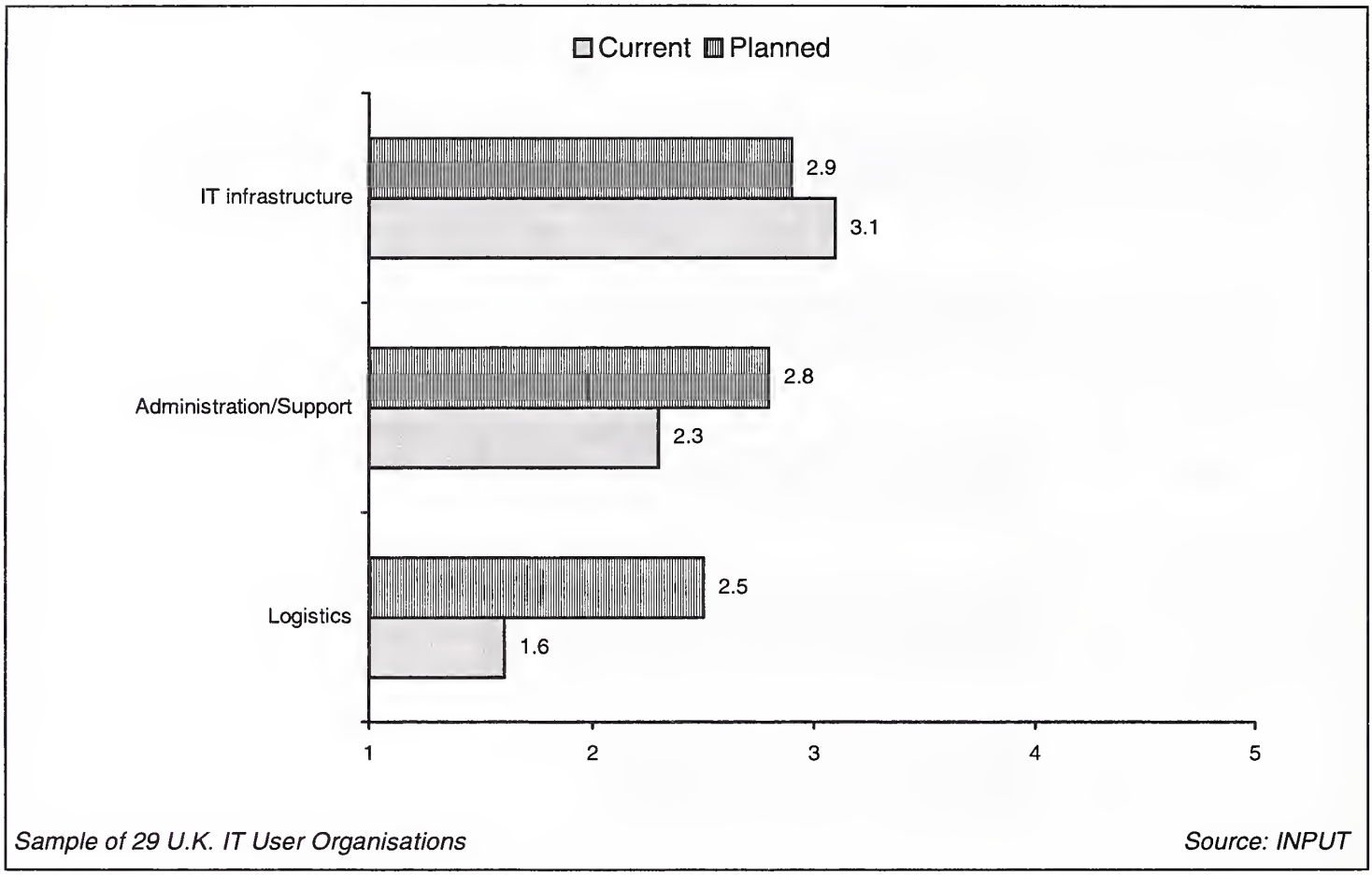



*Sample of 29 U.K. IT User Organisations* *Source: INPUT*

Exhibit III-44 shows the areas where IT executives report the highest need for external resources. As in the rest of Europe, IT infrastructure is high on the agenda. Otherwise the demand for external services seems to be spread more evenly over a range of areas including administration/support and logistics functions.

Exhibit III-44

## Areas with Highest Need for External Service




*Sample of 29 U.K. IT User Organisations* *Source: INPUT*

### 3. Perception of IT Services Vendors

U.K. IT executives seem to have a different perception of IT service vendors than their colleagues in Germany and France. As in the rest of Europe, IBM is top of the ranking as perceived capable/suitable for undertaking projects by 50% of respondents. However, many other IT services vendors are ranked highly by more than 10% of respondents as detailed in Exhibit III-45.

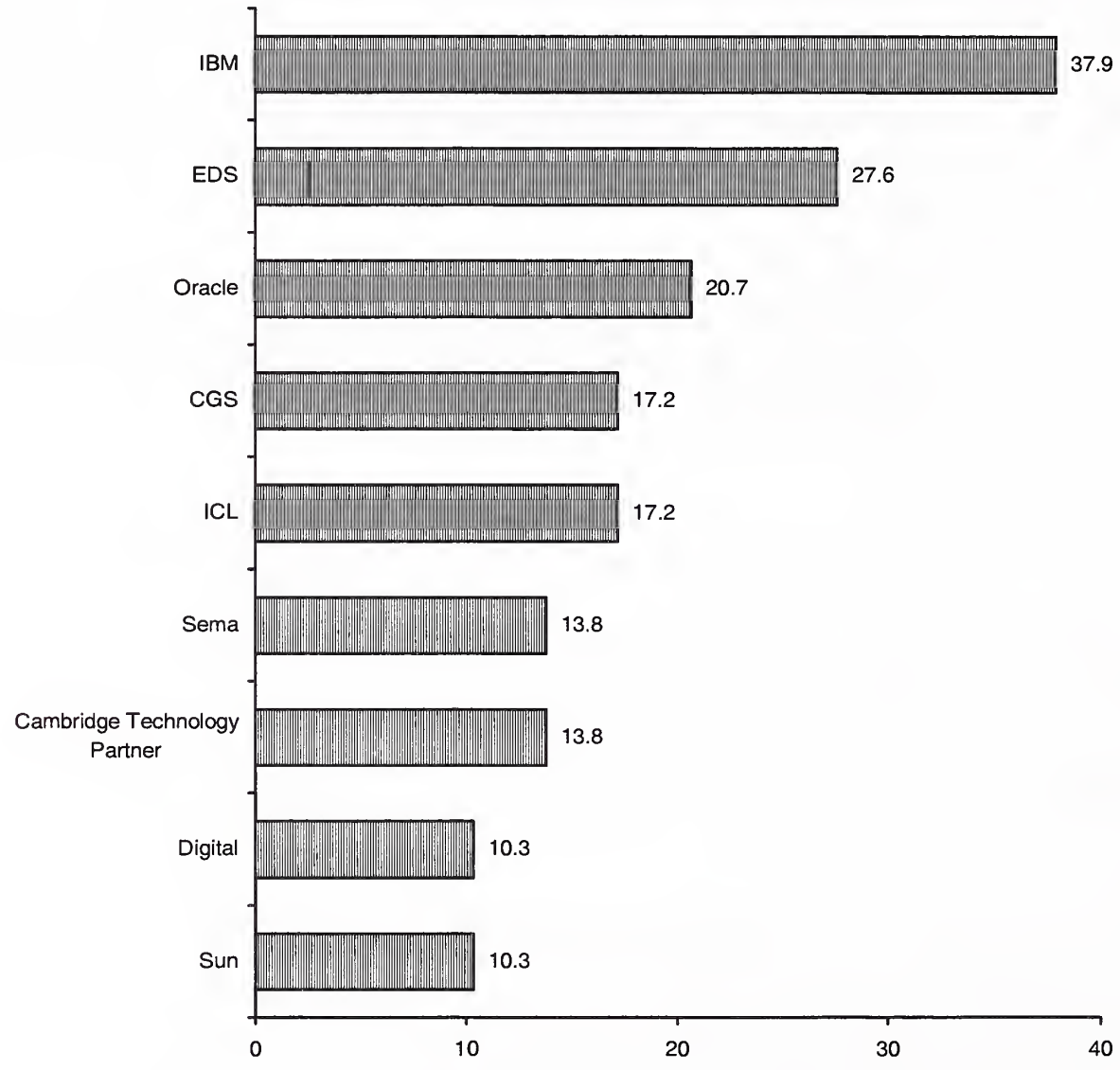
ICL is rated as capable by 23% of U.K. IT executives, while the company does not make it to the European listing. An explanation is that despite being present in most European countries and having Japanese owners, ICL is still considered a U.K. company and generates a large part of its revenues there.

Other IT services vendors that show up on the rating are Cambridge Technology Partners (CTP), Sema Group and Sun. CTP are beginning to generate a very healthy profile in the UK, for an organisation that is still relatively small. EDS is clearly rated second in the U.K. after IBM. This is very likely due to the company's outsourcing capabilities. Outsourcing is more predominant in the U.K. than in the rest of Europe and EDS has over the past years won some high profile projects, such as Inland Revenue and Department of Social Services, which may have positively influenced IT users' perception of the company.

Foreign vendors, and especially U.S.-based vendors, looking to break into the European market have often used the U.K. as a first base. This partly explains the wider spread in companies mentioned in the ranking in Exhibit III-45.

Exhibit III-45

## U.K. IT Managers' Perception of IT Services Vendors (prompted)




*Sample of 22 UK IT User Organisations % of respondents that rate the vendor's capability/suitability 4 or 5 as a services vendor on a scale of 1-5 where 5 is extremely capable/suitable.*

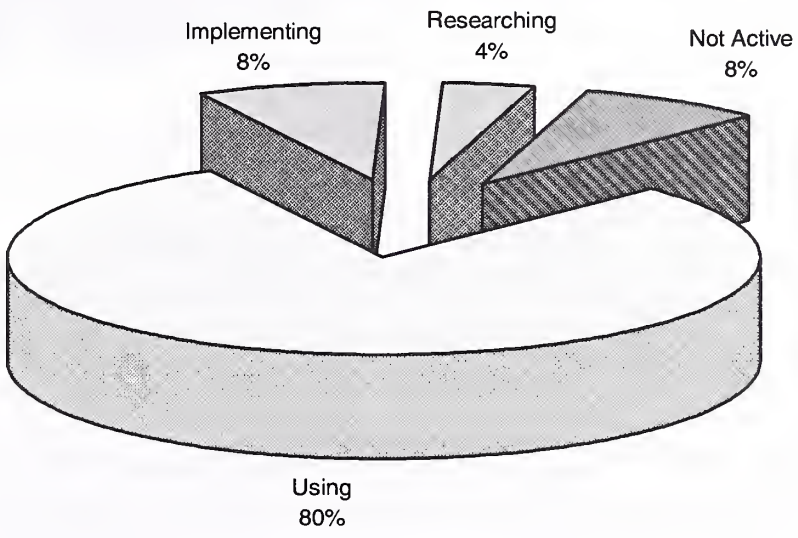
*Source: INPUT*

### 4. Deployment of New Technology

Exhibit III-46 shows the utilisation of wide area networks (WAN) in the U.K. Organisations already using WANs has increased over last year from 74% to 80%. Only 8% of IT user operations are not somehow active in the technology. This penetration of WANs is on level with France but well ahead of Germany where only 63% of IT operations are using the technology.

Exhibit III-46

**U.K. Users' Current Utilisation of Wide Area Networks**

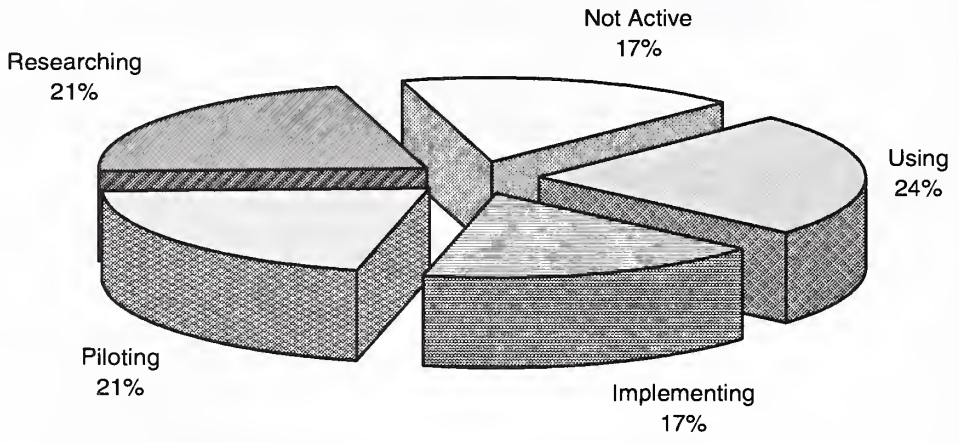



*Sample of 29 U.K. IT User Organisations* *Source: INPUT*

On a European level 30% of IT user organisations have already implemented groupware and 23% are in the process of doing so. According to the survey, U.K. IT operations have been slower in taking on this technology. Just under a quarter of organisations reported that they are using groupware while 17% are in an implementation phase. However, the proportion of U.K. IT user organisations reporting that they have no activity in groupware is almost level with the European average so the differences are likely to peter out over the next couple of years.

Exhibit III-47

## U.K. Users' Current Utilisation of Groupware



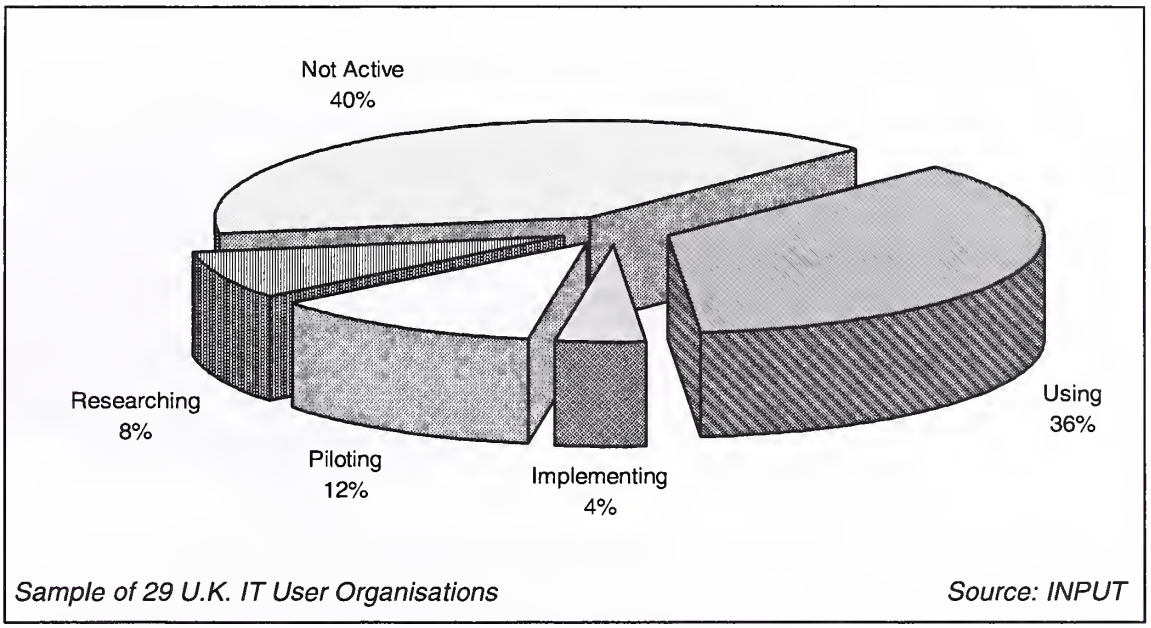

*Sample of 29 U.K. IT User Organisations* *Source: INPUT*

Exhibit III-47 shows details of level of utilisation in the U.K.

Adoption of the Internet seems to be much slower in the U.K. than in Europe on average. While the proportion of U.K. IT user organisations using the Internet (36%) is more or less on level with the European average of 43%, there are major differences in non-activity level. On a European level, 24% of IT executives reported that their operations have no activity in usage of the Internet while the proportion in the U.K. is 40%. The details of the utilisation of the Internet in the U.K. are shown in Exhibit III-48.

Exhibit III-48

## U.K. Users' Current Utilisation of the Internet

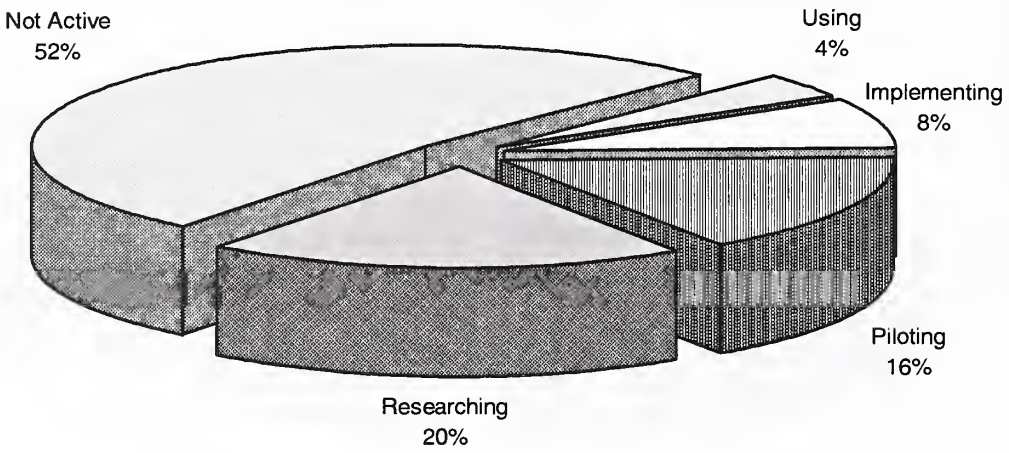



*Sample of 29 U.K. IT User Organisations* *Source: INPUT*

Since the Intranet can be described as a subset of the Internet, there is strong correlation between the degree of adoption of these two technologies. Exhibit III-48 shows the U.K. IT users' utilisation of the Intranet. Only 4% of users report that they are using intranet technology compared with 9% on a European level. Further, more than half of IT executives reported that they had no activity in the technology at all compared with 40% on a European level. Since only 8% reported that they were in the process of implementing intranet applications in their operations compared with 14% on a European level, it seems that the U.K. may lag behind the European average in this technology for some time.

Exhibit III-49

## U.K. Users' Current Utilisation of Intranet




*Sample of 29 U.K. IT User Organisations* *Source: INPUT*

# E
# Italy

## 1. A New Government Brings Hope for an End to Turbulence

The Italian economy has been one of the most unstable in Europe over the years, mainly due to turbulence on the political arena. Over the past three years, there have been four general elections and the previous ten governments have survived an average of 10 months each.

However, the so-called 'Olive Tree' coalition which was formed at the end of May 1996 and headed by Mr Romano Prodi, brings hope that this time the government will stay in power for the foreseeable future. Italy needs stability now for growth to return to the country's economy.

In June 1995, the government estimated that the growth in the Italian economy would be 3% for 1996. Six months later, the prediction was adjusted to 2.4%. At the moment the most optimistic forecasts are 1.5% while the industrialists' association, Confindustria, estimates that growth will be around 0.7%. Mr Prodi also has to face continuing high unemployment figures of 12.3%, driven by the alarming 22% in the South of Italy. There has always been a great divide between the industrial rich North and the rural and poorer South. This divide has not lessened in the past years turbulence. If the Italian economy is to brought back to a stable growth pattern then the government must somehow ensure that the growth takes place across the whole of the country.

During the past three years, profitability in business and industry has been very strong and close to the historic high in the 1950s. However, this trend is now expected to end since domestic demand, which was weak in 1995, has failed to pick up in 1996. One explanation is that businesses has held back on investments until the outcome of the elections was clear. Another is the weakness of consumer spending due to continued decline in real wages since the average increase in gross earnings was 4.5% against actual inflation of 5.4%. So far it looks like inflation this year will be 3.5% with an ambitious 2.5% target for 1997.

Mr Prodi and his Olive Tree government have their work cut out for them. It is committed to bringing the Lira back to the ERM which it left in 1992 and around the corner are waiting the strict criteria's from the Maastricht treaty. Firstly, however, he must make sure that his government survives for long enough to have a real influence and bring some sort of peace to the turbulent Italian economy.

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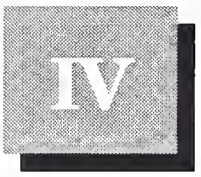



# Business Integration Industry

## A
## Leading Business Integration Vendors 1995

The following chapter provides INPUT's analysis of the leading European Business Integration (BI) vendors in each of the three BI sub-delivery modes; Systems Integration, Professional Services, and Turnkey Systems for each of the 16 major countries of Europe.

The format of the chapter is as follows; Exhibit IV-1 shows the leading twenty Business Integration vendors in Europe in 1995. Exhibits IV-2 to IV-5 shows the leading five Business Integration vendors in the United Kingdom, Germany, Italy, and France respectively.

Exhibits IV-6 to IV-20 then show the leading Systems Integration vendors country by country starting with the UK in US Dollars. This format is then repeated in Exhibits IV-21 to IV-35 in ECUs and then again in local currencies in Exhibits IV-36 to IV-50.

This format then continues giving vendor rankings for Professional Services and then Turnkey Systems.

Exhibits IV-51 to IV-66 show leading Professional Services vendors in US Dollars; Exhibits IV-67 to IV-82 in ECUs and Exhibits IV-83 to Exhibit IV-98 in local currencies.

Exhibits IV-99 to Exhibit IV-113 show leading Turnkey Systems vendors in US Dollars; Exhibits IV-114 to Exhibit IV-128 in ECUs and Exhibits IV-129 to Exhibit IV-143 in local currencies.

Sections B through to N provide snapshots of leading European Business Integration vendors detailing INPUT's assessment of their key areas of competency, how their BI revenues fit into their overall business, and also provides a geographical analysis of their BI revenues.

Exhibit IV-1

**Leading Business Integration Vendors, Europe 1995**

| Rank | Company | 1995 Estimated Revenue ($Millions) |
|---|---|---|
| 1 | IBM | 3060 |
| 2 | Cap Gemini Sogeti | 1505 |
| 3 | Digital | 1280 |
| 4 | SNI | 1210 |
| 5 | Andersen Consulting | 1040 |
| 6 | EDS | 800 |
| 7 | ICL | 760 |
| 8 | Groupe Bull | 700 |
| 9 | Finsiel | 670 |
| 10 | Sema Group | 620 |
| 11 | Oracle | 560 |
| 12 | Olivetti | 509 |
| 13 | Hewlett Packard | 500 |
| 14 | debis Systemhaus | 489 |
| 15 | Syseca | 416 |
| 16 | SAP | 400 |
| 17 | Getronics | 362 |
| 18 | Unisys | 355 |
| 19 | CSC | 341 |
| 20 | Logica | 300 |

*Source: INPUT*

Exhibit IV-2

## Leading Business Integration Vendors, United Kingdom 1995 ($ Millions)

| Rank | Company | 1995 Estimated Revenue ($Millions) |
|---|---|---|
| 1 | IBM | 500 |
| 2 | ICL | 490 |
| 3 | Andersen Consulting | 280 |
| 4 | EDS | 235 |
| 5 | Sema | 210 |

*Source: INPUT*

Exhibit IV-3

## Leading Business Integration Vendors, Germany 1995 ($ Millions)

| Rank | Company | 1995 Estimated Revenue ($Millions) |
|---|---|---|
| 1 | SNI | 975 |
| 2 | IBM | 685 |
| 3 | debis Systemhaus | 489 |
| 4 | Digital | 285 |
| 5 | Hewlett Packard | 195 |

*Source: INPUT*

Exhibit IV-4

## Leading Business Integration Vendors, Italy 1995 ($ Millions)

| Rank | Company | 1995 Estimated Revenue ($Millions) |
|---|---|---|
| 1 | Finsiel | 710 |
| 2 | Olivetti | 455 |
| 3 | IBM | 215 |
| 4 | Database Informatica | 200 |
| 5 | Andersen Consulting | 145 |

*Source: INPUT*

Exhibit IV-5

## Leading Business Integration Vendors, France 1995 ($ Millions)

| Rank | Company | 1995 Estimated Revenue ($Millions) |
|---|---|---|
| 1 | IBM | 470 |
| 2 | Cap Gemini Sogeti | 425 |
| 3 | Syseca | 335 |
| 4 | Sema Group | 295 |
| 5 | Digital | 185 |

*Source: INPUT*

Exhibit IV-6

## Leading Systems Integration Vendors, United Kingdom 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 17 | 275 |
| 2 | ICL | 12 | 190 |
| 3 | Andersen Consulting | 8 | 130 |
| 4 | EDS | 8 | 125 |
| 5 | Syntegra | 7 | 120 |
| 6 | Groupe Bull | 7 | 120 |
| 7 | Sema | 5 | 80 |
| 8 | CGS/Hoskyns | 5 | 75 |
| 9 | Logica | 5 | 75 |
| 10 | CSC | 4 | 70 |
| | Total Listed | 79 | 1260 |
| | Total Market | 100 | 1600 |

*Source: INPUT*

Exhibit IV-7

## Leading Systems Integration Vendors, France 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 19 | 210 |
| 2 | Cap Gemini Sogeti | 16 | 175 |
| 3 | Groupe Bull | 13 | 145 |
| 4 | Andersen Consulting | 9 | 100 |
| 5 | EDS | 9 | 95 |
| 6 | Sema Group | 9 | 95 |
| 7 | Syseca | 5 | 60 |
| 8 | Axime | 3 | 35 |
| 9 | Alcatel ISR | 3 | 35 |
| 10 | Digital | 3 | 35 |
| | Total Listed | 88 | 985 |
| | Total Market | 100 | 1115 |

*Source: INPUT*

Exhibit IV-8

## Leading Systems Integration Vendors, Germany 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 19 | 185 |
| 2 | SNI | 15 | 150 |
| 3 | Digital | 8 | 80 |
| 4 | debis Systemhaus | 6 | 63 |
| 5 | EDS | 6 | 60 |
| 6 | Groupe Bull | 5 | 50 |
| 7 | Andersen Consulting | 5 | 50 |
| 8 | CSC | 3 | 30 |
| 9 | Hewlett Packard | 3 | 30 |
| 10 | AT&T | 2 | 20 |
| | Total Listed | 71 | 695 |
| | Total Market | 100 | 980 |

*Source: INPUT*

Exhibit IV-9

## Leading Systems Integration Vendors, Italy 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Andersen Consulting | 18 | 65 |
| 2 | IBM | 16 | 60 |
| 3 | Groupe Bull | 14 | 50 |
| 4 | Finsiel | 14 | 50 |
| 5 | Olivetti | 10 | 35 |
| 6 | Digital | 8 | 28 |
| 7 | SNI | 4 | 15 |
| 8 | Cap Gemini Sogeti | 4 | 15 |
| 9 | Logica | 4 | 15 |
| 10 | Datitalia | 3 | 10 |
| | Total Listed | 94 | 343 |
| | Total Market | 100 | 365 |

*Source: INPUT*

Exhibit IV-10

## Leading Systems Integration Vendors, Austria 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 31 | 20 |
| 2 | Digital | 15 | 10 |
| 3 | SNI | 12 | 8 |
| 4 | Cap Gemini Sogeti | 12 | 8 |
| 5 | EDS | 8 | 6 |
| | Total Listed | 80 | 52 |
| | Total Market | 100 | 65 |

*Source: INPUT*

Exhibit IV-11

## Leading Systems Integration Vendors, Belgium 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 16 | 31 |
| 2 | Bull | 10 | 20 |
| 3 | Andersen | 9 | 18 |
| 4 | Cap Gemini Sogeti | 8 | 15 |
| 5 | EDS | 8 | 15 |
| | Total Listed | 51 | 99 |
| | Total Market | 100 | 195 |

*Source: INPUT*

Exhibit IV-12

## Leading Systems Integration Vendors, Denmark 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 27 | 15 |
| 2 | Groupe Bull | 18 | 10 |
| 3 | Cap Gemini Sogeti | 15 | 8 |
| 4 | Kommunedata | 11 | 6 |
| 5 | Computer Resource | 11 | 6 |
| | Total Listed | 82 | 45 |
| | Total Market | 100 | 55 |

*Source: INPUT*

Exhibit IV-13

## Leading Systems Integration Vendors, Finland 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Tietotehdas | 30 | 15 |
| 2 | Cap Gemini Sogeti | 20 | 10 |
| 3 | Nokia Data | 16 | 8 |
| 4 | KT- Datacentre | 16 | 8 |
| 5 | Groupe Bull | 10 | 5 |
| | Total Listed | 92 | 46 |
| | Total Market | 100 | 50 |

*Source: INPUT*

Exhibit IV-14

## Leading Systems Integration Vendors, Greece 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 20 | 3 |
| 2 | Digital | 20 | 3 |
| 3 | Cap Gemini Sogeti | 7 | 1 |
| 4 | Groupe Bull | 7 | 1 |
| 5 | AT&T | 3 | 0.5 |
| | Total Listed | 57 | 9 |
| | Total Market | 100 | 15 |

*Source: INPUT*

Exhibit IV-15

## Leading Systems Integration Vendors, Netherlands 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 22 | 45 |
| 2 | Digital | 12 | 24 |
| 3 | Origin | 10 | 20 |
| 4 | Cap Gemini Sogeti | 10 | 20 |
| 5 | Groupe Bull | 7 | 15 |
| 6 | CMG | 7 | 15 |
| 7 | Andersen Consulting | 7 | 15 |
| 8 | Getronics | 6 | 12 |
| 9 | Logica | 4 | 8 |
| 10 | RAET | 4 | 8 |
| | Total Listed | 89 | 182 |
| | Total Market | 100 | 205 |

*Source: INPUT*

Exhibit IV-16

## Leading Systems Integration Vendors, Norway 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 38 | 15 |
| 2 | Groupe Bull | 20 | 8 |
| 3 | Andersen Consulting | 13 | 5 |
| 4 | Unisys | 7 | 3 |
| 5 | Hewlett Packard | 7 | 3 |
| | Total Listed | 85 | 34 |
| | Total Market | 100 | 40 |

*Source: INPUT*

Exhibit IV-17

## Leading Systems Integration Vendors, Portugal 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 15 | 3 |
| 2 | Groupe Bull | 10 | 2 |
| 3 | Digital | 10 | 2 |
| 4 | CSC | 10 | 2 |
| 5 | Andersen Consulting | 10 | 2 |
| | Total Listed | 55 | 11 |
| | Total Market | 100 | 20 |

*Source: INPUT*

Exhibit IV-18

## Leading Systems Integration Vendors, Spain 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 18 | 41 |
| 2 | Groupe Bull | 13 | 30 |
| 3 | Digital | 12 | 28 |
| 4 | CSC | 12 | 28 |
| 5 | Andersen Consulting | 12 | 28 |
| | Total Listed | 67 | 154 |
| | Total Market | 100 | 230 |

*Source: INPUT*

Exhibit IV-19

## Leading Systems Integration Vendors, Sweden 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 27 | 16 |
| 2 | EDS | 20 | 12 |
| 3 | IBM | 20 | 12 |
| 4 | Groupe Bull | 13 | 8 |
| 5 | Celsius | 10 | 6 |
| | Total Listed | 90 | 54 |
| | Total Market | 100 | 60 |

*Source: INPUT*

Exhibit IV-20

## Leading Systems Integration Vendors, Switzerland 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Digital | 24 | 42 |
| 2 | IBM | 9 | 15 |
| 3 | Unisys | 9 | 15 |
| 4 | Cap Gemini Sogeti | 9 | 15 |
| 5 | EDS | 8 | 14 |
| | Total Listed | 58 | 101 |
| | Total Market | 100 | 175 |

*Source: INPUT*

Exhibit IV-21

## Leading Systems Integration Vendors, United Kingdom 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 17 | 215 |
| 2 | ICL | 12 | 148 |
| 3 | Andersen Consulting | 8 | 101 |
| 4 | EDS | 8 | 98 |
| 5 | Syntegra | 7 | 94 |
| 6 | Groupe Bull | 7 | 94 |
| 7 | Sema | 5 | 62 |
| 8 | CGS/Hoskyns | 5 | 59 |
| 9 | Logica | 5 | 59 |
| 10 | CSC | 4 | 55 |
| | Total Listed | 79 | 984 |
| | Total Market | 100 | 1250 |

*Source: INPUT*

Exhibit IV-22

## Leading Systems Integration Vendors, France 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 19 | 164 |
| 2 | Cap Gemini Sogeti | 16 | 136 |
| 3 | Groupe Bull | 13 | 113 |
| 4 | Andersen Consulting | 9 | 78 |
| 5 | EDS | 9 | 74 |
| 6 | Sema Group | 9 | 74 |
| 7 | Syseca | 5 | 47 |
| 8 | Axime | 3 | 27 |
| 9 | Alcatel ISR | 3 | 27 |
| 10 | Digital | 3 | 27 |
| | Total Listed | 88 | 768 |
| | Total Market | 100 | 870 |

*Source: INPUT*

Exhibit IV-23

## Leading Systems Integration Vendors, Germany 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 19 | 145 |
| 2 | SNI | 15 | 117 |
| 3 | Digital | 8 | 63 |
| 4 | debis Systemhaus | 6 | 49 |
| 5 | EDS | 6 | 47 |
| 6 | Groupe Bull | 5 | 39 |
| 7 | Andersen Consulting | 5 | 39 |
| 8 | CSC | 3 | 23 |
| 9 | Hewlett Packard | 3 | 23 |
| 10 | AT&T | 2 | 16 |
| | Total Listed | 71 | 543 |
| | Total Market | 100 | 766 |

*Source: INPUT*

Exhibit IV-24

## Leading Systems Integration Vendors, Italy 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Andersen Consulting | 18 | 51 |
| 2 | IBM | 16 | 47 |
| 3 | Groupe Bull | 14 | 39 |
| 4 | Finsiel | 14 | 39 |
| 5 | Olivetti | 10 | 27 |
| 6 | Digital | 8 | 22 |
| 7 | SNI | 4 | 12 |
| 8 | Cap Gemini Sogeti | 4 | 12 |
| 9 | Logica | 4 | 12 |
| 10 | Datitalia | 3 | 8 |
| | Total Listed | 94 | 269 |
| | Total Market | 100 | 285 |

*Source: INPUT*

Exhibit IV-25

## Leading Systems Integration Vendors, Austria 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 31 | 16 |
| 2 | Digital | 15 | 8 |
| 3 | SNI | 12 | 7 |
| 4 | Cap Gemini Sogeti | 12 | 7 |
| 5 | EDS | 9 | 5 |
| | Total Listed | 80 | 42 |
| | Total Market | 100 | 53 |

*Source: INPUT*

Exhibit IV-26

## Leading Systems Integration Vendors, Belgium 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 16 | 24 |
| 2 | Bull | 10 | 16 |
| 3 | Andersen Consulting | 9 | 14 |
| 4 | Cap Gemini Sogeti | 8 | 12 |
| 5 | EDS | 8 | 12 |
| | Total Listed | 51 | 77 |
| | Total Market | 100 | 152 |

*Source: INPUT*

Exhibit IV-27

## Leading Systems Integration Vendors, Denmark 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 27 | 12 |
| 2 | Groupe Bull | 18 | 8 |
| 3 | Cap Gemini Sogeti | 15 | 6 |
| 4 | Kommunedata | 11 | 5 |
| 5 | Computer Resource | 11 | 5 |
| | Total Listed | 82 | 35 |
| | Total Market | 100 | 43 |

*Source: INPUT*

Exhibit IV-28

## Leading Systems Integration Vendors, Finland 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Tietotehdas | 30 | 12 |
| 2 | Cap Gemini Sogeti | 20 | 8 |
| 3 | Nokia Data | 16 | 7 |
| 4 | KT- Datacentre | 16 | 7 |
| 5 | Groupe Bull | 10 | 4 |
| | Total Listed | 92 | 37 |
| | Total Market | 100 | 41 |

*Source: INPUT*

Exhibit IV-29

## Leading Systems Integration Vendors, Greece 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 20 | 2 |
| 2 | Digital | 20 | 2 |
| 3 | Cap Gemini Sogeti | 7 | 1 |
| 4 | Groupe Bull | 7 | 1 |
| 5 | AT&T | 3 | 0.4 |
| | Total Listed | 57 | 7 |
| | Total Market | 100 | 12 |

*Source: INPUT*

Exhibit IV-30

## Leading Systems Integration Vendors, Netherlands 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 22 | 35 |
| 2 | Digital | 12 | 19 |
| 3 | Origin | 10 | 16 |
| 4 | Cap Gemini Sogeti | 10 | 16 |
| 5 | Groupe Bull | 7 | 12 |
| 6 | CMG | 7 | 12 |
| 7 | Andersen Consulting | 7 | 12 |
| 8 | Getronics | 6 | 9 |
| 9 | Logica | 4 | 6 |
| 10 | RAET | 4 | 6 |
| | Total Listed | 89 | 142 |
| | Total Market | 100 | 160 |

*Source: INPUT*

Exhibit IV-31

## Leading Systems Integration Vendors, Norway 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 38 | 12 |
| 2 | Groupe Bull | 20 | 6 |
| 3 | Andersen Consulting | 13 | 4 |
| 4 | Unisys | 7 | 2 |
| 5 | Hewlett Packard | 7 | 2 |
| | Total Listed | 85 | 27 |
| | Total Market | 100 | 31 |

*Source: INPUT*

Exhibit IV-32

## Leading Systems Integration Vendors, Portugal 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 15 | 2 |
| 2 | Groupe Bull | 10 | 2 |
| 3 | Digital | 10 | 2 |
| 4 | CSC | 10 | 2 |
| 5 | Andersen Consulting | 10 | 2 |
| | Total Listed | 55 | 9 |
| | Total Market | 100 | 16 |

*Source: INPUT*

Exhibit IV-33

## Leading Systems Integration Vendors, Spain 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 18 | 32 |
| 2 | Groupe Bull | 13 | 23 |
| 3 | Digital | 12 | 22 |
| 4 | CSC | 12 | 21 |
| 5 | Andersen Consulting | 12 | 21 |
| | Total Listed | 67 | 120 |
| | Total Market | 100 | 180 |

*Source: INPUT*

Exhibit IV-34

## Leading Systems Integration Vendors, Sweden 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 27 | 12 |
| 2 | EDS | 20 | 9 |
| 3 | IBM | 20 | 9 |
| 4 | Groupe Bull | 13 | 6 |
| 5 | Celsius | 10 | 5 |
| | Total Listed | 90 | 42 |
| | Total Market | 100 | 47 |

*Source: INPUT*

Exhibit IV-35

## Leading Systems Integration Vendors, Switzerland 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Digital | 24 | 33 |
| 2 | IBM | 9 | 12 |
| 3 | Unisys | 9 | 12 |
| 4 | Cap Gemini Sogeti | 9 | 12 |
| 5 | EDS | 8 | 11 |
| | Total Listed | 58 | 79 |
| | Total Market | 100 | 137 |

*Source: INPUT*

Exhibit IV-36

## Leading Systems Integration Vendors, United Kingdom 1995 (£ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (£ Millions) |
|---|---|---|---|
| 1 | IBM | 17 | 177 |
| 2 | ICL | 12 | 122 |
| 3 | Andersen Consulting | 8 | 84 |
| 4 | EDS | 8 | 81 |
| 5 | Syntegra | 7 | 77 |
| 6 | Groupe Bull | 7 | 77 |
| 7 | Sema | 5 | 52 |
| 8 | CGS/Hoskyns | 5 | 48 |
| 9 | Logica | 5 | 48 |
| 10 | CSC | 4 | 45 |
| | Total Listed | 79 | 811 |
| | Total Market | 100 | 1030 |

*Source: INPUT*

Exhibit IV-37

## Leading Systems Integration Vendors, France 1995 (FF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (FF Millions) |
|---|---|---|---|
| 1 | IBM | 19 | 1027 |
| 2 | Cap Gemini Sogeti | 16 | 856 |
| 3 | Groupe Bull | 13 | 709 |
| 4 | Andersen Consulting | 9 | 489 |
| 5 | EDS | 9 | 465 |
| 6 | Sema Group | 9 | 465 |
| 7 | Syseca | 5 | 293 |
| 8 | Axime | 3 | 171 |
| 9 | Alcatel ISR | 3 | 171 |
| 10 | Digital | 3 | 171 |
| | Total Listed | 88 | 4817 |
| | Total Market | 100 | 5450 |

*Source: INPUT*

Exhibit IV-38

## Leading Systems Integration Vendors, Germany 1995 (DM Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (DM Millions) |
|---|---|---|---|
| 1 | IBM | 19 | 265 |
| 2 | SNI | 15 | 215 |
| 3 | Digital | 8 | 114 |
| 4 | debis Systemhaus | 6 | 90 |
| 5 | EDS | 6 | 86 |
| 6 | Groupe Bull | 5 | 72 |
| 7 | Andersen Consulting | 5 | 72 |
| 8 | CSC | 3 | 43 |
| 9 | Hewlett Packard | 3 | 43 |
| 10 | AT&T | 2 | 29 |
| | Total Listed | 71 | 994 |
| | Total Market | 100 | 1400 |

*Source: INPUT*

Exhibit IV-39

## Leading Systems Integration Vendors, Italy 1995 (Lira Billions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Lira Billions) |
|---|---|---|---|
| 1 | Andersen Consulting | 18 | 103 |
| 2 | IBM | 16 | 95 |
| 3 | Groupe Bull | 14 | 80 |
| 4 | Finsiel | 14 | 80 |
| 5 | Olivetti | 10 | 56 |
| 6 | Digital | 8 | 45 |
| 7 | SNI | 4 | 24 |
| 8 | Cap Gemini Sogeti | 4 | 24 |
| 9 | Logica | 4 | 24 |
| 10 | Datitalia | 3 | 16 |
| | Total Listed | 94 | 545 |
| | Total Market | 100 | 580 |

*Source: INPUT*

Exhibit IV-40

## Leading Systems Integration Vendors, Austria 1995 (Sch Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Sch Millions) |
|---|---|---|---|
| 1 | IBM | 31 | 202 |
| 2 | Digital | 15 | 101 |
| 3 | SNI | 12 | 81 |
| 4 | Cap Gemini Sogeti | 12 | 81 |
| 5 | EDS | 9 | 61 |
| | Total Listed | 80 | 525 |
| | Total Market | 100 | 650 |

*Source: INPUT*

Exhibit IV-41

## Leading Systems Integration Vendors, Belgium 1995 (BF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (BF Millions) |
|---|---|---|---|
| 1 | IBM | 16 | 911 |
| 2 | Bull | 10 | 588 |
| 3 | Andersen Consulting | 9 | 529 |
| 4 | Cap Gemini Sogeti | 8 | 441 |
| 5 | EDS | 8 | 441 |
| | Total Listed | 51 | 2911 |
| | Total Market | 100 | 5750 |

*Source: INPUT*

Exhibit IV-42

## Leading Systems Integration Vendors, Denmark 1995 (DK Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (DK Millions) |
|---|---|---|---|
| 1 | IBM | 27 | 83 |
| 2 | Groupe Bull | 18 | 55 |
| 3 | Cap Gemini Sogeti | 15 | 44 |
| 4 | Kommunedata | 11 | 33 |
| 5 | Computer Resource | 11 | 33 |
| | Total Listed | 82 | 249 |
| | Total Market | 100 | 305 |

*Source: INPUT*

Exhibit IV-43

## Leading Systems Integration Vendors, Finland 1995 (FM Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (FM Millions) |
|---|---|---|---|
| 1 | Tietotehdas | 30 | 65 |
| 2 | Cap Gemini Sogeti | 20 | 43 |
| 3 | Nokia Data | 16 | 35 |
| 4 | KT- Datacentre | 16 | 35 |
| 5 | Groupe Bull | 10 | 22 |
| | Total Listed | 92 | 200 |
| | Total Market | 100 | 215 |

*Source: INPUT*

Exhibit IV-44

## Leading Systems Integration Vendors, Greece 1995 (Dra Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Dra Millions) |
|---|---|---|---|
| 1 | IBM | 20 | 711 |
| 2 | Digital | 20 | 711 |
| 3 | Cap Gemini Sogeti | 7 | 237 |
| 4 | Groupe Bull | 7 | 237 |
| 5 | AT&T | 3 | 119 |
| | Total Listed | 57 | 2015 |
| | Total Market | 100 | 3550 |

*Source: INPUT*

Exhibit IV-45

## Leading Systems Integration Vendors, Netherlands 1995 (Dfl Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Dfl Millions) |
|---|---|---|---|
| 1 | IBM | 22 | 72 |
| 2 | Digital | 12 | 38 |
| 3 | Origin | 10 | 32 |
| 4 | Cap Gemini Sogeti | 10 | 32 |
| 5 | Groupe Bull | 7 | 24 |
| 6 | CMG | 7 | 24 |
| 7 | Andersen Consulting | 7 | 24 |
| 8 | Getronics | 6 | 19 |
| 9 | Logica | 4 | 13 |
| 10 | RAET | 4 | 13 |
| | Total Listed | 89 | 291 |
| | Total Market | 100 | 330 |

*Source: INPUT*

Exhibit IV-46

## Leading Systems Integration Vendors, Norway 1995 (NK Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (NK Millions) |
|---|---|---|---|
| 1 | IBM | 38 | 95 |
| 2 | Groupe Bull | 20 | 51 |
| 3 | Andersen Consulting | 13 | 32 |
| 4 | Unisys | 7 | 19 |
| 5 | Hewlett Packard | 7 | 19 |
| | Total Listed | 85 | 215 |
| | Total Market | 100 | 255 |

*Source: INPUT*

Exhibit IV-47

## Leading Systems Integration Vendors, Portugal 1995 (Esc Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Esc Millions) |
|---|---|---|---|
| 1 | IBM | 15 | 447 |
| 2 | Groupe Bull | 10 | 298 |
| 3 | Digital | 10 | 298 |
| 4 | CSC | 10 | 298 |
| 5 | Andersen Consulting | 10 | 298 |
| | Total Listed | 55 | 1639 |
| | Total Market | 100 | 2980 |

*Source: INPUT*

Exhibit IV-48

## Leading Systems Integration Vendors, Spain 1995 (Ptas Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Ptas Millions) |
|---|---|---|---|
| 1 | IBM | 18 | 4961 |
| 2 | Groupe Bull | 13 | 3630 |
| 3 | Digital | 12 | 3388 |
| 4 | CSC | 12 | 3328 |
| 5 | Andersen Consulting | 12 | 3328 |
| | Total Listed | 67 | 18634 |
| | Total Market | 100 | 27800 |

*Source: INPUT*

Exhibit IV-49

## Leading Systems Integration Vendors, Sweden 1995 (Sek Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Sek Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 27 | 106 |
| 2 | EDS | 20 | 80 |
| 3 | IBM | 20 | 80 |
| 4 | Groupe Bull | 13 | 53 |
| 5 | Celsius | 10 | 40 |
| | Total Listed | 90 | 358 |
| | Total Market | 100 | 400 |

*Source: INPUT*

Exhibit IV-50

## Leading Systems Integration Vendors, Switzerland 1995 (SF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (SF Millions) |
|---|---|---|---|
| 1 | Digital | 24 | 48 |
| 2 | IBM | 9 | 17 |
| 3 | Unisys | 9 | 17 |
| 4 | Cap Gemini Sogeti | 9 | 17 |
| 5 | EDS | 8 | 16 |
| | Total Listed | 58 | 116 |
| | Total Market | 100 | 200 |

*Source: INPUT*

Exhibit IV-51

## Leading Professional Services Vendors, United Kingdom 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | ICL | 10 | 300 |
| 2 | IBM | 6 | 170 |
| 3 | Andersen Consulting | 5 | 150 |
| 4 | Sema Group | 4 | 130 |
| 5 | Logica | 4 | 110 |
| 6 | Oracle | 4 | 110 |
| 7 | EDS | 4 | 110 |
| 8 | Digital | 3 | 100 |
| 9 | CGS/Hoskyns | 3 | 85 |
| 10 | Coopers & Lybrand | 3 | 80 |
| | Total Listed | 42 | 1265 |
| | Total Market | 100 | 3030 |

*Source: INPUT*

Exhibit IV-52

## Leading Professional Services Vendors, France 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 4 | 250 |
| 2 | IBM | 3 | 200 |
| 3 | Sema Group | 3 | 200 |
| 4 | Syseca | 3 | 195 |
| 5 | CGI | 3 | 170 |
| 6 | Unilog | 2 | 115 |
| 7 | Altran | 2 | 115 |
| 8 | Steria | 2 | 95 |
| 9 | Digital | 2 | 95 |
| 10 | IBSI | 1 | 90 |
| | Total Listed | 25 | 1525 |
| | Total Market | 100 | 6135 |

*Source: INPUT*

Exhibit IV-53

## Leading Professional Services Vendors, Germany 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 7 | 330 |
| 2 | SNI | 7 | 325 |
| 3 | SAP | 4 | 170 |
| 4 | Cap Gemini Sogeti | 3 | 140 |
| 5 | Digital | 3 | 115 |
| 6 | debis Systemhaus | 3 | 115 |
| 7 | ESG | 2 | 100 |
| 8 | Datev | 2 | 100 |
| 9 | Hewlett Packard | 2 | 80 |
| 10 | Coopers & Lybrand | 2 | 75 |
| | Total Listed | 31 | 1395 |
| | Total Market | 100 | 4475 |

*Source: INPUT*

Exhibit IV-54

## Leading Professional Services Vendors, Italy 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Finsiel | 30 | 660 |
| 2 | Olivetti | 11 | 250 |
| 3 | Database Informatica | 7 | 150 |
| 4 | Cerved | 5 | 110 |
| 5 | IBM | 5 | 100 |
| 6 | Andersen Consulting | 4 | 80 |
| 7 | Cap Gemini Sogeti | 2 | 45 |
| 8 | Digital | 2 | 45 |
| 9 | CSC | 1 | 20 |
| 10 | Hewlett Packard | 1 | 20 |
| | Total Listed | 68 | 1480 |
| | Total Market | 100 | 2180 |

*Source: INPUT*

Exhibit IV-55

## Leading Professional Services Vendors, Austria 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Management Data | 8 | 50 |
| 2 | EDV | 7 | 40 |
| 3 | IBM | 7 | 40 |
| 4 | SNI | 7 | 40 |
| 5 | Digital | 5 | 30 |
| 6 | Beko | 5 | 30 |
| 7 | Hewlett Packard | 3 | 15 |
| 8 | CSC | 2 | 10 |
| 9 | AI Infomatics | 2 | 10 |
| 10 | Voest-Alpine | 2 | 10 |
| | Total Listed | 46 | 275 |
| | Total Market | 100 | 595 |

*Source: INPUT*

Exhibit IV-56

## Leading Professional Services Vendors, Belgium 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 6 | 50 |
| 2 | Cap Gemini Sogeti | 4 | 35 |
| 3 | CSC | 4 | 35 |
| 4 | Sema Group | 4 | 35 |
| 5 | Trasys | 4 | 35 |
| 6 | Andersen Consulting | 4 | 35 |
| 7 | Cipal | 4 | 30 |
| 8 | Hewlett Packard | 3 | 20 |
| 9 | TIS Group | 3 | 20 |
| 10 | EDS | 3 | 20 |
| | Total Listed | 39 | 315 |
| | Total Market | 100 | 800 |

*Source: INPUT*

Exhibit IV-57

## Leading Professional Services Vendors, Denmark 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | PBS | 31 | 160 |
| 2 | IBM | 10 | 50 |
| 3 | Cap Gemini Sogeti | 5 | 25 |
| 4 | Digital | 5 | 25 |
| 5 | ICL | 5 | 25 |
| 6 | AT&T Istel Nordic | 5 | 25 |
| 7 | Hewlett Packard | 3 | 15 |
| 8 | EDS | 3 | 15 |
| 9 | Kommunedata | 3 | 15 |
| 10 | CSC | 1 | 5 |
| | Total Listed | 70 | 355 |
| | Total Market | 100 | 505 |

*Source: INPUT*

Exhibit IV-58

## Leading Professional Services Vendors, Finland 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | VTKK | 25 | 85 |
| 2 | KT-Datacentre | 22 | 76 |
| 3 | Elorg-Data | 10 | 35 |
| 4 | Paakaupunkiseudom | 9 | 30 |
| 5 | ICL | 6 | 22 |
| 6 | Valmet Data | 6 | 20 |
| 7 | IBM | 5 | 17 |
| 8 | Digital | 4 | 15 |
| 9 | Unic | 4 | 15 |
| 10 | Hewlett Packard | 3 | 10 |
| | Total Listed | 96 | 325 |
| | Total Market | 100 | 340 |

*Source: INPUT*

Exhibit IV-59

## Leading Professional Services Vendors, Greece 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Andersen Consulting | 8 | 15 |
| 2 | EDS | 5 | 10 |
| 3 | Digital | 4 | 8 |
| 4 | IBM | 4 | 8 |
| 5 | Hewlett Packard | 3 | 5 |
| 6 | Oracle | 2 | 4 |
| 7 | AT&T | 2 | 3 |
| 8 | CSC | 1 | 2 |
| 9 | Reuters | 1 | 2 |
| 10 | Groupe Bull | 1 | 1 |
| | Total Listed | 30 | 58 |
| | Total Market | 100 | 195 |

*Source: INPUT*

Exhibit IV-60

## Leading Professional Services Vendors, Ireland 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 6 | 20 |
| 2 | Andersen Consulting | 6 | 20 |
| 3 | Digital | 6 | 18 |
| 4 | Coopers & Lybrand | 6 | 18 |
| 5 | Ernst & Young | 5 | 15 |
| 6 | Unisys | 4 | 12 |
| 7 | CSC | 2 | 5 |
| 8 | Hewlett Packard | 2 | 5 |
| 9 | Price Waterhouse | 2 | 5 |
| 10 | KPMG | 2 | 5 |
| | Total Listed | 38 | 123 |
| | Total Market | 100 | 320 |

*Source: INPUT*

Exhibit IV-61

## Leading Professional Services Vendors, Netherlands 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 23 | 340 |
| 2 | Getronics | 13 | 200 |
| 3 | RAET | 11 | 170 |
| 4 | IBM | 8 | 120 |
| 5 | CSC | 5 | 80 |
| 6 | CMG | 5 | 80 |
| 7 | Origin | 4 | 55 |
| 8 | Hewlett Packard | 3 | 40 |
| 9 | Digital | 2 | 30 |
| 10 | Coopers & Lybrand | 2 | 30 |
| | Total Listed | 76 | 1145 |
| | Total Market | 100 | 1500 |

*Source: INPUT*

Exhibit IV-62

## Leading Professional Services Vendors, Norway 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | NIT | 18 | 85 |
| 2 | Fellesdata | 12 | 60 |
| 3 | Novit | 8 | 40 |
| 4 | Digital | 6 | 30 |
| 5 | IBM | 6 | 30 |
| 6 | Cap Gemini Sogeti | 5 | 25 |
| 7 | Celsius | 5 | 25 |
| 8 | Andersen Consulting | 5 | 25 |
| 9 | Hewlett Packard | 2 | 10 |
| 10 | Rogalandsdata | 2 | 10 |
| | Total Listed | 70 | 340 |
| | Total Market | 100 | 485 |

*Source: INPUT*

Exhibit IV-63

## Leading Professional Services Vendors, Portugal 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Andersen Consulting | 9 | 20 |
| 2 | IBM | 4 | 10 |
| 3 | Digital | 4 | 10 |
| 4 | Unisys | 3 | 6 |
| 5 | Groupe Bull | 2 | 5 |
| 6 | Hewlett Packard | 1 | 2 |
| 7 | Coopers & Lybrand | 1 | 2 |
| 8 | AT&T | 1 | 2 |
| 9 | Price Waterhouse | 0.5 | 1 |
| 10 | Cap Gemini Sogeti | 0.5 | 1 |
| | Total Listed | 25 | 59 |
| | Total Market | 100 | 235 |

*Source: INPUT*

Exhibit IV-64

## Leading Professional Services Vendors, Spain 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Eritel | 10 | 100 |
| 2 | EDS | 8 | 80 |
| 3 | Andersen Consulting | 8 | 80 |
| 4 | IBM | 4 | 45 |
| 5 | Hewlett Packard | 3 | 30 |
| 6 | Digital | 3 | 30 |
| 7 | Coopers & Lybrand | 2 | 25 |
| 8 | Price Waterhouse | 1 | 15 |
| 9 | Cap Gemini Sogeti | 0.5 | 5 |
| 10 | Sema Group | 0.5 | 5 |
| | Total Listed | 40 | 415 |
| | Total Market | 100 | 1035 |

*Source: INPUT*

Exhibit IV-65

## Leading Professional Services Vendors, Sweden 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | WM-Data | 7 | 80 |
| 2 | EDS | 5 | 55 |
| 3 | Celsius | 5 | 55 |
| 4 | Cap Gemini Sogeti | 4 | 40 |
| 5 | Sapia | 4 | 40 |
| 6 | Sema Group | 4 | 40 |
| 7 | IBM | 4 | 40 |
| 8 | Communicator AB | 4 | 40 |
| 9 | IBS | 2 | 25 |
| 10 | Digital | 2 | 20 |
| | Total Listed | 40 | 435 |
| | Total Market | 100 | 1100 |

*Source: INPUT*

Exhibit IV-66

## Leading Professional Services Vendors, Switzerland 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 8 | 60 |
| 2 | Digital | 8 | 55 |
| 3 | Fides | 7 | 50 |
| 4 | AT&T | 5 | 35 |
| 5 | SAP | 3 | 23 |
| 6 | Hewlett Packard | 3 | 20 |
| 7 | Cap Gemini Sogeti | 2 | 18 |
| 8 | SNI | 2 | 18 |
| 9 | Unisys | 2 | 15 |
| 10 | Delta ST | 2 | 15 |
| | Total Listed | 42 | 309 |
| | Total Market | 100 | 730 |

*Source: INPUT*

Exhibit IV-67

## Leading Professional Services Vendors, United Kingdom 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | ICL | 10 | 234 |
| 2 | IBM | 6 | 133 |
| 3 | Andersen Consulting | 5 | 117 |
| 4 | Sema Group | 4 | 101 |
| 5 | Logica | 4 | 86 |
| 6 | Oracle | 4 | 86 |
| 7 | EDS | 4 | 86 |
| 8 | Digital | 3 | 78 |
| 9 | CGS/Hoskyns | 3 | 66 |
| 10 | Coopers & Lybrand | 3 | 62 |
| | Total Listed | 42 | 987 |
| | Total Market | 100 | 2365 |

*Source: INPUT*

Exhibit IV-68

## Leading Professional Services Vendors, France 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 4 | 195 |
| 2 | IBM | 3 | 156 |
| 3 | Sema Group | 3 | 156 |
| 4 | Syseca | 3 | 152 |
| 5 | CGI | 3 | 133 |
| 6 | Unilog | 2 | 90 |
| 7 | Altran | 2 | 90 |
| 8 | Steria | 2 | 74 |
| 9 | Digital | 2 | 74 |
| 10 | IBSI | 1 | 70 |
| | Total Listed | 25 | 1189 |
| | Total Market | 100 | 4785 |

*Source: INPUT*

Exhibit IV-69

## Leading Professional Services Vendors, Germany 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 7 | 258 |
| 2 | SNI | 7 | 254 |
| 3 | SAP | 4 | 133 |
| 4 | Cap Gemini Sogeti | 3 | 109 |
| 5 | Digital | 3 | 90 |
| 6 | debis Systemhaus | 3 | 90 |
| 7 | ESG | 2 | 78 |
| 8 | Datev | 2 | 78 |
| 9 | Hewlett Packard | 2 | 63 |
| 10 | Coopers & Lybrand | 2 | 59 |
| | Total Listed | 31 | 1090 |
| | Total Market | 100 | 3497 |

*Source: INPUT*

Exhibit IV-70

## Leading Professional Services Vendors, Italy 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Finsiel | 30 | 517 |
| 2 | Olivetti | 11 | 196 |
| 3 | Database Informatica | 7 | 117 |
| 4 | Cerved | 5 | 86 |
| 5 | IBM | 5 | 78 |
| 6 | Andersen Consulting | 4 | 63 |
| 7 | Cap Gemini Sogeti | 2 | 35 |
| 8 | Digital | 2 | 35 |
| 9 | CSC | 1 | 16 |
| 10 | Hewlett Packard | 1 | 16 |
| | Total Listed | 68 | 1159 |
| | Total Market | 100 | 1707 |

*Source: INPUT*

Exhibit IV-71

## Leading Professional Services Vendors, Austria 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Management Data | 8 | 41 |
| 2 | EDV | 7 | 33 |
| 3 | IBM | 7 | 33 |
| 4 | SNI | 7 | 33 |
| 5 | Digital | 5 | 24 |
| 6 | Beko | 5 | 24 |
| 7 | Hewlett Packard | 3 | 12 |
| 8 | CSC | 2 | 8 |
| 9 | AI Infomatics | 2 | 8 |
| 10 | Voest-Alpine | 2 | 8 |
| | Total Listed | 46 | 224 |
| | Total Market | 100 | 485 |

*Source: INPUT*

Exhibit IV-72

## Leading Professional Services Vendors, Belgium 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 6 | 39 |
| 2 | Cap Gemini Sogeti | 4 | 27 |
| 3 | CSC | 4 | 27 |
| 4 | Sema Group | 4 | 27 |
| 5 | Trasys | 4 | 27 |
| 6 | Andersen Consulting | 4 | 27 |
| 7 | Cipal | 4 | 23 |
| 8 | Hewlett Packard | 3 | 16 |
| 9 | TIS Group | 3 | 16 |
| 10 | EDS | 3 | 16 |
| | Total Listed | 39 | 246 |
| | Total Market | 100 | 624 |

*Source: INPUT*

Exhibit IV-73

## Leading Professional Services Vendors, Denmark 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | PBS | 31 | 125 |
| 2 | IBM | 10 | 39 |
| 3 | Cap Gemini Sogeti | 5 | 20 |
| 4 | Digital | 5 | 20 |
| 5 | ICL | 5 | 20 |
| 6 | AT&T Istel Nordic | 5 | 20 |
| 7 | Hewlett Packard | 3 | 12 |
| 8 | EDS | 3 | 12 |
| 9 | Kommunedata | 3 | 12 |
| 10 | CSC | 1 | 4 |
| | Total Listed | 70 | 277 |
| | Total Market | 100 | 394 |

*Source: INPUT*

Exhibit IV-74

## Leading Professional Services Vendors, Finland 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | VTKK | 25 | 69 |
| 2 | KT-Datacentre | 22 | 62 |
| 3 | Elorg-Data | 10 | 28 |
| 4 | Paakaupunkiseudom | 9 | 24 |
| 5 | ICL | 6 | 18 |
| 6 | Valmet Data | 6 | 16 |
| 7 | IBM | 5 | 14 |
| 8 | Digital | 4 | 12 |
| 9 | Unic | 4 | 12 |
| 10 | Hewlett Packard | 3 | 8 |
| | Total Listed | 96 | 265 |
| | Total Market | 100 | 277 |

*Source: INPUT*

Exhibit IV-75

## Leading Professional Services Vendors, Greece 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Andersen Consulting | 8 | 12 |
| 2 | EDS | 5 | 8 |
| 3 | Digital | 4 | 7 |
| 4 | IBM | 4 | 7 |
| 5 | Hewlett Packard | 3 | 4 |
| 6 | Oracle | 2 | 3 |
| 7 | AT&T | 2 | 2 |
| 8 | CSC | 1 | 2 |
| 9 | Reuters | 1 | 2 |
| 10 | Groupe Bull | 1 | 1 |
| | Total Listed | 30 | 47 |
| | Total Market | 100 | 159 |

*Source: INPUT*

Exhibit IV-76

## Leading Professional Services Vendors, Ireland 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 6 | 16 |
| 2 | Andersen Consulting | 6 | 16 |
| 3 | Digital | 6 | 14 |
| 4 | Coopers & Lybrand | 6 | 14 |
| 5 | Ernst & Young | 5 | 12 |
| 6 | Unisys | 4 | 9 |
| 7 | CSC | 2 | 4 |
| 8 | Hewlett Packard | 2 | 4 |
| 9 | Price Waterhouse | 2 | 4 |
| 10 | KPMG | 2 | 4 |
| | Total Listed | 38 | 96 |
| | Total Market | 100 | 250 |

*Source: INPUT*

Exhibit IV-77

## Leading Professional Services Vendors, Netherlands 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 23 | 265 |
| 2 | Getronics | 13 | 156 |
| 3 | RAET | 11 | 133 |
| 4 | IBM | 8 | 94 |
| 5 | CSC | 5 | 62 |
| 6 | CMG | 5 | 62 |
| 7 | Origin | 4 | 43 |
| 8 | Hewlett Packard | 3 | 31 |
| 9 | Digital | 2 | 23 |
| 10 | Coopers & Lybrand | 2 | 23 |
| | Total Listed | 76 | 894 |
| | Total Market | 100 | 1171 |

*Source: INPUT*

Exhibit IV-78

## Leading Professional Services Vendors, Norway 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | NIT | 18 | 66 |
| 2 | Fellesdata | 12 | 47 |
| 3 | Novit | 8 | 31 |
| 4 | Digital | 6 | 23 |
| 5 | IBM | 6 | 23 |
| 6 | Cap Gemini Sogeti | 5 | 20 |
| 7 | Celsius | 5 | 20 |
| 8 | Andersen Consulting | 5 | 20 |
| 9 | Hewlett Packard | 2 | 8 |
| 10 | Rogalandsdata | 2 | 8 |
| | Total Listed | 70 | 266 |
| | Total Market | 100 | 379 |

*Source: INPUT*

Exhibit IV-79

## Leading Professional Services Vendors, Portugal 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Andersen Consulting | 9 | 16 |
| 2 | IBM | 4 | 8 |
| 3 | Digital | 4 | 8 |
| 4 | Unisys | 3 | 5 |
| 5 | Groupe Bull | 2 | 4 |
| 6 | Hewlett Packard | 1 | 2 |
| 7 | Coopers & Lybrand | 1 | 2 |
| 8 | AT&T | 1 | 2 |
| 9 | Price Waterhouse | 0.5 | 1 |
| 10 | Cap Gemini Sogeti | 0.5 | 1 |
| | Total Listed | 25 | 46 |
| | Total Market | 100 | 183 |

*Source: INPUT*

Exhibit IV-80

## Leading Professional Services Vendors, Spain 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Eritel | 10 | 78 |
| 2 | EDS | 8 | 62 |
| 3 | Andersen Consulting | 8 | 62 |
| 4 | IBM | 4 | 35 |
| 5 | Hewlett Packard | 3 | 23 |
| 6 | Digital | 3 | 23 |
| 7 | Coopers & Lybrand | 2 | 20 |
| 8 | Price Waterhouse | 1 | 12 |
| 9 | Cap Gemini Sogeti | 0.5 | 4 |
| 10 | Sema Group | 0.5 | 4 |
| | Total Listed | 40 | 324 |
| | Total Market | 100 | 808 |

*Source: INPUT*

Exhibit IV-81

## Leading Professional Services Vendors, Sweden 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | WM-Data | 7 | 62 |
| 2 | EDS | 5 | 43 |
| 3 | Celsius | 5 | 43 |
| 4 | Cap Gemini Sogeti | 4 | 31 |
| 5 | Sapia | 4 | 31 |
| 6 | Sema Group | 4 | 31 |
| 7 | IBM | 4 | 31 |
| 8 | Communicator AB | 4 | 31 |
| 9 | IBS | 2 | 20 |
| 10 | Digital | 2 | 16 |
| | Total Listed | 40 | 340 |
| | Total Market | 100 | 859 |

*Source: INPUT*

Exhibit IV-82

## Leading Professional Services Vendors, Switzerland 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 8 | 47 |
| 2 | Digital | 8 | 43 |
| 3 | Fides | 7 | 39 |
| 4 | AT&T | 5 | 27 |
| 5 | SAP | 3 | 18 |
| 6 | Hewlett Packard | 3 | 16 |
| 7 | Cap Gemini Sogeti | 2 | 14 |
| 8 | SNI | 2 | 14 |
| 9 | Unisys | 2 | 12 |
| 10 | Delta ST | 2 | 12 |
| | Total Listed | 42 | 242 |
| | Total Market | 100 | 571 |

*Source: INPUT*

Exhibit IV-83

## Leading Professional Services Vendors, United Kingdom 1995 (£ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (£ Millions) |
|---|---|---|---|
| 1 | ICL | 10 | 193 |
| 2 | IBM | 6 | 109 |
| 3 | Andersen Consulting | 5 | 97 |
| 4 | Sema Group | 4 | 84 |
| 5 | Logica | 4 | 71 |
| 6 | Oracle | 4 | 71 |
| 7 | EDS | 4 | 71 |
| 8 | Digital | 3 | 64 |
| 9 | CGS/Hoskyns | 3 | 55 |
| 10 | Coopers & Lybrand | 3 | 52 |
| | Total Listed | 42 | 815 |
| | Total Market | 100 | 1955 |

*Source: INPUT*

Exhibit IV-84

## Leading Professional Services Vendors, France 1995 (FF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (FF Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 4 | 1223 |
| 2 | IBM | 3 | 978 |
| 3 | Sema Group | 3 | 978 |
| 4 | Syseca | 3 | 954 |
| 5 | CGI | 3 | 831 |
| 6 | Unilog | 2 | 562 |
| 7 | Altran | 2 | 562 |
| 8 | Steria | 2 | 465 |
| 9 | Digital | 2 | 465 |
| 10 | IBSI | 1 | 440 |
| | Total Listed | 25 | 7457 |
| | Total Market | 100 | 30000 |

*Source: INPUT*

Exhibit IV-85

## Leading Professional Services Vendors, Germany 1995 (DM Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (DM Millions) |
|---|---|---|---|
| 1 | IBM | 7 | 472 |
| 2 | SNI | 7 | 465 |
| 3 | SAP | 4 | 243 |
| 4 | Cap Gemini Sogeti | 3 | 200 |
| 5 | Digital | 3 | 164 |
| 6 | debis Systemhaus | 3 | 164 |
| 7 | ESG | 2 | 143 |
| 8 | Datev | 2 | 143 |
| 9 | Hewlett Packard | 2 | 114 |
| 10 | Coopers & Lybrand | 2 | 107 |
| | Total Listed | 31 | 1995 |
| | Total Market | 100 | 6400 |

*Source: INPUT*

Exhibit IV-86

## Leading Professional Services Vendors, Italy 1995 (Lira Billions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Lira Billions) |
|---|---|---|---|
| 1 | Finsiel | 30 | 1049 |
| 2 | Olivetti | 11 | 398 |
| 3 | Database Informatica | 7 | 239 |
| 4 | Cerved | 5 | 175 |
| 5 | IBM | 5 | 159 |
| 6 | Andersen Consulting | 4 | 127 |
| 7 | Cap Gemini Sogeti | 2 | 72 |
| 8 | Digital | 2 | 72 |
| 9 | CSC | 1 | 32 |
| 10 | Hewlett Packard | 1 | 32 |
| | Total Listed | 68 | 2353 |
| | Total Market | 100 | 3500 |

*Source: INPUT*

Exhibit IV-87

## Leading Professional Services Vendors, Austria 1995 (Sch Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Sch Millions) |
|---|---|---|---|
| 1 | Management Data | 8 | 505 |
| 2 | EDV | 7 | 404 |
| 3 | IBM | 7 | 404 |
| 4 | SNI | 7 | 404 |
| 5 | Digital | 5 | 303 |
| 6 | Beko | 5 | 303 |
| 7 | Hewlett Packard | 3 | 152 |
| 8 | CSC | 2 | 101 |
| 9 | AI Infomatics | 2 | 101 |
| 10 | Voest-Alpine | 2 | 101 |
| | Total Listed | 46 | 2778 |
| | Total Market | 100 | 6010 |

*Source: INPUT*

Exhibit IV-88

## Leading Professional Services Vendors, Belgium 1995 (BF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (BF Millions) |
|---|---|---|---|
| 1 | IBM | 6 | 1470 |
| 2 | Cap Gemini Sogeti | 4 | 1029 |
| 3 | CSC | 4 | 1029 |
| 4 | Sema Group | 4 | 1029 |
| 5 | Trasys | 4 | 1029 |
| 6 | Andersen Consulting | 4 | 1029 |
| 7 | Cipal | 4 | 882 |
| 8 | Hewlett Packard | 3 | 588 |
| 9 | TIS Group | 3 | 588 |
| 10 | EDS | 3 | 588 |
| | Total Listed | 39 | 9261 |
| | Total Market | 100 | 23500 |

*Source: INPUT*

Exhibit IV-89

## Leading Professional Services Vendors, Denmark 1995 (DK Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (DK Millions) |
|---|---|---|---|
| 1 | PBS | 31 | 886 |
| 2 | IBM | 10 | 277 |
| 3 | Cap Gemini Sogeti | 5 | 139 |
| 4 | Digital | 5 | 139 |
| 5 | ICL | 5 | 139 |
| 6 | AT&T Istel Nordic | 5 | 139 |
| 7 | Hewlett Packard | 3 | 83 |
| 8 | EDS | 3 | 83 |
| 9 | Kommunedata | 3 | 83 |
| 10 | CSC | 1 | 28 |
| | Total Listed | 70 | 1967 |
| | Total Market | 100 | 2800 |

*Source: INPUT*

Exhibit IV-90

## Leading Professional Services Vendors, Finland 1995 (FM Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (FM Millions) |
|---|---|---|---|
| 1 | VTKK | 25 | 369 |
| 2 | KT-Datacentre | 22 | 330 |
| 3 | Elorg-Data | 10 | 152 |
| 4 | Paakaupunkiseudom | 9 | 130 |
| 5 | ICL | 6 | 95 |
| 6 | Valmet Data | 6 | 87 |
| 7 | IBM | 5 | 74 |
| 8 | Digital | 4 | 65 |
| 9 | Unic | 4 | 65 |
| 10 | Hewlett Packard | 3 | 43 |
| | Total Listed | 96 | 1411 |
| | Total Market | 100 | 1480 |

*Source: INPUT*

Exhibit IV-91

## Leading Professional Services Vendors, Greece 1995 (Dra Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Dra Millions) |
|---|---|---|---|
| 1 | Andersen Consulting | 8 | 3555 |
| 2 | EDS | 5 | 2370 |
| 3 | Digital | 4 | 1896 |
| 4 | IBM | 4 | 1896 |
| 5 | Hewlett Packard | 3 | 1185 |
| 6 | Oracle | 2 | 948 |
| 7 | AT&T | 2 | 711 |
| 8 | CSC | 1 | 474 |
| 9 | Reuters | 1 | 474 |
| 10 | Groupe Bull | 1 | 237 |
| | Total Listed | 30 | 13746 |
| | Total Market | 100 | 46200 |

*Source: INPUT*

Exhibit IV-92

## Leading Professional Services Vendors, Ireland 1995 (IR £ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (IR £ Millions) |
|---|---|---|---|
| 1 | IBM | 6 | 12 |
| 2 | Andersen Consulting | 6 | 12 |
| 3 | Digital | 6 | 11 |
| 4 | Coopers & Lybrand | 6 | 11 |
| 5 | Ernst & Young | 5 | 9 |
| 6 | Unisys | 4 | 7 |
| 7 | CSC | 2 | 3 |
| 8 | Hewlett Packard | 2 | 3 |
| 9 | Price Waterhouse | 2 | 3 |
| 10 | KPMG | 2 | 3 |
| | Total Listed | 38 | 77 |
| | Total Market | 100 | 200 |

*Source: INPUT*

Exhibit IV-93

## Leading Professional Services Vendors, Netherlands 1995 (Dfl Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Dfl Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 23 | 544 |
| 2 | Getronics | 13 | 320 |
| 3 | RAET | 11 | 272 |
| 4 | IBM | 8 | 192 |
| 5 | CSC | 5 | 128 |
| 6 | CMG | 5 | 128 |
| 7 | Origin | 4 | 88 |
| 8 | Hewlett Packard | 3 | 64 |
| 9 | Digital | 2 | 48 |
| 10 | Coopers & Lybrand | 2 | 48 |
| | Total Listed | 76 | 1832 |
| | Total Market | 100 | 2400 |

*Source: INPUT*

Exhibit IV-94

## Leading Professional Services Vendors, Norway 1995 (NK Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (NK Millions) |
|---|---|---|---|
| 1 | NIT | 18 | 537 |
| 2 | Fellesdata | 12 | 379 |
| 3 | Novit | 8 | 253 |
| 4 | Digital | 6 | 190 |
| 5 | IBM | 6 | 190 |
| 6 | Cap Gemini Sogeti | 5 | 158 |
| 7 | Celsius | 5 | 158 |
| 8 | Andersen Consulting | 5 | 158 |
| 9 | Hewlett Packard | 2 | 63 |
| 10 | Rogalandsdata | 2 | 63 |
| | Total Listed | 70 | 2149 |
| | Total Market | 100 | 3050 |

*Source: INPUT*

Exhibit IV-95

## Leading Professional Services Vendors, Portugal 1995 (Esc Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Esc Millions) |
|---|---|---|---|
| 1 | Andersen Consulting | 9 | 2980 |
| 2 | IBM | 4 | 1490 |
| 3 | Digital | 4 | 1490 |
| 4 | Unisys | 3 | 894 |
| 5 | Groupe Bull | 2 | 745 |
| 6 | Hewlett Packard | 1 | 298 |
| 7 | Coopers & Lybrand | 1 | 298 |
| 8 | AT&T | 1 | 298 |
| 9 | Price Waterhouse | 0.5 | 149 |
| 10 | Cap Gemini Sogeti | 0.5 | 149 |
| | Total Listed | 25 | 8791 |
| | Total Market | 100 | 35000 |

*Source: INPUT*

Exhibit IV-96

## Leading Professional Services Vendors, Spain 1995 (Ptas Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Ptas Millions) |
|---|---|---|---|
| 1 | Eritel | 10 | 12100 |
| 2 | EDS | 8 | 9680 |
| 3 | Andersen Consulting | 8 | 9680 |
| 4 | IBM | 4 | 5445 |
| 5 | Hewlett Packard | 3 | 3630 |
| 6 | Digital | 3 | 3630 |
| 7 | Coopers & Lybrand | 2 | 3025 |
| 8 | Price Waterhouse | 1 | 1815 |
| 9 | Cap Gemini Sogeti | 0.5 | 605 |
| 10 | Sema Group | 0.5 | 605 |
| | Total Listed | 40 | 50215 |
| | Total Market | 100 | 125000 |

*Source: INPUT*

Exhibit IV-97

## Leading Professional Services Vendors, Sweden 1995 (Sek Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Sek Millions) |
|---|---|---|---|
| 1 | WM-Data | 7 | 530 |
| 2 | EDS | 5 | 365 |
| 3 | Celsius | 5 | 365 |
| 4 | Cap Gemini Sogeti | 4 | 265 |
| 5 | Sapia | 4 | 265 |
| 6 | Sema Group | 4 | 265 |
| 7 | IBM | 4 | 265 |
| 8 | Communicator AB | 4 | 265 |
| 9 | IBS | 2 | 166 |
| 10 | Digital | 2 | 133 |
| | Total Listed | 40 | 2884 |
| | Total Market | 100 | 7290 |

*Source: INPUT*

Exhibit IV-98

## Leading Professional Services Vendors, Switzerland 1995 (SF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (SF Millions) |
|---|---|---|---|
| 1 | IBM | 8 | 69 |
| 2 | Digital | 8 | 63 |
| 3 | Fides | 7 | 58 |
| 4 | AT&T | 5 | 40 |
| 5 | SAP | 3 | 26 |
| 6 | Hewlett Packard | 3 | 23 |
| 7 | Cap Gemini Sogeti | 2 | 21 |
| 8 | SNI | 2 | 21 |
| 9 | Unisys | 2 | 17 |
| 10 | Delta ST | 2 | 17 |
| | Total Listed | 42 | 355 |
| | Total Market | 100 | 840 |

*Source: INPUT*

Exhibit IV-99

## Leading Turnkey Systems Vendors, United Kingdom 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Cray Electronics | 4 | 80 |
| 2 | Intergraph | 3 | 65 |
| 3 | JBA | 3 | 65 |
| 4 | IBM | 2 | 55 |
| 5 | Digital | 2 | 50 |
| 6 | Reuters | 2 | 50 |
| 7 | MDIS | 2 | 45 |
| 8 | Unisys | 2 | 40 |
| 9 | Hewlett Packard | 2 | 40 |
| 10 | P&P | 2 | 35 |
| | Total Listed | 23 | 525 |
| | Total Market | 100 | 2250 |

*Source: INPUT*

Exhibit IV-100

## Leading Turnkey Systems Vendors, France 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Sligos | 4 | 80 |
| 2 | Syseca | 4 | 80 |
| 3 | IBM | 3 | 60 |
| 4 | Digital | 3 | 55 |
| 5 | Alcatel TiTN | 3 | 55 |
| 6 | Reuters | 2 | 45 |
| 7 | Dassault | 2 | 40 |
| 8 | IBSI | 2 | 35 |
| 9 | Fininfor | 2 | 35 |
| 10 | CISI | 2 | 35 |
| | Total Listed | 27 | 520 |
| | Total Market | 100 | 1955 |

*Source: INPUT*

Exhibit IV-101

## Leading Turnkey Systems Vendors, Germany 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | SNI | 11 | 500 |
| 2 | IBM | 4 | 170 |
| 3 | Digital | 2 | 90 |
| 4 | Hewlett Packard | 2 | 85 |
| 5 | debis Systemhaus | 1 | 50 |
| 6 | Compunet Computer | 1 | 50 |
| 7 | Unisys | 1 | 35 |
| 8 | Reuters | 1 | 35 |
| 9 | Intergraph | 1 | 35 |
| 10 | Sligos | 1 | 30 |
| | Total Listed | 24 | 1080 |
| | Total Market | 100 | 4510 |

*Source: INPUT*

Exhibit IV-102

## Leading Turnkey Systems Vendors, Italy 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Olivetti | 25 | 170 |
| 2 | IBM | 8 | 55 |
| 3 | Digital | 7 | 50 |
| 4 | Database Informatica | 7 | 50 |
| 5 | Sicit | 4 | 30 |
| 6 | Editrice | 3 | 20 |
| 7 | Intergraph | 3 | 20 |
| 8 | Reuters | 3 | 20 |
| 9 | Cerved | 3 | 18 |
| 10 | Cortis Lentini | 2 | 15 |
| | Total Listed | 65 | 448 |
| | Total Market | 100 | 685 |

*Source: INPUT*

Exhibit IV-103

## Leading Turnkey Systems Vendors, Austria 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | SNI | 11 | 50 |
| 2 | IBM | 4 | 20 |
| 3 | Digital | 4 | 18 |
| 4 | Compunet Computer | 4 | 18 |
| 5 | Hewlett Packard | 3 | 15 |
| 6 | Unisys | 3 | 15 |
| 7 | Reuters | 2 | 10 |
| 8 | Software AG | 2 | 8 |
| 9 | Computervision | 2 | 8 |
| 10 | EDV | 1 | 6 |
| | Total Listed | 37 | 168 |
| | Total Market | 100 | 450 |

*Source: INPUT*

Exhibit IV-104

## Leading Turnkey Systems Vendors, Belgium 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Trasys | 11 | 40 |
| 2 | Digital | 4 | 15 |
| 3 | IBM | 4 | 15 |
| 4 | Intergraph | 4 | 15 |
| 5 | Hewlett Packard | 4 | 13 |
| 6 | Getronics | 3 | 12 |
| 7 | Olivetti | 3 | 10 |
| 8 | Reuters | 3 | 10 |
| 9 | Origin | 2 | 8 |
| 10 | Dolmen | 1 | 5 |
| | Total Listed | 39 | 143 |
| | Total Market | 100 | 380 |

*Source: INPUT*

Exhibit IV-105

## Leading Turnkey Systems Vendors, Denmark 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 4 | 15 |
| 2 | Digital | 1 | 5 |
| 3 | Olivetti | 1 | 5 |
| 4 | Intergraph | 1 | 5 |
| 5 | Hewlett Packard | 1 | 4 |
| 6 | Cap Gemini Sogeti | 1 | 4 |
| 7 | ComputerVision | 1 | 3 |
| 8 | Origin | 1 | 3 |
| 9 | Reuters | 1 | 3 |
| 10 | Kommunedata | 1 | 2 |
| | Total Listed | 13 | 49 |
| | Total Market | 100 | 383 |

*Source: INPUT*

Exhibit IV-106

## Leading Turnkey Systems Vendors, Finland 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Intergraph | 8 | 15 |
| 2 | IBM | 5 | 10 |
| 3 | Digital | 5 | 10 |
| 4 | Reuters | 4 | 8 |
| 5 | Origin | 3 | 5 |
| | Total Listed | 26 | 48 |
| | Total Market | 100 | 185 |

*Source: INPUT*

Exhibit IV-107

## Leading Turnkey Systems Vendors, Greece 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Digital | 6 | 4 |
| 2 | IBM | 6 | 4 |
| 3 | Hewlett Packard | 4 | 3 |
| 4 | Reuters | 3 | 2 |
| 5 | Origin | 3 | 2 |
| | Total Listed | 22 | 15 |
| | Total Market | 100 | 70 |

*Source: INPUT*

Exhibit IV-108

## Leading Turnkey Systems Vendors, Netherlands 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Getronics | 11 | 70 |
| 2 | Origin | 10 | 60 |
| 3 | IBM | 6 | 40 |
| 4 | Digital | 6 | 35 |
| 5 | SNI | 6 | 35 |
| 6 | Olivetti | 5 | 30 |
| 7 | Ordina | 5 | 30 |
| 8 | Intergraph | 5 | 30 |
| 9 | RAET | 3 | 20 |
| 10 | CMG | 2 | 15 |
| | Total Listed | 59 | 365 |
| | Total Market | 100 | 620 |

*Source: INPUT*

Exhibit IV-109

## Leading Turnkey Systems Vendors, Norway 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | IBM | 4 | 10 |
| 2 | Origin | 3 | 8 |
| 3 | DEC | 2 | 5 |
| 4 | Intergraph | 2 | 5 |
| 5 | Olivetti | 2 | 4 |
| | Total Listed | 12 | 32 |
| | Total Market | 100 | 260 |

*Source: INPUT*

Exhibit IV-110

## Leading Turnkey Systems Vendors, Portugal 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Digital | 7 | 4 |
| 2 | Intergraph | 5 | 3 |
| 3 | IBM | 5 | 3 |
| 4 | Hewlett Packard | 4 | 2 |
| 5 | Olivetti | 2 | 1 |
| | Total Listed | 24 | 13 |
| | Total Market | 100 | 55 |

*Source: INPUT*

Exhibit IV-111

## Leading Turnkey Systems Vendors, Spain 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 5 | 25 |
| 2 | Olivetti | 4 | 20 |
| 3 | Intergraph | 4 | 18 |
| 4 | Eritel | 3 | 16 |
| 5 | Ibermatica | 3 | 15 |
| 6 | Digital | 2 | 10 |
| 7 | Hewlett Packard | 2 | 10 |
| 8 | IBM | 2 | 10 |
| 9 | Reuters | 2 | 8 |
| 10 | Software AG | 1 | 5 |
| | Total Listed | 29 | 137 |
| | Total Market | 100 | 480 |

*Source: INPUT*

Exhibit IV-112

## Leading Turnkey Systems Vendors, Sweden 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | Sapia | 22 | 80 |
| 2 | Digital | 7 | 25 |
| 3 | IBM | 4 | 15 |
| 4 | Hewlett Packard | 4 | 15 |
| 5 | SNI | 4 | 15 |
| 6 | Reuters | 4 | 15 |
| 7 | Intergraph | 4 | 15 |
| 8 | Celsius | 4 | 15 |
| 9 | Industri-Matematik | 4 | 13 |
| 10 | WM Data | 3 | 10 |
| | Total Listed | 59 | 218 |
| | Total Market | 100 | 370 |

*Source: INPUT*

Exhibit IV-113

## Leading Turnkey Systems Vendors, Switzerland 1995 ($ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue ($ Millions) |
|---|---|---|---|
| 1 | SNI | 8 | 40 |
| 2 | Digital | 3 | 15 |
| 3 | IBM | 3 | 15 |
| 4 | Hewlett Packard | 3 | 15 |
| 5 | Intergraph | 3 | 15 |
| | Total Listed | 19 | 100 |
| | Total Market | 100 | 520 |

*Source: INPUT*

Exhibit IV-114

## Leading Turnkey Systems Vendors, United Kingdom 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Cray Electronics | 4 | 62 |
| 2 | Intergraph | 3 | 51 |
| 3 | JBA | 3 | 51 |
| 4 | IBM | 2 | 43 |
| 5 | Digital | 2 | 39 |
| 6 | Reuters | 2 | 39 |
| 7 | MDIS | 2 | 35 |
| 8 | Unisys | 2 | 31 |
| 9 | Hewlett Packard | 2 | 31 |
| 10 | P&P | 2 | 27 |
| | Total Listed | 23 | 410 |
| | Total Market | 100 | 1760 |

*Source: INPUT*

Exhibit IV-115

## Leading Turnkey Systems Vendors, France 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Sligos | 4 | 62 |
| 2 | Syseca | 4 | 62 |
| 3 | IBM | 3 | 47 |
| 4 | Digital | 3 | 43 |
| 5 | Alcatel TiTN | 3 | 43 |
| 6 | Reuters | 2 | 35 |
| 7 | Dassault | 2 | 31 |
| 8 | IBSI | 2 | 27 |
| 9 | Fininfor | 2 | 27 |
| 10 | CISI | 2 | 27 |
| | Total Listed | 27 | 406 |
| | Total Market | 100 | 1525 |

*Source: INPUT*

Exhibit IV-116

## Leading Turnkey Systems Vendors, Germany 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | SNI | 11 | 391 |
| 2 | IBM | 4 | 133 |
| 3 | Digital | 2 | 70 |
| 4 | Hewlett Packard | 2 | 66 |
| 5 | debis Systemhaus | 1 | 39 |
| 6 | Compunet Computer | 1 | 39 |
| 7 | Unisys | 1 | 27 |
| 8 | Reuters | 1 | 27 |
| 9 | Intergraph | 1 | 27 |
| 10 | Sligos | 1 | 23 |
| | Total Llsted | 24 | 844 |
| | Total Market | 100 | 3523 |

*Source: INPUT*

Exhibit IV-117

## Leading Turnkey Systems Vendors, Italy 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Olivetti | 25 | 133 |
| 2 | IBM | 8 | 43 |
| 3 | Digital | 7 | 39 |
| 4 | Database Informatica | 7 | 39 |
| 5 | Sicit | 4 | 23 |
| 6 | Editrice | 3 | 16 |
| 7 | Intergraph | 3 | 16 |
| 8 | Reuters | 3 | 16 |
| 9 | Cerved | 3 | 14 |
| 10 | Cortis Lentini | 2 | 12 |
| | Total Listed | 65 | 351 |
| | Total Market | 100 | 540 |

*Source: INPUT*

Exhibit IV-118

## Leading Turnkey Systems Vendors, Austria 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | SNI | 11 | 41 |
| 2 | IBM | 4 | 16 |
| 3 | Digital | 4 | 15 |
| 4 | Compunet Computer | 4 | 15 |
| 5 | Hewlett Packard | 3 | 12 |
| 6 | Unisys | 3 | 12 |
| 7 | Reuters | 2 | 8 |
| 8 | Software AG | 2 | 7 |
| 9 | Computervision | 2 | 7 |
| 10 | EDV | 1 | 5 |
| | Total Listed | 37 | 137 |
| | Total Market | 100 | 367 |

*Source: INPUT*

Exhibit IV-119

## Leading Turnkey Systems Vendors, Belgium 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Trasys | 11 | 31 |
| 2 | Digital | 4 | 12 |
| 3 | IBM | 4 | 12 |
| 4 | Intergraph | 4 | 12 |
| 5 | Hewlett Packard | 4 | 10 |
| 6 | Getronics | 3 | 9 |
| 7 | Olivetti | 3 | 8 |
| 8 | Reuters | 3 | 8 |
| 9 | Origin | 2 | 6 |
| 10 | Dolmen | 1 | 4 |
| | Total Listed | 39 | 112 |
| | Total Market | 100 | 288 |

*Source: INPUT*

Exhibit IV-120

## Leading Turnkey Systems Vendors, Denmark 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 4 | 12 |
| 2 | Digital | 1 | 4 |
| 3 | Olivetti | 1 | 4 |
| 4 | Intergraph | 1 | 4 |
| 5 | Hewlett Packard | 1 | 3 |
| 6 | Cap Gemini Sogeti | 1 | 3 |
| 7 | ComputerVision | 1 | 2 |
| 8 | Origin | 1 | 2 |
| 9 | Reuters | 1 | 2 |
| 10 | Kommunedata | 1 | 2 |
| | Total Listed | 13 | 38 |
| | Total Market | 100 | 299 |

*Source: INPUT*

Exhibit IV-121

## Leading Turnkey Systems Vendors, Finland 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Intergraph | 8 | 12 |
| 2 | IBM | 5 | 8 |
| 3 | Digital | 5 | 8 |
| 4 | Reuters | 4 | 7 |
| 5 | Origin | 3 | 4 |
| | Total Listed | 26 | 39 |
| | Total Market | 100 | 151 |

*Source: INPUT*

Exhibit IV-122

## Leading Turnkey Systems Vendors, Greece 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Digital | 6 | 3 |
| 2 | IBM | 6 | 3 |
| 3 | Hewlett Packard | 4 | 2 |
| 4 | Reuters | 3 | 2 |
| 5 | Origin | 3 | 2 |
| | Total Listed | 22 | 12 |
| | Total Market | 100 | 55 |

*Source: INPUT*

Exhibit IV-123

## Leading Turnkey Systems Vendors, Netherlands 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Getronics | 11 | 55 |
| 2 | Origin | 10 | 47 |
| 3 | IBM | 6 | 31 |
| 4 | Digital | 6 | 27 |
| 5 | SNI | 6 | 27 |
| 6 | Olivetti | 5 | 23 |
| 7 | Ordina | 5 | 23 |
| 8 | Intergraph | 5 | 23 |
| 9 | RAET | 3 | 16 |
| 10 | CMG | 2 | 12 |
| | Total Listed | 59 | 285 |
| | Total Market | 100 | 484 |

*Source: INPUT*

Exhibit IV-124

## Leading Turnkey Systems Vendors, Norway 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | IBM | 4 | 8 |
| 2 | Origin | 3 | 6 |
| 3 | DEC | 2 | 4 |
| 4 | Intergraph | 2 | 4 |
| 5 | Olivetti | 2 | 3 |
| | Total Listed | 12 | 25 |
| | Total Market | 100 | 203 |

*Source: INPUT*

Exhibit IV-125

## Leading Turnkey Systems Vendors, Portugal 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Digital | 7 | 3 |
| 2 | Intergraph | 5 | 2 |
| 3 | IBM | 5 | 2 |
| 4 | Hewlett Packard | 4 | 2 |
| 5 | Olivetti | 2 | 1 |
| | Total Listed | 24 | 10 |
| | Total Market | 100 | 43 |

*Source: INPUT*

Exhibit IV-126

## Leading Turnkey Systems Vendors, Spain 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 5 | 20 |
| 2 | Olivetti | 4 | 16 |
| 3 | Intergraph | 4 | 14 |
| 4 | Eritel | 3 | 12 |
| 5 | Ibermatica | 3 | 12 |
| 6 | Digital | 2 | 8 |
| 7 | Hewlett Packard | 2 | 8 |
| 8 | IBM | 2 | 8 |
| 9 | Reuters | 2 | 6 |
| 10 | Software AG | 1 | 4 |
| | Total Listed | 29 | 107 |
| | Total Market | 100 | 375 |

*Source: INPUT*

Exhibit IV-127

## Leading Turnkey Systems Vendors, Sweden 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | Sapia | 22 | 62 |
| 2 | Digital | 7 | 20 |
| 3 | IBM | 4 | 12 |
| 4 | Hewlett Packard | 4 | 12 |
| 5 | SNI | 4 | 12 |
| 6 | Reuters | 4 | 12 |
| 7 | Intergraph | 4 | 12 |
| 8 | Celsius | 4 | 12 |
| 9 | Industri-Matematik | 4 | 10 |
| 10 | WM Data | 3 | 8 |
| | Total Listed | 59 | 170 |
| | Total Market | 100 | 289 |

*Source: INPUT*

Exhibit IV-128

## Leading Turnkey Systems Vendors, Switzerland 1995 (ECU Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (ECU Millions) |
|---|---|---|---|
| 1 | SNI | 8 | 31 |
| 2 | Digital | 3 | 12 |
| 3 | IBM | 3 | 12 |
| 4 | Hewlett Packard | 3 | 12 |
| 5 | Intergraph | 3 | 12 |
| | Total Listed | 19 | 78 |
| | Total Market | 100 | 406 |

*Source: INPUT*

Exhibit IV-129

## Leading Turnkey Systems Vendors, United Kingdom 1995 (£ Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (£ Millions) |
|---|---|---|---|
| 1 | Cray Electronics | 4 | 52 |
| 2 | Intergraph | 3 | 42 |
| 3 | JBA | 3 | 42 |
| 4 | IBM | 2 | 35 |
| 5 | Digital | 2 | 32 |
| 6 | Reuters | 2 | 32 |
| 7 | MDIS | 2 | 29 |
| 8 | Unisys | 2 | 26 |
| 9 | Hewlett Packard | 2 | 26 |
| 10 | P&P | 2 | 23 |
| | Total Listed | 23 | 338 |
| | Total Market | 100 | 1450 |

*Source: INPUT*

Exhibit IV-130

## Leading Turnkey Systems Vendors, France 1995 (FF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (FF Millions) |
|---|---|---|---|
| 1 | Sligos | 4 | 391 |
| 2 | Syseca | 4 | 391 |
| 3 | IBM | 3 | 293 |
| 4 | Digital | 3 | 269 |
| 5 | Alcatel TiTN | 3 | 269 |
| 6 | Reuters | 2 | 220 |
| 7 | Dassault | 2 | 196 |
| 8 | IBSI | 2 | 171 |
| 9 | Fininfor | 2 | 171 |
| 10 | CISI | 2 | 171 |
| | Total Listed | 27 | 2543 |
| | Total Market | 100 | 9600 |

*Source: INPUT*

Exhibit IV-131

## Leading Turnkey Systems Vendors, Germany 1995 (DM Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (DM Millions) |
|---|---|---|---|
| 1 | SNI | 11 | 715 |
| 2 | IBM | 4 | 243 |
| 3 | Digital | 2 | 129 |
| 4 | Hewlett Packard | 2 | 122 |
| 5 | debis Systemhaus | 1 | 72 |
| 6 | Compunet Computer | 1 | 72 |
| 7 | Unisys | 1 | 50 |
| 8 | Reuters | 1 | 50 |
| 9 | Intergraph | 1 | 50 |
| 10 | Sligos | 1 | 43 |
| | Total Llsted | 24 | 1544 |
| | Total Market | 100 | 6450 |

*Source: INPUT*

Exhibit IV-132

## Leading Turnkey Systems Vendors, Italy 1995 (Lira Billions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Lira Billions) |
|---|---|---|---|
| 1 | Olivetti | 25 | 270 |
| 2 | IBM | 8 | 87 |
| 3 | Digital | 7 | 80 |
| 4 | Database Informatica | 7 | 80 |
| 5 | Sicit | 4 | 48 |
| 6 | Editrice | 3 | 32 |
| 7 | Intergraph | 3 | 32 |
| 8 | Reuters | 3 | 32 |
| 9 | Cerved | 3 | 29 |
| 10 | Cortis Lentini | 2 | 24 |
| | Total Listed | 65 | 712 |
| | Total Market | 100 | 1090 |

*Source: INPUT*

Exhibit IV-133

## Leading Turnkey Systems Vendors, Austria 1995 (Sch Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Sch Millions) |
|---|---|---|---|
| 1 | SNI | 11 | 505 |
| 2 | IBM | 4 | 202 |
| 3 | Digital | 4 | 182 |
| 4 | Compunet Computer | 4 | 182 |
| 5 | Hewlett Packard | 3 | 152 |
| 6 | Unisys | 3 | 152 |
| 7 | Reuters | 2 | 101 |
| 8 | Software AG | 2 | 81 |
| 9 | Computervision | 2 | 81 |
| 10 | EDV | 1 | 61 |
| | Total Listed | 37 | 1697 |
| | Total Market | 100 | 4550 |

*Source: INPUT*

Exhibit IV-134

## Leading Turnkey Systems Vendors, Belgium 1995 (BF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (BF Millions) |
|---|---|---|---|
| 1 | Trasys | 11 | 1176 |
| 2 | Digital | 4 | 441 |
| 3 | IBM | 4 | 441 |
| 4 | Intergraph | 4 | 441 |
| 5 | Hewlett Packard | 4 | 382 |
| 6 | Getronics | 3 | 353 |
| 7 | Olivetti | 3 | 294 |
| 8 | Reuters | 3 | 294 |
| 9 | Origin | 2 | 235 |
| 10 | Dolmen | 1 | 147 |
| | Total Listed | 39 | 4204 |
| | Total Market | 100 | 10880 |

*Source: INPUT*

Exhibit IV-135

## Leading Turnkey Systems Vendors, Denmark 1995 (DK Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (DK Millions) |
|---|---|---|---|
| 1 | IBM | 4 | 83 |
| 2 | Digital | 1 | 28 |
| 3 | Olivetti | 1 | 28 |
| 4 | Intergraph | 1 | 28 |
| 5 | Hewlett Packard | 1 | 22 |
| 6 | Cap Gemini Sogeti | 1 | 22 |
| 7 | ComputerVision | 1 | 17 |
| 8 | Origin | 1 | 17 |
| 9 | Reuters | 1 | 17 |
| 10 | Kommunedata | 1 | 11 |
| | Total Listed | 13 | 271 |
| | Total Market | 100 | 2100 |

*Source: INPUT*

Exhibit IV-136

## Leading Turnkey Systems Vendors, Finland 1995 (FM Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (FM Millions) |
|---|---|---|---|
| 1 | Intergraph | 8 | 65 |
| 2 | IBM | 5 | 43 |
| 3 | Digital | 5 | 43 |
| 4 | Reuters | 4 | 35 |
| 5 | Origin | 3 | 22 |
| | Total Listed | 26 | 208 |
| | Total Market | 100 | 800 |

*Source: INPUT*

Exhibit IV-137

## Leading Turnkey Systems Vendors, Greece 1995 (Dra Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Dra Millions) |
|---|---|---|---|
| 1 | Digital | 6 | 948 |
| 2 | IBM | 6 | 948 |
| 3 | Hewlett Packard | 4 | 711 |
| 4 | Reuters | 3 | 474 |
| 5 | Origin | 3 | 474 |
| | Total Listed | 22 | 3555 |
| | Total Market | 100 | 16600 |

*Source: INPUT*

Exhibit IV-138

## Leading Turnkey Systems Vendors, Netherlands 1995 (Dfl Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Dfl Millions) |
|---|---|---|---|
| 1 | Getronics | 11 | 112 |
| 2 | Origin | 10 | 96 |
| 3 | IBM | 6 | 64 |
| 4 | Digital | 6 | 56 |
| 5 | SNI | 6 | 56 |
| 6 | Olivetti | 5 | 48 |
| 7 | Ordina | 5 | 48 |
| 8 | Intergraph | 5 | 48 |
| 9 | RAET | 3 | 32 |
| 10 | CMG | 2 | 24 |
| | Total Listed | 59 | 584 |
| | Total Market | 100 | 990 |

*Source: INPUT*

Exhibit IV-139

## Leading Turnkey Systems Vendors, Norway 1995 (NK Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (NK Millions) |
|---|---|---|---|
| 1 | IBM | 4 | 63 |
| 2 | Origin | 3 | 51 |
| 3 | DEC | 2 | 32 |
| 4 | Intergraph | 2 | 32 |
| 5 | Olivetti | 2 | 25 |
| | Total Listed | 12 | 202 |
| | Total Market | 100 | 1640 |

*Source: INPUT*

Exhibit IV-140

## Leading Turnkey Systems Vendors, Portugal 1995 (Esc Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Esc Millions) |
|---|---|---|---|
| 1 | Digital | 7 | 596 |
| 2 | Intergraph | 5 | 447 |
| 3 | IBM | 5 | 447 |
| 4 | Hewlett Packard | 4 | 298 |
| 5 | Olivetti | 2 | 149 |
| | Total Listed | 24 | 1937 |
| | Total Market | 100 | 8200 |

*Source: INPUT*

Exhibit IV-141

## Leading Turnkey Systems Vendors, Spain 1995 (Ptas Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Ptas Millions) |
|---|---|---|---|
| 1 | Cap Gemini Sogeti | 5 | 3025 |
| 2 | Olivetti | 4 | 2420 |
| 3 | Intergraph | 4 | 2178 |
| 4 | Eritel | 3 | 1936 |
| 5 | Ibermatica | 3 | 1815 |
| 6 | Digital | 2 | 1210 |
| 7 | Hewlett Packard | 2 | 1210 |
| 8 | IBM | 2 | 1210 |
| 9 | Reuters | 2 | 968 |
| 10 | Software AG | 1 | 605 |
| | Total Listed | 29 | 16577 |
| | Total Market | 100 | 58100 |

*Source: INPUT*

Exhibit IV-142

## Leading Turnkey Systems Vendors, Sweden 1995 (Sek Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (Sek Millions) |
|---|---|---|---|
| 1 | Sapia | 22 | 530 |
| 2 | Digital | 7 | 166 |
| 3 | IBM | 4 | 99 |
| 4 | Hewlett Packard | 4 | 99 |
| 5 | SNI | 4 | 99 |
| 6 | Reuters | 4 | 99 |
| 7 | Intergraph | 4 | 99 |
| 8 | Celsius | 4 | 99 |
| 9 | Industri-Matematik | 4 | 86 |
| 10 | WM Data | 3 | 66 |
| | Total Listed | 59 | 1445 |
| | Total Market | 100 | 2450 |

*Source: INPUT*

Exhibit IV-143

## Leading Turnkey Systems Vendors, Switzerland 1995 (SF Millions)

| Rank | Company | Estimated Market Share (Per cent) | 1995 Estimated Revenue (SF Millions) |
|---|---|---|---|
| 1 | SNI | 8 | 46 |
| 2 | Digital | 3 | 17 |
| 3 | IBM | 3 | 17 |
| 4 | Hewlett Packard | 3 | 17 |
| 5 | Intergraph | 3 | 17 |
| | Total Listed | 19 | 115 |
| | Total Market | 100 | 600 |

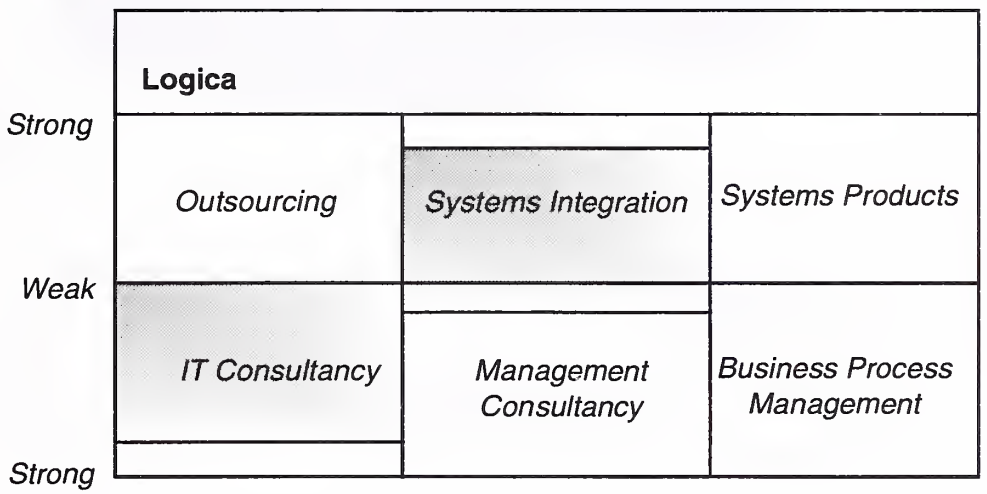
*Source: INPUT*

# B
# Logica

Exhibit IV-144 presents a mapping of Logica's key areas of competitive excellence within the Business Integration domain. Exhibit IV-145 analyses Logica's Business Integration revenues as a proportion of its overall revenue. Exhibit IV-146 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-144

**Logica — Key Competency Areas in Business Integration Services**

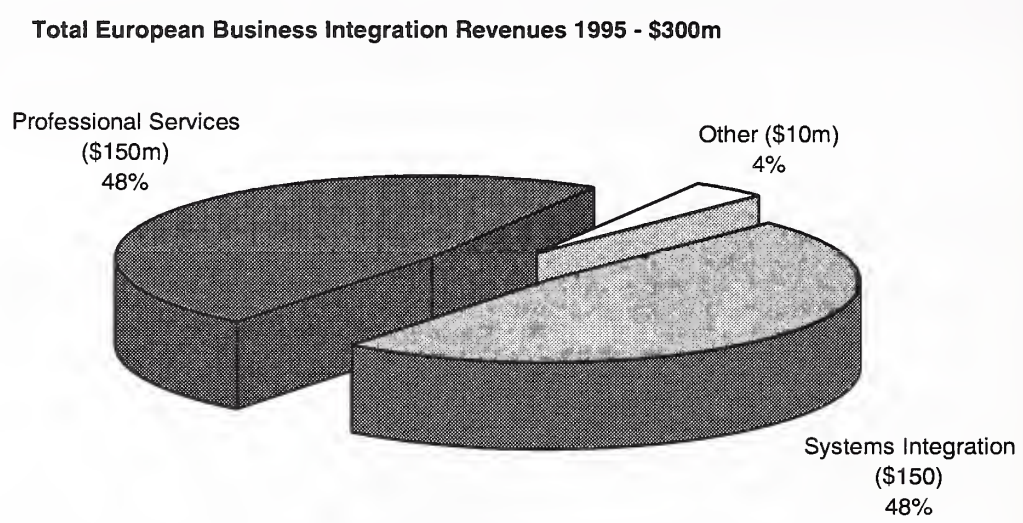



- *IT Systems development strengths positioned around quasi-product solutions*
- *No operational capabilities – embryonic applications management services leveraged from SI contracts*
- *Strong IT technology orientation*
- *Sub-contract/development contractor ethos – not prime relationship contractor*
- *Concentration on key vertical markets, e.g. telecommunications, aerospace*
- *Focus on "repeatability" — leveraging existing solutions into new opportunities.*

*Source: INPUT*

Exhibit IV-145

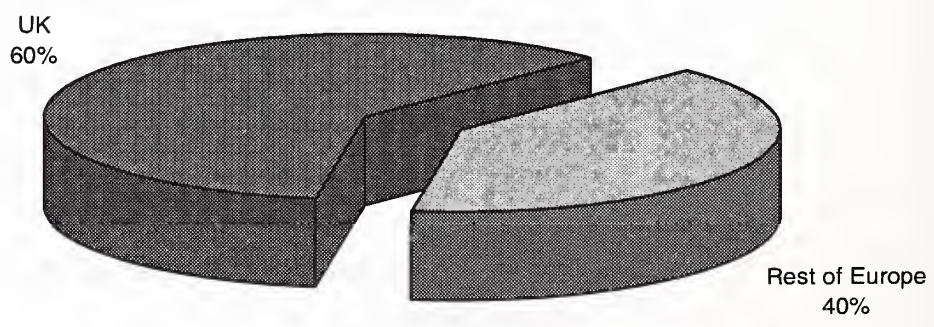
## Logica – Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-146

## Logica – Business Integration, Geographical Analysis




*Source: INPUT*

# C
# Hewlett Packard

Exhibit IV-147 presents a mapping of Hewlett Packard's key areas of competitive excellence within the Business Integration domain. Exhibit IV-148 analyses Hewlett Packard's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-149 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-147

**Hewlett Packard — Key Competency Areas in Business Integration Services**

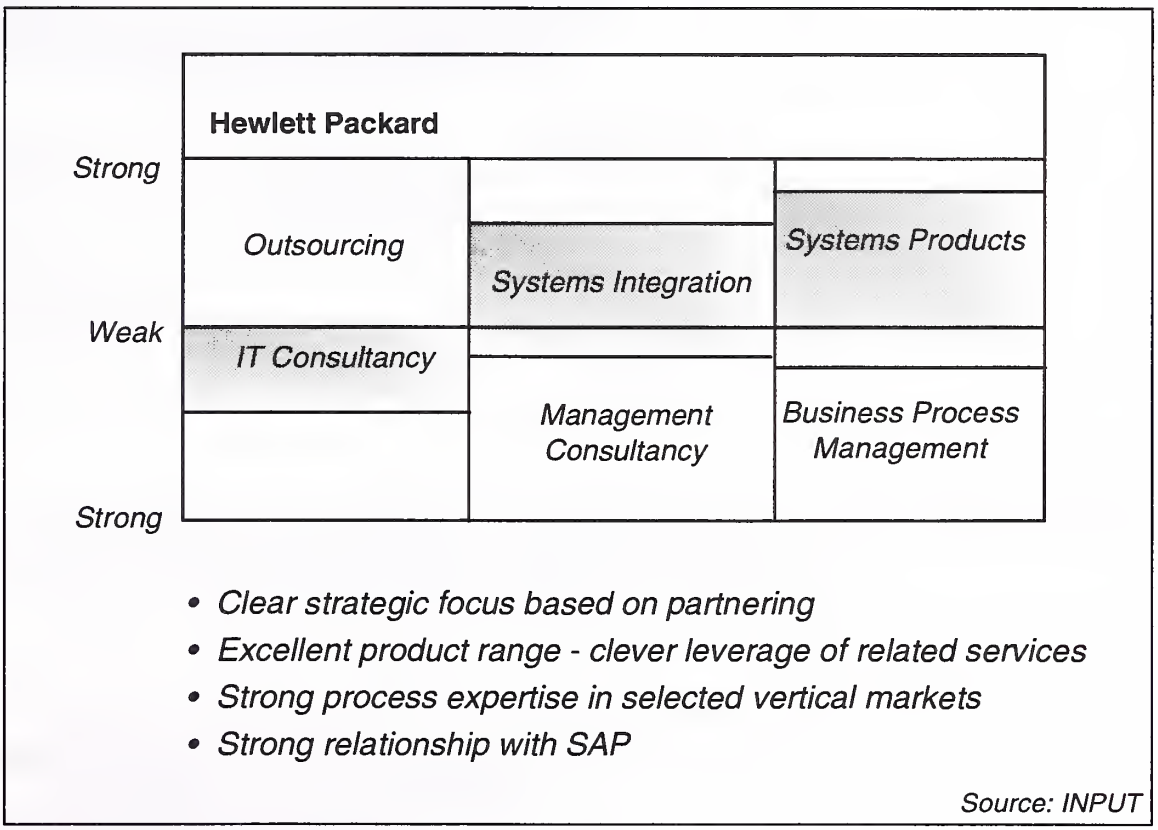
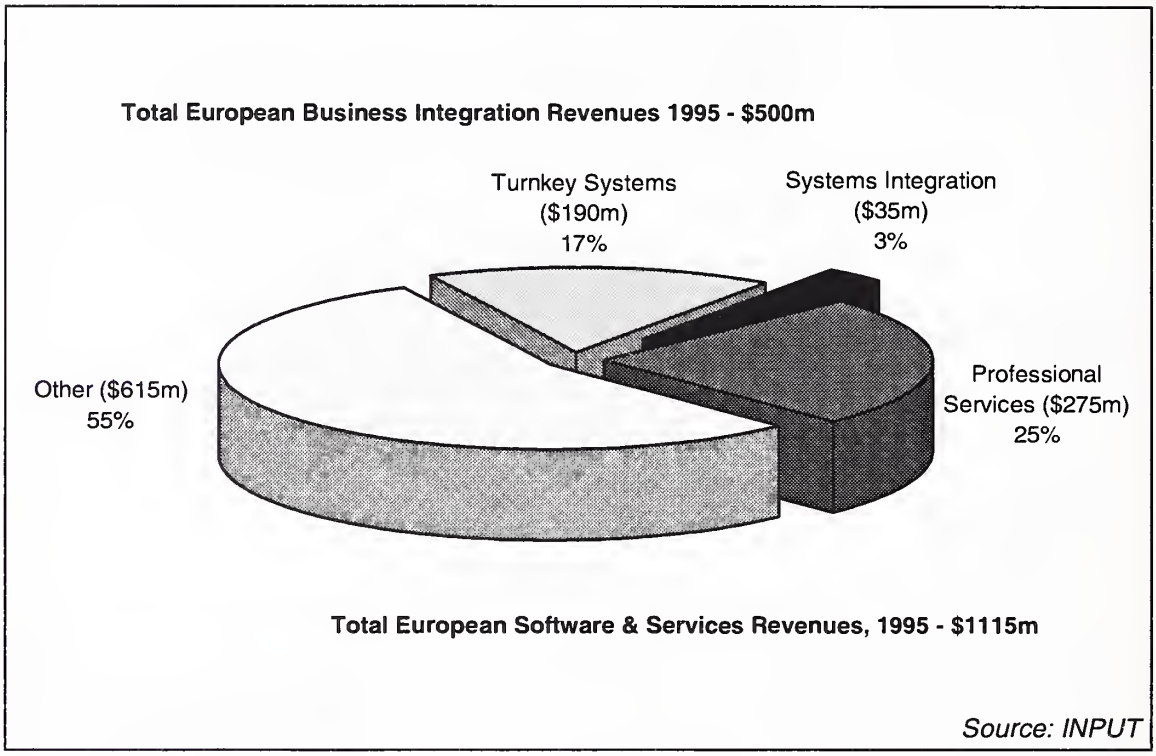


Exhibit IV-148

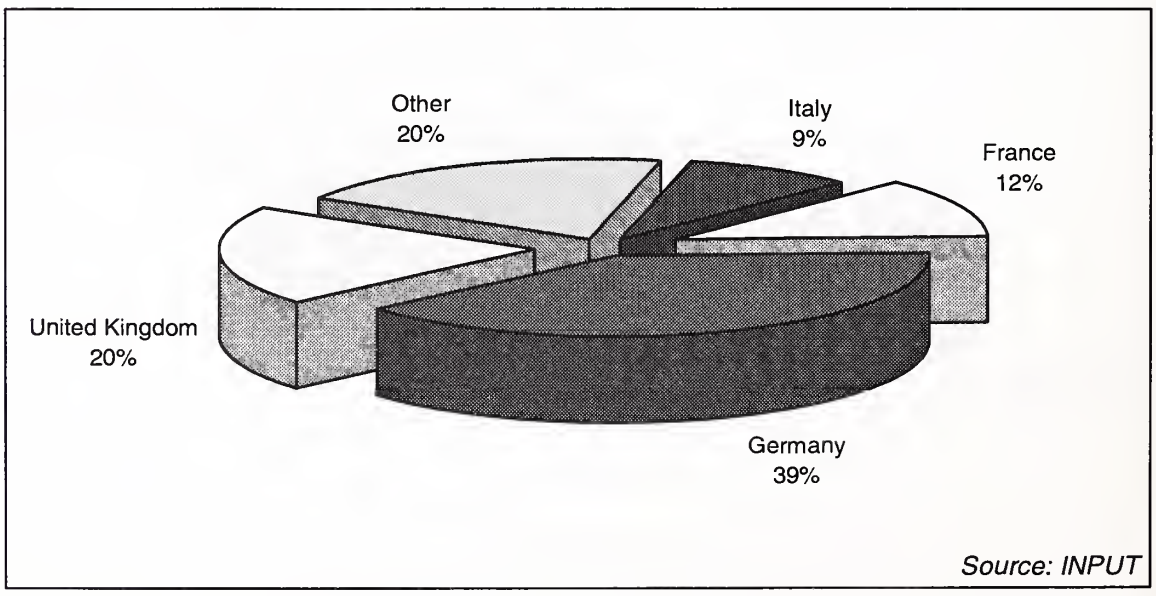
## Hewlett Packard — Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-149

## Hewlett Packard — Business Integration, Geographical Analysis



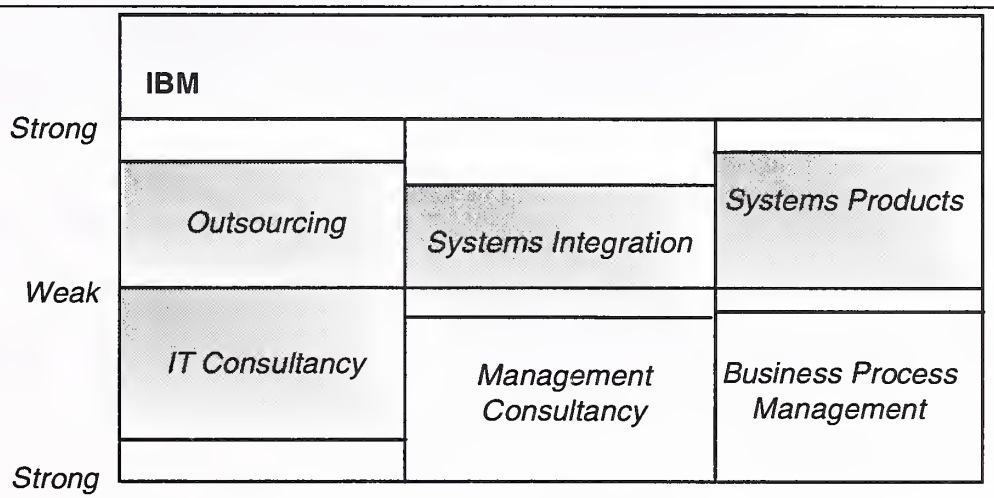

*Source: INPUT*

# D
# IBM

Exhibit IV-150 presents a mapping of IBM's key areas of competitive excellence within the Business Integration domain. Exhibit IV-151 analyses IBM's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-152 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-150

## IBM — Key Competency Areas in Business Integration Services

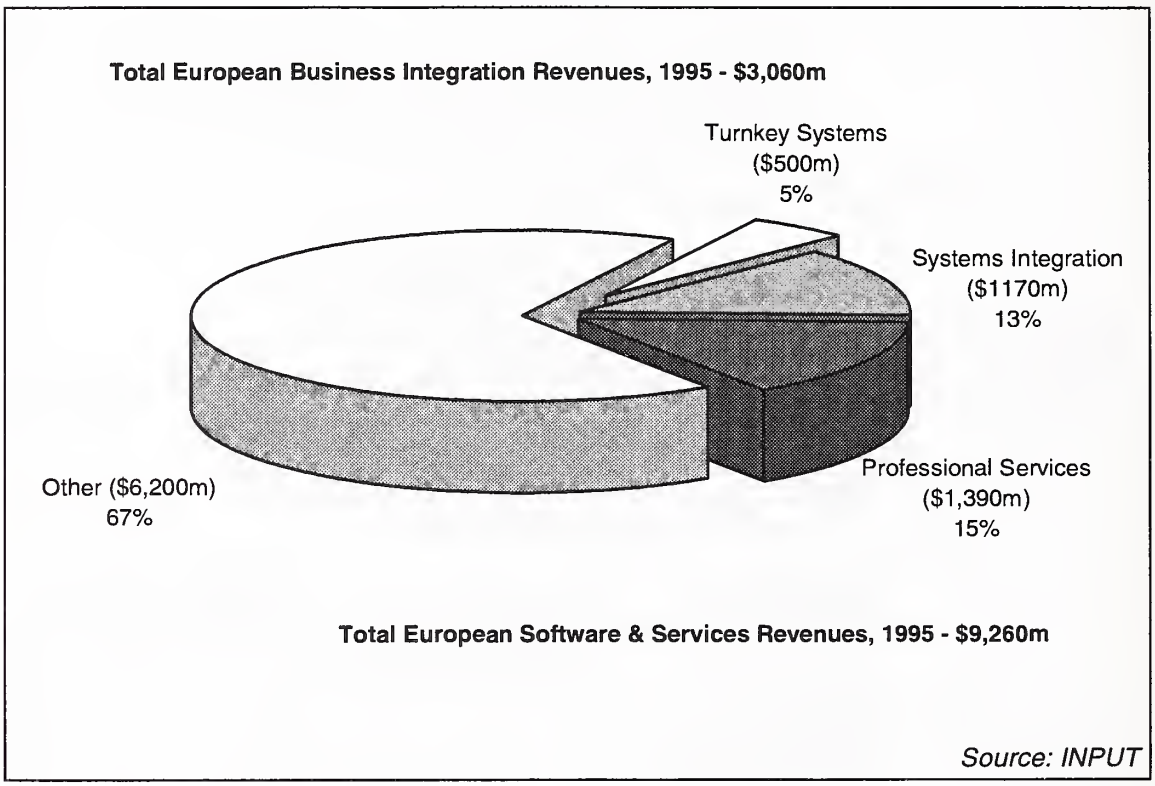



- *Multi-faceted organisation operating symbiotically - contrasts with ICL model where units interact on a commercial basis*
- *Strong IT image leveraged into development and IT skill specific consultancy*
- *Computing services capability not yet developed into Business Process Management (BPM) offering*
- *Management consultancy embroyonic*
- *IT Product orientation still dominates*
- *Still possesses greater resources than competitors to provide wide scope of technology*
- *Services a key area of focus — installed base still offering account management.*

*Source: INPUT*

Exhibit IV-151

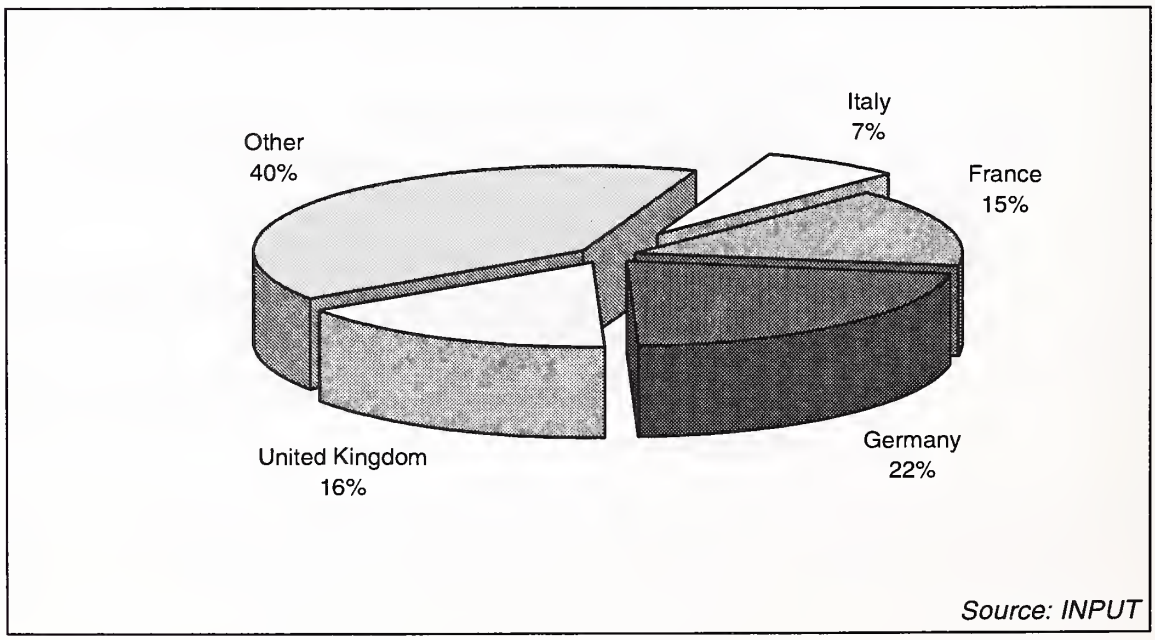
## IBM — Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-152

## IBM — Business Integration, Geographical Analysis



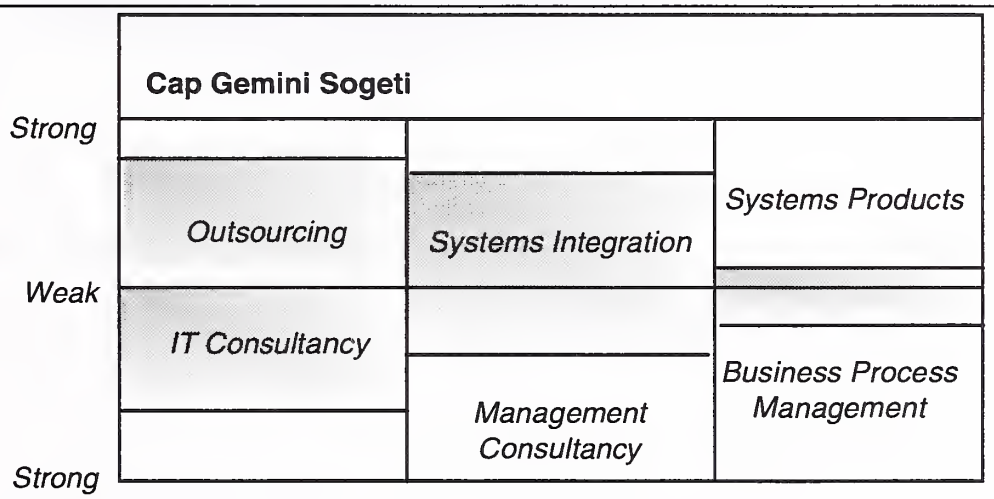

*Source: INPUT*

# E
# Cap Gemini Sogeti

Exhibit IV-153 presents a mapping of Cap Gemini Sogeti's key areas of competitive excellence within the Business Integration domain. Exhibit IV-154 analyses Cap Gemini Sogeti's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-155 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-153

**Cap Gemini Sogeti — Key Competency Areas in Business Integration Services**




- *Systems development and operations heritage*
- *Continuing issue of shift away from "body shopping"*
- *Needing to integrate Gemini to present seamless services a la Andersen Consulting - Gemini weakened by over-emphasis on strategy consulting*
- *IT product adverse culture*
- *Dominant French culture perceived internationally as a "negative"*
- *Strong "national" cultures still evident within the "federation"*
- *Plan to drop "Sogeti" from branding*

*Source: INPUT*

Exhibit IV-154

## Cap Gemini Sogeti — Business Integration Revenues in Relation to Overall Revenues

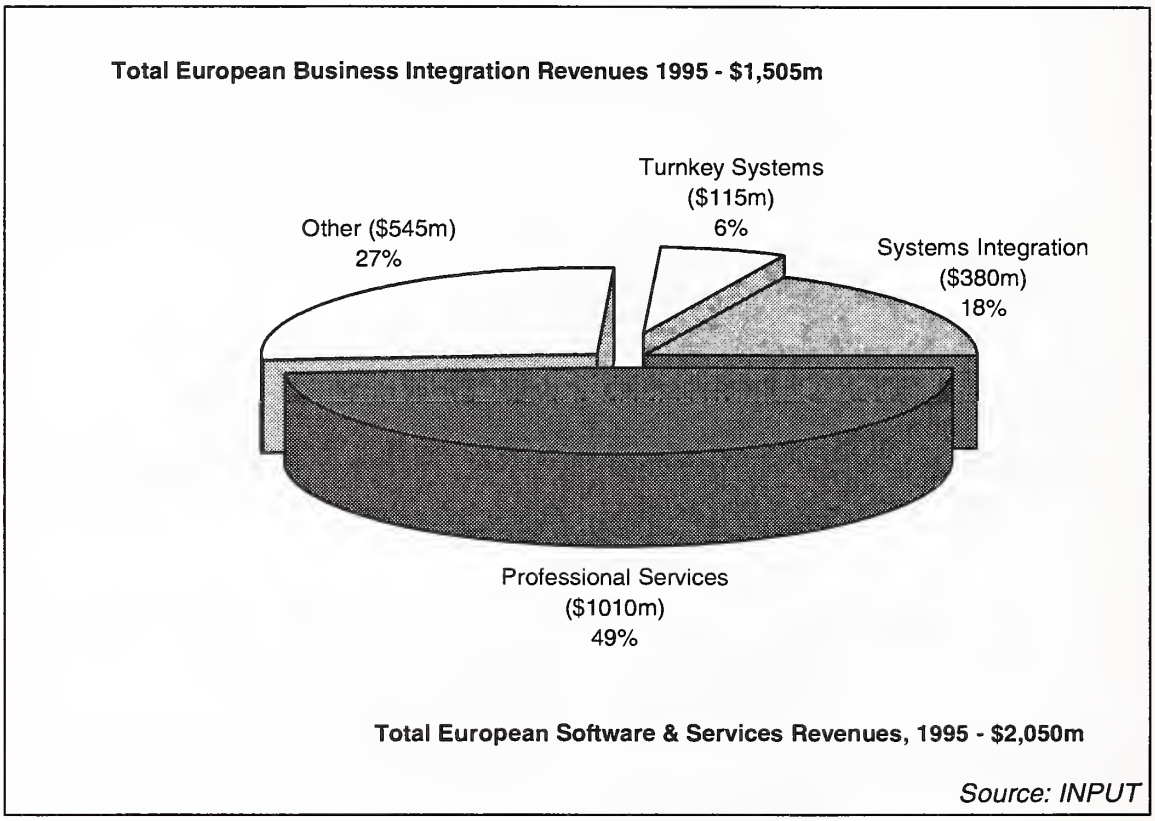
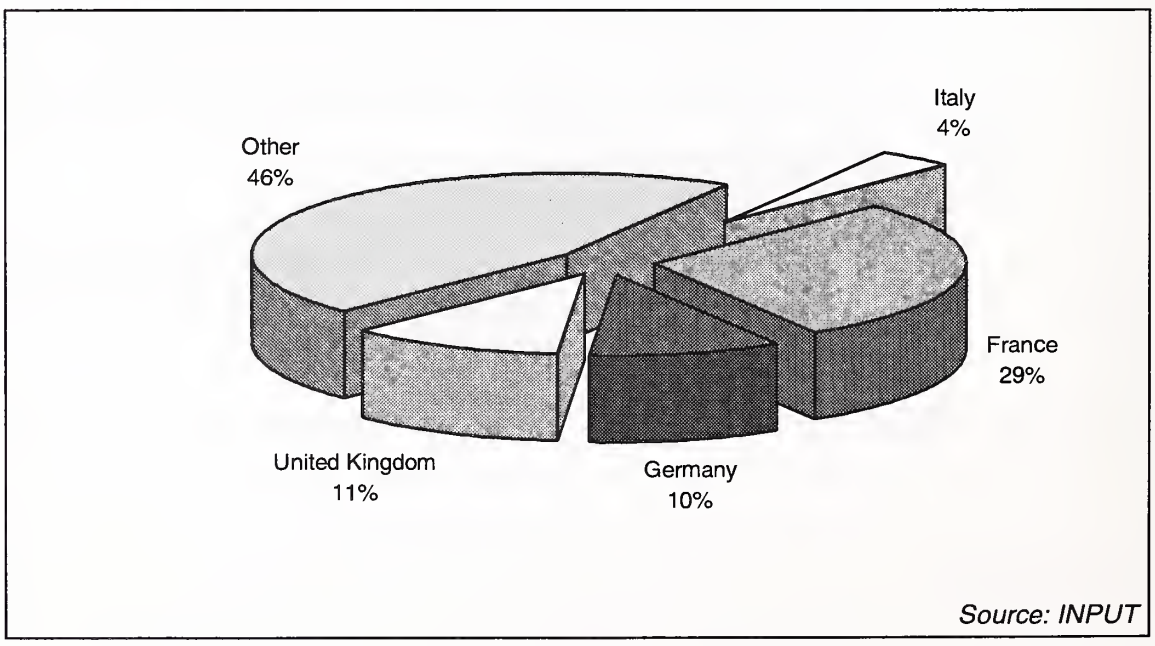



Exhibit IV-155

## Cap Gemini Sogeti — Business Integration, Geographic Analysis

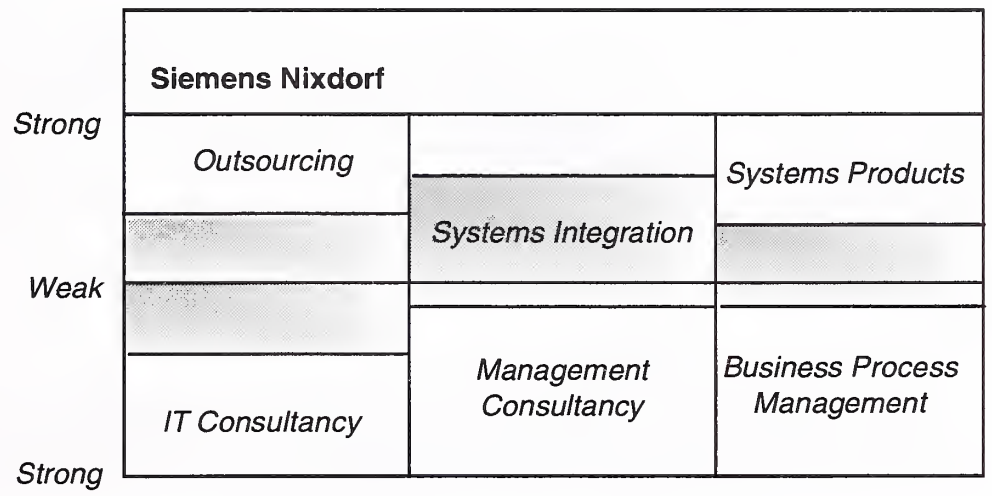


# F
# Siemens Nixdorf

Exhibit IV-156 presents a mapping of Siemens Nixdorf's key areas of competitive excellence within the Business Integration domain. Exhibit IV-157 analyses Siemens Nixdorf's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-158 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-156

**Siemens Nixdorf — Key Competency Areas in Business Integration Services**




- *Presently undergoing massive internal change programme - of both culture and competencies*
- *Excellent product reputation being leveraged into the services marketplace*
- *Lagging in "internationalisation"*
- *Strong vertical market focus*
- *Focusing agressively on application product centered development; becoming a leading SAP partner.*

*Source: INPUT*

Exhibit IV-157

## Siemens Nixdorf — Business Integration Revenues in Relation to Overall Revenues

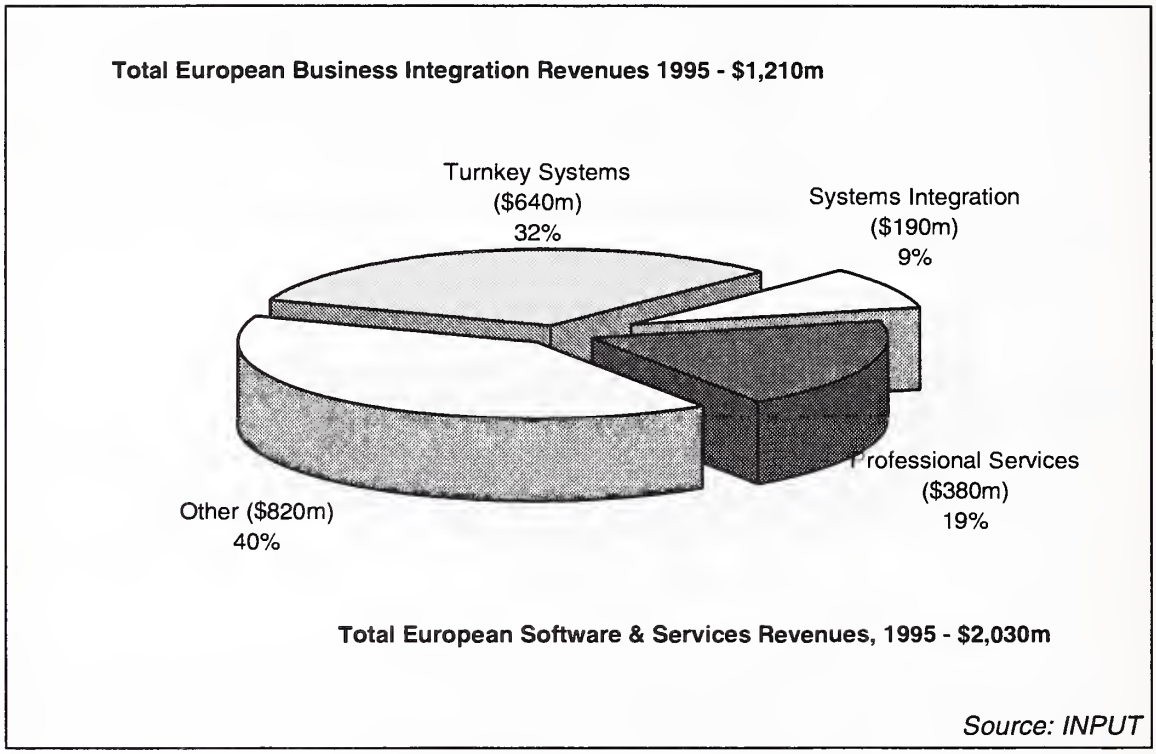
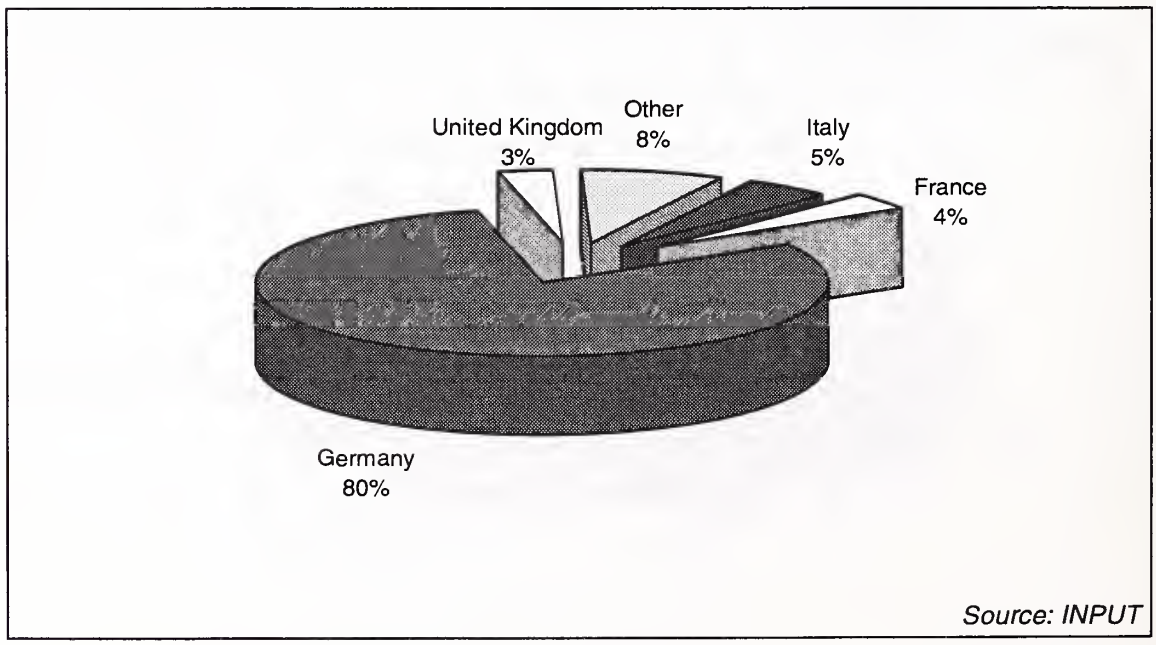



Exhibit IV-158

## Siemens Nixdorf — Business Integration, Geographical Analysis

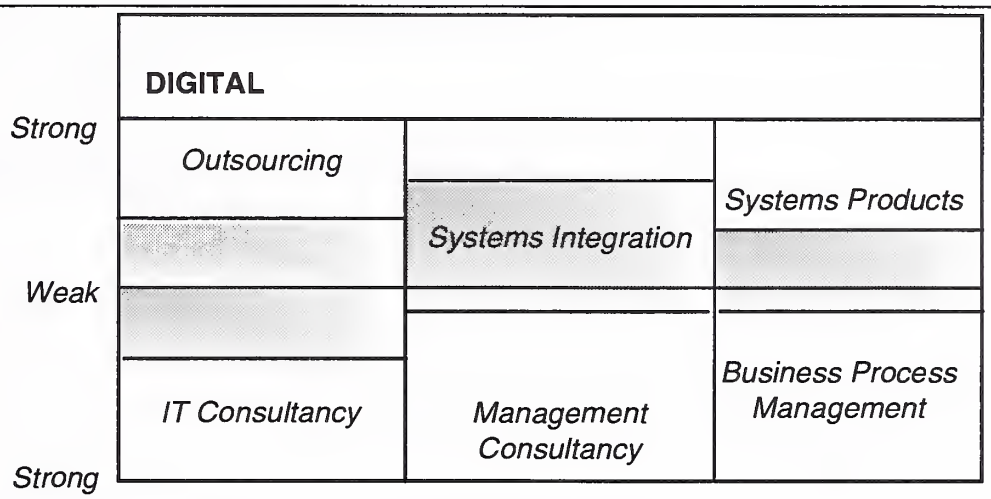


# G
# Digital Equipment Corporation

Exhibit IV-159 presents a mapping of Digital's key areas of competitive excellence within the Business Integration domain. Exhibit IV-160 analyses Digital's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-161 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-159

## Digital — Key Competency Areas in Business Integration Services

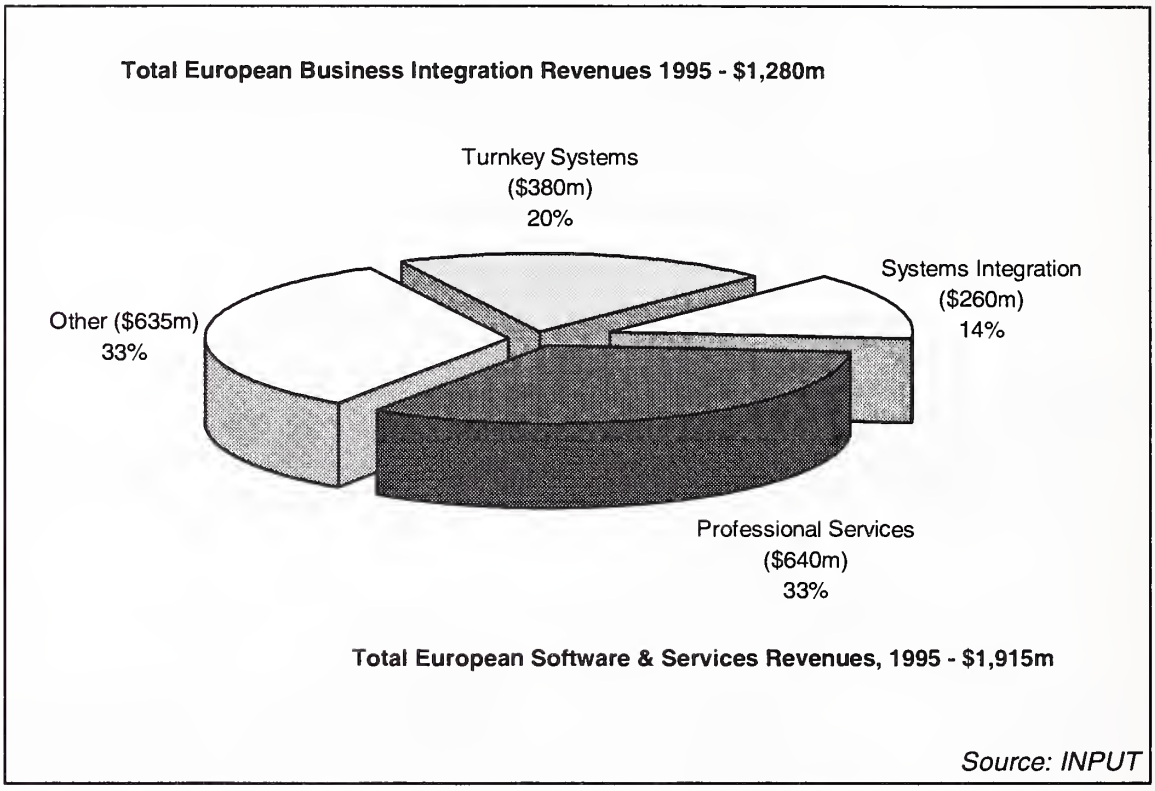



- *Refocusing on three key vertical markets (Telco's, Retail, Manufacturing)*
- *Strengthening services based relationship with Microsoft*
- *Withdrawing from "solutions" driven systems integration*
- *Leveraging off strong platform base as a "technical" SI player*
- *Heritage in distributed, mid size, multivendor environments*
- *Becoming a leading Internet player through success with Alta Vista — aims at being an Intranet Integrator.*

*Source: INPUT*

Exhibit IV-160

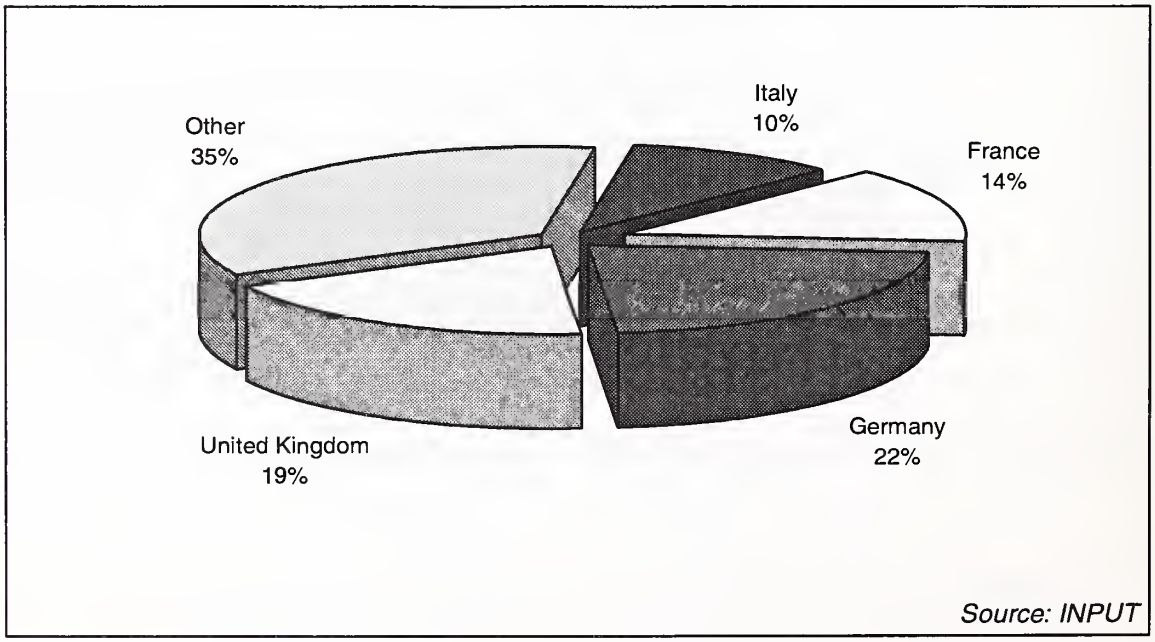
## Digital — Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-161

## Digital — Business Integration, Geographical Analysis



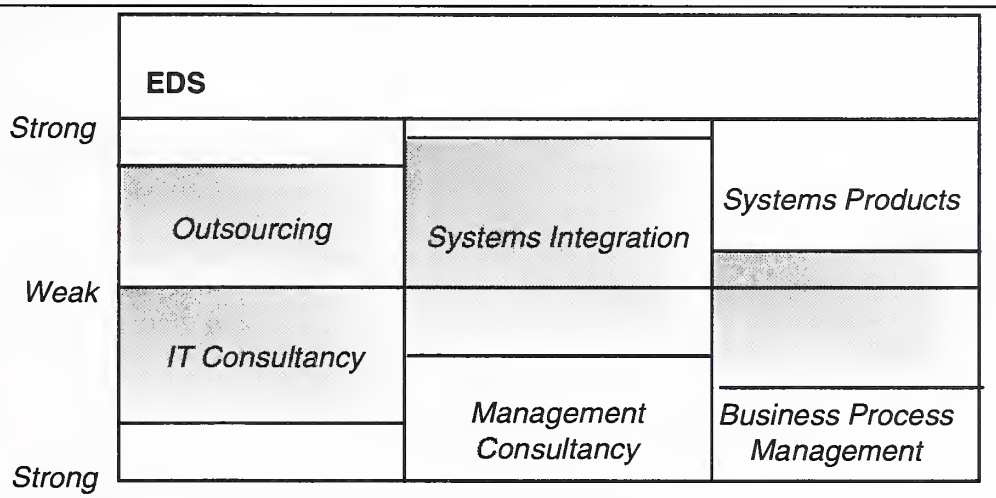

*Source: INPUT*

# H
# EDS

Exhibit IV-162 presents a mapping of EDS's key areas of competitive excellence within the Business Integration domain. Exhibit IV-163 analyses EDS's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-164 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-162

**EDS — Key Competency Areas in Business Integration Services**

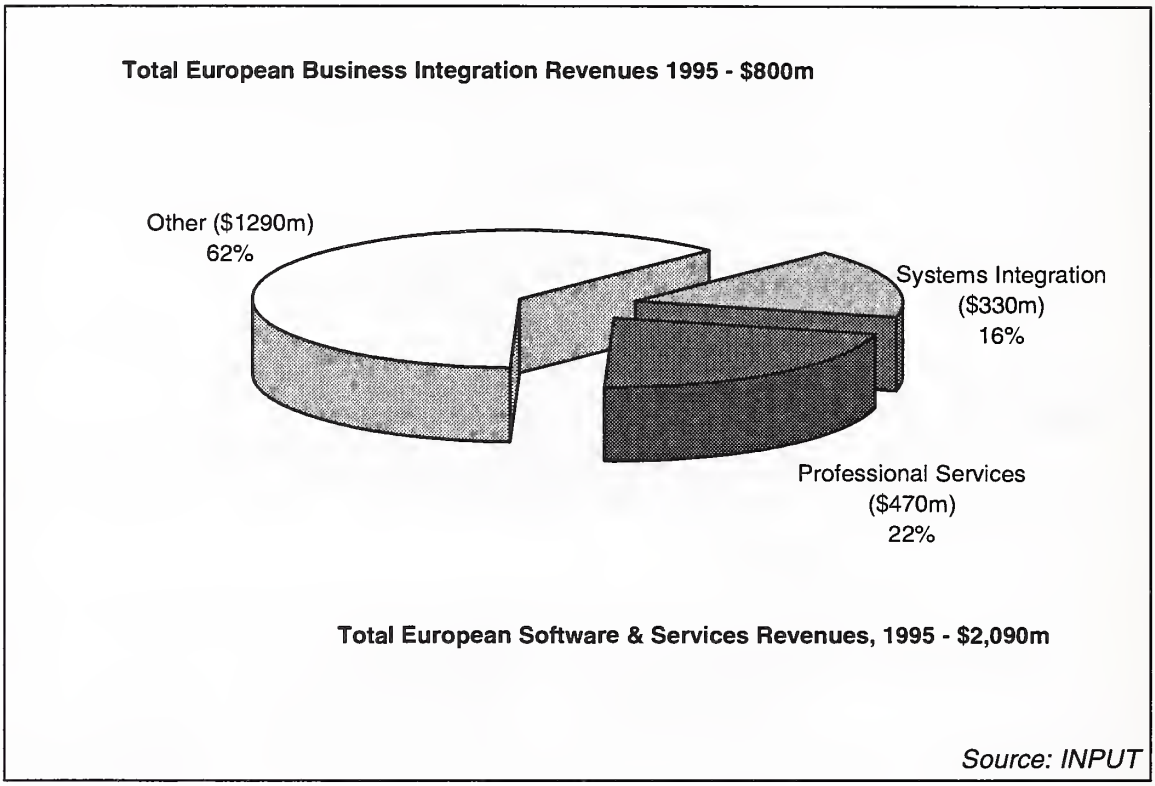



- *Computing services image morphed into business process management services*
- *AT Kearney acquisition signals further drive to strengthen full life cycle relationship with client*
- *Focus on value based pricing*
- *Systems integration skills complement operational capability*
- *An IT technology user and facilitator (not an IT company)*
- *Independence from GM will enhance access to capital — signalling even more aggressive period of acquisition, PFI and outsourcing driven growth.*

*Source: INPUT*

Exhibit IV-163

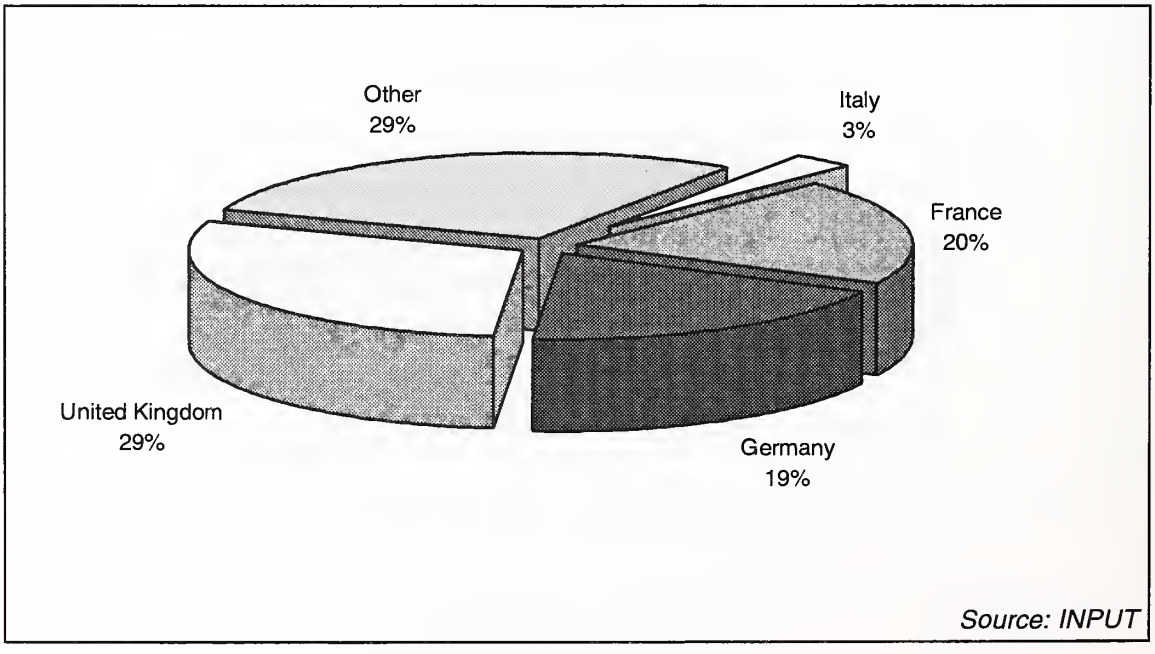
## EDS — Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-164

## EDS — Business Integration, Geographical Analysis



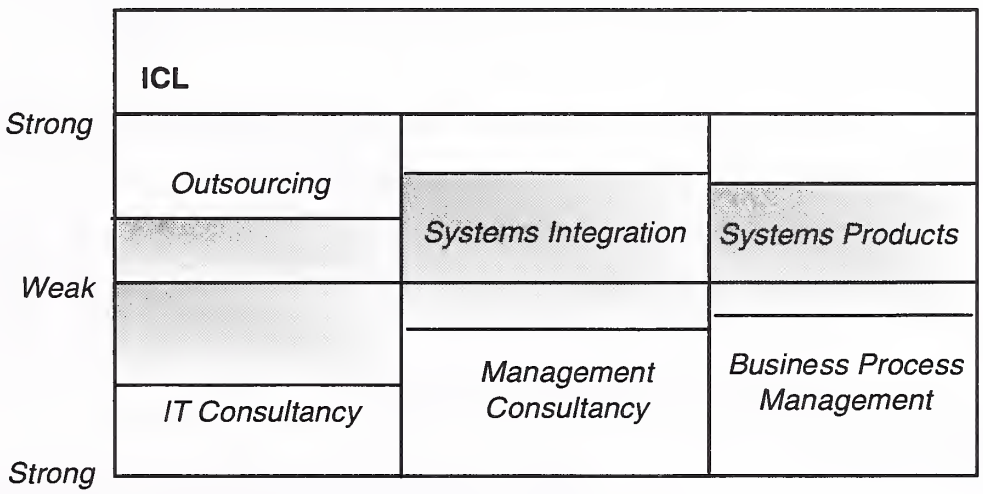

*Source: INPUT*

# I
# ICL

Exhibit IV-165 presents a mapping of ICL's key areas of competitive excellence within the Business Integration domain. Exhibit IV-166 analyses ICL's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-167 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-165

## ICL — Key Competency Areas in Business Integration Services

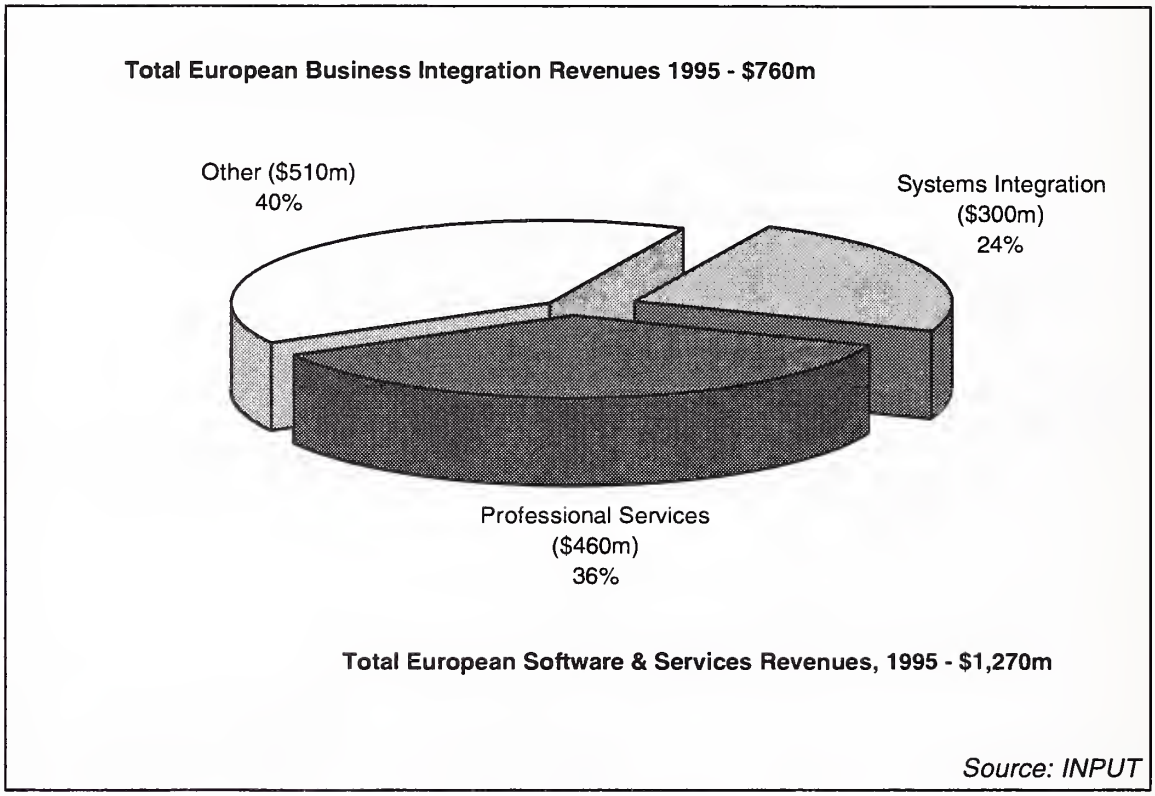



- *Maximising leverage from Fujitsu technology relationship*
- *Adding high end value services to existing strong vertical focus (ie retail)*
- *Ease in playing both prime and sub contractor roles*
- *Attempting to extend geographical coverage*
- *Candidate for AT&T/Unisys style "demerger" (?)*

*Source: INPUT*

Exhibit IV-166

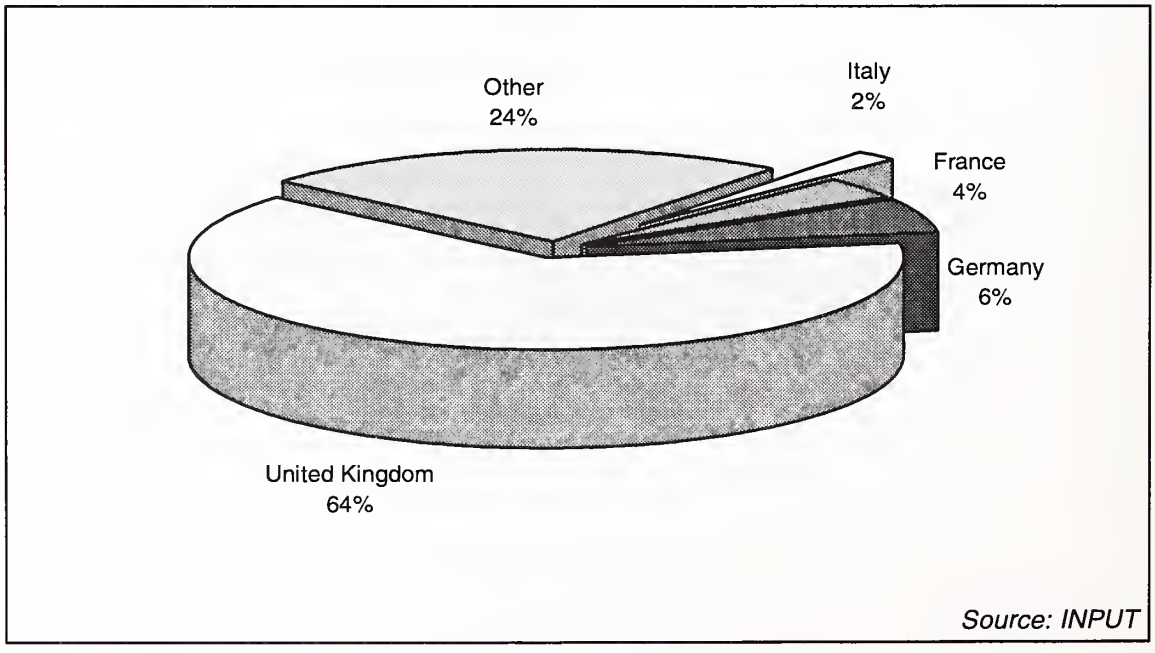
## ICL — Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-167

## ICL — Business Integration, Geographical Analysis



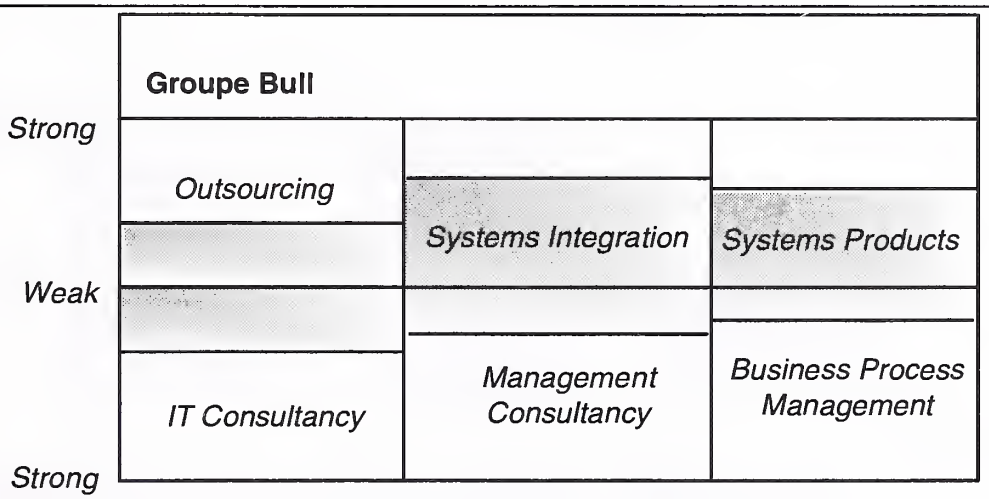

*Source: INPUT*

# J
# Groupe Bull

Exhibit IV-168 presents a mapping of Groupe Bull's key areas of competitive excellence within the Business Integration domain. Exhibit IV-169 analyses Groupe Bull's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-170 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-168

**Groupe Bull — Key Competency Areas in Business Integration Services**

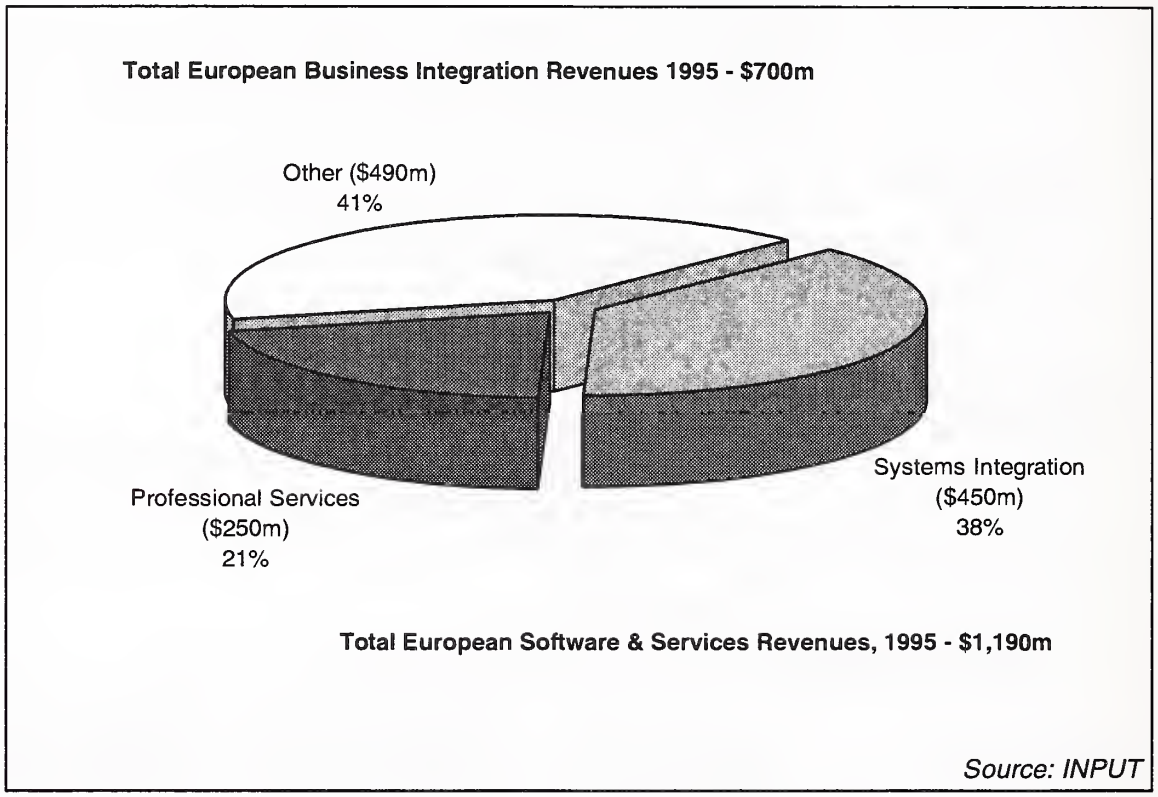



- *Major push into high end systems integration*
- *Significant refocusing on services*
- *First rate development methodologies*
- *Sharp vertical market focus*
- *Focus on SAP in developing market places, ie. France and Italy offering re-training to existing staff.*

*Source: INPUT*

Exhibit IV-169

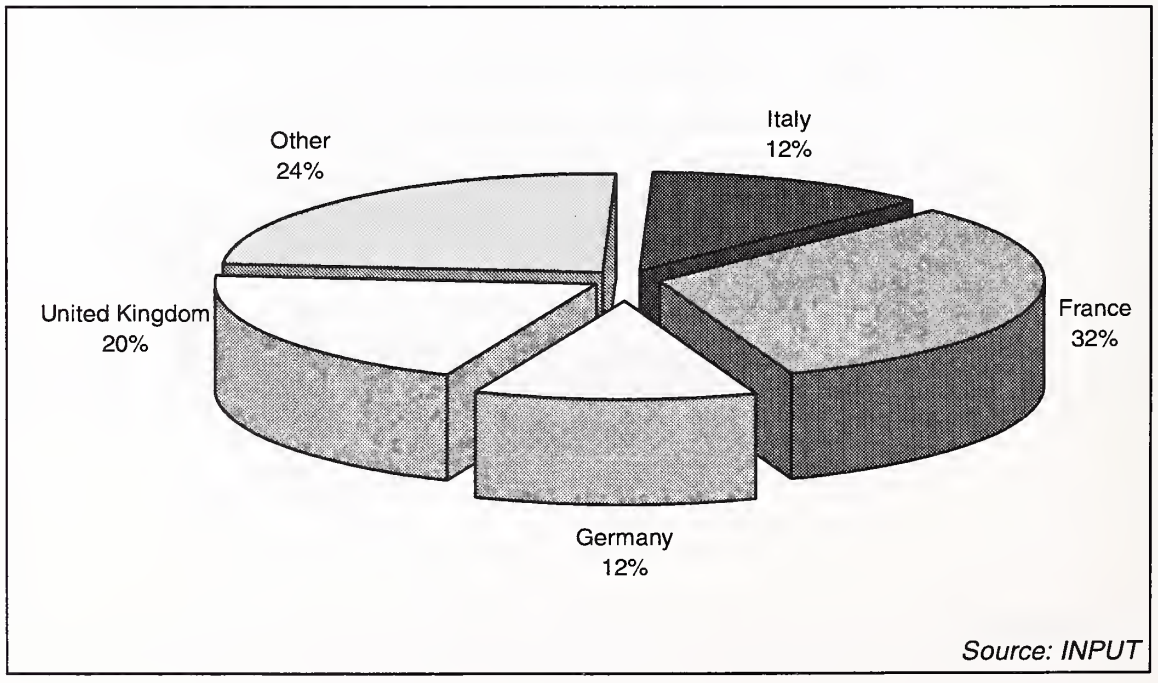
## Groupe Bull — Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-170

## Groupe Bull — Business Integration, Geographical Analysis



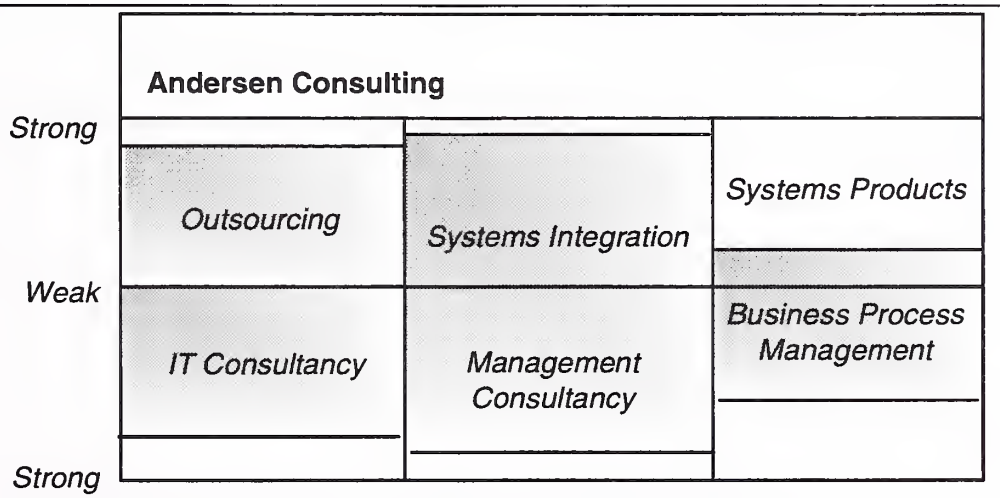

*Source: INPUT*

# K
# Andersen Consulting

Exhibit IV-171 presents a mapping of Andersen Consulting's key areas of competitive excellence within the Business Integration domain. Exhibit IV-172 analyses Andersen Consulting's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-173 presents an analysis of its Business Integration related revenues by geographical coverage across Europe.

Exhibit IV-171

## Andersen Consulting — Key Competency Areas in Business Integration Services

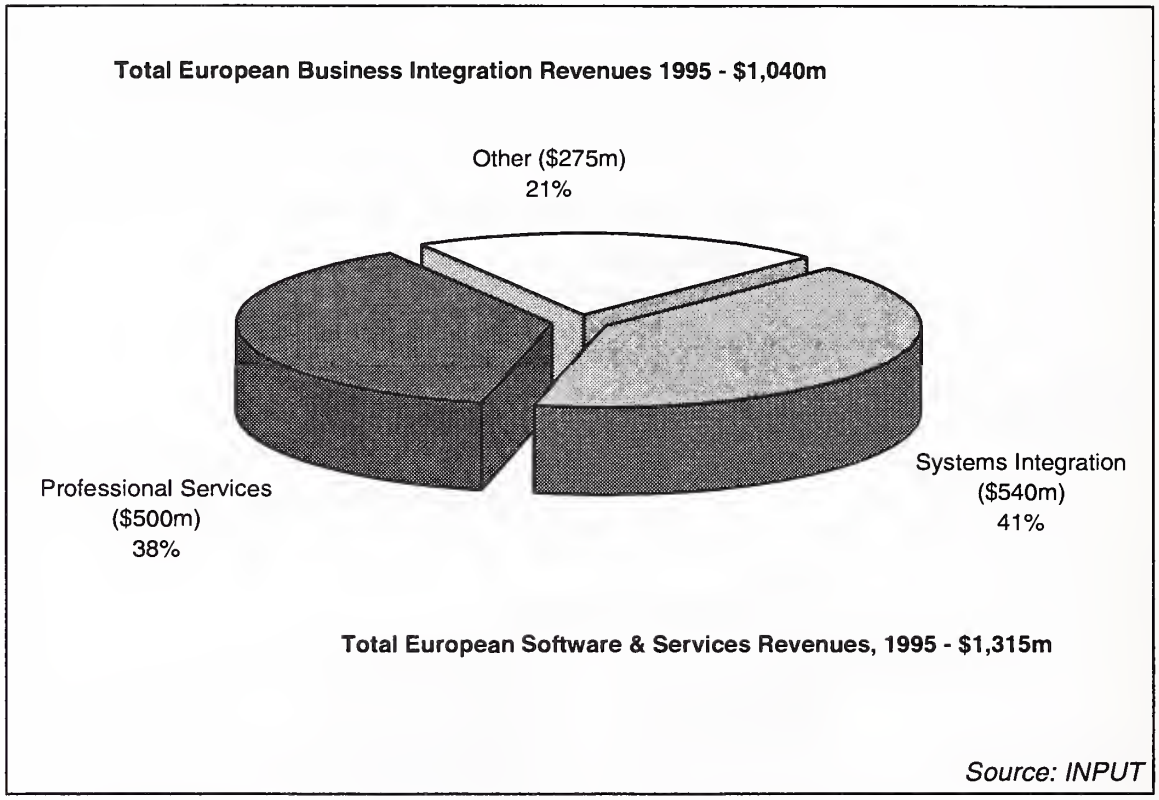



- *Love or loathe relationship perception*
- *Vision - building the services firm of the future (whatever it is?) delivering value to clients across a continuum of change*
- *Neither IT nor computing services oriented*
- *Shifting from internal day rate services to value added on outsourced services*
- *Capabilities have been built from within rather than through acquisitions*
- *Focus on PFI deals in the UK. Driving into "management services"; not consulting or advice but "doing".*

*Source: INPUT*

Exhibit IV-172

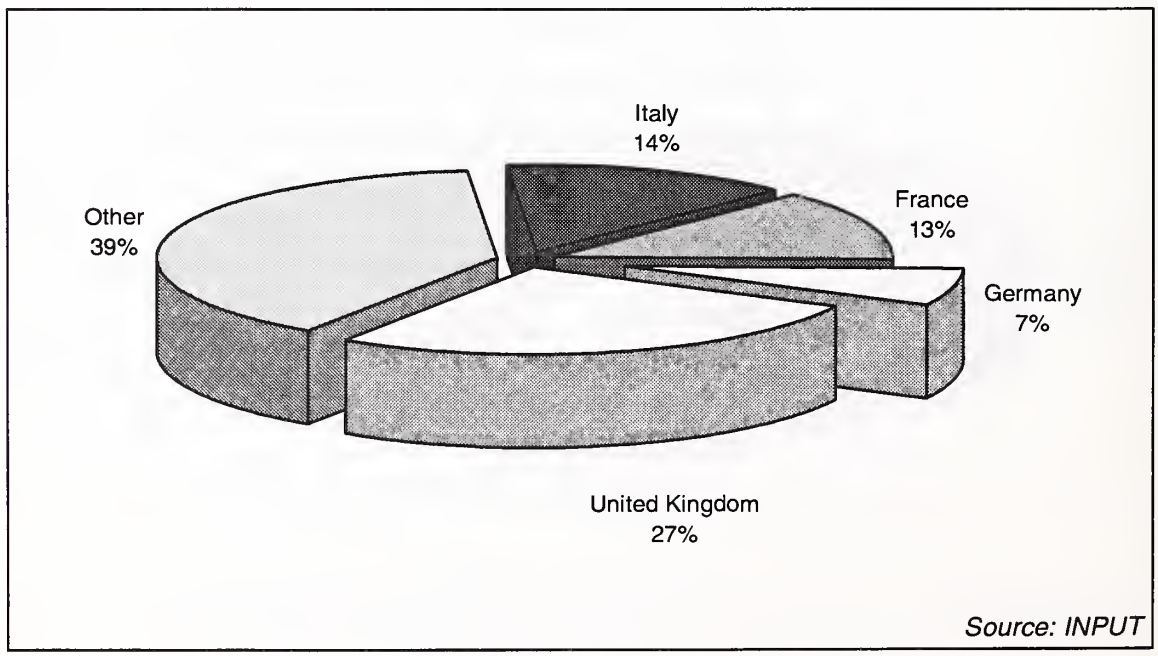
## Andersen Consulting — Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-173

## Andersen Consulting — Business Integration, Geographical Analysis



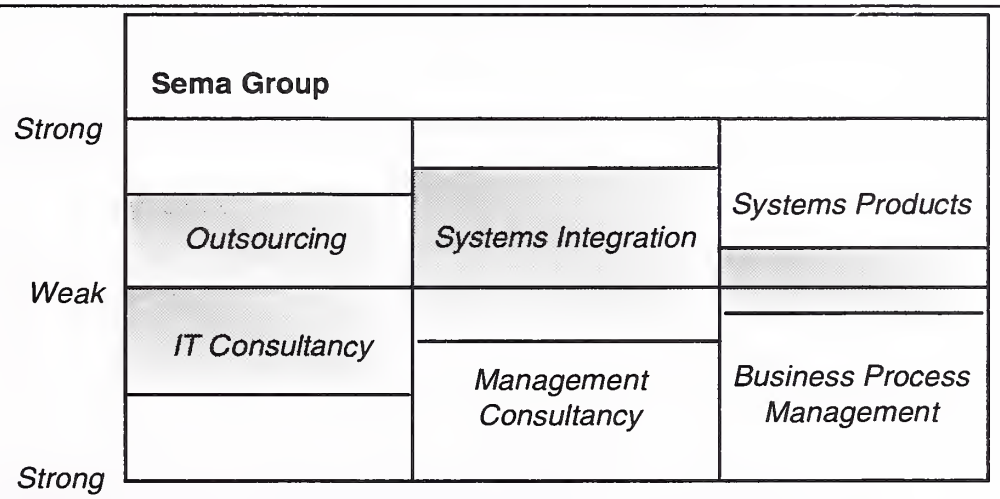

*Source: INPUT*

# L
# Sema Group

Exhibit IV-174 presents a mapping of Sema Group's key areas of competitive excellence within the Business Integration domain. Exhibit IV-175 analyses Sema Group's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-176 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-174

## Sema Group — Key Competency Areas in Business Integration Services




- *System development heritage being complemented by expanding operational capabilities*
- *Operational capability lacks business process management capability*
- *Limited geographic and vertical industry scope … but extremely strong where it chooses to play*
- *Relationship potential limited by management consulting weakness*
- *Strategic focus on outsourcing*

*Source: INPUT*

Exhibit IV-175

## Sema Group — Business Integration Revenues in Relation to Overall Revenues

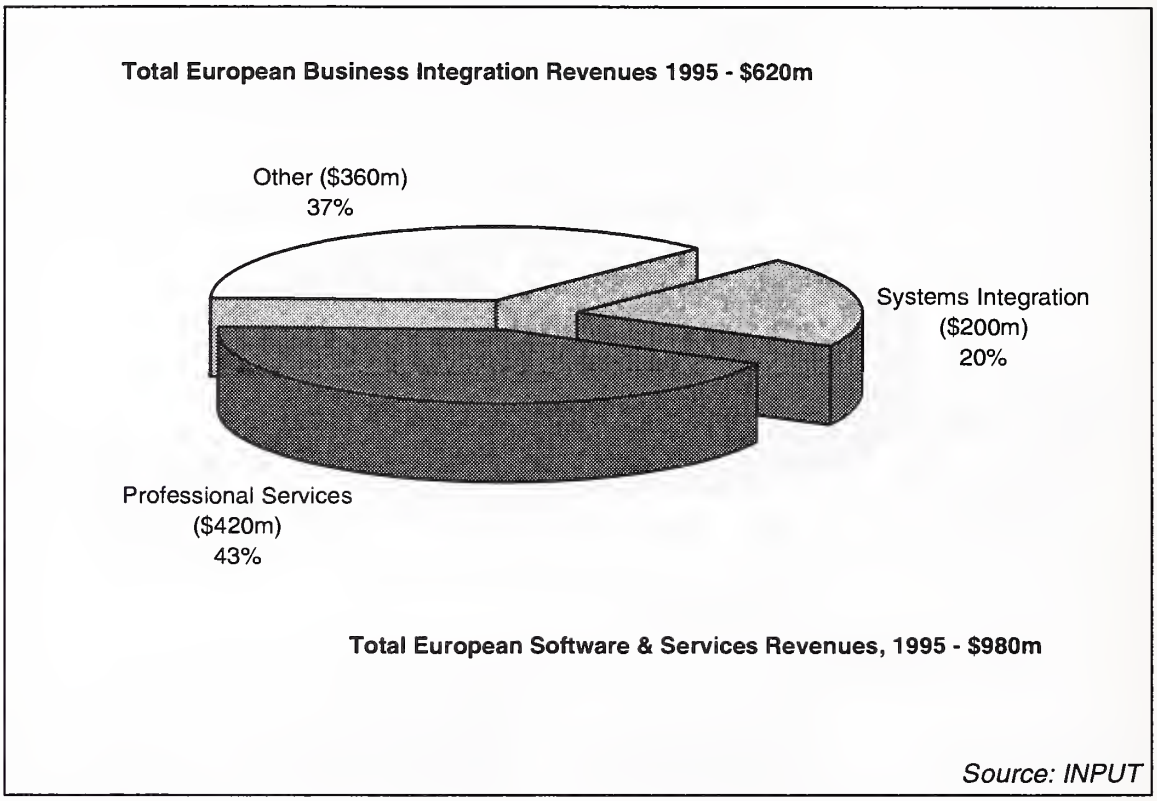
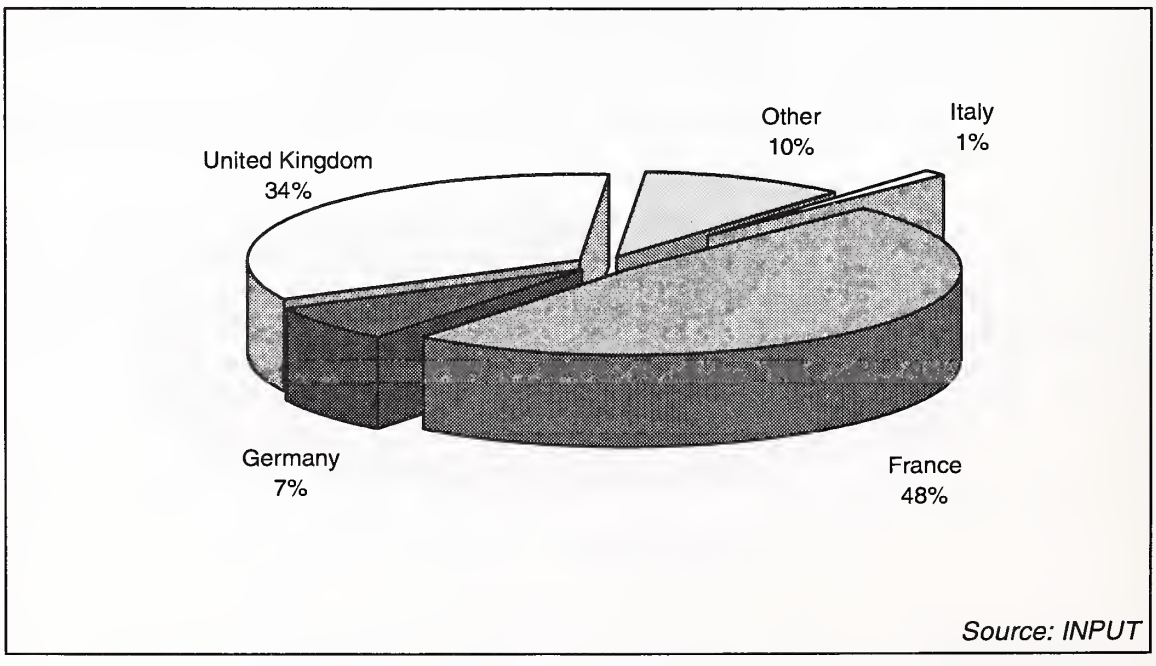



Exhibit IV-176

## Sema Groupe — Business Integration, Geographical Analysis

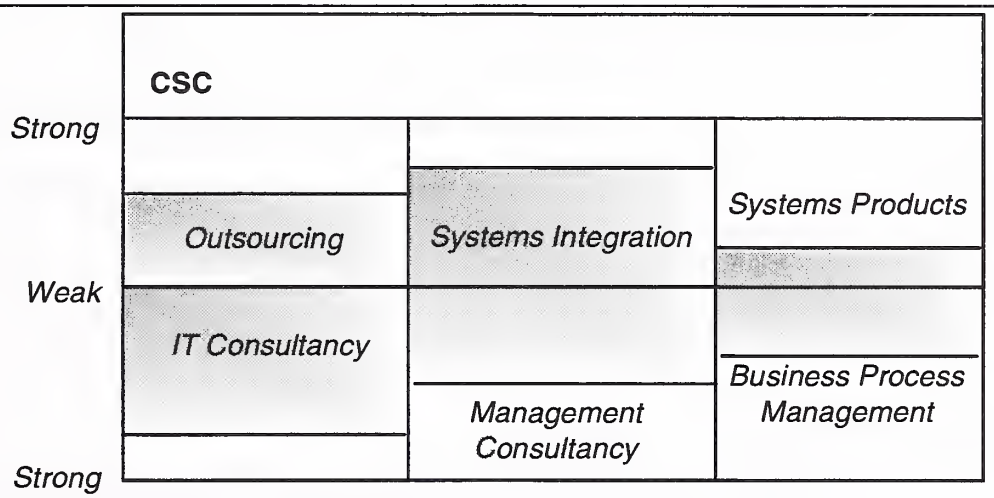


# M
# CSC

Exhibit IV-177 presents a mapping of CSC's key areas of competitive excellence within the Business Integration domain. Exhibit IV-178 analyses CSC's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-179 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-177

## CSC— Key Competency Areas in Business Integration Services

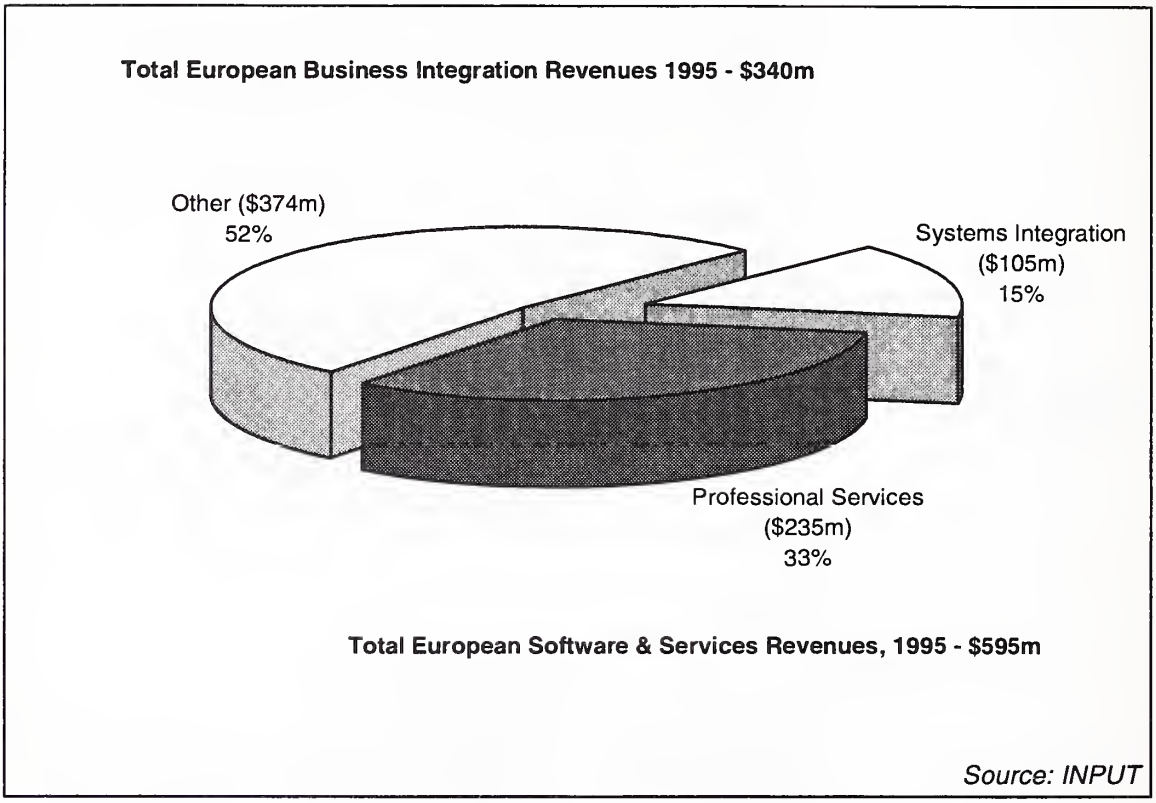



- *Strong system development and computing services heritage*
- *Business process management capabilities under-developed versus EDS*
- *Index represents the drive for higher value added - pushing out the envelope*
- *Like EDS an IT technology user and facilitator*

*Source: INPUT*

Exhibit IV-178

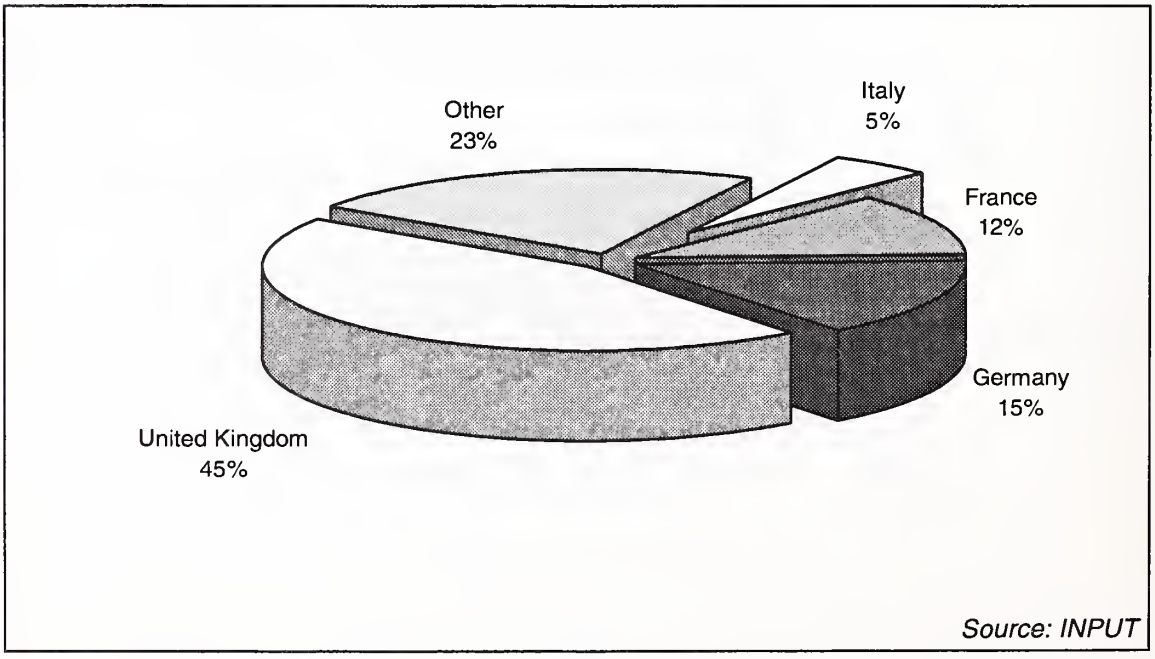
## CSC — Business Integration Revenues in Relation to Overall Revenues




*Source: INPUT*

Exhibit IV-179

## CSC — Business Integration, Geographical Analysis



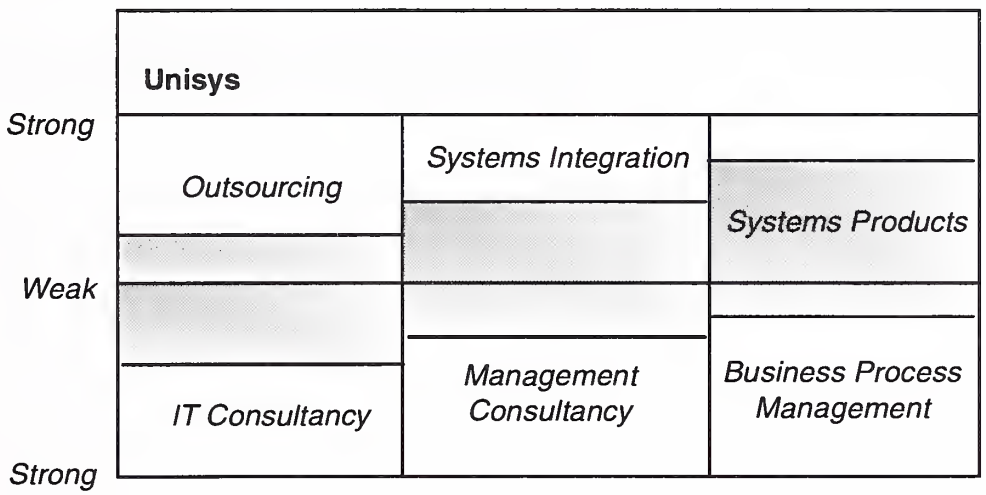

*Source: INPUT*

# N
# Unisys

Exhibit IV-180 presents a mapping of Unisys's key areas of competitive excellence within the Business Integration domain. Exhibit IV-181 analyses Unisys's Business Integration revenues as a proportion of its overall revenues. Exhibit IV-182 presents an analysis of its Business Integration derived revenues by geographical coverage throughout Europe.

Exhibit IV-180

## Unisys — Key Competency Areas in Business Integration Services



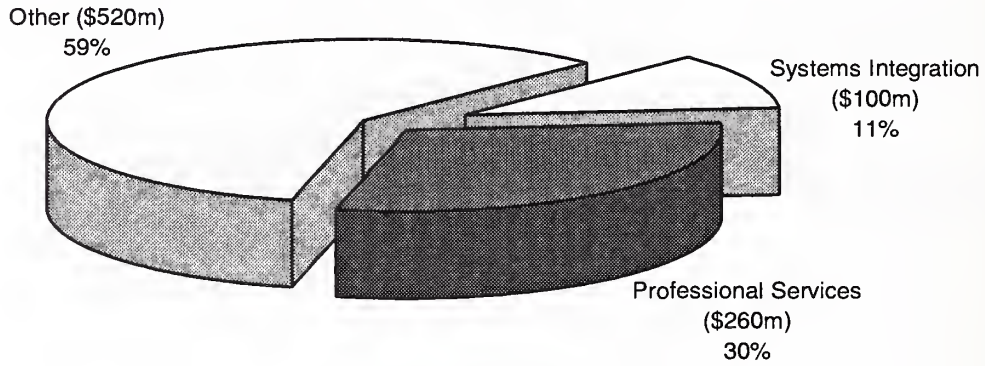

- *Technology heritage*
- *Vertical market domain knowledge*
- *Portfolio of client services for entire business cycle from planning to operations management*
- *Recent "demerger" aims at unleashing services*

*Source: INPUT*

Exhibit IV-181

## Unisys — Business Integration Revenues in Relation to Overall Revenues

**Total European Business Integration Revenues 1995 - $360m**

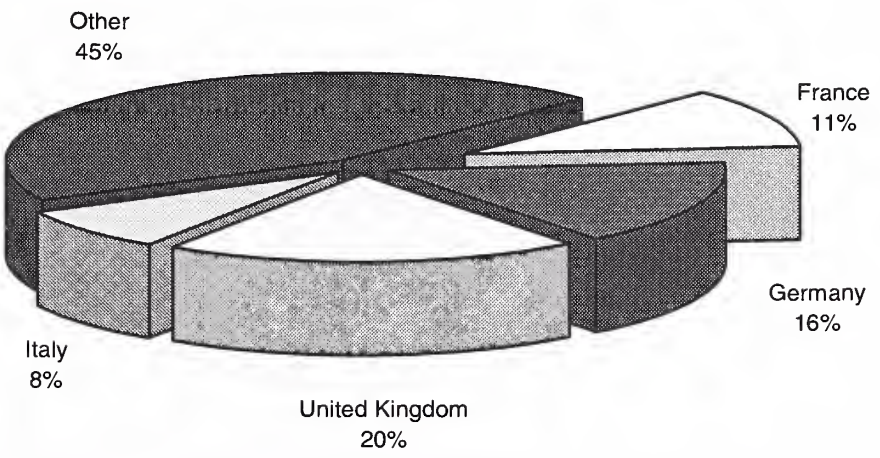



**Total European Software & Services Revenues, 1995 - $880m**

*Source: INPUT*

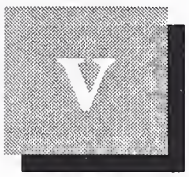
Exhibit IV-182

## Unisys — Business Integration, Geographical Analysis




*Source: INPUT*

(Blank)



# Business Integration Market

## A
## Europe

The following section provides INPUT's analysis of the market sizes of the European Business Integration. It also provides segmentation of market sizes by vertical markets. Lastly it presents INPUT's forecasts of growth over the next five years. These details are presented for all three Business Integration sub-delivery modes.

Exhibits V-1 compares the growth of Systems Integration markets in sixteen individual country markets between 1994 and 1995. Exhibit V-2 presents INPUT's forecast of growth in these countries between 1996 and 2001.

Exhibit V-1

## Systems Integration Markets by Country, Europe 1994-1995

| Market Size ($ Millions) | | | |
|---|---|---|---|
| **Country** | **1994** | **1995** | **1994-1995 Growth (%)** |
| France | 1020 | 1115 | 9 |
| Germany | 873 | 980 | 12 |
| United Kingdom | 1390 | 1600 | 15 |
| Italy | 330 | 365 | 11 |
| Sweden | 50 | 60 | 20 |
| Denmark | 50 | 55 | 10 |
| Norway | 35 | 40 | 14 |
| Finland | 45 | 50 | 11 |
| Netherlands | 180 | 205 | 14 |
| Belgium | 170 | 195 | 15 |
| Switzerland | 160 | 175 | 9 |
| Austria | 55 | 65 | 18 |
| Spain | 200 | 230 | 15 |
| Ireland | 14 | 20 | 43 |
| Portugal | 15 | 20 | 33 |
| Greece | 8 | 15 | 88 |
| Eastern Europe | 410 | 470 | 15 |
| Total | 5005 | 5660 | 13 |

*Source: INPUT*

Exhibit V-2

## Systems Integration Markets by Country, Europe 1995-2001

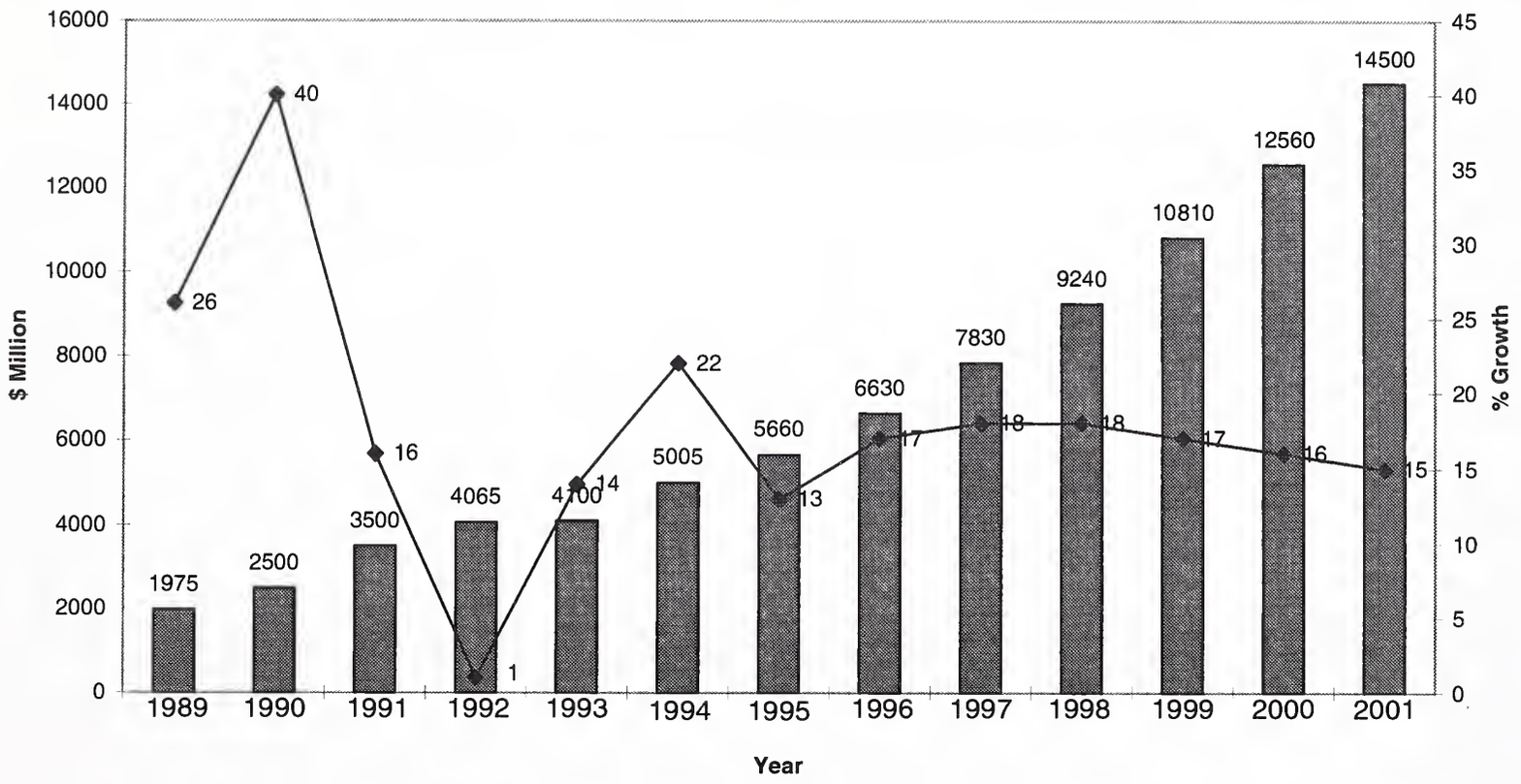
| Market Size ($ Millions) | | | | |
|---|---|---|---|---|
| **Country** | **1995** | **1996** | **2001** | **1996-2001 CAGR (%)** |
| France | 1115 | 1309 | 2873 | 17 |
| Germany | 980 | 1220 | 3290 | 22 |
| United Kingdom | 1600 | 1840 | 3690 | 15 |
| Italy | 365 | 430 | 840 | 14 |
| Sweden | 60 | 73 | 217 | 24 |
| Denmark | 55 | 63 | 158 | 20 |
| Norway | 40 | 65 | 144 | 17 |
| Finland | 50 | 56 | 144 | 21 |
| Netherlands | 205 | 219 | 469 | 17 |
| Belgium | 195 | 220 | 395 | 12 |
| Switzerland | 175 | 196 | 348 | 12 |
| Austria | 65 | 75 | 150 | 15 |
| Spain | 230 | 264 | 577 | 17 |
| Ireland | 20 | 24 | 77 | 26 |
| Portugal | 20 | 25 | 64 | 21 |
| Greece | 15 | 19 | 59 | 25 |
| Eastern Europe | 470 | 535 | 1005 | 13 |
| Total | 5660 | 6630 | 14500 | 17 |

*Numbers are rounded* *Source: INPUT*

The following two charts represent the development of the European Systems Integration market. Exhibit V-3 shows the size of the SI market and the year on year growth between 1989 and 2001. Exhibit V-4 presents purely the forecast element of Exhibit V-3.

Exhibit V-3

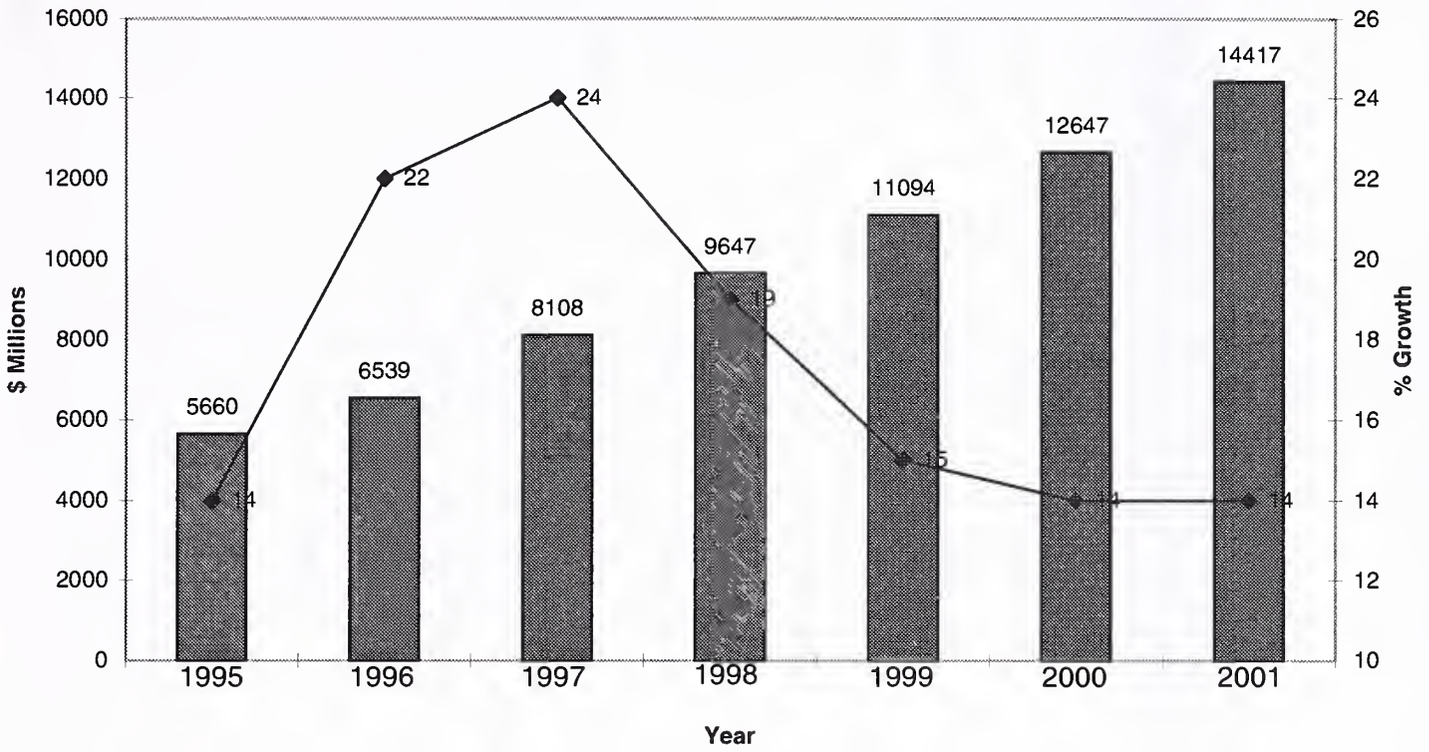
## European Systems Integration Market and Percentage Growth, 1989–2001




*Source: INPUT*

Exhibit V-4

## European Systems Integration Market and Growth, 1995–2001




*Source: INPUT*

Exhibit V-5 provides a segmentation of the 1995 Systems Integration market by vertical market. Exhibit V-6 presents INPUT's forecast of likely growth within verticals over the period until 2001. Exhibit V-7 provides further analysis of this forecast for the component elements of the stems integration delivery mode, equipment, applications software and systems software and professional services.

Exhibit V-5

**Systems Integration Industry Sector Analysis, Europe 1995**

| Sector | Value ($ Millions) | Proportion of Market (%) |
|---|---|---|
| **Government** | 2095 | 37 |
| - Defence | 565 | 10 |
| - Central | 960 | 17 |
| - Local | 565 | 10 |
| **Financial Services** | 1075 | 19 |
| - Banking & Finance | 680 | 12 |
| - Insurance | 395 | 7 |
| **Manufacturing** | 680 | 12 |
| - Process | 340 | 6 |
| - Discrete | 340 | 6 |
| Utilities | 620 | 11 |
| Transportation | 340 | 6 |
| Telecommunications | 680 | 12 |
| Distribution | 170 | 3 |
| Total | 5660 | |

*Source: INPUT*

Exhibit V-6

## Systems Integration Industry Sector Analysis, Europe 1995-2001

| Sector | 1995 | 1996 | 2001 | 1996-2001 CAGR (%) |
|---|---|---|---|---|
| **Government** | 2095 | 2455 | 5365 | 17 |
| - Defence | 565 | 665 | 1015 | 9 |
| - Central | 960 | 1125 | 2610 | 19 |
| - Local | 565 | 665 | 1740 | 22 |
| **Financial Services** | 1075 | 1260 | 2610 | 16 |
| - Banking & Finance | 680 | 795 | 1450 | 13 |
| - Insurance | 395 | 465 | 1160 | 21 |
| **Manufacturing** | 680 | 800 | 1310 | 11 |
| - Process | 340 | 400 | 655 | 11 |
| - Discrete | 340 | 400 | 655 | 11 |
| Utilities | 620 | 730 | 1160 | 10 |
| Transportation | 340 | 395 | 725 | 13 |
| Telecommunications | 680 | 795 | 2895 | 30 |
| Distribution | 170 | 200 | 435 | 17 |
| Total | 5660 | 6630 | 14500 | 17 |

*Source: INPUT*

Exhibit V-7

## Systems Integration Market, Europe 1995-2001

| Market Forecast (US $ Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 1350 | 1470 | 10 | 2390 |
| Applications Software | 1070 | 1320 | 25 | 3990 |
| Systems Software | 420 | 480 | 16 | 1030 |
| Professional Services | 2570 | 3120 | 16 | 6690 |
| Other | 240 | 260 | 10 | 420 |
| Total | 5660 | 6630 | 17 | 14500 |

*Source: INPUT*

Exhibits V-8 compares the growth of Professional Services markets in sixteen individual country markets between 1994 and 1995. Exhibit V-9 presents INPUT's forecast of growth in these countries between 1996 and 2001.

Exhibit V-8

**Professional Services Markets by Country, Europe 1994-1995**

| Market Size ($ Millions) | | | |
|---|---|---|---|
| **Country** | **1994** | **1995** | **1994-1995 Growth (%)** |
| France | 5950 | 6135 | 3 |
| Germany | 4430 | 4475 | 1 |
| United Kingdom | 2970 | 3030 | 2 |
| Italy | 2100 | 2180 | 4 |
| Sweden | 1025 | 1100 | 7 |
| Denmark | 500 | 505 | 1 |
| Norway | 430 | 485 | 13 |
| Finland | 340 | 340 | 0 |
| Netherlands | 1356 | 1500 | 10 |
| Belgium | 760 | 800 | 5 |
| Switzerland | 740 | 730 | -2 |
| Austria | 540 | 595 | 10 |
| Spain | 984 | 1035 | 5 |
| Ireland | 275 | 320 | 17 |
| Portugal | 168 | 235 | 40 |
| Greece | 163 | 195 | 20 |
| Eastern Europe | 75 | 100 | 36 |
| Total | 22800 | 23780 | 4 |

*Source: INPUT*

Exhibit V-9

## Professional Forecast Services Markets by Country, Europe 1996-2001

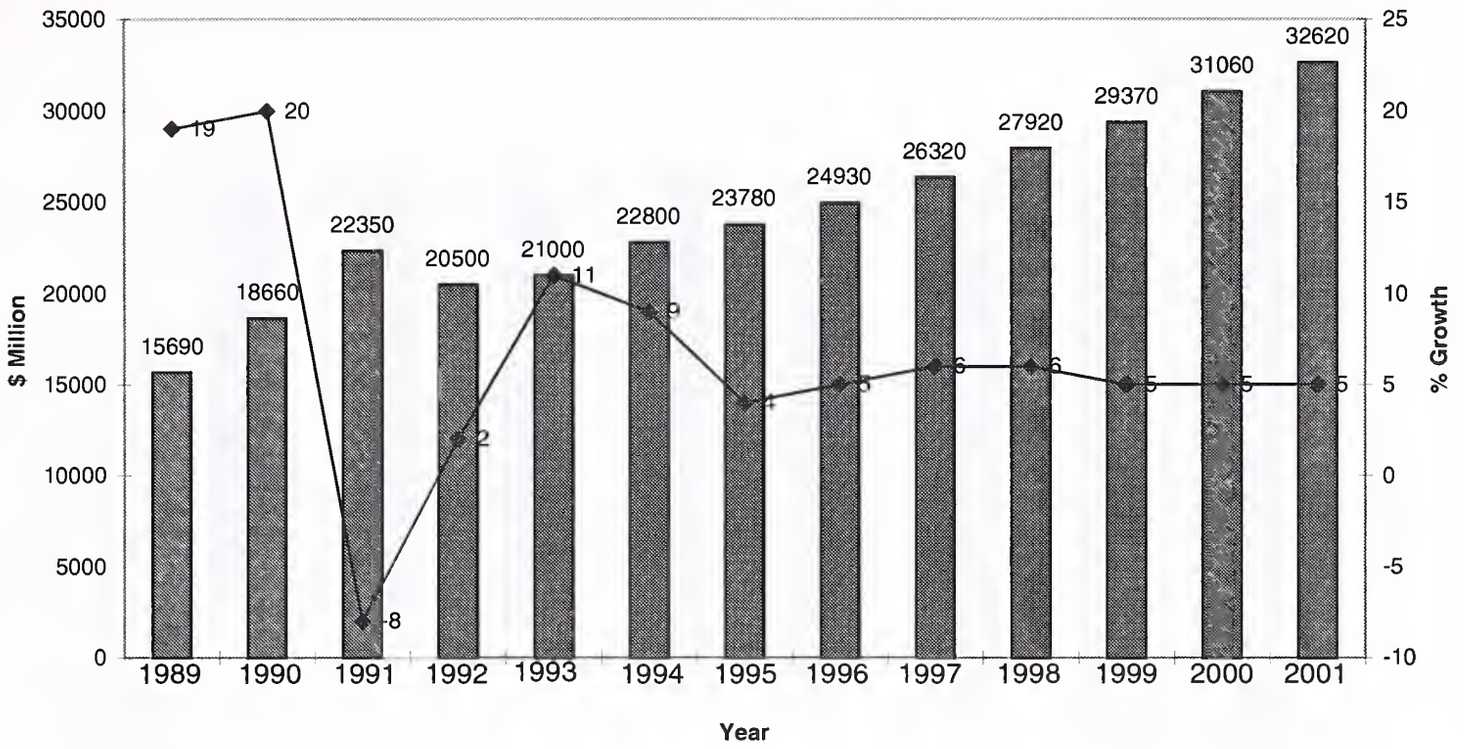
| Market Size ($ Millions) | | | |
|---|---|---|---|
| **Country** | **1996** | **2001** | **1996-2001 CAGR (%)** |
| France | 6340 | 7790 | 4 |
| Germany | 4610 | 5180 | 3 |
| United Kingdom | 3060 | 3410 | 2 |
| Italy | 2220 | 3170 | 7 |
| Sweden | 1215 | 1965 | 10 |
| Denmark | 550 | 675 | 4 |
| Norway | 520 | 815 | 9 |
| Finland | 380 | 670 | 12 |
| Netherlands | 1645 | 2205 | 6 |
| Belgium | 825 | 965 | 3 |
| Switzerland | 765 | 905 | 3 |
| Austria | 670 | 1165 | 12 |
| Spain | 1140 | 1845 | 10 |
| Ireland | 370 | 690 | 13 |
| Portugal | 270 | 500 | 13 |
| Greece | 230 | 490 | 16 |
| Eastern Europe | 120 | 245 | 15 |
| Total | 24930 | 32620 | 6 |

*Source: INPUT*

The following two charts graphically represent the development of the European Professional Services market. Exhibit V-10 shows the size of the PS market and the year on year growth between 1989 and 2001. Exhibit V-11 presents purely the forecast element of Exhibit V-10.

Exhibit V-10

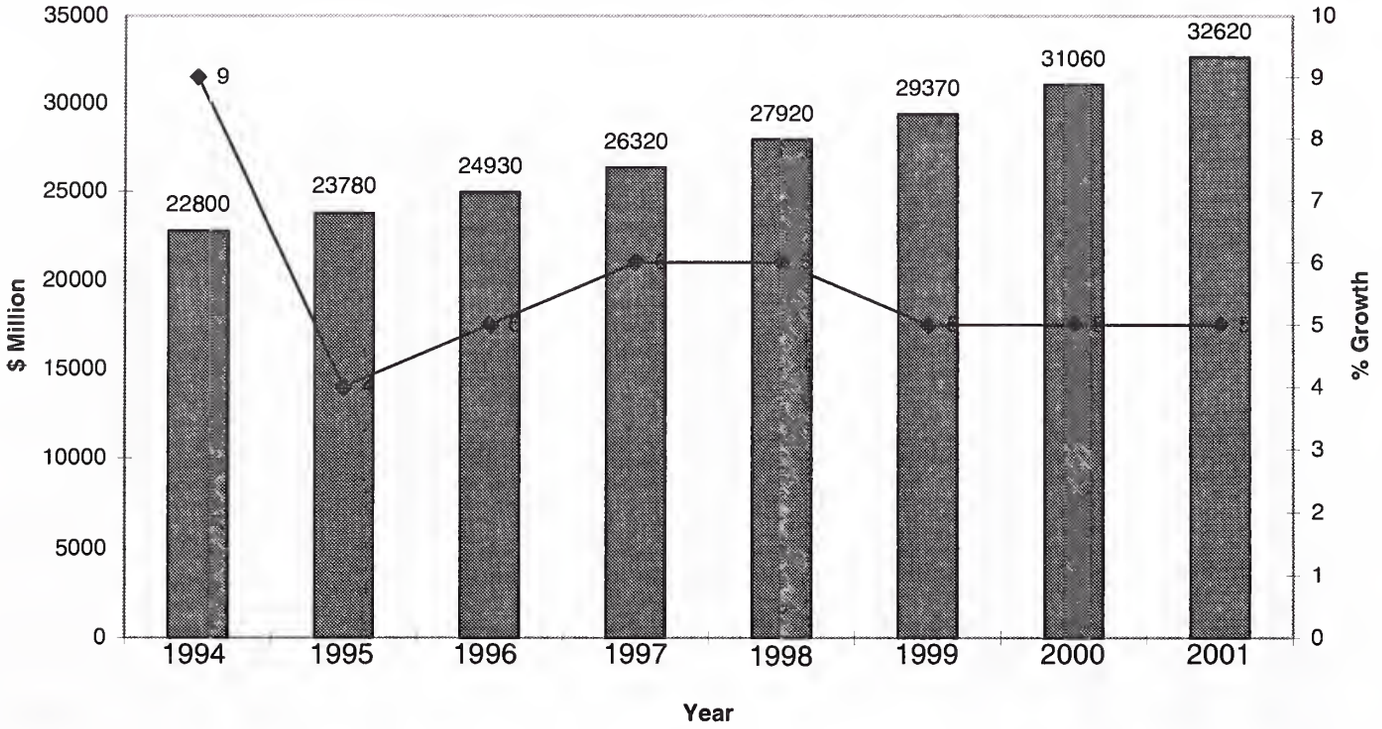
**European Professional Services Market and Percentage Growth, 1989-2001**




*Source: INPUT*

Exhibit V-11

## European Professional Services Market and Percentage Growth, 1994-2001




*Source: INPUT*

Exhibits V-12 compares the growth of Turnkey Systems markets in sixteen individual country markets between 1994 and 1995. Exhibit V-13 presents INPUT's forecast of growth in these countries between 1996 and 2001.

Exhibit V-12

**Turnkey Systems Markets by Country, Europe 1994-1995**

| Market Size ($ Millions) | | | |
|---|---|---|---|
| **Country** | **1994** | **1995** | **1994-1995 Growth (%)** |
| France | 1870 | 1965 | 5 |
| Germany | 4390 | 4510 | 3 |
| United Kingdom | 2140 | 2250 | 5 |
| Italy | 670 | 685 | 2 |
| Sweden | 350 | 370 | 6 |
| Denmark | 357 | 380 | 7 |
| Norway | 243 | 260 | 7 |
| Finland | 155 | 185 | 19 |
| Netherlands | 592 | 620 | 5 |
| Belgium | 335 | 370 | 10 |
| Switzerland | 481 | 520 | 8 |
| Austria | 375 | 450 | 20 |
| Spain | 429 | 480 | 11 |
| Ireland | 139 | 165 | 18 |
| Portugal | 40 | 55 | 37 |
| Greece | 57 | 70 | 20 |
| Eastern Europe | 27 | 40 | 52 |
| Total | 12650 | 13380 | 6 |

*Source: INPUT*

Exhibit V-13

## Turnkey Systems Markets by Country, Europe 1996-2001

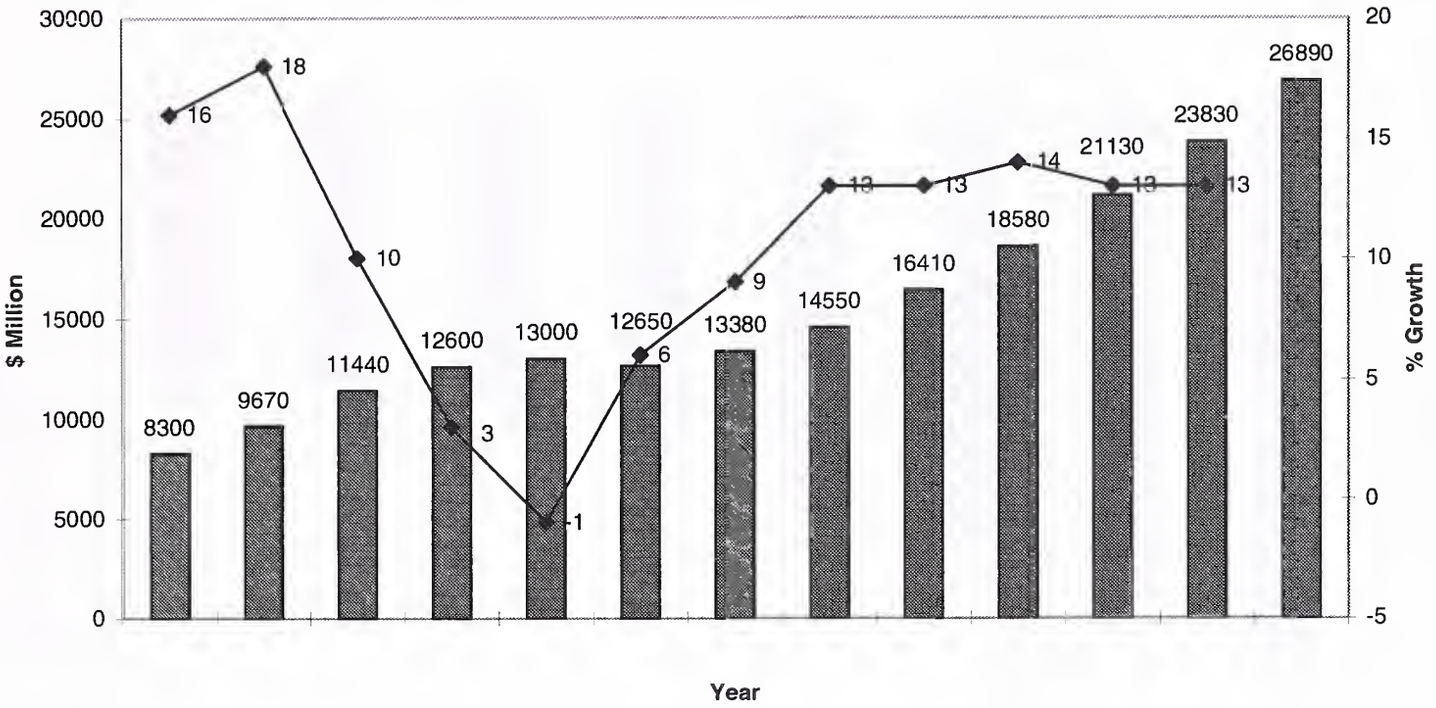
| Market Size ($ Millions) | | | |
|---|---|---|---|
| **Country** | **1996** | **2001** | **1996-2001 CAGR (%)** |
| France | 2005 | 3495 | 12 |
| Germany | 4730 | 8410 | 12 |
| United Kingdom | 2590 | 4980 | 14 |
| Italy | 750 | 1520 | 15 |
| Sweden | 405 | 820 | 15 |
| Denmark | 440 | 830 | 14 |
| Norway | 295 | 530 | 12 |
| Finland | 215 | 375 | 12 |
| Netherlands | 715 | 1430 | 15 |
| Belgium | 400 | 610 | 9 |
| Switzerland | 575 | 1115 | 14 |
| Austria | 465 | 1020 | 17 |
| Spain | 560 | 960 | 11 |
| Ireland | 190 | 360 | 14 |
| Portugal | 90 | 165 | 13 |
| Greece | 80 | 180 | 18 |
| Eastern Europe | 45 | 90 | 15 |
| Total | 14550 | 26890 | 13 |

*Source: INPUT*

The following two charts graphically represent the development of the European Turnkey Systems market. Exhibit V-14 shows the size of the Turnkey market and the year on year growth between 1989 and 2001. Exhibit V-15 presents purely the forecast element of Exhibit V-14.

Exhibit V-14

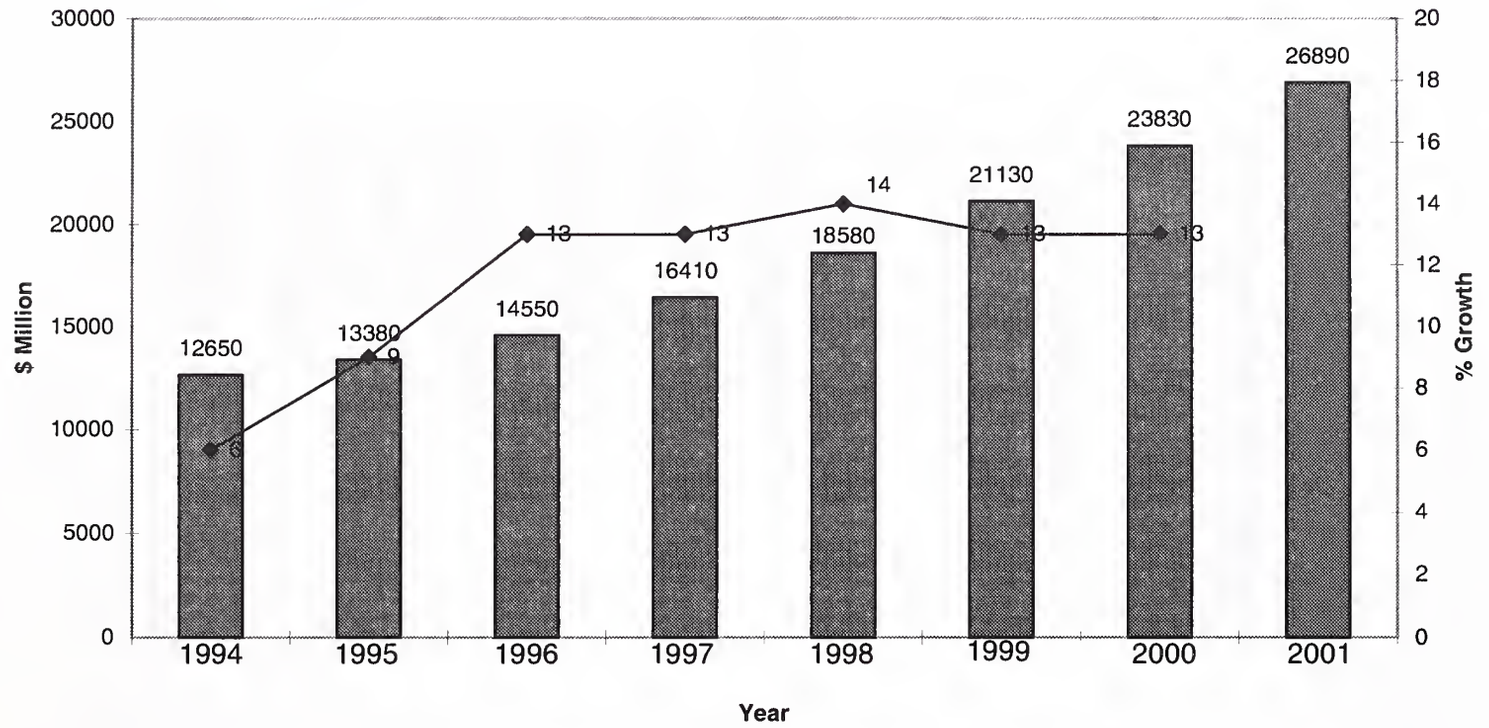
**European Turnkey Systems Market and Percentage Growth, 1989-2001**




*Source: INPUT*

Exhibit V-15

## European Turnkey Systems Market and Percentage Growth, 1994-2001




*Source: INPUT*

# B
# France

The following three charts present analysis of the Systems Integration market in France. Exhibit V-16 presents a segmentation of the market by vertical markets in 1995. Exhibit V-17 provides a forecast of this segmentation through to 2001 and Exhibit V-18 provides further analysis of this forecast for the component elements of the Systems Integration delivery mode; equipment, applications software and systems software, and professional services.

Exhibit V-16

## Systems Integration Industry Sector Analysis, France 1995

| Sector | Value (FFm) | Proportion of Market (%) |
|---|---|---|
| **Government** | 2180 | 40 |
| - Defence | 655 | 12 |
| - Central | 1090 | 20 |
| - Local | 435 | 8 |
| **Financial Services** | 925 | 17 |
| - Banking & Finance | 545 | 10 |
| - Insurance | 380 | 7 |
| **Manufacturing** | 815 | 15 |
| - Process | 435 | 8 |
| - Discrete | 380 | 7 |
| Utilities | 435 | 8 |
| Transportation | 380 | 7 |
| Telecommunications | 545 | 10 |
| Distribution | 170 | 3 |
| Total | 5450 | 100 |

*Source: INPUT*

Exhibit V-17

## Systems Integration Industry Sector Analysis, France 1996-2001

| Market Size (FFm) | | | |
|---|---|---|---|
| **Sector** | **1996** | **2001** | **1996-2001 CAGR (%)** |
| **Government** | 2560 | 5340 | 16 |
| - Defence | 765 | 1125 | 8 |
| - Central | 1280 | 2810 | 17 |
| - Local | 515 | 1405 | 22 |
| **Financial Services** | 1090 | 2810 | 21 |
| - Banking & Finance | 640 | 1405 | 17 |
| - Insurance | 450 | 1405 | 26 |
| **Manufacturing** | 960 | 2105 | 17 |
| - Process | 515 | 1125 | 17 |
| - Discrete | 445 | 980 | 17 |
| Utilities | 515 | 700 | 6 |
| Transportation | 445 | 700 | 10 |
| Telecommunications | 640 | 2105 | 27 |
| Distribution | 190 | 290 | 9 |
| Total | 6400 | 14050 | 17 |

*Source: INPUT*

Exhibit V-18

## Systems Integration Market, France 1995-2001

| Market Forecast (FF Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 1365 | 1500 | 12 | 2650 |
| Applications Software | 1035 | 1250 | 23 | 3500 |
| Systems Software | 435 | 500 | 18 | 1130 |
| Professional Services | 2510 | 3010 | 17 | 6490 |
| Other | 105 | 130 | 17 | 290 |
| Total | 5450 | 6400 | 17 | 14050 |

*Source: INPUT*

# C
# United Kingdom

The following three charts present analysis of the Systems Integration market in the United Kingdom. Exhibit V-19 presents a segmentation of the market by vertical markets in 1995. Exhibit V-20 provides a forecast of this segmentation through to 2001 and Exhibit V-21 provides further analysis of this forecast for the component elements of the Systems Integration delivery mode; equipment, applications software and systems software, and professional services.

Exhibit V-19

**Systems Integration Industry Sector Analysis, United Kingdom 1995**

| Sector | Value (£ Millions) | Proportion of Market (%) |
|---|---|---|
| **Government** | 445 | 43 |
| - Defence | 155 | 15 |
| - Central | 165 | 16 |
| - Local | 125 | 12 |
| **Financial Services** | 195 | 19 |
| - Banking & Finance | 135 | 13 |
| - Insurance | 60 | 6 |
| **Manufacturing** | 115 | 11 |
| - Process | 60 | 6 |
| - Discrete | 55 | 5 |
| Utilities | 80 | 8 |
| Transportation | 60 | 6 |
| Telecommunications | 105 | 10 |
| Distribution | 30 | 3 |
| Total | 1030 | 100 |

*Source: INPUT*

Exhibit V-20

## Systems Integration Industry Sector Analysis, United Kingdom 1996-2001

| Market Size (£ Millions) | | | |
|---|---|---|---|
| **Sector** | **1996** | **2001** | **1996-2001 CAGR (%)** |
| **Government** | 510 | 880 | 12 |
| - Defence | 180 | 240 | 6 |
| - Central | 190 | 425 | 18 |
| - Local | 140 | 215 | 9 |
| **Financial Services** | 225 | 500 | 17 |
| - Banking & Finance | 155 | 260 | 11 |
| - Insurance | 70 | 240 | 28 |
| **Manufacturing** | 130 | 260 | 15 |
| - Process | 70 | 140 | 15 |
| - Discrete | 60 | 120 | 15 |
| Utilities | 95 | 120 | 5 |
| Transportation | 70 | 95 | 6 |
| Telecommunications | 120 | 450 | 30 |
| Distribution | 35 | 70 | 15 |
| Total | 1185 | 2375 | 15 |

*Source: INPUT*

Exhibit V-21

## Systems Integration Market, United Kingdom 1995-2001

| Market Forecast (£ Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 235 | 260 | 8 | 385 |
| Applications Software | 195 | 245 | 24 | 715 |
| Systems Software | 70 | 80 | 16 | 170 |
| Professional Services | 500 | 565 | 13 | 1040 |
| Other | 30 | 35 | 13 | 65 |
| Total | 1030 | 1185 | 15 | 2375 |

*Source: INPUT*

# D
# Germany

The following three charts present analysis of the Systems Integration market in Germany. Exhibit V-22 presents a segmentation of the market by vertical markets in 1995. Exhibit V-23 provides a forecast of this segmentation through to 2001 and Exhibit V-24 provides further analysis of this forecast for the component elements of the Systems Integration delivery mode; equipment, applications software and systems software, and professional services.

Exhibit V-22

## Systems Integration Industry Sector Analysis, Germany 1995

| Sector | Value (DM Millions) | Proportion of Market (%) |
|---|---|---|
| **Government** | 420 | 30 |
| - Defence | 125 | 9 |
| - Central | 155 | 11 |
| - Local | 140 | 10 |
| **Financial Services** | 380 | 27 |
| - Banking & Finance | 240 | 17 |
| - Insurance | 140 | 10 |
| **Manufacturing** | 240 | 17 |
| - Process | 85 | 6 |
| - Discrete | 155 | 11 |
| Utilities | 85 | 6 |
| Transportation | 70 | 5 |
| Telecommunications | 170 | 12 |
| Distribution | 35 | 3 |
| Total | 1400 | 100 |

*Source: INPUT*

Exhibit V-23

## Systems Integration Industry Sector Analysis, Germany 1996-2001

| Market Size (DM Millions) | | | |
|---|---|---|---|
| **Sector** | **1996** | **2001** | **1996-2001 CAGR (%)** |
| **Government** | 525 | 1315 | 20 |
| - Defence | 155 | 375 | 19 |
| - Central | 190 | 470 | 20 |
| - Local | 180 | 470 | 21 |
| **Financial Services** | 475 | 1175 | 20 |
| - Banking & Finance | 300 | 660 | 17 |
| - Insurance | 175 | 515 | 24 |
| **Manufacturing** | 300 | 705 | 19 |
| - Process | 105 | 375 | 29 |
| - Discrete | 195 | 330 | 11 |
| Utilities | 105 | 235 | 18 |
| Transportation | 90 | 235 | 21 |
| Telecommunications | 210 | 895 | 34 |
| Distribution | 45 | 140 | 26 |
| Total | 1750 | 4700 | 22 |

*Source: INPUT*

Exhibit V-24

## Systems Integration Market, Germany 1995-2001

| Market Forecast (DM Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR %** | **2001** |
| Equipment | 360 | 380 | 14 | 740 |
| Applications Software | 310 | 360 | 30 | 1340 |
| Systems Software | 100 | 120 | 22 | 325 |
| Professional Services | 560 | 820 | 22 | 2210 |
| Other | 70 | 70 | 7 | 100 |
| Total | 1400 | 1750 | 22 | 4705 |

*Source: INPUT*

# E

## Italy

The following three charts present analysis of the Systems Integration market in Italy. Exhibit V-25 presents a segmentation of the market by vertical markets in 1995. Exhibit V-26 provides a forecast of this segmentation through to 2001 and Exhibit V-27 provides further analysis of this forecast for the component elements of the Systems Integration delivery mode; equipment, applications software and systems software, and professional services.

Exhibit V-25

### Systems Integration Industry Sector Analysis, Italy 1995

| Sector | Value (Lira Billions) | Proportion of Market (%) |
|---|---|---|
| **Government** | 208 | 36 |
| - Defence | 23 | 4 |
| - Central | 133 | 23 |
| - Local | 52 | 9 |
| **Financial Services** | 110 | 19 |
| - Banking & Finance | 75 | 13 |
| - Insurance | 35 | 6 |
| **Manufacturing** | 93 | 16 |
| - Process | 52 | 9 |
| - Discrete | 41 | 7 |
| Utilities | 52 | 9 |
| Transportation | 12 | 2 |
| Telecommunications | 93 | 16 |
| Distribution | 12 | 2 |
| Total | 580 | 100 |

*Source: INPUT*

Exhibit V-26

## Systems Integration Industry Sector Analysis, Italy 1996-2001

| Market Size (Lira Billions) | | | |
|---|---|---|---|
| **Sector** | **1996** | **2001** | **1996-2001 CAGR (%)** |
| **Government** | 250 | 425 | 11 |
| - Defence | 30 | 65 | 17 |
| - Central | 160 | 250 | 9 |
| - Local | 60 | 110 | 13 |
| **Financial Services** | 130 | 280 | 17 |
| - Banking & Finance | 90 | 160 | 12 |
| - Insurance | 40 | 120 | 25 |
| **Manufacturing** | 110 | 185 | 11 |
| - Process | 60 | 95 | 10 |
| - Discrete | 50 | 90 | 13 |
| Utilities | 60 | 105 | 12 |
| Transportation | 15 | 55 | 30 |
| Telecommunications | 110 | 240 | 17 |
| Distribution | 15 | 40 | 22 |
| Total | 690 | 1330 | 14 |

*Source: INPUT*

Exhibit V-27

## Systems Integration Market, Italy 1995-2001

| Market Forecast (Lira Billions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 139 | 155 | 8 | 230 |
| Applications Software | 110 | 145 | 21 | 370 |
| Systems Software | 41 | 50 | 14 | 95 |
| Professional Services | 279 | 330 | 13 | 615 |
| Other | 11 | 12 | 9 | 19 |
| Total | 580 | 690 | 14 | 1330 |

*Source: INPUT*

The following charts, Exhibits V-28 through to V-39 provides analysis of Systems Integration markets for the other major country markets of Europe.

## F

## Austria

Exhibit V-28

### Systems Integration Market, Austria 1995-2001

| Market Forecast (Sch Millions) | | | | |
|---|---|---|---|---|
| Sector | 1995 | 1996 | 1996-2001 CAGR (%) | 2001 |
| Equipment | 157 | 170 | 7 | 240 |
| Applications Software | 150 | 185 | 21 | 480 |
| Systems Software | 59 | 65 | 9 | 99 |
| Professional Services | 275 | 320 | 15 | 645 |
| Other | 13 | 16 | 23 | 45 |
| Total | 650 | 760 | 15 | 1510 |

*Source: INPUT*

Exhibit V-29

### Systems Integration Market, Belgium 1995-2001

| Market Forecast (BF Millions) | | | | |
|---|---|---|---|---|
| Sector | 1995 | 1996 | 1996-2001 CAGR (%) | 2001 |
| Equipment | 1319 | 1400 | 6 | 1850 |
| Applications Software | 1261 | 1500 | 18 | 3450 |
| Systems Software | 516 | 550 | 6 | 750 |
| Professional Services | 2407 | 2730 | 13 | 4950 |
| Other | 229 | 270 | 18 | 620 |
| Total | 5750 | 6450 | 12 | 11600 |

*Source: INPUT*

Exhibit V-30

## Systems Integration Market, Denmark 1995-2001

| Market Forecast (DK Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 67 | 75 | 14 | 145 |
| Applications Software | 52 | 65 | 33 | 270 |
| Systems Software | 24 | 25 | 15 | 50 |
| Professional Services | 140 | 160 | 19 | 380 |
| Other | 21 | 22 | 7 | 30 |
| Total | 305 | 345 | 20 | 875 |

*Source: INPUT*

Exhibit V-31

## Systems Integration Market, Eastern Europe 1995-2001

| Market Forecast ($ Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 103 | 110 | 5 | 140 |
| Applications Software | 75 | 90 | 20 | 220 |
| Systems Software | 33 | 35 | 11 | 60 |
| Professional Services | 221 | 260 | 16 | 540 |
| Other | 38 | 40 | 3 | 45 |
| Total | 470 | 535 | 13 | 1005 |

*Source: INPUT*

Exhibit V-32

## Systems Integration Market, Finland 1995-2001

| Market Forecast (FM Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 45 | 50 | 16 | 106 |
| Applications Software | 35 | 41 | 32 | 162 |
| Systems Software | 18 | 19 | 14 | 37 |
| Professional Services | 104 | 112 | 20 | 281 |
| Other | 15 | 17 | 17 | 37 |
| Total | 215 | 240 | 21 | 625 |

*Source: INPUT*

Exhibit V-33

## Systems Integration Market, Greece 1995-2001

| Market Forecast (Dra Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 817 | 1000 | 22 | 2745 |
| Applications Software | 569 | 760 | 33 | 3200 |
| Systems Software | 284 | 345 | 22 | 940 |
| Professional Services | 1600 | 2000 | 25 | 6200 |
| Other | 284 | 345 | 22 | 940 |
| Total | 3550 | 4450 | 26 | 14025 |

*Source: INPUT*

Exhibit V-34

## Systems Integration Market, Ireland 1995-2001

| Market Forecast (IR £ Millions) | | | | |
|---|---|---|---|---|
| Sector | 1995 | 1996 | 1996-2001 CAGR (%) | 2001 |
| Equipment | 3 | 4 | 12 | 7 |
| Applications Software | 2 | 2 | 45 | 13 |
| Systems Software | 1 | 1 | 32 | 4 |
| Professional Services | 6 | 7 | 26 | 22 |
| Other | 1 | 1 | 15 | 2 |
| Total | 13 | 15 | 26 | 48 |

*Source: INPUT*

Exhibit V-35

## Systems Integration Market, Netherlands 1995-2001

| Market Forecast (Dfl Millions) | | | | |
|---|---|---|---|---|
| Sector | 1995 | 1996 | 1996-2001 CAGR (%) | 2001 |
| Equipment | 78 | 74 | 10 | 120 |
| Applications Software | 52 | 67 | 24 | 196 |
| Systems Software | 26 | 28 | 14 | 53 |
| Professional Services | 149 | 162 | 17 | 353 |
| Other | 23 | 21 | 7 | 30 |
| Total | 330 | 350 | 16 | 750 |

*Source: INPUT*

Exhibit V-36

## Systems Integration Market, Norway 1995-2001

| Market Forecast (NK Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 60 | 90 | 9 | 137 |
| Applications Software | 41 | 70 | 27 | 228 |
| Systems Software | 21 | 33 | 14 | 64 |
| Professional Services | 113 | 189 | 18 | 437 |
| Other | 18 | 29 | 10 | 46 |
| Total | 255 | 410 | 17 | 910 |

*Source: INPUT*

Exhibit V-37

## Systems Integration Market, Portugal 1995-2001

| Market Forecast (Esc Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 715 | 840 | 11 | 1440 |
| Applications Software | 477 | 660 | 31 | 2550 |
| Systems Software | 209 | 250 | 14 | 485 |
| Professional Services | 1370 | 1730 | 20 | 4360 |
| Other | 209 | 265 | 20 | 665 |
| Total | 2980 | 3750 | 20 | 9500 |

*Source: INPUT*

Exhibit V-38

## Systems Integration Market, Spain 1995-2001

| Market Forecast (Ptas Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 4564 | 4792 | 9 | 7260 |
| Applications Software | 3175 | 3703 | 28 | 12584 |
| Systems Software | 1588 | 1742 | 14 | 3388 |
| Professional Services | 9128 | 10237 | 17 | 22748 |
| Other | 1389 | 1307 | 13 | 2420 |
| Total | 19844 | 21780 | 17 | 48400 |

*Source: INPUT*

Exhibit V-39

## Systems Integration Market, Sweden 1995-2001

| Market Forecast (Sek Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 89 | 95 | 17 | 212 |
| Applications Software | 59 | 73 | 36 | 345 |
| Systems Software | 30 | 34 | 22 | 93 |
| Professional Services | 167 | 203 | 25 | 610 |
| Other | 26 | 26 | 21 | 66 |
| Total | 371 | 431 | 25 | 1326 |

*Source: INPUT*

Exhibit V-40

## Systems Integration Market, Switzerland 1995-2001

| Market Forecast (SF Millions) | | | | |
|---|---|---|---|---|
| **Sector** | **1995** | **1996** | **1996-2001 CAGR (%)** | **2001** |
| Equipment | 46 | 50 | 5 | 64 |
| Applications Software | 30 | 38 | 23 | 105 |
| Systems Software | 16 | 16 | 12 | 28 |
| Professional Services | 94 | 104 | 12 | 185 |
| Other | 16 | 18 | 2 | 20 |
| Total | 200 | 225 | 12 | 403 |

*Source: INPUT*

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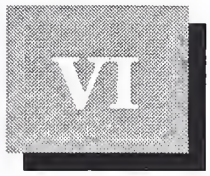



# Market Data Base — Quantitative Data

## A
## Data in US Dollars

Exhibit VI-1

**Europe**

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Sub-Sector** | **1995** | **95-96 %** | **1996** | **1997** | **1998** | **1999** | **2000** | **2001** | **96-2001 CAGR %** |
| Systems Integration | 5660 | 17 | 6630 | 7830 | 9240 | 10810 | 12560 | 14500 | 17 |
| - Equipment | 1350 | 9 | 1470 | 1610 | 1790 | 1990 | 2180 | 2390 | 10 |
| - Applications Software | 1070 | 23 | 1320 | 1650 | 2100 | 2610 | 3250 | 3990 | 25 |
| - Systems Software | 420 | 14 | 480 | 570 | 660 | 770 | 890 | 1030 | 16 |
| - Professional Services | 2570 | 21 | 3120 | 3720 | 4390 | 5100 | 5880 | 6690 | 16 |
| - Other | 240 | 8 | 260 | 280 | 310 | 330 | 370 | 420 | 10 |

*Source: INPUT*

Exhibit VI-2

## United Kingdom

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 1600 | 15 | 1840 | 2140 | 2500 | 2870 | 3300 | 3690 | 15 |
| - Equipment | 370 | 9 | 400 | 440 | 490 | 530 | 570 | 600 | 8 |
| - Applications Software | 306 | 24 | 380 | 474 | 590 | 730 | 908 | 1110 | 24 |
| - Systems Software | 112 | 11 | 124 | 148 | 171 | 202 | 233 | 264 | 16 |
| - Professional Services | 760 | 15 | 880 | 1020 | 1180 | 1340 | 1500 | 1610 | 13 |
| - Other | 48 | 13 | 54 | 61 | 69 | 78 | 89 | 100 | 13 |

*Source: INPUT*

Exhibit VI-3

## Italy

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 365 | 19 | 430 | 510 | 580 | 660 | 740 | 840 | 14 |
| - Equipment | 87 | 12 | 100 | 110 | 120 | 130 | 140 | 140 | 8 |
| - Applications Software | 69 | 32 | 91 | 113 | 138 | 164 | 195 | 233 | 21 |
| - Systems Software | 26 | 22 | 31 | 38 | 44 | 47 | 53 | 60 | 14 |
| - Professional Services | 175 | 18 | 210 | 240 | 280 | 310 | 350 | 390 | 13 |
| - Other | 7 | 9 | 8 | 8 | 9 | 10 | 11 | 12 | 9 |

*Source: INPUT*

Exhibit VI-4

## Germany

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 980 | 25 | 1220 | 1500 | 1850 | 2270 | 2730 | 3290 | 22 |
| - Equipment | 250 | 4 | 270 | 290 | 330 | 390 | 450 | 520 | 14 |
| - Applications Software | 215 | 17 | 252 | 325 | 430 | 563 | 731 | 937 | 30 |
| - Systems Software | 69 | 22 | 84 | 105 | 129 | 157 | 189 | 227 | 22 |
| - Professional Services | 390 | 46 | 570 | 730 | 900 | 1090 | 1310 | 1550 | 22 |
| - Other | 49 | 0 | 49 | 52 | 56 | 59 | 63 | 70 | 7 |

*Source: INPUT*

Exhibit VI-5

## France

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 1115 | 17 | 1310 | 1555 | 1850 | 2155 | 2485 | 2875 | 17 |
| - Equipment | 280 | 10 | 305 | 350 | 400 | 450 | 490 | 540 | 12 |
| - Applications Software | 211 | 21 | 256 | 317 | 399 | 491 | 593 | 716 | 23 |
| - Systems Software | 90 | 14 | 102 | 121 | 143 | 170 | 199 | 231 | 18 |
| - Professional Services | 515 | 20 | 615 | 730 | 870 | 1000 | 1155 | 1325 | 17 |
| - Other | 23 | 8819 | 27 | 32 | 37 | 43 | 50 | 60 | 17 |

*Source: INPUT*

Exhibit VI-6

## Austria

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 65 | 17 | 75 | 86 | 100 | 116 | 134 | 150 | 15 |
| - Equipment | 16 | 8 | 17 | 19 | 20 | 22 | 23 | 24 | 7 |
| - Applications Software | 15 | 23 | 18 | 22 | 27 | 33 | 41 | 48 | 21 |
| - Systems Software | 6 | 10 | 6 | 7 | 8 | 9 | 9 | 10 | 9 |
| - Professional Services | 27 | 16 | 32 | 37 | 43 | 50 | 58 | 64 | 15 |
| - Other | 1 | 23 | 2 | 2 | 3 | 3 | 4 | 4 | 23 |

*Source: INPUT*

Exhibit VI-7

## Belgium

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 196 | 12 | 220 | 249 | 283 | 318 | 359 | 395 | 12 |
| - Equipment | 45 | 6 | 48 | 51 | 55 | 58 | 61 | 63 | 6 |
| - Applications Software | 43 | 19 | 51 | 61 | 73 | 87 | 102 | 117 | 18 |
| - Systems Software | 18 | 7 | 19 | 20 | 21 | 23 | 25 | 26 | 6 |
| - Professional Services | 82 | 13 | 93 | 106 | 120 | 136 | 153 | 169 | 13 |
| - Other | 8 | 17 | 9 | 11 | 13 | 15 | 18 | 21 | 18 |

*Source: INPUT*

Exhibit VI-8

## Denmark

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 55 | 13 | 63 | 75 | 91 | 111 | 133 | 158 | 20 |
| - Equipment | 12 | 12 | 14 | 16 | 18 | 21 | 24 | 26 | 14 |
| - Applications Software | 9 | 25 | 12 | 15 | 21 | 28 | 37 | 49 | 33 |
| - Systems Software | 4 | 4 | 5 | 5 | 6 | 7 | 8 | 9 | 15 |
| - Professional Services | 26 | 14 | 29 | 35 | 42 | 50 | 59 | 69 | 19 |
| - Other | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 6 | 7 |

*Source: INPUT*

Exhibit VI-9

## Eastern Europe

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 470 | 14 | 535 | 615 | 700 | 790 | 890 | 1005 | 13 |
| - Equipment | 103 | 7 | 110 | 120 | 125 | 130 | 135 | 140 | 5 |
| - Applications Software | 75 | 20 | 90 | 110 | 130 | 155 | 185 | 220 | 20 |
| - Systems Software | 33 | 6 | 35 | 40 | 45 | 50 | 55 | 60 | 11 |
| - Professional Services | 221 | 18 | 260 | 305 | 355 | 410 | 470 | 540 | 16 |
| - Other | 38 | 5 | 40 | 42 | 44 | 45 | 46 | 47 | 3 |

*Source: INPUT*

Exhibit VI-10

## Finland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 50 | 12 | 56 | 66 | 80 | 99 | 120 | 144 | 21 |
| - Equipment | 11 | 11 | 12 | 13 | 15 | 17 | 21 | 25 | 16 |
| - Applications Software | 8 | 17 | 9 | 13 | 18 | 24 | 31 | 37 | 32 |
| - Systems Software | 4 | 6 | 4 | 5 | 6 | 6 | 7 | 9 | 14 |
| - Professional Services | 24 | 8 | 26 | 31 | 37 | 47 | 54 | 65 | 20 |
| - Other | 3 | 13 | 4 | 4 | 5 | 6 | 7 | 9 | 17 |

*Source: INPUT*

Exhibit VI-11

## Greece

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 15 | 25 | 19 | 24 | 30 | 37 | 47 | 59 | 26 |
| - Equipment | 3 | 22 | 4 | 5 | 6 | 8 | 10 | 12 | 22 |
| - Applications Software | 2 | 34 | 3 | 4 | 6 | 8 | 10 | 14 | 33 |
| - Systems Software | 1 | 21 | 1 | 2 | 2 | 3 | 3 | 4 | 22 |
| - Professional Services | 7 | 25 | 8 | 11 | 13 | 17 | 21 | 26 | 25 |
| - Other | 1 | 21 | 1 | 2 | 2 | 3 | 3 | 4 | 22 |

*Source: INPUT*

Exhibit VI-12

## Ireland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 21 | 15 | 24 | 30 | 39 | 50 | 63 | 77 | 26 |
| - Equipment | 5 | 33 | 6 | 6 | 6 | 8 | 10 | 11 | 12 |
| - Applications Software | 3 | 0 | 3 | 6 | 10 | 13 | 16 | 21 | 45 |
| - Systems Software | 2 | 0 | 2 | 2 | 3 | 5 | 5 | 6 | 32 |
| - Professional Services | 10 | 17 | 11 | 14 | 18 | 22 | 29 | 35 | 26 |
| - Other | 2 | 0 | 2 | 2 | 2 | 2 | 3 | 3 | 15 |

*Source: INPUT*

Exhibit VI-13

## Netherlands

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 207 | 6 | 219 | 253 | 300 | 357 | 413 | 469 | 16 |
| - Equipment | 49 | -5 | 47 | 48 | 55 | 57 | 66 | 75 | 10 |
| - Applications Software | 33 | 29 | 42 | 51 | 69 | 89 | 107 | 123 | 24 |
| - Systems Software | 16 | 8 | 18 | 20 | 21 | 25 | 29 | 33 | 14 |
| - Professional Services | 93 | 9 | 102 | 119 | 142 | 171 | 194 | 221 | 17 |
| - Other | 14 | -9 | 13 | 15 | 15 | 14 | 16 | 19 | 7 |

*Source: INPUT*

Exhibit VI-14

## Norway

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 41 | 61 | 65 | 76 | 90 | 107 | 125 | 144 | 17 |
| - Equipment | 10 | 50 | 14 | 15 | 15 | 17 | 19 | 22 | 9 |
| - Applications Software | 7 | 71 | 11 | 15 | 20 | 26 | 31 | 36 | 27 |
| - Systems Software | 3 | 57 | 5 | 6 | 7 | 7 | 9 | 10 | 14 |
| - Professional Services | 18 | 67 | 30 | 36 | 42 | 52 | 60 | 69 | 18 |
| - Other | 3 | 61 | 5 | 5 | 5 | 5 | 6 | 7 | 10 |

*Source: INPUT*

Exhibit VI-15

## Portugal

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 20 | 26 | 25 | 30 | 37 | 45 | 53 | 64 | 20 |
| - Equipment | 5 | 17 | 6 | 6 | 7 | 8 | 9 | 10 | 11 |
| - Applications Software | 3 | 38 | 4 | 6 | 8 | 10 | 13 | 17 | 31 |
| - Systems Software | 1 | 20 | 2 | 2 | 2 | 3 | 3 | 3 | 14 |
| - Professional Services | 9 | 26 | 12 | 14 | 17 | 21 | 25 | 29 | 20 |
| - Other | 1 | 27 | 2 | 2 | 3 | 3 | 4 | 4 | 20 |

*Source: INPUT*

Exhibit VI-16

## Spain

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 230 | 15 | 264 | 303 | 349 | 407 | 480 | 577 | 17 |
| - Equipment | 53 | 8 | 57 | 61 | 66 | 70 | 77 | 85 | 8 |
| - Applications Software | 37 | 28 | 47 | 60 | 75 | 96 | 123 | 160 | 28 |
| - Systems Software | 18 | 12 | 21 | 23 | 26 | 29 | 33 | 39 | 13 |
| - Professional Services | 106 | 16 | 123 | 141 | 162 | 189 | 221 | 263 | 17 |
| - Other | 16 | 2 | 17 | 18 | 20 | 22 | 26 | 30 | 13 |

*Source: INPUT*

Exhibit VI-17

## Sweden

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 61 | 20 | 73 | 91 | 110 | 138 | 172 | 217 | 25 |
| - Equipment | 15 | 15 | 17 | 20 | 23 | 27 | 31 | 36 | 17 |
| - Applications Software | 10 | 33 | 13 | 17 | 23 | 32 | 43 | 59 | 36 |
| - Systems Software | 5 | 17 | 5 | 6 | 8 | 9 | 11 | 14 | 22 |
| - Professional Services | 27 | 22 | 33 | 42 | 52 | 64 | 79 | 100 | 25 |
| - Other | 4 | 4 | 4 | 5 | 6 | 7 | 7 | 9 | 14 |

*Source: INPUT*

Exhibit VI-18

## Switzerland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 174 | 13 | 196 | 226 | 252 | 283 | 318 | 348 | 12 |
| - Equipment | 40 | 7 | 43 | 44 | 44 | 45 | 51 | 56 | 5 |
| - Applications Software | 26 | 27 | 33 | 43 | 58 | 68 | 83 | 91 | 23 |
| - Systems Software | 14 | 0 | 14 | 16 | 17 | 20 | 22 | 24 | 12 |
| - Professional Services | 82 | 11 | 91 | 107 | 119 | 136 | 146 | 161 | 12 |
| - Other | 14 | 13 | 16 | 16 | 15 | 14 | 16 | 17 | 2 |

*Source: INPUT*

Exhibit VI-19

## Europe

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 23780 | 5 | 24940 | 26330 | 27930 | 29380 | 31070 | 32630 | 6 |
| - IS Consulting | 3970 | 11 | 4390 | 4910 | 5500 | 6160 | 6870 | 7640 | 12 |
| - Education & Training | 2980 | 9 | 3240 | 3480 | 3730 | 3990 | 4290 | 4630 | 7 |
| - Custom Software | 16820 | 3 | 17290 | 17910 | 18460 | 19260 | 19820 | 20430 | 3 |

*Source: INPUT*

Exhibit VI-20

## United Kingdom

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 3030 | 2 | 3100 | 3190 | 3270 | 3320 | 3350 | 3390 | 2 |
| - IS Consulting | 740 | 12 | 820 | 940 | 1060 | 1180 | 1290 | 1410 | 11 |
| - Education & Training | 320 | 5 | 330 | 350 | 360 | 370 | 380 | 390 | 3 |
| - Custom Software | 2000 | -2 | 1900 | 1900 | 1800 | 1800 | 1700 | 1600 | -4 |

*Source: INPUT*

Exhibit VI-21

## Italy

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 2180 | 3 | 2260 | 2390 | 2580 | 2770 | 2960 | 3140 | 7 |
| - IS Consulting | 390 | 11 | 440 | 500 | 580 | 680 | 800 | 930 | 16 |
| - Education & Training | 170 | 5 | 180 | 200 | 230 | 260 | 300 | 340 | 13 |
| - Custom Software | 1610 | 2 | 1640 | 1690 | 1750 | 1800 | 1830 | 1870 | 3 |

*Source: INPUT*

Exhibit VI-22

## Germany

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 4475 | 2 | 4550 | 4690 | 4760 | 4900 | 5030 | 5170 | 3 |
| - IS Consulting | 900 | 7 | 960 | 1050 | 1150 | 1270 | 1380 | 1510 | 9 |
| - Education & Training | 980 | 7 | 1050 | 1120 | 1190 | 1260 | 1360 | 1470 | 7 |
| - Custom Software | 2600 | -2 | 2550 | 2520 | 2450 | 2380 | 2310 | 2200 | -3 |

*Source: INPUT*

Exhibit VI-23

## France

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 6135 | 3 | 6340 | 6605 | 6935 | 7260 | 7505 | 7790 | 4 |
| - IS Consulting | 775 | 8 | 840 | 910 | 990 | 1085 | 1185 | 1290 | 9 |
| - Education & Training | 635 | 7 | 680 | 730 | 785 | 840 | 890 | 950 | 7 |
| - Custom Software | 4725 | 2 | 4815 | 4960 | 5155 | 5335 | 5440 | 5550 | 3 |

*Source: INPUT*

Exhibit VI-24

## Austria

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 595 | 13 | 670 | 755 | 855 | 965 | 1090 | 1165 | 12 |
| - IS Consulting | 89 | 17 | 104 | 122 | 143 | 167 | 194 | 216 | 16 |
| - Education & Training | 72 | 15 | 82 | 94 | 108 | 124 | 142 | 155 | 13 |
| - Custom Software | 435 | 12 | 485 | 540 | 605 | 675 | 750 | 795 | 10 |

*Source: INPUT*

Exhibit VI-25

## Belgium

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 800 | 3 | 825 | 850 | 880 | 910 | 950 | 965 | 3 |
| - IS Consulting | 144 | 11 | 159 | 176 | 194 | 215 | 237 | 256 | 10 |
| - Education & Training | 64 | 4 | 67 | 70 | 73 | 76 | 80 | 81 | 4 |
| - Custom Software | 590 | 1 | 600 | 605 | 610 | 620 | 635 | 625 | 1 |

*Source: INPUT*

Exhibit VI-26

## Denmark

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 505 | 9 | 550 | 580 | 615 | 630 | 660 | 675 | 4 |
| - IS Consulting | 98 | 13 | 110 | 123 | 136 | 146 | 159 | 172 | 9 |
| - Education & Training | 45 | 8 | 49 | 51 | 53 | 54 | 56 | 56 | 3 |
| - Custom Software | 360 | 8 | 390 | 405 | 425 | 435 | 440 | 450 | 3 |

*Source: INPUT*

Exhibit VI-27

## Eastern Europe

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 100 | 17 | 117 | 135 | 156 | 182 | 211 | 246 | 16 |
| - IS Consulting | 2 | 50 | 3 | 4 | 5 | 7 | 9 | 12 | 32 |
| - Education & Training | 58 | 17 | 68 | 79 | 92 | 108 | 126 | 147 | 17 |
| - Custom Software | 40 | 15 | 46 | 52 | 59 | 67 | 76 | 87 | 14 |

*Source: INPUT*

Exhibit VI-28

## Finland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 340 | 13 | 385 | 430 | 475 | 530 | 600 | 680 | 12 |
| - IS Consulting | 62 | 17 | 72 | 83 | 96 | 111 | 130 | 153 | 16 |
| - Education & Training | 31 | 15 | 35 | 36 | 38 | 39 | 41 | 44 | 5 |
| - Custom Software | 250 | 12 | 280 | 310 | 345 | 380 | 430 | 485 | 12 |

*Source: INPUT*

Exhibit VI-29

## Greece

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 195 | 17 | 228 | 268 | 314 | 368 | 425 | 490 | 17 |
| - IS Consulting | 23 | 25 | 29 | 37 | 46 | 58 | 71 | 88 | 24 |
| - Education & Training | 16 | 12 | 18 | 20 | 22 | 25 | 27 | 30 | 11 |
| - Custom Software | 156 | 16 | 181 | 211 | 246 | 286 | 327 | 372 | 15 |

*Source: INPUT*

Exhibit VI-30

## Ireland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 320 | 15 | 367 | 418 | 478 | 537 | 609 | 689 | 13 |
| - IS Consulting | 37 | 15 | 43 | 49 | 56 | 63 | 72 | 82 | 14 |
| - Education & Training | 30 | 11 | 34 | 38 | 42 | 46 | 51 | 56 | 11 |
| - Custom Software | 253 | 15 | 290 | 332 | 380 | 428 | 486 | 551 | 14 |

*Source: INPUT*

Exhibit VI-31

## Netherlands

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 1500 | 10 | 1645 | 1755 | 1875 | 1975 | 2095 | 2205 | 6 |
| - IS Consulting | 213 | 12 | 238 | 266 | 297 | 325 | 360 | 394 | 11 |
| - Education & Training | 187 | 29 | 241 | 258 | 276 | 298 | 322 | 351 | 8 |
| - Custom Software | 1100 | 6 | 1165 | 1230 | 1300 | 1350 | 1415 | 1465 | 5 |

*Source: INPUT*

Exhibit VI-32

## Norway

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 485 | 8 | 520 | 555 | 610 | 670 | 735 | 815 | 9 |
| - IS Consulting | 78 | 10 | 86 | 94 | 105 | 119 | 135 | 153 | 12 |
| - Education & Training | 64 | 9 | 69 | 75 | 83 | 94 | 105 | 118 | 11 |
| - Custom Software | 345 | 6 | 365 | 390 | 420 | 460 | 500 | 545 | 8 |

*Source: INPUT*

Exhibit VI-33

## Portugal

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 235 | 15 | 270 | 308 | 351 | 401 | 447 | 499 | 13 |
| - IS Consulting | 40 | 20 | 48 | 58 | 69 | 82 | 96 | 112 | 18 |
| - Education & Training | 24 | 15 | 27 | 31 | 36 | 41 | 46 | 51 | 14 |
| - Custom Software | 172 | 13 | 195 | 219 | 247 | 278 | 305 | 336 | 12 |

*Source: INPUT*

Exhibit VI-34

## Spain

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 1035 | 10 | 1140 | 1230 | 1355 | 1490 | 1655 | 1845 | 10 |
| - IS Consulting | 166 | 17 | 194 | 228 | 265 | 310 | 368 | 434 | 17 |
| - Education & Training | 93 | 6 | 99 | 104 | 112 | 120 | 128 | 141 | 7 |
| - Custom Software | 775 | 9 | 845 | 900 | 975 | 1060 | 1155 | 1265 | 8 |

*Source: INPUT*

Exhibit VI-35

## Sweden

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 1100 | 11 | 1215 | 1340 | 1485 | 1610 | 1810 | 1965 | 10 |
| - IS Consulting | 121 | 15 | 139 | 159 | 181 | 204 | 237 | 266 | 14 |
| - Education & Training | 77 | 8 | 83 | 89 | 95 | 100 | 109 | 115 | 7 |
| - Custom Software | 900 | 10 | 995 | 1095 | 1205 | 1305 | 1465 | 1585 | 10 |

*Source: INPUT*

Exhibit VI-36

## Switzerland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 730 | 5 | 765 | 800 | 845 | 850 | 880 | 905 | 3 |
| - IS Consulting | 96 | 12 | 107 | 118 | 131 | 139 | 152 | 165 | 9 |
| - Education & Training | 117 | 1 | 118 | 122 | 126 | 126 | 126 | 126 | 1 |
| - Custom Software | 520 | 4 | 540 | 560 | 585 | 585 | 600 | 615 | 3 |

*Source: INPUT*

Exhibit VI-37

## Europe

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 13380 | 9 | 14560 | 16410 | 18590 | 21130 | 23840 | 26900 | 13 |
| - Equipment | 6340 | 6 | 6750 | 7390 | 8140 | 8950 | 9830 | 10940 | 10 |
| - Application Software | 2780 | 12 | 3120 | 3650 | 4270 | 5050 | 5880 | 6720 | 17 |
| - System Software | 720 | 11 | 800 | 910 | 1020 | 1140 | 1270 | 1390 | 12 |
| - Professional Services | 3530 | 10 | 3870 | 4440 | 5160 | 5960 | 6850 | 7840 | 15 |

*Source: INPUT*

Exhibit VI-38

## United Kingdom

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 2250 | 15 | 2590 | 3030 | 3490 | 3980 | 4450 | 4980 | 14 |
| - Equipment | 1100 | 15 | 1270 | 1470 | 1670 | 1870 | 2100 | 2340 | 13 |
| - Application Software | 410 | 17 | 470 | 570 | 680 | 780 | 880 | 970 | 15 |
| - System Software | 180 | 12 | 202 | 233 | 264 | 295 | 326 | 357 | 12 |
| - Professional Services | 560 | 16 | 650 | 760 | 890 | 1020 | 1150 | 1300 | 15 |

*Source: INPUT*

Exhibit VI-39

## Italy

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 685 | 9 | 750 | 860 | 980 | 1140 | 1320 | 1520 | 15 |
| - Equipment | 340 | 8 | 370 | 420 | 470 | 530 | 590 | 660 | 12 |
| - Application Software | 160 | 14 | 180 | 210 | 240 | 290 | 340 | 410 | 18 |
| - System Software | 14 | 11 | 15 | 18 | 20 | 24 | 27 | 31 | 15 |
| - Professional Services | 170 | 8 | 190 | 210 | 250 | 300 | 360 | 430 | 18 |

*Source: INPUT*

Exhibit VI-40

## Germany

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 4510 | 5 | 4730 | 5270 | 5920 | 6690 | 7460 | 8410 | 12 |
| - Equipment | 2120 | 1 | 2130 | 2270 | 2450 | 2620 | 2800 | 3150 | 8 |
| - Application Software | 900 | 9 | 980 | 1150 | 1360 | 1640 | 1920 | 2170 | 17 |
| - System Software | 271 | 15 | 311 | 353 | 392 | 427 | 465 | 503 | 10 |
| - Professional Services | 1220 | 7 | 1300 | 1480 | 1720 | 1990 | 2270 | 2590 | 15 |

*Source: INPUT*

Exhibit VI-41

## France

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 1955 | 2 | 2005 | 2170 | 2435 | 2760 | 3110 | 3495 | 12 |
| - Equipment | 940 | 1 | 950 | 1000 | 1095 | 1205 | 1320 | 1440 | 9 |
| - Application Software | 470 | 5 | 490 | 540 | 615 | 715 | 830 | 940 | 14 |
| - System Software | 39 | 2 | 40 | 43 | 48 | 55 | 64 | 70 | 12 |
| - Professional Services | 510 | 1 | 515 | 580 | 670 | 775 | 900 | 1035 | 15 |

*Source: INPUT*

Exhibit VI-42

## Austria

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 451 | 3 | 466 | 549 | 546 | 763 | 899 | 1021 | 17 |
| - Equipment | 212 | 2 | 215 | 249 | 287 | 333 | 384 | 427 | 15 |
| - Application Software | 99 | 11 | 110 | 137 | 171 | 213 | 265 | 318 | 24 |
| - System Software | 27 | 0 | 27 | 31 | 35 | 40 | 45 | 49 | 12 |
| - Professional Services | 113 | 1 | 114 | 133 | 154 | 177 | 205 | 228 | 15 |

*Source: INPUT*

Exhibit VI-43

## Belgium

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 370 | 9 | 404 | 439 | 479 | 522 | 571 | 610 | 9 |
| - Equipment | 170 | 6 | 181 | 191 | 201 | 211 | 225 | 232 | 5 |
| - Application Software | 85 | 14 | 97 | 109 | 124 | 141 | 160 | 177 | 13 |
| - System Software | 15 | 9 | 16 | 18 | 19 | 21 | 23 | 25 | 9 |
| - Professional Services | 100 | 10 | 110 | 122 | 135 | 149 | 164 | 177 | 10 |

*Source: INPUT*

Exhibit VI-44

## Denmark

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 380 | 16 | 441 | 504 | 578 | 659 | 742 | 829 | 13 |
| - Equipment | 171 | 13 | 193 | 216 | 241 | 267 | 293 | 318 | 10 |
| - Application Software | 76 | 19 | 91 | 107 | 126 | 146 | 170 | 194 | 17 |
| - System Software | 23 | 16 | 26 | 30 | 35 | 40 | 45 | 50 | 14 |
| - Professional Services | 110 | 18 | 130 | 152 | 177 | 206 | 235 | 267 | 16 |

*Source: INPUT*

Exhibit VI-45

## Eastern Europe

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 40 | 15 | 46 | 54 | 62 | 71 | 79 | 88 | 14 |
| - Equipment | 19 | 16 | 22 | 26 | 30 | 35 | 39 | 44 | 15 |
| - Application Software | 7 | 14 | 8 | 9 | 10 | 11 | 12 | 13 | 10 |
| - System Software | 1 | 0 | 1 | 2 | 2 | 2 | 3 | 3 | 25 |
| - Professional Services | 13 | 15 | 15 | 17 | 20 | 23 | 25 | 28 | 13 |

*Source: INPUT*

Exhibit VI-46

## Finland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 185 | 19 | 219 | 244 | 274 | 307 | 341 | 380 | 12 |
| - Equipment | 83 | 15 | 96 | 105 | 114 | 125 | 135 | 147 | 9 |
| - Application Software | 39 | 22 | 47 | 54 | 62 | 72 | 82 | 95 | 15 |
| - System Software | 11 | 15 | 13 | 14 | 15 | 16 | 18 | 19 | 8 |
| - Professional Services | 52 | 20 | 62 | 72 | 82 | 94 | 106 | 121 | 14 |

*Source: INPUT*

Exhibit VI-47

## Greece

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 70 | 17 | 82 | 98 | 117 | 138 | 158 | 182 | 17 |
| - Equipment | 33 | 14 | 37 | 43 | 49 | 56 | 61 | 68 | 13 |
| - Application Software | 16 | 21 | 19 | 24 | 29 | 35 | 41 | 48 | 20 |
| - System Software | 3 | 18 | 3 | 4 | 5 | 5 | 6 | 7 | 17 |
| - Professional Services | 18 | 22 | 22 | 28 | 34 | 42 | 50 | 60 | 22 |

*Source: INPUT*

Exhibit VI-48

## Ireland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 165 | 14 | 192 | 216 | 240 | 272 | 321 | 361 | 13 |
| - Equipment | 79 | 14 | 90 | 96 | 104 | 114 | 127 | 144 | 10 |
| - Application Software | 37 | 22 | 45 | 51 | 61 | 69 | 82 | 95 | 16 |
| - System Software | 3 | 0 | 3 | 5 | 5 | 6 | 8 | 8 | 20 |
| - Professional Services | 47 | 17 | 55 | 63 | 72 | 87 | 101 | 115 | 16 |

*Source: INPUT*

Exhibit VI-49

## Netherlands

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 620 | 15 | 713 | 819 | 932 | 1063 | 1225 | 1432 | 15 |
| - Equipment | 273 | 11 | 303 | 335 | 366 | 400 | 444 | 497 | 10 |
| - Application Software | 155 | 19 | 185 | 222 | 263 | 313 | 372 | 450 | 20 |
| - System Software | 38 | 15 | 43 | 50 | 58 | 66 | 76 | 89 | 16 |
| - Professional Services | 155 | 17 | 182 | 213 | 247 | 285 | 335 | 394 | 17 |

*Source: INPUT*

Exhibit VI-50

## Norway

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 260 | 13 | 295 | 330 | 370 | 418 | 473 | 530 | 12 |
| - Equipment | 127 | 11 | 142 | 155 | 170 | 188 | 208 | 233 | 10 |
| - Application Software | 55 | 19 | 65 | 76 | 89 | 105 | 123 | 138 | 16 |
| - System Software | 16 | 13 | 18 | 20 | 22 | 25 | 28 | 32 | 12 |
| - Professional Services | 62 | 13 | 71 | 79 | 89 | 100 | 113 | 127 | 12 |

*Source: INPUT*

Exhibit VI-51

## Portugal

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 55 | 62 | 89 | 101 | 114 | 130 | 148 | 167 | 13 |
| - Equipment | 25 | 51 | 38 | 41 | 45 | 48 | 53 | 60 | 9 |
| - Application Software | 12 | 77 | 21 | 25 | 30 | 35 | 41 | 47 | 17 |
| - System Software | 3 | 62 | 4 | 5 | 6 | 6 | 7 | 8 | 13 |
| - Professional Services | 15 | 68 | 25 | 29 | 33 | 40 | 46 | 52 | 16 |

*Source: INPUT*

Exhibit VI-52

## Spain

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 480 | 17 | 561 | 619 | 685 | 766 | 855 | 961 | 11 |
| - Equipment | 221 | 14 | 252 | 270 | 291 | 317 | 344 | 375 | 8 |
| - Application Software | 106 | 20 | 127 | 144 | 164 | 188 | 215 | 248 | 14 |
| - System Software | 24 | 17 | 28 | 31 | 34 | 38 | 43 | 48 | 11 |
| - Professional Services | 130 | 19 | 155 | 174 | 196 | 223 | 253 | 289 | 13 |

*Source: INPUT*

Exhibit VI-53

## Sweden

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 370 | 10 | 407 | 460 | 528 | 604 | 709 | 822 | 15 |
| - Equipment | 159 | 6 | 169 | 186 | 207 | 233 | 263 | 297 | 12 |
| - Application Software | 82 | 12 | 92 | 106 | 124 | 147 | 174 | 208 | 18 |
| - System Software | 22 | 5 | 23 | 26 | 28 | 31 | 35 | 39 | 11 |
| - Professional Services | 107 | 13 | 121 | 144 | 166 | 196 | 234 | 279 | 18 |

*Source: INPUT*

Exhibit VI-54

## Switzerland

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 520 | 10 | 574 | 652 | 739 | 852 | 983 | 1113 | 14 |
| - Equipment | 270 | 9 | 293 | 319 | 356 | 400 | 451 | 513 | 12 |
| - Application Software | 79 | 18 | 92 | 111 | 126 | 153 | 177 | 201 | 17 |
| - System Software | 26 | 10 | 29 | 32 | 37 | 43 | 49 | 56 | 14 |
| - Professional Services | 146 | 10 | 161 | 189 | 223 | 256 | 304 | 345 | 16 |

*Source: INPUT*

# B
# Data in ECUs

Exhibit VI-55

## Europe

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 6863 | 22 | 8374 | 10381 | 12352 | 14205 | 16193 | 18460 | 17 |
| - Equipment | 1647 | 7 | 1759 | 1972 | 2223 | 2415 | 2591 | 3138 | 12 |
| - Application Software | 1304 | 28 | 1675 | 2284 | 2965 | 3693 | 4534 | 5169 | 25 |
| - System Software | 480 | 22 | 586 | 727 | 865 | 994 | 1134 | 1292 | 17 |
| - Professional Services | 3157 | 25 | 3936 | 4879 | 5682 | 6392 | 7125 | 8122 | 16 |
| - Other | 275 | 53 | 419 | 519 | 618 | 710 | 810 | 738 | 12 |

*Source: INPUT*

Exhibit VI-56

## United Kingdom

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 1250 | 15 | 1440 | 1670 | 1950 | 2240 | 2570 | 2880 | 15 |
| - Equipment | 290 | 9 | 320 | 350 | 380 | 410 | 440 | 470 | 8 |
| - Application Software | 239 | 24 | 297 | 370 | 461 | 570 | 709 | 867 | 24 |
| - System Software | 87 | 11 | 97 | 115 | 133 | 158 | 182 | 206 | 16 |
| - Professional Services | 600 | 15 | 680 | 790 | 920 | 1040 | 1170 | 1260 | 13 |
| - Other | 38 | 13 | 42 | 48 | 54 | 61 | 69 | 78 | 13 |

*Source: INPUT*

Exhibit VI-57

## Italy

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 290 | 19 | 340 | 400 | 460 | 520 | 580 | 660 | 14 |
| - Equipment | 70 | 12 | 80 | 80 | 90 | 100 | 110 | 110 | 8 |
| - Application Software | 54 | 32 | 71 | 89 | 108 | 128 | 153 | 182 | 21 |
| - System Software | 20 | 22 | 25 | 30 | 34 | 37 | 42 | 47 | 14 |
| - Professional Services | 140 | 18 | 160 | 190 | 220 | 250 | 270 | 300 | 13 |
| - Other | 5 | 9 | 6 | 6 | 7 | 8 | 8 | 9 | 9 |

*Source: INPUT*

Exhibit VI-58

## Germany

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 770 | 25 | 960 | 1170 | 1450 | 1780 | 2130 | 2570 | 22 |
| - Equipment | 200 | 4 | 210 | 230 | 260 | 300 | 350 | 400 | 14 |
| - Application Software | 168 | 17 | 197 | 254 | 336 | 440 | 571 | 732 | 30 |
| - System Software | 54 | 22 | 66 | 82 | 101 | 123 | 148 | 178 | 22 |
| - Professional Services | 310 | 46 | 450 | 570 | 700 | 850 | 1020 | 1210 | 22 |
| - Other | 38 | 0 | 38 | 41 | 44 | 46 | 49 | 55 | 7 |

*Source: INPUT*

Exhibit VI-59

## France

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 869 | 17 | 1020 | 1212 | 1443 | 1682 | 1938 | 2241 | 17 |
| - Equipment | 217 | 10 | 239 | 271 | 311 | 351 | 383 | 422 | 12 |
| - Application Software | 164 | 21 | 199 | 247 | 311 | 382 | 462 | 558 | 23 |
| - System Software | 70 | 14 | 80 | 94 | 112 | 132 | 155 | 180 | 18 |
| - Professional Services | 401 | 20 | 480 | 571 | 680 | 782 | 900 | 1035 | 17 |
| - Other | 17 | 19 | 21 | 25 | 29 | 34 | 39 | 46 | 17 |

*Source: INPUT*

Exhibit VI-60

## Austria

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 53 | 17 | 62 | 70 | 82 | 95 | 109 | 122 | 15 |
| - Equipment | 13 | 8 | 14 | 15 | 16 | 18 | 19 | 20 | 7 |
| - Application Software | 12 | 23 | 15 | 18 | 22 | 27 | 33 | 39 | 21 |
| - System Software | 5 | 10 | 5 | 6 | 6 | 7 | 8 | 8 | 9 |
| - Professional Services | 22 | 16 | 26 | 30 | 35 | 41 | 47 | 52 | 15 |
| - Other | 1 | 23 | 1 | 2 | 2 | 3 | 3 | 4 | 23 |

*Source: INPUT*

Exhibit VI-61

## Belgium

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 153 | 12 | 171 | 194 | 220 | 248 | 280 | 308 | 12 |
| - Equipment | 35 | 6 | 37 | 40 | 43 | 45 | 48 | 49 | 6 |
| - Application Software | 33 | 19 | 40 | 48 | 57 | 68 | 80 | 92 | 18 |
| - System Software | 14 | 7 | 15 | 16 | 17 | 18 | 19 | 20 | 6 |
| - Professional Services | 64 | 13 | 73 | 82 | 94 | 106 | 119 | 132 | 13 |
| - Other | 6 | 17 | 7 | 9 | 10 | 12 | 14 | 16 | 18 |

*Source: INPUT*

Exhibit VI-62

## Denmark

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 43 | 13 | 49 | 59 | 71 | 87 | 104 | 123 | 20 |
| - Equipment | 10 | 12 | 11 | 12 | 14 | 16 | 19 | 21 | 14 |
| - Application Software | 7 | 25 | 9 | 12 | 16 | 22 | 29 | 38 | 33 |
| - System Software | 3 | 4 | 4 | 4 | 5 | 6 | 6 | 7 | 15 |
| - Professional Services | 20 | 14 | 23 | 27 | 33 | 39 | 46 | 54 | 19 |
| - Other | 3 | 5 | 3 | 3 | 4 | 4 | 4 | 4 | 7 |

*Source: INPUT*

Exhibit VI-63

## Eastern Europe

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 602 | 14 | 685 | 788 | 896 | 1012 | 1140 | 1287 | 13 |
| - Equipment | 132 | 7 | 141 | 154 | 160 | 167 | 173 | 179 | 5 |
| - Application Software | 96 | 20 | 115 | 141 | 166 | 198 | 237 | 282 | 20 |
| - System Software | 42 | 6 | 45 | 51 | 58 | 64 | 70 | 77 | 11 |
| - Professional Services | 283 | 18 | 333 | 391 | 455 | 525 | 602 | 691 | 16 |
| - Other | 49 | 5 | 51 | 54 | 56 | 58 | 59 | 60 | 3 |

*Source: INPUT*

Exhibit VI-64

## Finland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 41 | 12 | 45 | 54 | 65 | 81 | 98 | 118 | 21 |
| - Equipment | 9 | 11 | 10 | 10 | 12 | 14 | 17 | 20 | 16 |
| - Application Software | 7 | 17 | 8 | 11 | 15 | 19 | 25 | 30 | 32 |
| - System Software | 3 | 6 | 4 | 4 | 5 | 5 | 6 | 7 | 14 |
| - Professional Services | 20 | 8 | 21 | 25 | 30 | 38 | 44 | 53 | 20 |
| - Other | 3 | 13 | 3 | 3 | 4 | 5 | 6 | 7 | 17 |

*Source: INPUT*

Exhibit VI-65

## Greece

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 12 | 25 | 15 | 19 | 24 | 30 | 38 | 48 | 26 |
| - Equipment | 3 | 22 | 3 | 4 | 5 | 6 | 8 | 9 | 22 |
| - Application Software | 2 | 34 | 3 | 3 | 5 | 6 | 8 | 11 | 33 |
| - System Software | 1 | 21 | 1 | 1 | 2 | 2 | 3 | 3 | 22 |
| - Professional Services | 6 | 25 | 7 | 9 | 11 | 14 | 17 | 21 | 25 |
| - Other | 1 | 21 | 1 | 1 | 2 | 2 | 3 | 3 | 22 |

*Source: INPUT*

Exhibit VI-66

## Ireland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 16 | 15 | 19 | 24 | 30 | 39 | 49 | 60 | 26 |
| - Equipment | 4 | 33 | 5 | 5 | 5 | 6 | 8 | 9 | 12 |
| - Application Software | 3 | 0 | 3 | 5 | 8 | 10 | 13 | 16 | 45 |
| - System Software | 1 | 0 | 1 | 1 | 3 | 4 | 4 | 5 | 32 |
| - Professional Services | 8 | 17 | 9 | 11 | 14 | 18 | 23 | 28 | 26 |
| - Other | 1 | 0 | 1 | 1 | 1 | 1 | 3 | 3 | 15 |

*Source: INPUT*

Exhibit VI-67

## Netherlands

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 161 | 6 | 171 | 198 | 234 | 278 | 322 | 366 | 16 |
| - Equipment | 38 | -5 | 36 | 38 | 43 | 45 | 51 | 59 | 10 |
| - Application Software | 25 | 29 | 33 | 40 | 54 | 69 | 83 | 96 | 24 |
| - System Software | 13 | 8 | 14 | 16 | 17 | 20 | 22 | 26 | 14 |
| - Professional Services | 73 | 9 | 79 | 93 | 110 | 133 | 151 | 172 | 17 |
| - Other | 11 | -9 | 10 | 12 | 12 | 11 | 13 | 15 | 7 |

*Source: INPUT*

Exhibit VI-68

## Norway

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 32 | 61 | 51 | 60 | 70 | 84 | 98 | 113 | 17 |
| - Equipment | 8 | 50 | 11 | 11 | 12 | 14 | 15 | 17 | 9 |
| - Application Software | 5 | 71 | 9 | 12 | 15 | 20 | 24 | 28 | 27 |
| - System Software | 3 | 57 | 4 | 5 | 6 | 6 | 7 | 8 | 14 |
| - Professional Services | 14 | 67 | 24 | 28 | 33 | 40 | 47 | 54 | 18 |
| - Other | 2 | 61 | 4 | 4 | 4 | 4 | 5 | 6 | 10 |

*Source: INPUT*

Exhibit VI-69

## Portugal

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 16 | 26 | 20 | 24 | 29 | 35 | 42 | 50 | 20 |
| - Equipment | 4 | 17 | 4 | 5 | 6 | 6 | 7 | 8 | 11 |
| - Application Software | 3 | 38 | 3 | 5 | 6 | 8 | 10 | 13 | 31 |
| - System Software | 1 | 20 | 1 | 2 | 2 | 2 | 2 | 3 | 14 |
| - Professional Services | 7 | 26 | 9 | 11 | 13 | 16 | 19 | 23 | 20 |
| - Other | 1 | 27 | 1 | 2 | 2 | 2 | 3 | 3 | 20 |

*Source: INPUT*

Exhibit VI-70

## Spain

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 172 | 15 | 198 | 227 | 262 | 305 | 360 | 433 | 17 |
| - Equipment | 40 | 8 | 43 | 46 | 49 | 53 | 58 | 64 | 8 |
| - Application Software | 28 | 28 | 35 | 45 | 56 | 72 | 92 | 120 | 28 |
| - System Software | 14 | 12 | 16 | 17 | 20 | 22 | 25 | 29 | 13 |
| - Professional Services | 80 | 16 | 92 | 106 | 122 | 142 | 166 | 197 | 17 |
| - Other | 12 | 2 | 12 | 14 | 15 | 17 | 19 | 22 | 13 |

*Source: INPUT*

Exhibit VI-71

## Sweden

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 47 | 20 | 57 | 71 | 86 | 107 | 135 | 170 | 25 |
| - Equipment | 12 | 15 | 13 | 16 | 18 | 21 | 24 | 29 | 17 |
| - Application Software | 8 | 33 | 10 | 14 | 18 | 25 | 34 | 46 | 36 |
| - System Software | 4 | 17 | 4 | 5 | 6 | 7 | 9 | 11 | 22 |
| - Professional Services | 21 | 22 | 26 | 33 | 40 | 50 | 62 | 78 | 25 |
| - Other | 3 | 4 | 3 | 4 | 5 | 5 | 6 | 7 | 14 |

*Source: INPUT*

Exhibit VI-72

## Switzerland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 136 | 13 | 153 | 177 | 198 | 221 | 249 | 272 | 12 |
| - Equipment | 32 | 7 | 34 | 34 | 34 | 36 | 40 | 44 | 5 |
| - Application Software | 20 | 27 | 26 | 33 | 46 | 53 | 65 | 71 | 23 |
| - System Software | 11 | 0 | 11 | 12 | 14 | 16 | 17 | 19 | 12 |
| - Professional Services | 64 | 11 | 71 | 84 | 93 | 106 | 115 | 126 | 12 |
| - Other | 11 | 13 | 12 | 12 | 12 | 11 | 12 | 14 | 2 |

*Source: INPUT*

Exhibit VI-73

## Europe

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 31013 | 5 | 32694 | 34516 | 36931 | 39146 | 41102 | 43157 | 6 |
| - IS Consulting | 4962 | 12 | 5558 | 6213 | 7017 | 8221 | 9043 | 9926 | 12 |
| - Education & Training | 3722 | 5 | 3923 | 4487 | 4801 | 5089 | 5343 | 6042 | 9 |
| - Custom Software | 21709 | 4 | 22559 | 23126 | 24374 | 25053 | 25894 | 26326 | 3 |
| - Application Management | 620 | 5 | 654 | 690 | 739 | 783 | 822 | 863 | 6 |

*Source: INPUT*

Exhibit VI-74

## United Kingdom

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 2330 | 2 | 2400 | 2500 | 2600 | 2610 | 2610 | 2600 | 2 |
| - IS Consulting | 580 | 12 | 640 | 730 | 820 | 920 | 1010 | 1100 | 11 |
| - Education & Training | 250 | 5 | 260 | 270 | 280 | 290 | 300 | 300 | 3 |
| - Custom Software | 1500 | -2 | 1500 | 1500 | 1400 | 1400 | 1300 | 1200 | -4 |

*Source: INPUT*

Exhibit VI-75

## Italy

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 1700 | 3 | 1800 | 1900 | 2000 | 2200 | 2300 | 2500 | 7 |
| - IS Consulting | 310 | 11 | 340 | 390 | 460 | 530 | 620 | 730 | 16 |
| - Education & Training | 140 | 5 | 140 | 160 | 180 | 200 | 230 | 260 | 13 |
| - Custom Software | 1300 | 2 | 1300 | 1300 | 1400 | 1400 | 1400 | 1500 | 3 |

*Source: INPUT*

Exhibit VI-76

## Germany

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 3500 | 2 | 3600 | 3700 | 3700 | 3800 | 3900 | 4000 | 3 |
| - IS Consulting | 700 | 7 | 750 | 820 | 900 | 990 | 1080 | 1180 | 9 |
| - Education & Training | 770 | 7 | 820 | 870 | 930 | 980 | 1070 | 1150 | 7 |
| - Custom Software | 2000 | -2 | 2000 | 2000 | 1900 | 1900 | 1800 | 1700 | -3 |

*Source: INPUT*

Exhibit VI-77

## France

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 4785 | 3 | 4945 | 5150 | 5405 | 5660 | 5855 | 6075 | 4 |
| - IS Consulting | 606 | 8 | 654 | 710 | 774 | 846 | 925 | 1005 | 9 |
| - Education & Training | 495 | 7 | 529 | 571 | 611 | 654 | 693 | 742 | 7 |
| - Custom Software | 3685 | 2 | 3755 | 3870 | 4020 | 4165 | 4240 | 4330 | 3 |

*Source: INPUT*

Exhibit VI-78

## Austria

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 485 | 13 | 545 | 615 | 695 | 785 | 885 | 950 | 12 |
| - IS Consulting | 73 | 17 | 85 | 99 | 116 | 136 | 158 | 176 | 16 |
| - Education & Training | 58 | 15 | 67 | 77 | 88 | 101 | 116 | 126 | 13 |
| - Custom Software | 355 | 12 | 395 | 440 | 490 | 550 | 615 | 650 | 10 |

*Source: INPUT*

Exhibit VI-79

## Belgium

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 625 | 3 | 640 | 665 | 685 | 710 | 740 | 750 | 3 |
| - IS Consulting | 113 | 11 | 124 | 137 | 152 | 167 | 185 | 200 | 10 |
| - Education & Training | 50 | 4 | 52 | 55 | 57 | 59 | 62 | 63 | 4 |
| - Custom Software | 460 | 1 | 465 | 470 | 475 | 485 | 495 | 490 | 1 |

*Source: INPUT*

Exhibit VI-80

## Denmark

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 395 | 9 | 430 | 450 | 480 | 495 | 515 | 530 | 4 |
| - IS Consulting | 76 | 13 | 86 | 96 | 106 | 114 | 124 | 134 | 9 |
| - Education & Training | 35 | 8 | 38 | 40 | 41 | 43 | 44 | 44 | 3 |
| - Custom Software | 280 | 8 | 305 | 315 | 330 | 340 | 345 | 350 | 3 |

*Source: INPUT*

Exhibit VI-81

## Eastern Europe

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 128 | 17 | 150 | 173 | 200 | 233 | 270 | 315 | 16 |
| - IS Consulting | 3 | 50 | 4 | 5 | 6 | 9 | 12 | 15 | 32 |
| - Education & Training | 74 | 17 | 87 | 101 | 118 | 138 | 161 | 188 | 17 |
| - Custom Software | 51 | 15 | 59 | 67 | 76 | 86 | 97 | 111 | 14 |

*Source: INPUT*

Exhibit VI-82

## Finland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 280 | 13 | 315 | 350 | 390 | 430 | 490 | 555 | 12 |
| - IS Consulting | 50 | 17 | 58 | 68 | 78 | 90 | 106 | 125 | 16 |
| - Education & Training | 25 | 15 | 29 | 30 | 31 | 32 | 34 | 36 | 5 |
| - Custom Software | 200 | 12 | 225 | 250 | 280 | 310 | 350 | 395 | 12 |

*Source: INPUT*

Exhibit VI-83

## Greece

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 159 | 17 | 186 | 218 | 255 | 300 | 346 | 399 | 17 |
| - IS Consulting | 19 | 25 | 24 | 30 | 38 | 47 | 58 | 71 | 24 |
| - Education & Training | 13 | 12 | 14 | 16 | 18 | 20 | 22 | 25 | 11 |
| - Custom Software | 127 | 16 | 148 | 172 | 200 | 233 | 266 | 303 | 15 |

*Source: INPUT*

Exhibit VI-84

## Ireland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 250 | 15 | 286 | 326 | 373 | 419 | 475 | 538 | 13 |
| - IS Consulting | 29 | 15 | 33 | 38 | 44 | 49 | 56 | 64 | 14 |
| - Education & Training | 24 | 11 | 26 | 29 | 33 | 36 | 39 | 44 | 11 |
| - Custom Software | 198 | 15 | 226 | 259 | 296 | 334 | 379 | 430 | 14 |

*Source: INPUT*

Exhibit VI-85

## Netherlands

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 1170 | 10 | 1285 | 1370 | 1465 | 1540 | 1635 | 1720 | 6 |
| - IS Consulting | 166 | 12 | 186 | 208 | 234 | 254 | 281 | 308 | 11 |
| - Education & Training | 146 | 29 | 188 | 201 | 215 | 232 | 251 | 274 | 8 |
| - Custom Software | 860 | 6 | 905 | 960 | 1015 | 1055 | 1100 | 1140 | 5 |

*Source: INPUT*

Exhibit VI-86

## Norway

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 375 | 8 | 410 | 435 | 475 | 525 | 575 | 635 | 9 |
| - IS Consulting | 61 | 10 | 67 | 74 | 82 | 93 | 105 | 120 | 12 |
| - Education & Training | 50 | 9 | 54 | 59 | 65 | 73 | 82 | 92 | 11 |
| - Custom Software | 270 | 6 | 285 | 305 | 330 | 360 | 390 | 425 | 8 |

*Source: INPUT*

Exhibit VI-87

## Portugal

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 183 | 15 | 210 | 240 | 274 | 313 | 349 | 390 | 13 |
| - IS Consulting | 31 | 20 | 38 | 45 | 54 | 64 | 75 | 88 | 18 |
| - Education & Training | 18 | 15 | 21 | 24 | 28 | 32 | 36 | 40 | 14 |
| - Custom Software | 134 | 13 | 152 | 171 | 192 | 216 | 238 | 262 | 12 |

*Source: INPUT*

Exhibit VI-88

## Spain

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 775 | 10 | 855 | 925 | 1015 | 1115 | 1240 | 1380 | 10 |
| - IS Consulting | 124 | 17 | 146 | 171 | 199 | 233 | 276 | 326 | 17 |
| - Education & Training | 70 | 6 | 75 | 78 | 84 | 90 | 96 | 106 | 7 |
| - Custom Software | 580 | 9 | 630 | 675 | 730 | 795 | 865 | 950 | 8 |

*Source: INPUT*

Exhibit VI-89

## Sweden

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 860 | 11 | 950 | 1045 | 1160 | 1255 | 1410 | 1535 | 10 |
| - IS Consulting | 95 | 15 | 109 | 124 | 142 | 159 | 185 | 208 | 14 |
| - Education & Training | 60 | 8 | 65 | 70 | 74 | 78 | 85 | 90 | 7 |
| - Custom Software | 705 | 10 | 775 | 855 | 940 | 1020 | 1145 | 1235 | 10 |

*Source: INPUT*

Exhibit VI-90

## Switzerland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 570 | 5 | 600 | 625 | 660 | 665 | 685 | 705 | 3 |
| - IS Consulting | 75 | 12 | 84 | 92 | 102 | 109 | 119 | 130 | 9 |
| - Education & Training | 91 | 1 | 92 | 95 | 99 | 99 | 99 | 99 | 1 |
| - Custom Software | 405 | 4 | 420 | 440 | 455 | 460 | 470 | 480 | 3 |

*Source: INPUT*

Exhibit VI-91

## Europe

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 17494 | 8 | 18894 | 20783 | 23275 | 26534 | 30778 | 35703 | 14 |
| - Equipment | 8222 | 6 | 8691 | 9352 | 10008 | 11144 | 12311 | 13567 | 9 |
| - Application Software | 3674 | 8 | 3968 | 4572 | 5353 | 6368 | 7695 | 9283 | 19 |
| - System Software | 1050 | 8 | 1134 | 1039 | 1164 | 1327 | 1539 | 1785 | 10 |
| - Professional Services | 4549 | 12 | 5101 | 5819 | 6750 | 7695 | 9234 | 11068 | 17 |

*Source: INPUT*

Exhibit VI-92

## United Kingdom

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 1760 | 15 | 2020 | 2360 | 2730 | 3100 | 3470 | 3880 | 14 |
| - Equipment | 860 | 15 | 990 | 1150 | 1300 | 1460 | 1640 | 1830 | 13 |
| - Application Software | 320 | 17 | 370 | 440 | 530 | 610 | 680 | 760 | 15 |
| - System Software | 141 | 12 | 158 | 182 | 206 | 230 | 255 | 279 | 12 |
| - Professional Services | 440 | 16 | 510 | 590 | 690 | 800 | 900 | 1020 | 15 |

*Source: INPUT*

Exhibit VI-93

## Italy

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 540 | 9 | 590 | 670 | 770 | 890 | 1030 | 1190 | 15 |
| - Equipment | 270 | 8 | 290 | 330 | 370 | 410 | 460 | 510 | 12 |
| - Application Software | 120 | 14 | 140 | 160 | 190 | 230 | 270 | 320 | 18 |
| - System Software | 11 | 11 | 12 | 14 | 16 | 18 | 21 | 24 | 15 |
| - Professional Services | 130 | 8 | 150 | 170 | 190 | 230 | 280 | 330 | 18 |

*Source: INPUT*

Exhibit VI-94

## Germany

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 3520 | 5 | 3690 | 4110 | 4630 | 5220 | 5830 | 6570 | 12 |
| - Equipment | 1660 | 1 | 1670 | 1780 | 1910 | 2050 | 2190 | 2460 | 8 |
| - Application Software | 700 | 9 | 770 | 900 | 1070 | 1280 | 1500 | 1690 | 17 |
| - System Software | 211 | 15 | 243 | 276 | 306 | 333 | 363 | 393 | 10 |
| - Professional Services | 950 | 7 | 1020 | 1160 | 1343 | 1560 | 1780 | 2030 | 15 |

*Source: INPUT*

Exhibit VI-95

## France

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 1531 | 2 | 1563 | 1691 | 1898 | 2153 | 2424 | 2728 | 12 |
| - Equipment | 732 | 1 | 742 | 782 | 854 | 941 | 1029 | 1125 | 9 |
| - Application Software | 366 | 5 | 383 | 423 | 479 | 558 | 646 | 734 | 14 |
| - System Software | 30 | 2 | 31 | 34 | 38 | 43 | 49 | 55 | 12 |
| - Professional Services | 397 | 1 | 401 | 453 | 522 | 605 | 702 | 807 | 15 |

*Source: INPUT*

Exhibit VI-96

## Austria

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 367 | 3 | 379 | 447 | 526 | 621 | 733 | 832 | 17 |
| - Equipment | 172 | 2 | 175 | 203 | 234 | 271 | 313 | 348 | 15 |
| - Application Software | 81 | 11 | 89 | 112 | 139 | 173 | 216 | 259 | 24 |
| - System Software | 22 | 0 | 22 | 25 | 28 | 32 | 36 | 40 | 12 |
| - Professional Services | 92 | 1 | 93 | 108 | 125 | 145 | 167 | 186 | 15 |

*Source: INPUT*

Exhibit VI-97

## Belgium

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 289 | 9 | 315 | 342 | 373 | 407 | 446 | 476 | 9 |
| - Equipment | 133 | 6 | 141 | 149 | 157 | 165 | 175 | 181 | 5 |
| - Application Software | 67 | 14 | 76 | 85 | 97 | 110 | 125 | 138 | 13 |
| - System Software | 12 | 9 | 13 | 14 | 15 | 17 | 18 | 19 | 9 |
| - Professional Services | 78 | 10 | 86 | 95 | 105 | 116 | 128 | 138 | 10 |

*Source: INPUT*

Exhibit VI-98

## Denmark

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 296 | 16 | 344 | 393 | 451 | 514 | 579 | 647 | 13 |
| - Equipment | 134 | 13 | 151 | 169 | 188 | 209 | 228 | 248 | 10 |
| - Application Software | 60 | 19 | 71 | 83 | 98 | 114 | 133 | 152 | 17 |
| - System Software | 18 | 16 | 21 | 24 | 27 | 31 | 35 | 39 | 14 |
| - Professional Services | 86 | 18 | 102 | 119 | 138 | 161 | 183 | 209 | 16 |

*Source: INPUT*

Exhibit VI-99

## Eastern Europe

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 51 | 15 | 59 | 69 | 79 | 91 | 101 | 113 | 14 |
| - Equipment | 24 | 16 | 28 | 33 | 38 | 45 | 50 | 56 | 15 |
| - Application Software | 9 | 14 | 10 | 12 | 13 | 14 | 15 | 17 | 10 |
| - System Software | 1 | 0 | 1 | 3 | 3 | 3 | 4 | 4 | 25 |
| - Professional Services | 17 | 15 | 19 | 22 | 26 | 29 | 32 | 36 | 13 |

*Source: INPUT*

Exhibit VI-100

## Finland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 150 | 19 | 178 | 199 | 224 | 250 | 278 | 310 | 12 |
| - Equipment | 68 | 15 | 78 | 86 | 93 | 102 | 110 | 119 | 9 |
| - Application Software | 32 | 22 | 39 | 44 | 51 | 58 | 67 | 77 | 15 |
| - System Software | 9 | 15 | 10 | 11 | 12 | 13 | 14 | 15 | 8 |
| - Professional Services | 42 | 20 | 51 | 58 | 67 | 76 | 87 | 99 | 14 |

*Source: INPUT*

Exhibit VI-101

## Greece

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 57 | 17 | 67 | 80 | 95 | 112 | 129 | 148 | 17 |
| - Equipment | 27 | 14 | 30 | 35 | 40 | 45 | 50 | 55 | 13 |
| - Application Software | 13 | 21 | 16 | 19 | 23 | 28 | 33 | 39 | 20 |
| - System Software | 2 | 18 | 3 | 3 | 4 | 4 | 5 | 6 | 17 |
| - Professional Services | 15 | 22 | 18 | 23 | 28 | 34 | 41 | 49 | 22 |

*Source: INPUT*

Exhibit VI-102

## Ireland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 131 | 14 | 150 | 169 | 188 | 213 | 250 | 281 | 13 |
| - Equipment | 61 | 14 | 70 | 75 | 81 | 89 | 99 | 113 | 10 |
| - Application Software | 29 | 22 | 35 | 40 | 48 | 54 | 64 | 74 | 16 |
| - System Software | 3 | 0 | 3 | 4 | 4 | 5 | 6 | 6 | 20 |
| - Professional Services | 36 | 17 | 43 | 49 | 56 | 68 | 79 | 90 | 16 |

*Source: INPUT*

Exhibit VI-103

## Netherlands

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 483 | 15 | 556 | 639 | 727 | 830 | 956 | 1117 | 15 |
| - Equipment | 213 | 11 | 237 | 261 | 286 | 312 | 347 | 388 | 10 |
| - Application Software | 121 | 19 | 144 | 173 | 205 | 244 | 290 | 351 | 20 |
| - System Software | 29 | 15 | 34 | 39 | 45 | 52 | 60 | 69 | 16 |
| - Professional Services | 121 | 17 | 142 | 166 | 193 | 222 | 261 | 308 | 17 |

*Source: INPUT*

Exhibit VI-104

## Norway

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 203 | 13 | 230 | 258 | 289 | 327 | 369 | 414 | 12 |
| - Equipment | 100 | 11 | 111 | 121 | 133 | 147 | 162 | 182 | 10 |
| - Application Software | 43 | 19 | 51 | 59 | 69 | 82 | 96 | 108 | 16 |
| - System Software | 12 | 13 | 14 | 15 | 17 | 20 | 22 | 25 | 12 |
| - Professional Services | 49 | 13 | 55 | 62 | 69 | 78 | 89 | 99 | 12 |

*Source: INPUT*

Exhibit VI-105

## Portugal

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 43 | 62 | 69 | 78 | 89 | 101 | 115 | 130 | 13 |
| - Equipment | 20 | 51 | 30 | 32 | 35 | 37 | 41 | 47 | 9 |
| - Application Software | 9 | 77 | 17 | 20 | 23 | 27 | 32 | 36 | 17 |
| - System Software | 2 | 62 | 3 | 4 | 4 | 5 | 6 | 7 | 13 |
| - Professional Services | 12 | 68 | 19 | 23 | 26 | 31 | 36 | 40 | 16 |

*Source: INPUT*

Exhibit VI-106

## Spain

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 360 | 17 | 421 | 464 | 514 | 574 | 641 | 720 | 11 |
| - Equipment | 166 | 14 | 189 | 203 | 218 | 238 | 238 | 258 | 8 |
| - Application Software | 79 | 20 | 95 | 108 | 123 | 141 | 161 | 186 | 14 |
| - System Software | 18 | 17 | 21 | 23 | 26 | 29 | 32 | 36 | 11 |
| - Professional Services | 97 | 19 | 116 | 130 | 147 | 167 | 190 | 216 | 13 |

*Source: INPUT*

Exhibit VI-107

## Sweden

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 289 | 10 | 318 | 359 | 412 | 471 | 554 | 642 | 15 |
| - Equipment | 125 | 6 | 132 | 145 | 162 | 182 | 205 | 232 | 12 |
| - Application Software | 64 | 12 | 72 | 83 | 97 | 115 | 136 | 162 | 18 |
| - System Software | 17 | 5 | 18 | 20 | 22 | 24 | 27 | 31 | 11 |
| - Professional Services | 84 | 13 | 94 | 112 | 130 | 153 | 183 | 218 | 18 |

*Source: INPUT*

Exhibit VI-108

## Switzerland

| ECU Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 408 | 10 | 449 | 510 | 578 | 667 | 769 | 871 | 14 |
| - Equipment | 211 | 9 | 230 | 249 | 278 | 313 | 353 | 402 | 12 |
| - Application Software | 61 | 18 | 72 | 87 | 99 | 120 | 138 | 157 | 17 |
| - System Software | 20 | 10 | 22 | 25 | 29 | 33 | 38 | 44 | 14 |
| - Professional Services | 115 | 10 | 126 | 148 | 174 | 200 | 238 | 270 | 16 |

*Source: INPUT*

# C
# Data in Local Currencies

Exhibit VI-109

## United Kingdom

| £ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 1030 | 15 | 1185 | 1380 | 1610 | 1850 | 2120 | 2375 | 15 |
| - Equipment | 238 | 9 | 260 | 285 | 315 | 340 | 365 | 385 | 8 |
| - Application Software | 238 | 9 | 260 | 285 | 315 | 340 | 365 | 385 | 8 |
| - System Software | 197 | 24 | 245 | 305 | 380 | 470 | 585 | 715 | 24 |
| - Professional Services | 492 | 15 | 565 | 655 | 760 | 860 | 965 | 1040 | 13 |
| - Other | 31 | 13 | 35 | 40 | 45 | 51 | 57 | 65 | 13 |

*Source: INPUT*

Exhibit VI-110

## Italy

| Lira Billions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 580 | 19 | 690 | 810 | 930 | 1050 | 1180 | 1330 | 14 |
| - Equipment | 139 | 12 | 155 | 170 | 185 | 200 | 215 | 230 | 8 |
| - Application Software | 110 | 32 | 145 | 180 | 220 | 260 | 310 | 370 | 21 |
| - System Software | 41 | 22 | 50 | 60 | 70 | 75 | 85 | 95 | 14 |
| - Professional Services | 279 | 18 | 330 | 385 | 440 | 500 | 555 | 615 | 13 |
| - Other | 11 | 9 | 12 | 13 | 14 | 16 | 17 | 19 | 9 |

*Source: INPUT*

Exhibit VI-111

## Germany

| DM Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 1400 | 25 | 1750 | 2150 | 2650 | 3250 | 3900 | 4700 | 22 |
| - Equipment | 364 | 4 | 380 | 415 | 475 | 555 | 645 | 740 | 14 |
| - Application Software | 308 | 17 | 360 | 465 | 615 | 805 | 1045 | 1340 | 30 |
| - System Software | 98 | 22 | 120 | 150 | 185 | 225 | 270 | 325 | 22 |
| - Professional Services | 560 | 46 | 820 | 1040 | 1280 | 1560 | 1870 | 2210 | 22 |
| - Other | 70 | 0 | 70 | 75 | 80 | 85 | 90 | 100 | 7 |

*Source: INPUT*

Exhibit VI-112

## France

| FF Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 5450 | 17 | 6400 | 7600 | 9050 | 10550 | 12150 | 14050 | 17 |
| - Equipment | 1364 | 10 | 1500 | 1700 | 1950 | 2200 | 2400 | 2650 | 12 |
| - Application Software | 1032 | 21 | 1250 | 1550 | 1950 | 2400 | 2900 | 3500 | 23 |
| - System Software | 437 | 14 | 500 | 590 | 700 | 830 | 970 | 1130 | 18 |
| - Professional Services | 2510 | 20 | 3010 | 3580 | 4260 | 4900 | 5640 | 6490 | 17 |
| - Other | 109 | 19 | 130 | 155 | 180 | 210 | 245 | 290 | 17 |

*Source: INPUT*

Exhibit VI-113

## Austria

| Sch Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 650 | 17 | 760 | 870 | 1010 | 1170 | 1350 | 1510 | 15 |
| - Equipment | 157 | 8 | 170 | 185 | 200 | 215 | 230 | 240 | 7 |
| - Application Software | 150 | 23 | 185 | 225 | 275 | 335 | 410 | 480 | 21 |
| - System Software | 59 | 10 | 65 | 71 | 78 | 86 | 94 | 99 | 9 |
| - Professional Services | 275 | 16 | 320 | 370 | 430 | 500 | 580 | 645 | 15 |
| - Other | 13 | 23 | 16 | 20 | 25 | 31 | 38 | 45 | 23 |

*Source: INPUT*

Exhibit VI-114

## Belgium

| BF Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 5750 | 12 | 6450 | 7300 | 8300 | 9350 | 10550 | 11600 | 12 |
| - Equipment | 1320 | 6 | 1400 | 1500 | 1600 | 1700 | 1800 | 1850 | 6 |
| - Application Software | 1260 | 19 | 1500 | 1800 | 2150 | 2550 | 3000 | 3450 | 18 |
| - System Software | 515 | 7 | 550 | 590 | 630 | 680 | 720 | 750 | 6 |
| - Professional Services | 2410 | 13 | 2730 | 3100 | 3520 | 3990 | 4480 | 4950 | 13 |
| - Other | 230 | 17 | 270 | 320 | 380 | 450 | 530 | 620 | 18 |

*Source: INPUT*

Exhibit VI-115

## Denmark

| DK Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 305 | 13 | 345 | 415 | 505 | 615 | 735 | 875 | 20 |
| - Equipment | 67 | 12 | 75 | 85 | 100 | 115 | 130 | 145 | 14 |
| - Application Software | 52 | 25 | 65 | 85 | 115 | 155 | 205 | 270 | 33 |
| - System Software24 | 24 | 4 | 25 | 30 | 35 | 40 | 45 | 50 | 15 |
| - Professional Services | 140 | 14 | 160 | 190 | 230 | 275 | 325 | 380 | 19 |
| - Other | 21 | 5 | 22 | 24 | 26 | 28 | 30 | 31 | 7 |

*Source: INPUT*

Exhibit VI-116

## Eastern Europe

| $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 470 | 51 | 708 | 758 | 818 | 892 | 972 | 1050 | 8 |
| - Equipment | 103 | 44 | 149 | 144 | 139 | 152 | 165 | 179 | 4 |
| - Application Software | 75 | 60 | 120 | 152 | 180 | 214 | 253 | 273 | 18 |
| - System Software | 33 | 51 | 50 | 53 | 57 | 54 | 68 | 74 | 8 |
| - Professional Services | 221 | 51 | 333 | 356 | 385 | 419 | 428 | 462 | 7 |
| - Other | 38 | 51 | 57 | 53 | 57 | 54 | 58 | 63 | 2 |

*Source: INPUT*

Exhibit VI-117

## Finland

| FM Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 215 | 12 | 240 | 285 | 345 | 430 | 520 | 625 | 21 |
| - Equipment | 45 | 11 | 50 | 54 | 62 | 73 | 88 | 106 | 16 |
| - Application Software | 35 | 17 | 41 | 57 | 80 | 103 | 135 | 162 | 32 |
| - System Software | 18 | 6 | 19 | 23 | 24 | 26 | 31 | 37 | 14 |
| - Professional Services | 104 | 8 | 112 | 134 | 159 | 202 | 234 | 281 | 20 |
| - Other | 15 | 13 | 17 | 18 | 21 | 26 | 31 | 37 | 17 |

*Source: INPUT*

Exhibit VI-118

## Greece

| Dra Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 3550 | 25 | 4450 | 5600 | 7050 | 8850 | 11150 | 14050 | 26 |
| - Equipment | 817 | 22 | 1000 | 1225 | 1500 | 1835 | 2245 | 2745 | 22 |
| - Application Software | 569 | 34 | 760 | 1010 | 1350 | 1800 | 2400 | 3200 | 33 |
| - System Software | 284 | 21 | 345 | 420 | 515 | 630 | 770 | 940 | 22 |
| - Professional Services | 1600 | 25 | 2000 | 2500 | 3150 | 3950 | 4950 | 6200 | 25 |
| - Other | 284 | 21 | 345 | 420 | 515 | 630 | 770 | 940 | 22 |

*Source: INPUT*

Exhibit VI-119

## Ireland

| IR £ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 13 | 15 | 15 | 19 | 24 | 31 | 39 | 48 | 26 |
| - Equipment | 3 | 33 | 4 | 4 | 4 | 5 | 6 | 7 | 12 |
| - Application Software | 2 | 0 | 2 | 4 | 6 | 8 | 10 | 13 | 45 |
| - System Software | 1 | 0 | 1 | 1 | 2 | 3 | 3 | 4 | 32 |
| - Professional Services | 6 | 17 | 7 | 9 | 11 | 14 | 18 | 22 | 26 |
| - Other | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 15 |

*Source: INPUT*

Exhibit VI-120

## Netherlands

| Dfl Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 330 | 6 | 350 | 405 | 480 | 570 | 660 | 750 | 16 |
| - Equipment | 78 | -5 | 74 | 77 | 87 | 91 | 105 | 120 | 10 |
| - Application Software | 52 | 29 | 67 | 81 | 111 | 142 | 171 | 196 | 24 |
| - System Software | 26 | 8 | 28 | 32 | 34 | 40 | 46 | 53 | 14 |
| - Professional Services | 149 | 9 | 162 | 190 | 226 | 273 | 310 | 353 | 17 |
| - Other | 23 | -9 | 21 | 24 | 24 | 23 | 26 | 30 | 7 |

*Source: INPUT*

Exhibit VI-121

## Norway

| NK Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 255 | 61 | 410 | 480 | 565 | 675 | 790 | 910 | 17 |
| - Equipment | 60 | 50 | 90 | 91 | 96 | 108 | 118 | 137 | 9 |
| - Application Software | 41 | 71 | 70 | 96 | 125 | 162 | 197 | 228 | 27 |
| - System Software | 21 | 57 | 33 | 38 | 45 | 47 | 55 | 64 | 14 |
| - Professional Services | 113 | 67 | 189 | 226 | 267 | 324 | 379 | 437 | 18 |
| - Other | 18 | 61 | 29 | 29 | 34 | 34 | 39 | 46 | 10 |

*Source: INPUT*

Exhibit VI-122

## Portugal

| Esc Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 2980 | 26 | 3750 | 4530 | 5500 | 6680 | 7920 | 9500 | 20 |
| - Equipment | 715 | 17 | 840 | 950 | 1070 | 1200 | 1310 | 1440 | 11 |
| - Application Software | 477 | 38 | 660 | 870 | 1150 | 1520 | 1960 | 2550 | 31 |
| - System Software | 209 | 20 | 250 | 290 | 335 | 385 | 430 | 485 | 14 |
| - Professional Services | 1370 | 26 | 1730 | 2100 | 2550 | 3100 | 3660 | 4360 | 20 |
| - Other | 209 | 27 | 265 | 320 | 390 | 475 | 560 | 665 | 20 |

*Source: INPUT*

Exhibit VI-123

## Spain

| Ptas Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 27800 | 15 | 31900 | 36600 | 42200 | 49200 | 58100 | 69800 | 17 |
| - Equipment | 6400 | 8 | 6900 | 7400 | 7900 | 8500 | 9300 | 10300 | 8 |
| - Application Software | 4453 | 28 | 5700 | 7200 | 9100 | 11600 | 14900 | 19400 | 28 |
| - System Software | 2226 | 12 | 2500 | 2800 | 3150 | 3550 | 4050 | 4700 | 13 |
| - Professional Services | 12801 | 16 | 14800 | 17000 | 19600 | 22800 | 26700 | 31800 | 17 |
| - Other | 1948 | 2 | 1995 | 2200 | 2400 | 2700 | 3100 | 3600 | 13 |

*Source: INPUT*

Exhibit VI-124

## Sweden

| Sek Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 400 | 20 | 480 | 600 | 730 | 910 | 1140 | 1440 | 25 |
| - Equipment | 96 | 15 | 110 | 130 | 150 | 175 | 205 | 240 | 17 |
| - Application Software | 64 | 33 | 85 | 115 | 155 | 210 | 285 | 390 | 36 |
| - System Software | 30 | 17 | 35 | 42 | 51 | 62 | 76 | 94 | 22 |
| - Professional Services | 180 | 22 | 220 | 275 | 340 | 420 | 525 | 660 | 25 |
| - Other | 28 | 4 | 29 | 33 | 38 | 43 | 49 | 57 | 14 |

*Source: INPUT*

Exhibit VI-125

## Switzerland

| SF Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Systems Integration | 200 | 13 | 225 | 260 | 290 | 325 | 365 | 400 | 12 |
| - Equipment | 46 | 7 | 49 | 50 | 50 | 52 | 58 | 64 | 5 |
| - Application Software | 30 | 27 | 38 | 49 | 67 | 78 | 95 | 105 | 23 |
| - System Software | 16 | 0 | 16 | 18 | 20 | 23 | 25 | 28 | 12 |
| - Professional Services | 94 | 11 | 104 | 123 | 136 | 156 | 168 | 185 | 12 |
| - Other | 16 | 13 | 18 | 18 | 17 | 16 | 18 | 20 | 2 |

*Source: INPUT*

Exhibit VI-126

## United Kingdom

| £ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 1950 | 2 | 1995 | 2055 | 2105 | 2140 | 2160 | 2185 | 2 |
| - IS Consulting | 475 | 12 | 530 | 605 | 680 | 760 | 830 | 905 | 11 |
| - Education & Training | 205 | 5 | 215 | 225 | 235 | 240 | 245 | 250 | 3 |
| - Custom Software | 1270 | -2 | 1250 | 1225 | 1190 | 1140 | 1085 | 1030 | -4 |

*Source: INPUT*

Exhibit VI-127

## Italy

| Lira Billions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 3500 | 3 | 3600 | 3800 | 4100 | 4400 | 4700 | 5000 | 7 |
| - IS Consulting | 624 | 11 | 695 | 790 | 925 | 1080 | 1265 | 1480 | 16 |
| - Education & Training | 277 | 5 | 290 | 320 | 365 | 415 | 475 | 535 | 13 |
| - Custom Software | 2566 | 2 | 2615 | 2695 | 2775 | 2860 | 2915 | 2975 | 3 |

*Source: INPUT*

Exhibit VI-128

## Germany

| DM Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 6400 | 2 | 6500 | 6700 | 6800 | 7000 | 7200 | 7400 | 3 |
| - IS Consulting | 1280 | 7 | 1370 | 1495 | 1645 | 1810 | 1975 | 2155 | 9 |
| - Education & Training | 1408 | 7 | 1500 | 1600 | 1700 | 1800 | 1950 | 2100 | 7 |
| - Custom Software | 3711 | -2 | 3650 | 3600 | 3500 | 3400 | 3300 | 3150 | -3 |

*Source: INPUT*

Exhibit VI-129

## France

| FF Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Sub-Sector** | **1995** | **95-96 %** | **1996** | **1997** | **1998** | **1999** | **2000** | **2001** | **96-2001 CAGR %** |
| Professional Services | 30000 | 3 | 31000 | 32300 | 33900 | 35500 | 36700 | 38100 | 4 |
| - IS Consulting | 3800 | 8 | 4100 | 4450 | 4850 | 5300 | 5800 | 6300 | 9 |
| - Education & Training | 3100 | 7 | 3315 | 3580 | 3830 | 4100 | 4345 | 4650 | 7 |
| - Custom Software | 23100 | 2 | 23550 | 24250 | 25200 | 26100 | 26600 | 27150 | 3 |

*Source: INPUT*

Exhibit VI-130

## Austria

| Sch Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Sub-Sector** | **1995** | **95-96 %** | **1996** | **1997** | **1998** | **1999** | **2000** | **2001** | **96-2001 CAGR %** |
| Professional Services | 6010 | 13 | 6780 | 7630 | 8630 | 9730 | 10990 | 11790 | 12 |
| - IS Consulting | 901 | 17 | 1050 | 1230 | 1440 | 1680 | 1960 | 2180 | 16 |
| - Education & Training | 720 | 15 | 830 | 950 | 1090 | 1250 | 1430 | 1560 | 13 |
| - Custom Software | 4387 | 12 | 4900 | 5450 | 6100 | 6800 | 7600 | 8050 | 10 |

*Source: INPUT*

Exhibit VI-131

## Belgium

| BF Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 23500 | 3 | 24200 | 25000 | 25900 | 26800 | 27900 | 28300 | 3 |
| - IS Consulting | 4235 | 11 | 4680 | 5170 | 5710 | 6300 | 6960 | 7520 | 10 |
| - Education & Training | 1880 | 4 | 1960 | 2050 | 2140 | 2230 | 2330 | 2380 | 4 |
| - Custom Software | 17405 | 1 | 17600 | 17800 | 18000 | 18300 | 18600 | 18400 | 1 |

*Source: INPUT*

Exhibit VI-132

## Denmark

| DK Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 2800 | 9 | 3050 | 3200 | 3400 | 3500 | 3650 | 3750 | 4 |
| - IS Consulting | 540 | 13 | 610 | 680 | 750 | 810 | 880 | 950 | 9 |
| - Education & Training | 250 | 8 | 270 | 280 | 290 | 300 | 310 | 310 | 3 |
| - Custom Software | 2000 | 8 | 2150 | 2250 | 2350 | 2400 | 2450 | 2500 | 3 |

*Source: INPUT*

Exhibit VI-133

## Eastern Europe

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 97 | 58 | 153 | 182 | 215 | 251 | 292 | 337 | 17 |
| - IS Consulting | 2 | 58 | 3 | 4 | 4 | 8 | 9 | 13 | 35 |
| - Education & Training | 56 | 58 | 89 | 107 | 127 | 148 | 172 | 199 | 18 |
| - Custom Software | 38 | 58 | 60 | 69 | 82 | 93 | 108 | 121 | 15 |
| - Application Management | 1 | 58 | 2 | 2 | 2 | 3 | 3 | 3 | 17 |

*Source: INPUT*

Exhibit VI-134

## Finland

| FM Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 1480 | 13 | 1670 | 1860 | 2070 | 2300 | 2600 | 2960 | 12 |
| - IS Consulting | 266 | 17 | 310 | 360 | 415 | 480 | 545 | 665 | 16 |
| - Education & Training | 132 | 15 | 152 | 156 | 162 | 170 | 179 | 190 | 5 |
| - Custom Software | 1077 | 12 | 1210 | 1340 | 1490 | 1650 | 1860 | 2100 | 12 |

*Source: INPUT*

Exhibit VI-135

## Greece

| Dra Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 46200 | 17 | 54100 | 63400 | 74300 | 87200 | 100700 | 116100 | 17 |
| - IS Consulting | 5546 | 25 | 6950 | 8700 | 10900 | 13650 | 16850 | 20750 | 24 |
| - Education & Training | 3697 | 12 | 4150 | 4660 | 5230 | 5870 | 6470 | 7120 | 11 |
| - Custom Software | 36972 | 16 | 43000 | 50000 | 58200 | 67700 | 77400 | 88200 | 15 |

*Source: INPUT*

Exhibit VI-136

## Ireland

| IR £ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 200 | 15 | 229 | 261 | 298 | 335 | 380 | 430 | 13 |
| - IS Consulting | 23 | 15 | 27 | 31 | 35 | 40 | 45 | 51 | 14 |
| - Education & Training | 19 | 11 | 21 | 24 | 26 | 29 | 32 | 35 | 11 |
| - Custom Software | 158 | 15 | 181 | 207 | 237 | 267 | 303 | 344 | 14 |

*Source: INPUT*

Exhibit VI-137

## Netherlands

| Dfl Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 2400 | 10 | 2630 | 2810 | 3000 | 3160 | 3350 | 3530 | 6 |
| - IS Consulting | 340 | 12 | 380 | 425 | 475 | 520 | 575 | 630 | 11 |
| - Education & Training | 298 | 29 | 385 | 412 | 441 | 476 | 514 | 561 | 8 |
| - Custom Software | 1762 | 6 | 1860 | 1970 | 2080 | 2160 | 2260 | 2340 | 5 |

*Source: INPUT*

Exhibit VI-138

## Norway

| NK Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 3050 | 8 | 3300 | 3500 | 3850 | 4250 | 4650 | 5150 | 9 |
| - IS Consulting | 490 | 10 | 540 | 595 | 665 | 750 | 850 | 965 | 12 |
| - Education & Training | 400 | 9 | 435 | 475 | 525 | 590 | 660 | 745 | 11 |
| - Custom Software | 2175 | 6 | 2300 | 2450 | 2650 | 2900 | 3150 | 3450 | 8 |

*Source: INPUT*

Exhibit VI-139

## Portugal

| Esc Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 35000 | 15 | 40200 | 45900 | 52300 | 59700 | 66600 | 74400 | 13 |
| - IS Consulting | 5952 | 20 | 7170 | 8570 | 10240 | 12240 | 14320 | 16750 | 18 |
| - Education & Training | 3502 | 15 | 4040 | 4630 | 5300 | 6070 | 6800 | 7620 | 14 |
| - Custom Software | 25561 | 13 | 29000 | 32650 | 36750 | 41350 | 45500 | 50050 | 12 |

*Source: INPUT*

Exhibit VI-140

## Spain

| Ptas Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 125000 | 10 | 138000 | 149000 | 164000 | 180000 | 200000 | 223000 | 10 |
| - IS Consulting | 20037 | 17 | 23500 | 27500 | 32000 | 37500 | 44500 | 52500 | 17 |
| - Education & Training | 11272 | 6 | 12000 | 12500 | 13500 | 14500 | 15500 | 17000 | 7 |
| - Custom Software | 93926 | 9 | 102000 | 109000 | 118000 | 128000 | 140000 | 153000 | 8 |

*Source: INPUT*

Exhibit VI-141

## Sweden

| Sek Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 7290 | 11 | 8070 | 8890 | 9830 | 10660 | 11990 | 13020 | 10 |
| - IS Consulting | 802 | 15 | 920 | 1050 | 1200 | 1350 | 1570 | 1760 | 14 |
| - Education & Training | 511 | 8 | 550 | 590 | 630 | 660 | 720 | 760 | 7 |
| - Custom Software | 5980 | 10 | 6600 | 7250 | 8000 | 8650 | 9700 | 10500 | 10 |

*Source: INPUT*

Exhibit VI-142

## Switzerland

| SF Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Professional Services | 840 | 5 | 880 | 920 | 970 | 980 | 1010 | 1040 | 3 |
| - IS Consulting | 110 | 12 | 123 | 135 | 150 | 160 | 175 | 190 | 9 |
| - Education & Training | 134 | 1 | 135 | 140 | 145 | 145 | 145 | 145 | 1 |
| - Custom Software | 596 | 4 | 620 | 645 | 670 | 675 | 690 | 705 | 3 |

*Source: INPUT*

Exhibit VI-143

## United Kingdom

| £ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 1450 | 15 | 1670 | 1950 | 2250 | 2560 | 2865 | 3205 | 14 |
| - Equipment | 710 | 15 | 815 | 945 | 1075 | 1205 | 1350 | 1510 | 13 |
| - Application Software | 261 | 17 | 305 | 365 | 435 | 505 | 565 | 625 | 15 |
| - System Software | 116 | 12 | 130 | 150 | 170 | 190 | 210 | 230 | 12 |
| - Professional Services | 363 | 16 | 420 | 490 | 570 | 660 | 740 | 840 | 15 |

*Source: INPUT*

Exhibit VI-144

## Italy

| Lira Billions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 1090 | 9 | 1190 | 1360 | 1565 | 1815 | 2100 | 2420 | 15 |
| - Equipment | 543 | 8 | 585 | 665 | 750 | 840 | 940 | 1045 | 12 |
| - Application Software | 250 | 14 | 285 | 330 | 385 | 460 | 545 | 645 | 18 |
| - System Software | 22 | 11 | 25 | 28 | 33 | 38 | 43 | 49 | 15 |
| - Professional Services | 273 | 8 | 295 | 335 | 395 | 475 | 570 | 680 | 18 |

*Source: INPUT*

Exhibit VI-145

## Germany

| DM Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 6450 | 5 | 6760 | 7530 | 8470 | 9560 | 10670 | 12030 | 12 |
| - Equipment | 3030 | 1 | 3050 | 3250 | 3500 | 3750 | 4000 | 4500 | 8 |
| - Application Software | 1290 | 9 | 1400 | 1650 | 1950 | 2350 | 2750 | 3100 | 17 |
| - System Software | 387 | 15 | 445 | 505 | 560 | 610 | 665 | 720 | 10 |
| - Professional Services | 1741 | 7 | 1860 | 2120 | 2460 | 2850 | 3250 | 3710 | 15 |

*Source: INPUT*

Exhibit VI-146

## France

| FM Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 9600 | 2 | 9800 | 10600 | 11900 | 13500 | 15200 | 17100 | 12 |
| - Equipment | 4589 | 1 | 4650 | 4900 | 5350 | 5900 | 6450 | 7050 | 9 |
| - Application Software | 2294 | 5 | 2400 | 2650 | 3000 | 3500 | 4050 | 4600 | 14 |
| - System Software | 191 | 2 | 195 | 210 | 235 | 270 | 310 | 345 | 12 |
| - Professional Services | 2485 | 1 | 2510 | 2840 | 3270 | 3790 | 4400 | 5060 | 15 |

*Source: INPUT*

Exhibit VI-147

## Austria

| Sch Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 4550 | 3 | 4700 | 5540 | 6520 | 7700 | 9080 | 10310 | 17 |
| - Equipment | 2135 | 2 | 2170 | 2510 | 2900 | 3360 | 3880 | 4310 | 15 |
| - Application Software | 1000 | 11 | 1105 | 1380 | 1720 | 2145 | 2675 | 3210 | 24 |
| - System Software | 275 | 0 | 275 | 310 | 350 | 400 | 450 | 490 | 12 |
| - Professional Services | 1135 | 1 | 1150 | 1340 | 1550 | 1790 | 2070 | 2300 | 15 |

*Source: INPUT*

Exhibit VI-148

## Belgium

| BF Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 10880 | 9 | 11870 | 12900 | 14070 | 15340 | 16790 | 17920 | 9 |
| - Equipment | 5005 | 6 | 5300 | 5600 | 5900 | 6200 | 6600 | 6800 | 5 |
| - Application Software | 2500 | 14 | 2850 | 3200 | 3650 | 4150 | 4700 | 5200 | 13 |
| - System Software | 435 | 9 | 475 | 520 | 570 | 625 | 680 | 730 | 9 |
| - Professional Services | 2935 | 10 | 3240 | 3580 | 3950 | 4360 | 4810 | 5190 | 10 |

*Source: INPUT*

Exhibit VI-149

## Denmark

| DK Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 2100 | 16 | 2440 | 2790 | 3200 | 3650 | 4110 | 4590 | 13 |
| - Equipment | 947 | 13 | 1070 | 1195 | 1335 | 1480 | 1620 | 1760 | 10 |
| - Application Software | 421 | 19 | 500 | 590 | 695 | 810 | 940 | 1075 | 17 |
| - System Software | 126 | 16 | 146 | 168 | 193 | 220 | 247 | 275 | 14 |
| - Professional Services | 610 | 18 | 720 | 840 | 980 | 1140 | 1300 | 1480 | 16 |

*Source: INPUT*

Exhibit VI-150

## Eastern Europe

| US $ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 41 | 80 | 74 | 79 | 86 | 93 | 103 | 112 | 9 |
| - Equipment | 20 | 77 | 35 | 36 | 38 | 41 | 44 | 48 | 7 |
| - Application Software | 7 | 91 | 14 | 15 | 16 | 18 | 21 | 22 | 10 |
| - System Software | 1 | 141 | 3 | 3 | 3 | 3 | 4 | 4 | 9 |
| - Professional Services | 13 | 75 | 22 | 25 | 27 | 32 | 34 | 37 | 11 |

*Source: INPUT*

Exhibit VI-151

## Finland

| FM Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 800 | 19 | 950 | 1060 | 1190 | 1330 | 1480 | 1650 | 12 |
| - Equipment | 361 | 15 | 415 | 455 | 495 | 540 | 585 | 635 | 9 |
| - Application Software | 168 | 22 | 205 | 235 | 270 | 310 | 355 | 410 | 15 |
| - System Software | 48 | 15 | 55 | 60 | 65 | 70 | 76 | 82 | 8 |
| - Professional Services | 225 | 20 | 270 | 310 | 355 | 405 | 460 | 525 | 14 |

*Source: INPUT*

Exhibit VI-152

## Greece

| Dra Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 16600 | 17 | 19500 | 23300 | 27700 | 32600 | 37400 | 43100 | 17 |
| - Equipment | 77797 | 14 | 8850 | 10200 | 11650 | 13200 | 14550 | 16050 | 13 |
| - Application Software | 3815 | 21 | 4600 | 5600 | 6800 | 8200 | 9600 | 11250 | 20 |
| - System Software | 663 | 18 | 780 | 930 | 1100 | 1290 | 1470 | 1680 | 17 |
| - Professional Services | 4313 | 22 | 5250 | 6550 | 8100 | 9900 | 11800 | 14100 | 22 |

*Source: INPUT*

Exhibit VI-153

## Ireland

| IR £ Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 105 | 14 | 120 | 135 | 150 | 170 | 200 | 225 | 13 |
| - Equipment | 49 | 14 | 56 | 60 | 65 | 71 | 79 | 90 | 10 |
| - Application Software | 23 | 22 | 28 | 32 | 38 | 43 | 51 | 59 | 16 |
| - System Software | 2 | 0 | 2 | 3 | 3 | 4 | 5 | 5 | 20 |
| - Professional Services | 29 | 17 | 34 | 39 | 45 | 54 | 63 | 72 | 16 |

*Source: INPUT*

Exhibit VI-154

## Netherlands

| Dfl Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 990 | 15 | 1140 | 1310 | 1490 | 1700 | 1960 | 2290 | 15 |
| - Equipment | 436 | 11 | 485 | 535 | 585 | 640 | 710 | 795 | 10 |
| - Application Software | 248 | 19 | 295 | 355 | 420 | 500 | 595 | 720 | 20 |
| - System Software | 60 | 15 | 69 | 80 | 92 | 106 | 122 | 142 | 16 |
| - Professional Services | 248 | 17 | 290 | 340 | 395 | 455 | 535 | 630 | 17 |

*Source: INPUT*

Exhibit VI-155

## Norway

| NK Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 1643 | 13 | 1864 | 2088 | 2339 | 2643 | 2986 | 3350 | 12 |
| - Equipment | 805 | 11 | 895 | 981 | 1076 | 1189 | 1314 | 1474 | 10 |
| - Application Software | 345 | 19 | 410 | 480 | 561 | 661 | 776 | 871 | 16 |
| - System Software | 99 | 13 | 112 | 125 | 140 | 159 | 179 | 201 | 12 |
| - Professional Services | 394 | 13 | 447 | 501 | 561 | 634 | 717 | 804 | 12 |

*Source: INPUT*

Exhibit VI-156

## Portugal

| Esc Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 8200 | 62 | 13250 | 15000 | 16950 | 19300 | 22000 | 24850 | 13 |
| - Equipment | 3770 | 51 | 5702 | 6144 | 6773 | 7142 | 7922 | 8950 | 9 |
| - Application Software | 1803 | 77 | 3183 | 3746 | 4403 | 5212 | 6162 | 6970 | 17 |
| - System Software | 410 | 62 | 663 | 749 | 847 | 965 | 1100 | 1240 | 13 |
| - Professional Services | 2213 | 68 | 3713 | 4346 | 4911 | 5984 | 6822 | 7700 | 16 |

*Source: INPUT*

Exhibit VI-157

## Spain

| Ptas Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 58100 | 17 | 67900 | 74900 | 82900 | 92600 | 103400 | 116200 | 11 |
| - Equipment | 26717 | 14 | 30500 | 32700 | 35200 | 38300 | 41600 | 45400 | 8 |
| - Application Software | 12777 | 20 | 15300 | 17400 | 19800 | 22700 | 26000 | 30000 | 14 |
| - System Software | 2904 | 17 | 3400 | 3750 | 4150 | 4650 | 5200 | 5850 | 11 |
| - Professional Services | 15681 | 19 | 18700 | 21000 | 23700 | 26900 | 30600 | 34900 | 13 |

*Source: INPUT*

Exhibit VI-158

## Sweden

| Sek Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 2450 | 10 | 2700 | 3050 | 3500 | 4000 | 4700 | 5450 | 15 |
| - Equipment | 1055 | 6 | 1120 | 1230 | 1370 | 1540 | 1740 | 1970 | 12 |
| - Application Software | 539 | 12 | 605 | 700 | 820 | 970 | 1155 | 1375 | 18 |
| - System Software | 147 | 5 | 155 | 170 | 185 | 205 | 230 | 260 | 11 |
| - Professional Services | 711 | 13 | 800 | 950 | 1100 | 1300 | 1550 | 1850 | 18 |

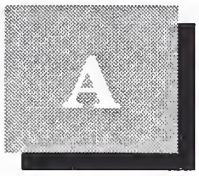
*Source: INPUT*

Exhibit VI-159

## Switzerland

| SF Millions | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub-Sector | 1995 | 95-96 % | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 96-2001 CAGR % |
| Turnkey Systems | 600 | 10 | 660 | 750 | 850 | 980 | 1130 | 1280 | 14 |
| - Equipment | 310 | 9 | 337 | 366 | 409 | 460 | 518 | 590 | 12 |
| - Application Software | 90 | 18 | 106 | 127 | 145 | 176 | 203 | 231 | 17 |
| - System Software | 30 | 10 | 33 | 37 | 43 | 49 | 56 | 64 | 14 |
| - Professional Services | 168 | 10 | 185 | 217 | 256 | 294 | 349 | 397 | 16 |

*Source: INPUT*



# Questionnaire

## A
## User Questionnaire

*Business Integration (BI) revenues include all project related revenues in the area of systems integration, turnkey systems development, and professional services, whether on a time and materials, fixed price, or other basis.*

*However, it specifically excludes all activity undertaken as part of an outsourcing contract, maintenance contract, or a processing services contract. It also excludes software product sales not undertaken as part of wider project activity, for example shrink wrapped software.*

**Questionnaire Respondent Details**

Company Name _____

Respondent Name _____

Job Title _____

Total Annual Turnover _____

(Please state Currency) _____

Total Number of Staff _____

Industry Sector _____

1. Are you planning to undertake large scale systems development or integration projects over the course of the next year ?

   Yes _____

   No _____

   Currently Considering _____

2. What applications do you intend implementing over the course of the next year ?

   _____

   _____

3. Do you intend to use external IT service vendors to assist in these initiatives ?

   Yes _____

   No _____

   Currently Considering _____

4. If "yes" or "currently considering" what type of external service vendor will you use ?

   System Integrator (i.e. IBM, EDS, CSC) _____

   Outsourcer _____

   Systems House (i.e. Logica, CGS) _____

   Management Consultancy _____

   Other (please describe) _____

   _____

5. What are the key objectives of your current, or planned, major project developments ?

_____

_____

6. Over the last year has your proportion of overall IT spend on external development or integration services increased, decreased or remained static ?

Increased _____

Decreased _____

Remained static _____

7. What are the current priorities of your external IT spend ?
*(Please rate on a scale of 1 - 5 where 1 = low priority and 5 = high priority)*

If possible, can you detail what percentage of your overall IT spend is on these external services ?

| | Priority | Proportion of Spend |
|---|---|---|
| Systems Integration | _____ | _____ |
| Application Development | _____ | _____ |
| Outsourcing | _____ | _____ |
| Training & Education | _____ | _____ |
| Consultancy | _____ | _____ |
| Other (please describe) | _____ | |

_____

8. What proportion of your external IT budget is spent on application development/integration projects and infrastructure development/integration projects respectively ?

   Application related _____

   Infrastructure related _____

9. To what extent do you expect the following business pressures to impact on your organisation's IT operation over the next two years ?

   *(Please rate on a scale of 1 - 5 where 1 = not at all and 5 = very strongly)*

   Regulatory Control _____

   Cost Reduction Requirement _____

   Downsizing _____

   Being a potential acquisition target _____

   Increase in product/service development timescales _____

   Need to improve customer service levels _____

   Improved customer/supplier interworking _____

   European Community harmonisation _____

   Continuing high interest rates _____

   Other (please describe) _____

10. To what extent is your IT operation currently focused on the following issues ?

*(Please rate on a scale of 1-5 where 1 = not at all and 5 = very strongly)*

Integrating systems _____

Cutting IT costs _____

Changing IT platforms _____

Creating a new information architecture _____

Improving systems development processes _____

Developing cross-functional information systems _____

Reengineering business processes using IT _____

Developing decentralised systems _____

Educating non-IT staff on IT _____

Establishing IT connectivity to suppliers/customers _____

Using IT for competitive advantage _____

Using leading edge technology _____

Improving IT Human Resources _____

Integrating IT and corporate aims _____

Other (please describe) _____

_____

11. To what extent is your IT spend directed towards the following business functions ?

Customer Service _____

Finance/Accounting _____

Delivery/Logistics _____

Sales _____

Marketing _____

Manufacturing/Operations _____

Inventory _____

Administration/Support Functions _____

Logistics _____

IT Infrastructure _____

Research and Development _____

Other (please describe) _____

---

12. Which of these business processes do you most need implementation or integration assistance with both presently and for planned projects?

*(Please rate on a scale of 1-5 where 1 = not at all and 5 = very strongly)*

| | Presently | Planned |
|---|---|---|
| Customer Service | _____ | _____ |
| Finance/Accounting | _____ | _____ |
| Delivery/Logistics | _____ | _____ |
| Sales | _____ | _____ |
| Marketing | _____ | _____ |
| Manufacturing/Operations | _____ | _____ |
| Inventory | _____ | _____ |
| Administration/Support Functions | _____ | _____ |
| Logistics | _____ | _____ |

IT Infrastructure _____ _____

Research and Development _____ _____

Other (please describe) _____

---

13. Which of the following technologies is your organisation either using, implementing, piloting, researching, or not active in ?

*(Please rate on a scale of 1-5 where 5 = using, 4 = implementing, 3 = piloting, 2 = researching, 1 = not active)*

Client-Server _____

LANs _____

WANs _____

MANs _____

Data Warehousing _____

OLAP (On-line analytical processing) _____

Object-orientated development _____

Video-conferencing _____

CD-Roms _____

Groupware (i.e. Lotus Notes) _____

On-line databases (FT Profile, Dialog) _____

Internet _____

Intranet _____

Java _____

Rapid Application Tools _____

Distributed Databases _____

RISC technology _____

Software reengineering _____

Platform Integration _____

Other (please describe) _____

---

14. Which of these technologies do you most need external service assistance with ?

(Multiple responses accepted)

Client-Server _____

LANs _____

WANs _____

MANs _____

Data Warehousing _____

OLAP (On-line analytical processing) _____

Object-orientated development _____

Video-conferencing _____

CD-Roms _____

Groupware (i.e. Lotus Notes) _____

On-line databases (FT Profile, Dialog) _____

Internet _____

Intranet _____

Java _____

Rapid Application Tools _____

Distributed Databases _____

RISC technology _____

Software reengineering _____

Platform Integration _____

Other (please describe) _____

---

15. Does your IT operation have direct board level representation ?

Yes _____

No _____

Currently considering _____

If "no" is it represented indirectly though the FD or Operations Director ?

Yes _____

No _____

Currently considering _____

16. In large scale systems development/integration projects what form of contract pricing does your organisation favour ?

Fixed price _____

Time & materials _____

Value based _____

Other (please describe) _____

---

17. Do you have requirements which are not currently being met by systems integration/professional services vendors overall ?

Yes _____

No _____

If yes, can you briefly describe them ?

_____

_____

_____

18. (a) Can you list any vendor(s) you consider capable or suitable to assist your organisation with systems development or integration projects?

_____

_____

18. (b) Can you indicate how capable or suitable you consider the following IT services organisations are, or would be, to assist your organisation with future systems development or integration projects ?

*(Please rate on a scale of 1-5 where 1 = no perception and 5 = extremely capable/suitable)*

| Vendor | Perception of Capability |
|---|---|
| EDS | |
| IBM | |
| CSC | |
| Digital | |
| Logica | |
| Cambridge Technology (CTP) | |
| Finsiel | |
| Oracle | |
| Syseca | |
| Unisys | |
| Hewlett Packard | |
| BSO | |
| Getronics | |
| debis | |
| Sun Microsystems | |
| Arancia | |
| Groupe Bull | |
| Syntegra | |
| Sema Group | |
| Olivetti | |
| CGS | |
| Siemens Nixdorf | |
| Andersen Consulting | |
| ICL | |

**Thank you very much for your time and assistance with this questionnaire**

# B
# Vendor Questionnaire

*Business Integration (BI) revenues include all project related revenues in the area of systems integration, turnkey systems development, and professional services, whether on a time and materials, fixed price, or other basis.*

*However, it specifically excludes all activity undertaken as part of an outsourcing contract, maintenance contract, or a processing services contract. It also excludes software product sales not undertaken as part of wider project activity, for example shrink wrapped software.*

**Questionnaire Respondent Details**

Company Name _____

Respondent Name _____

Job Title _____

Total Annual Turnover (Please state Currency) _____

Total Number of Staff _____

1. What were your organisation's overall European BI revenues in 1995? [Please state currency used]

2. What does this represent in terms of percentage growth over 1994 ?

3. What were your European BI professional staff numbers in 1995 ?

4. What does this represent in terms of percentage growth over 1994 ?

5. Have you included subcontractor revenues within your 1995 figure ?

   Yes _____

   No _____

   If yes, what proportion of your BI revenues are accounted for by payments to subcontractors ?

6. Does your 1994 figure include subcontractor revenues ?

Yes _____

No _____

If yes, what proportion ?

_____

_____

7. Which of the following components have you included within your BI revenues ?

| | | | |
|---|---|---|---|
| Equipment | total value | yes | no |
| | commission | yes | no |
| Third-party software products | total value | yes | no |
| | commission | yes | no |
| Services | own organisation | yes | no |
| | subcontractor | yes | no |

8. What was the mix of products and services for your organisation's overall 1995 BI revenues ?

   Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| Component | Proportion of 1995 BI Revenues (%) | Growth Over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| Equipment | | | |
| Packaged system software | | | |
| Packaged application software | | | |
| Management Consulting | | | |
| IS Consulting | | | |
| Software Development | | | |
| Technical Integration/Implementation | | | |
| Education & Training | | | |
| Other | | | |
| Overall | | | |

9. If your organisation was involved in implementing packaged application software, can you detail what these were ?

_____

_____

10. Which companies do you consider your closest competitors ?

_____

_____

11. How do you differentiate your systems integrations/professional services offerings from those of your competitors ?

12. What proportion of your overall BI revenues were delivered on each of the following pricing bases ? Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| Pricing Basis | Proportion of 1995 BI Revenues (%) | Growth Over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| Time and Materials | | | |
| Fixed Price | | | |
| Value Based | | | |
| A combination of the above | | | |

13. Where contracts included an element of value based pricing, what proportion did this represent of the overall contract ?

14. For what proportion of projects delivered on a fixed price or value based pricing basis was your organisation the prime contractor ?

15. How would you describe your pricing strategy (e.g. premium, competitive, low cost etc.)

16. Would you please break down your European BI revenues for 1995 by country ? Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| Country | Proportion of 1995 BI Revenues (%) | Growth Over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| France | | | |
| Germany | | | |
| United Kingdom | | | |
| Italy | | | |
| Sweden | | | |
| Denmark | | | |
| Norway | | | |
| Finland | | | |
| Netherlands | | | |
| Belgium | | | |
| Switzerland | | | |
| Austria | | | |
| Spain | | | |
| Eastern Europe | | | |
| Overall | | | |

17. Would you please also supply similar breakdowns by industry sector ? Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| Industry Sector | Proportion of 1995 BI Revenues (%) | Growth Over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| Banking and Finance | | | |
| Insurance | | | |
| Process Manufacturing | | | |
| Discrete Manufacturing | | | |
| Retail Distribution | | | |
| Wholesale Distribution | | | |
| Utilities | | | |
| Transportation | | | |
| Telecommunications | | | |
| Defence | | | |
| Central Government | | | |
| Local Government | | | |
| Healthcare | | | |
| Business Services | | | |
| Overall | | | |

18. Would you, if possible, please provide proportions (in percentage terms) of your 1995 BI revenues by industry sector in country markets ?

| | Financial Services | Manufacturing | Distribution | Utilities | Transport | Government | Telco |
|---|---|---|---|---|---|---|---|
| France | | | | | | | |
| Germany | | | | | | | |
| United Kingdom | | | | | | | |
| Italy | | | | | | | |
| Sweden | | | | | | | |
| Denmark | | | | | | | |
| Norway | | | | | | | |
| Finland | | | | | | | |
| Netherlands | | | | | | | |
| Belgium | | | | | | | |
| Spain | | | | | | | |
| Switzerland | | | | | | | |
| Austria | | | | | | | |
| Portugal | | | | | | | |
| Greece | | | | | | | |
| Ireland | | | | | | | |
| Eastern Europe | | | | | | | |

19. Would you please provide a breakdown of your 1995 BI services revenues by the nature of the project ? Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| Nature of Project | Proportion of 1994 BI revenues (%) | Growth over 1993 (%) | Projected Growth for 1995 (%) |
|---|---|---|---|
| Networking/Infrastructure led | | | |
| Application/Business Solution led | | | |
| Other | | | |
| Overall | | | |

20. Does your BI offering specialise in any particular applications or technologies ? If so, which ones ?

_____

_____

21. Which of the following technologies is your organisation either using, implementing, piloting, researching, or not active in, on client engagements?

*(Please rate on a scale of 1-5 where 5 = using, 4 = implementing, 3 = piloting, 2 = researching, 1 = not active)*

Client-Server _____

LANs _____

WANs _____

MANs _____

Object-orientated development _____

Video-conferencing _____

CD-Roms _____

Groupware (i.e. Lotus Notes) _____

Workflow _____

Internet/Intranet _____

Rapid Application Tools _____

Distributed Databases _____

RISC technology _____

Software reengineering _____

Digital Switching (i.e. ATM) _____

Electronic Imaging _____

Artificial Intelligence _____

Other (please describe) _____

_____

22. What percentage of your BI projects are performed utilising rapid application development methodologies ?

_____

_____

23. Would you please supply a break down of your 1995 BI services revenues by project value ? [Project value being the total value of the project throughout its life, rather than revenues accrued in 1995] Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| Value of Project | Proportion of 1995 BI revenues (%) | Growth over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| < $500K | | | |
| $500K < $2 million | | | |
| $2m < $10 million | | | |
| > $10 million | | | |
| Overall | | | |

24. What was the average length of 1995 BI contracts by value of project? Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| Value of Project | Average Project Length (Months) | Growth over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| < $500K | | | |
| $500K < $2 million | | | |
| $2m < $10 million | | | |
| > $10 million | | | |
| Overall | | | |

25. What proportion of your 1995 BI revenues were derived from client/server based projects ? Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| | Proportion of 1995 BI revenues (%) | Growth over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| Client/server based | | | |

26. What proportion of your 1995 BI revenues were derived from internet or intranet based projects ? Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| | Proportion of 1995 BI revenues (%) | Growth over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| Internet/intranet based | | | |

27. What proportion of your 1995 BI revenues were derived from business process reengineering led assignments ? Can you also indicate how this has changed in relation to 1994 and how you see it changing in 1996 ?

| | Proportion of 1995 BI revenues (%) | Growth over 1994 (%) | Projected Growth for 1996 (%) |
|---|---|---|---|
| Business process reengineering led | | | |

28. What are the most important trends you see in the systems integration/professional services market currently and over the next three years ?

_____

_____

**Thank you very much for your time and assistance with this questionnaire**

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# Business Integration Defined

## A
## Definitions are in Reality, "Conceptual Models"

Business Integration, as defined by INPUT, is a "meta" term which reflects the increasingly embedded role technology plays in business processes as shown in Exhibit B-1.

From the point of view of tracking vendors' Business Integration revenues, this meta term has three delivery sub-modes, Systems Integration (SI), Turnkey Systems (TK) and Professional Services (PS). Exhibit B-2 illustrates how these sub-modes fit into INPUT's mapping of the overall software and services industry.

The complexity of mapping definitions to the nature of the "real world" is such that it is unrealistic to completely mirror the complexity of supply and demand in the marketplace. This complexity is especially evident in the areas INPUT tracks within its Business Integration Programme. It is necessary, therefore, to regard INPUT's definitions as, to some extent, conceptual models of marketplace activity.

Exhibit B-3 illustrates the primary difference between the turnkey systems delivery mode and the systems integration delivery mode. The major difference between the two delivery modes is one of customisation. SI projects are defined as being more than 50% customised. Clearly, the 50% cut off line is an arbitrary figure.

However, there are **real** differences in the marketplace between these two delivery modes. Exhibits B-4 and B-5 provide more detailed analyses of these differences.

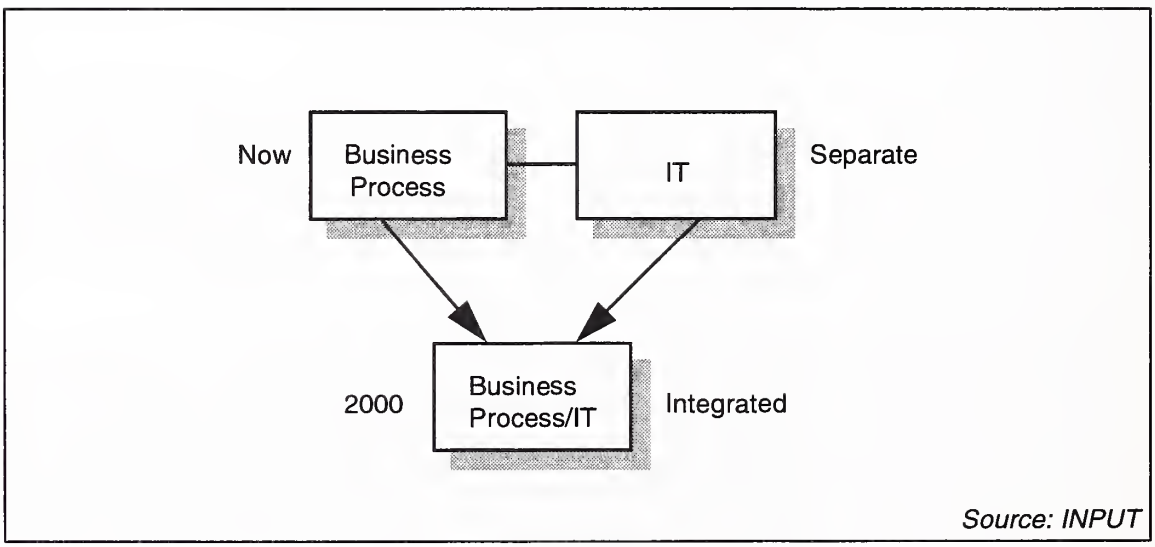
The purpose of presenting the three delivery modes or conceptual modes within the broad term "Business Integration" in this report is to offer vendors the ability to use the analysis in a variety of ways.

Combining the SI and TK delivery modes may be appropriate for certain country markets but inappropriate in others; for example, it is appropriate to combine the delivery modes in German market whereas it is inappropriate to do this in other country markets such as the UK and France and particularly at a European level where this combination would contort a true picture of marketplace competition.

The provision of data and analysis under the meta level allows users of this report the freedom to combine the basic data provided in any way that they see fit and present their own vision of marketplace competition.

Exhibit B-1

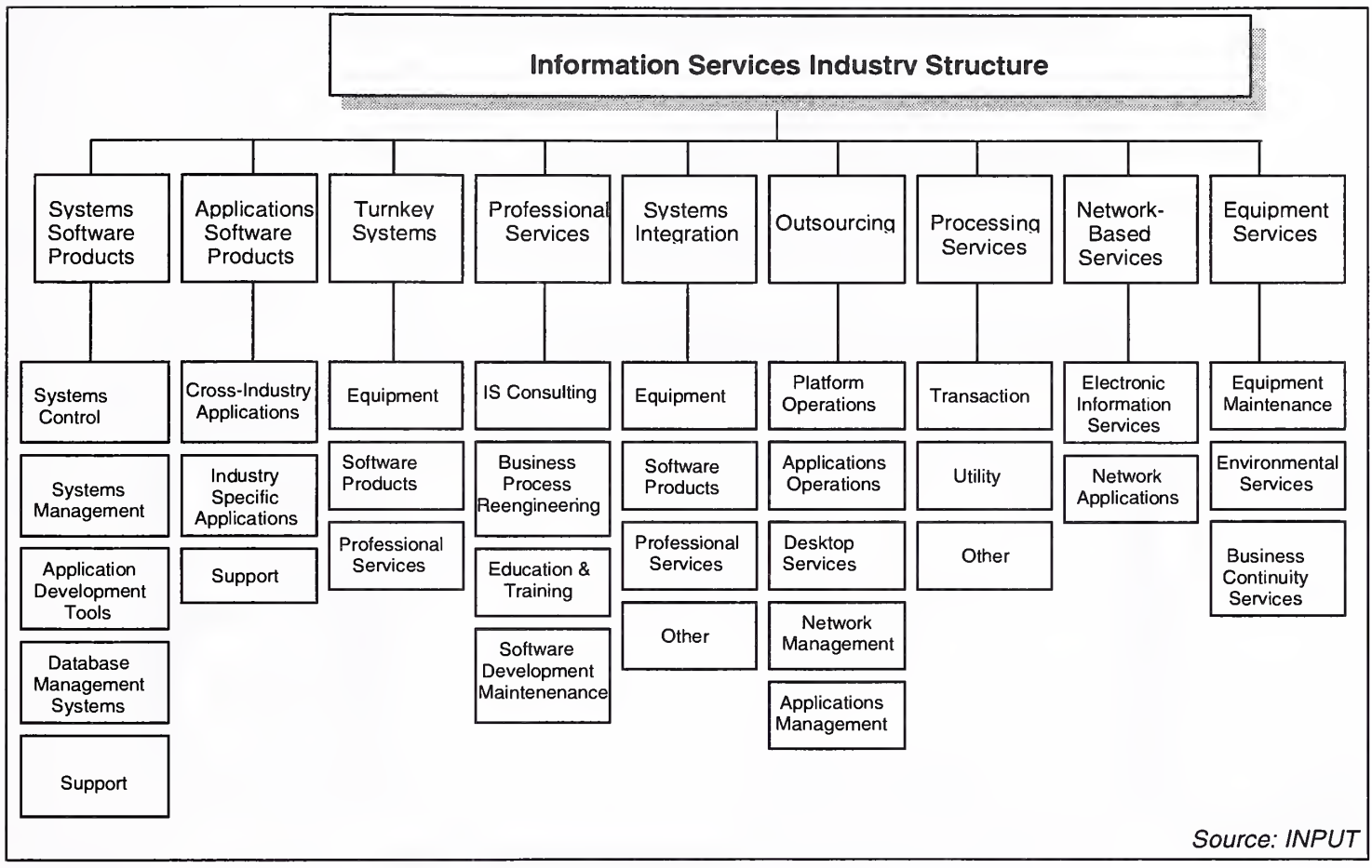
**Integration of IT and Business Processes**




*Source: INPUT*

Exhibit B-2

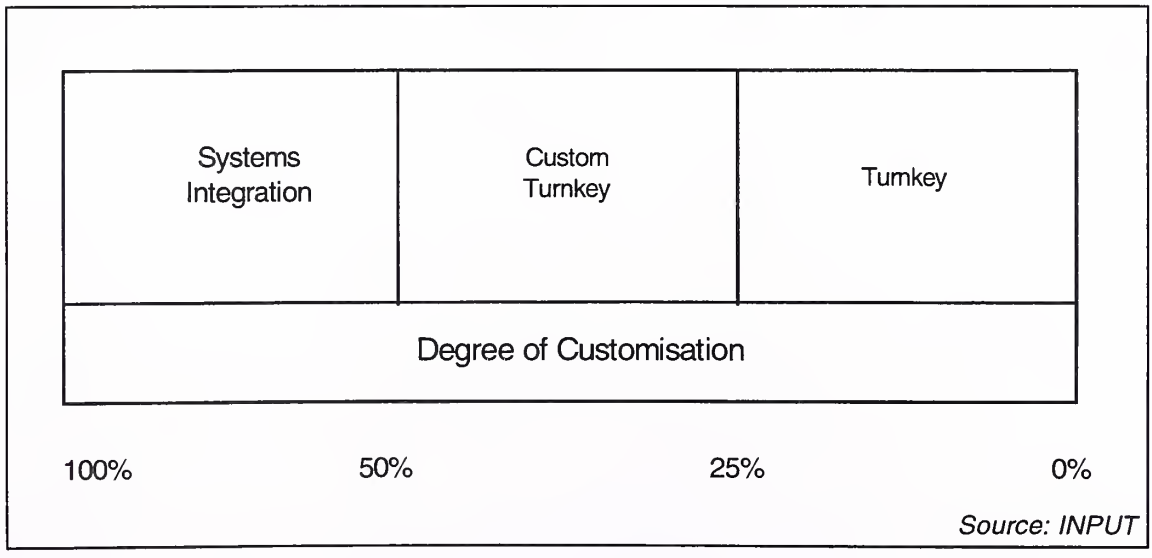
## Information Services Industry Structure




*Source: INPUT*

Exhibit B-3

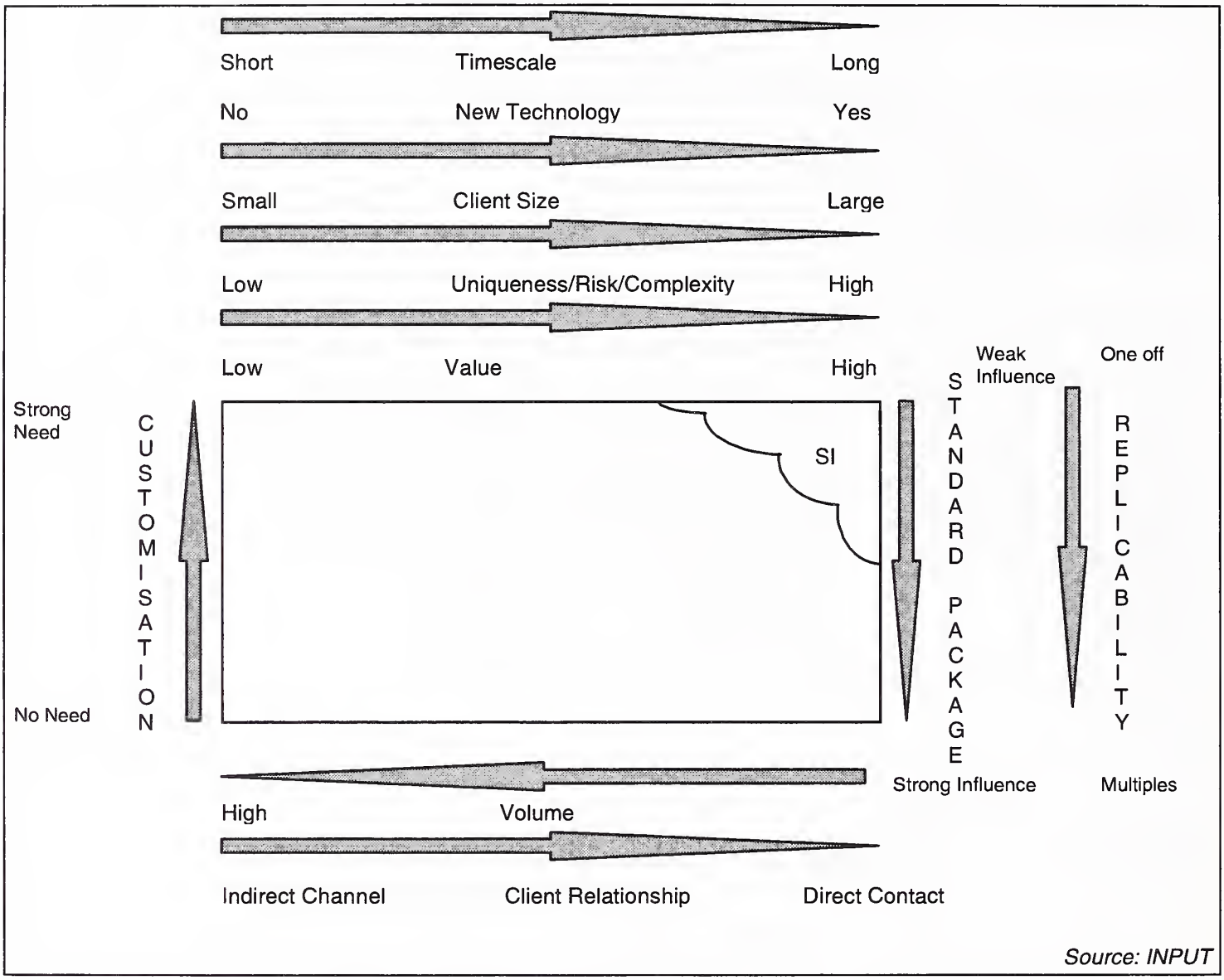
## The Customisation Spectrum




*Source: INPUT*

Exhibit B-4

## Systems Integration and Turnkey Mapping



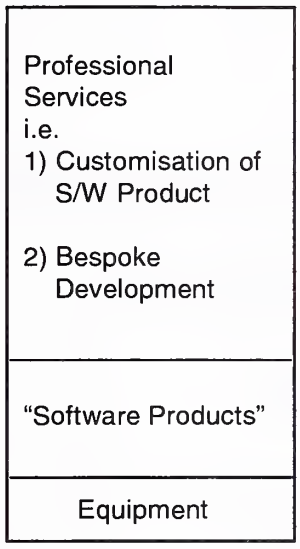

*Source: INPUT*

Exhibit B-5

## Similarity/Differences Between Systems Integration and Turnkey Systems

**Systems Integration**

- Prime Contractor
- Contract = $2m(+)
- Top 10 suppliers have 85% of the $4.6 bn market

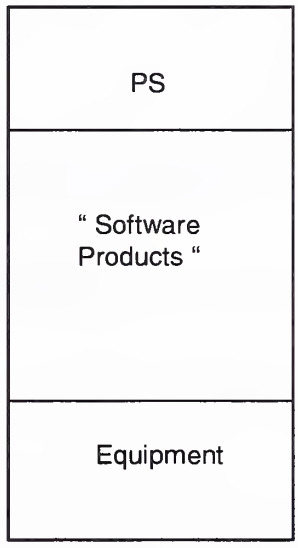



Relative Proportions

Contract Components

**Turnkey**

- Lower Risk
- Fewer subcontractors
- Contract = $55-K (+)
- Top Ten suppliers have 40% of the $11 bn market




Contract = $5-K (+)

Top suppliers have 40% of the $11 bn market

Contract Components

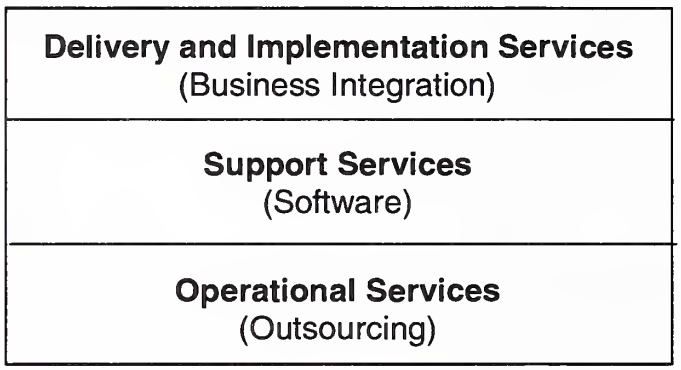
*Source: INPUT*

# B
# Evolving Service Models

As the information services industry continues to develop there is a constant influx of new firms impelled by technological developments on the one hand and entrepreneurial responses to new user needs on the other.

Exhibit B-6

**Fundamental Information Services Industry Structure**




*Source: INPUT*

However, despite the significant level of flux that can be observed in the vendor community, currently characterised by a significant level of merger and acquisition activity, service fundamentals remain immutable and consistent over the long term.

Consequently it is possible to identify at a high level three fundamental areas of service activities from which the total information services business is based. This fundamental structure is shown in Exhibit B-7.

In essence it can be observed that information services firms or major distinct divisions of larger organisations are separately targeting three distinct areas of activity viewed at this meta level:

1. The *delivery channel* through which *complete* systems are introduced and installed into the customer environment. In the early years of the industry this sector was represented largely by professional services (that tended to support direct product sales channels) and turnkey

systems. Today, *systems / business integration* has also become a significant delivery channel.

2. The *support* infrastructure that ensures that the fundamental software and hardware technology carries out the functions assigned - once represented by the hardware maintenance sector - is becoming increasingly concerned with *software product support* and whole system environment support.

3. The *operations* environment, manifested in the early years as the bureau business, is, of course, the focus of much greater interest as *outsourcing* continues to remain one of the key topics and issues in the approach to the 21st century.

Each of these areas has its own particular and enduring characteristics:

- The *delivery* sector is by its very nature event driven and exhibits the need for particular skills, notably project management

- The *support* sector requires the existence of logistics networks and, particularly today, the provision of sophisticated call monitoring systems and rapid response deployment infrastructure

- The *operations* sector has fundamentally been distinguished by the ownership of assets; computer bureaux operate physical and IT intellectual assets to provide remote services while outsourcing vendors are typically more fully integrated into the infrastructure of the client organisation; but both types of vendor do require an operational skills focus.

Recent reorganisations have served to underline the enduring nature of these fundamentally different services business models.

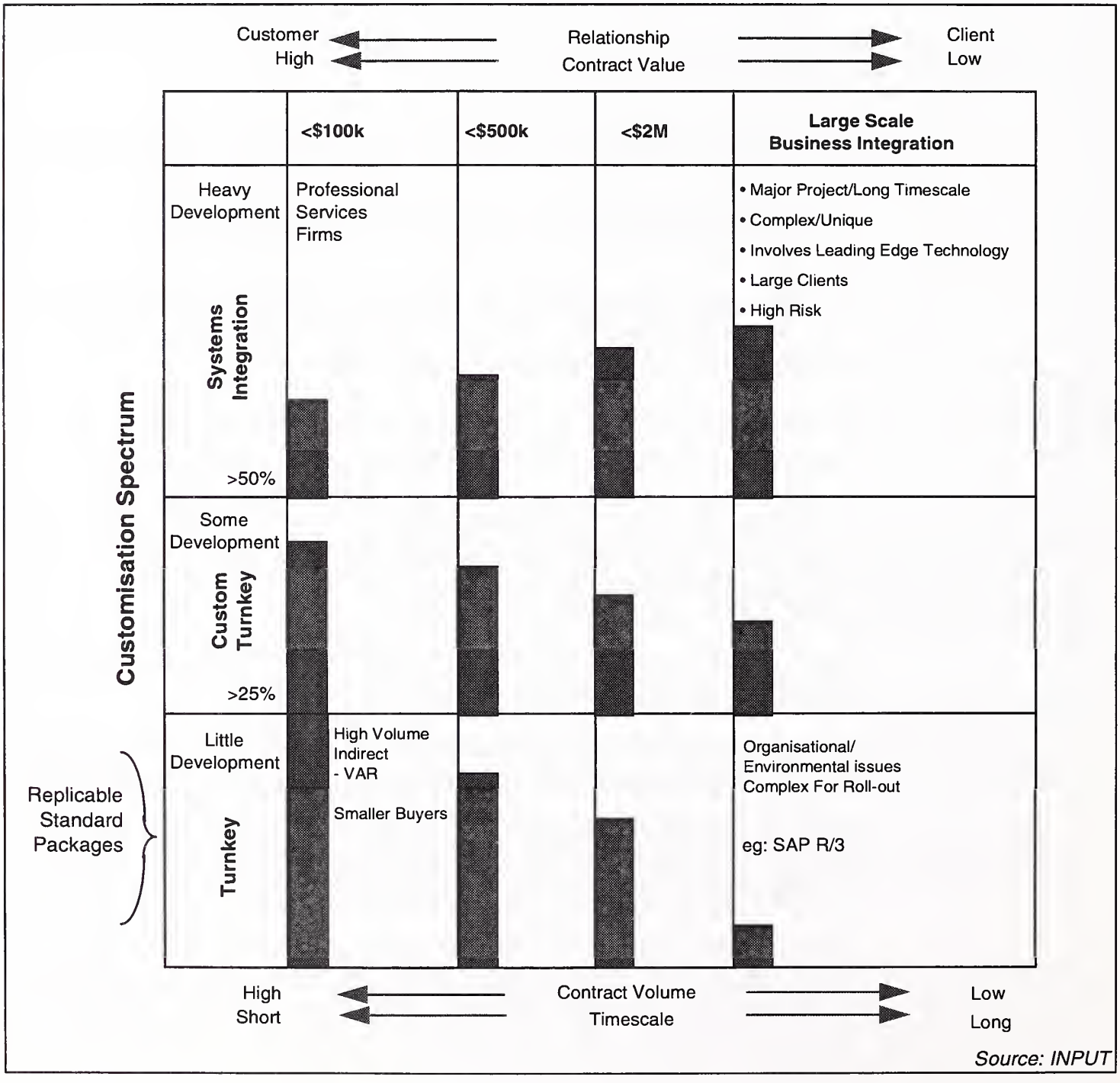
For example, the 1995 Unisys reorganisation created three distinct and separate operating entities. The largest incorporates the hardware and software product division, the other two focus on services - integration (*delivery*) services and global *support* services. Services within Unisys now account for 27% of revenue and are its single largest business area.

ICL's internal structure has adopted this model for some years. ICL Enterprises and Technology plc is essentially ICL's *delivery* mechanism, CFM is its *operations* arm and ICL Sorbus offers system and software *support*.

It needs to be recognised that each of these service meta-levels can be analysed further into important sub-sectors, some of which again have significant differentiation between them with regard to the skill levels and management competence required. This is particularly true of the delivery sector, which resulting from commoditisation of products has been invaded by a variety of new delivery modes necessary for targeting different levels of customer needs and wants.

Exhibit B-7

## Characteristics of the Delivery and Implementation Services Matrix



The character of the delivery services level is further analysed in Exhibit B-7. The bar charts represent the significance of the market in terms of contract potential.

Firms are compelled to address the opportunity represented by specific cells characteristics - the further away from these 'optimised cells' (core competencies) they stray, the weaker their offer.

## C
## Defining the Information Services Business Boundaries

Having established the basic framework of the services part of the industry it is then possible to extend this model to a wider view of the business, incorporating parts of the computer and communications industry.

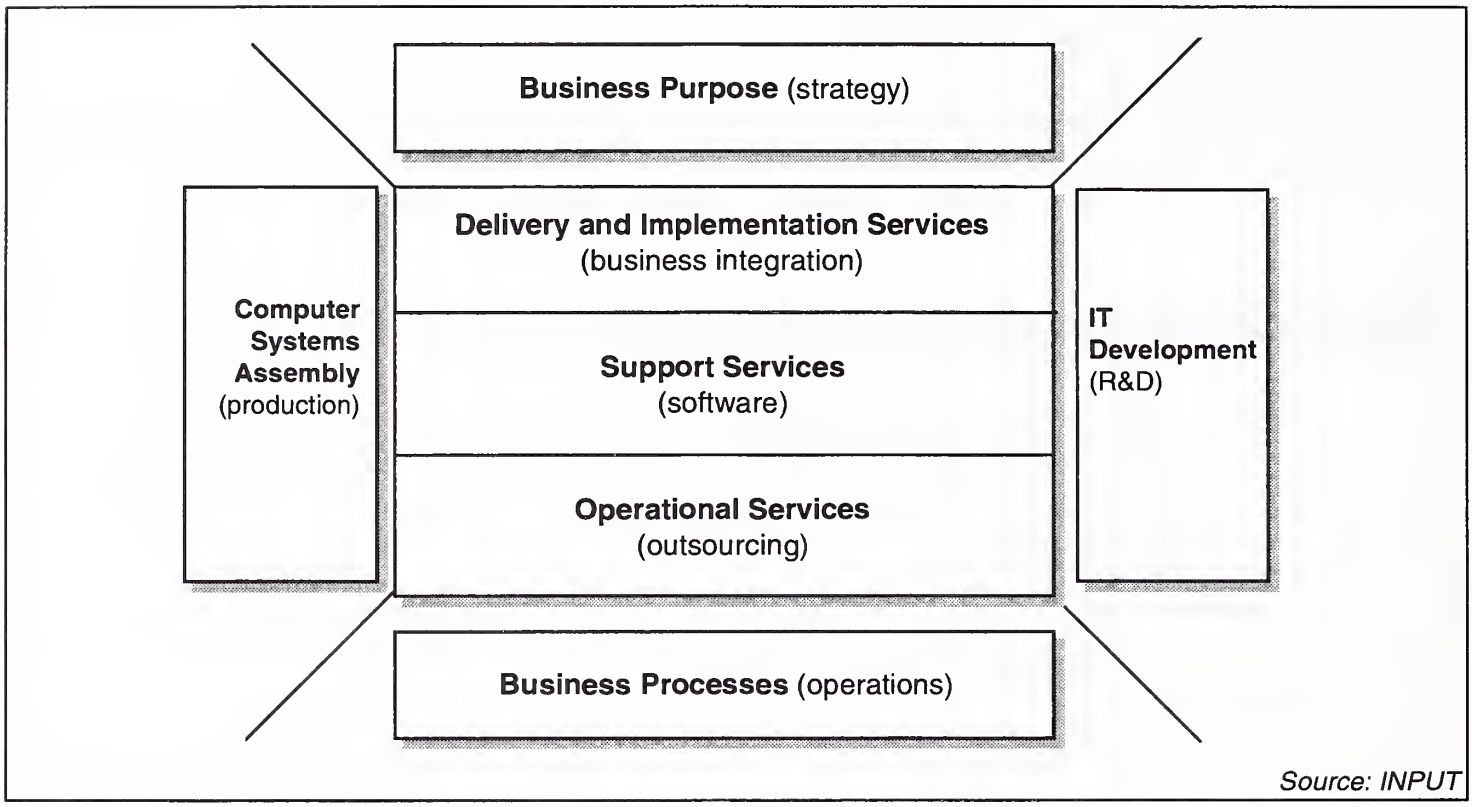
Exhibit B-8 shows the conceptual model for the boundaries of the information services business.

It can be seen that in each case as we move from the defined central area we encroach into domains that are distinctly different and not part of the market for IT services or support functions of any kind.

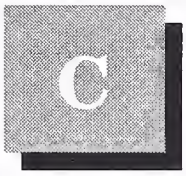
However, over the last three years there has been tremendous growth in offering consultancy for *all* elements of the business, using IT as an enabling factor to improve business processes in the areas of production, R&D, procurement, logistics - and other elements along the value chain. Consultancy and education and training are services not mapped onto this domain since they are pervasive and could relate to any or all sectors.

Exhibit B-8

## Information Services Industry Boundaries




*Source: INPUT*




# Exchange Rates

Exhibit D-1

## US Dollar and ECU Exchange Rates 1996

| Country | Currency | US Dollar | ECU |
|---|---|---|---|
| Europe | $ | 1 | 0.781 |
| France | FF | 4.89 | 6.27 |
| Germany | DM | 1.43 | 1.83 |
| United Kingdom | PS | 0.644 | 0.825 |
| Italy | Lira (K) | 1.59 | 2.03 |
| Sweden | Sek | 6.63 | 8.49 |
| Denmark | DK | 5.54 | 7.10 |
| Norway | NK | 6.32 | 8.09 |
| Finland | FM | 4.34 | 5.33 |
| Netherlands | Dfl | 1.6 | 2.05 |
| Belgium | BF | 29.4 | 37.70 |
| Switzerland | SF | 1.15 | 1.47 |
| Austria | Sch | 10.1 | 12.40 |
| Spain | Ptas | 121 | 155.00 |
| Ireland | IP | 0.624 | 0.800 |
| Portugal | Esc | 149 | 191.00 |
| Greece | Dra | 237 | 291.00 |
| Eastern Europe | $ | 1 | 0.781 |

*Source: Financial Times January 1996*

(Blank)