# Executive Overview

# Major Western European Markets for Information Services Analysis and Forecasts, 1986-1991

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To Our Clients:

This summary is an excerpt from a full research report, Major Western European Markets for Information Services Analysis and Forecasts, 1986-1991, issued as part of INPUT's Software and Services Planning Service - Western Europe (SSPS). A complete description of the program is provided at the end of this Executive Overview.

If you have questions or comments about this report, please call INPUT on 01-493 9335 or on +441 493 9335 if calling from abroad and ask for the Client Hotline.

## REPORT ABSTRACT

This report examines the status and growth potential of the information services industry in the four major Western European country markets of France, Italy, the United Kingdom, and West Germany.

The information services industry is defined by INPUT as comprising four major sectors--processing and network services, software products, professional services, and integrated systems.

Each sector is examined in respect of major industry trends and issues from both a vendor and user standpoint. User expenditures on data processing and user expectations for future development are also examined. Estimates of sector and country market growth are given together with size and growth estimates up to 1991. Factors affecting this growth are described.

The report also discusses the economic and strategic position of the information services industry in Western Europe in comparison with the U.S. market.

## OVERVIEW CONTENTS

## A. 1986 SERVICES INDUSTRY OUTLOOK

- The distinct boundaries that once separated the various sections of the information services industry are increasingly blurring as knowledge of the customers' needs, rather than of a particular delivery mode or area of technical expertise, becomes the key competitive issue.

- Professional services are providing opportunities for vendors across all sectors of the market and are essentially the carrying plasma of the information services industry.

- The continued convergence of computing and telecommunications is driving user requirements for totally integrated business solutions.

- This increased emphasis on large integrated system implementation is driving the trend towards market dominance by a limited number of large corporations.

- It is becoming increasingly important for larger vendors to achieve a critical market position in terms of financial strength, image, and resource in order to meet increasingly complex user demands and to achieve higher user awareness.

EXHIBIT II-1

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## 1986 SERVICES INDUSTRY OUTLOOK

- The Professional Services Opportunity
- Computer/Communications Integration
- Critical Market Position

## B. STRATEGIC DIRECTIONS

- The need to achieve critical market position, spread market development risks, and pool technical and market knowledge in order to meet increasingly complex user requirements is driving continued levels of interest in acquisitions, agreements, and especially strategic partnering arrangements.

- Levels of reported vendor activity and interest in these directions are shown in Exhibit II-2.

- Strategic partnering is an attractive growth strategy for the following reasons:

  - Increasing risk of formal acquisition.

  - Shortening technology and product life cycles.

  - Rapidly changing market structures.

  - Increasing product/market complexity.

  - Need to exploit narrowing market/product opportunity windows.

- The increasing desire of users for 'one-stop shopping' will lead to increased adoption of agreements and partnerships as future growth strategies.

- There is continued interest in international expansion as a growth strategy. To an extent, this reflects market fragmentation and the trend towards specialisation in key applications or vertical market areas. It is therefore vital to minimise risk and leverage investments by expanding across a number of geographical markets.

EXHIBIT II-2

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## STRATEGIC DIRECTIONS

| VENDOR INITIATIVES | ALREADY ACTIVE | HIGH INTEREST |
|---|---|---|
| Geographic Expansion | 40% | 20% |
| Agreements | 35% | 20% |
| Partnerships | 25% | 25% |
| Acquisition Initiatives | 15% | 25% |

## C. $48 BILLION INFORMATION SERVICES MARKET BY 1991

- INPUT estimates that the overall market for information services in the four major country markets of Western Europe (France, Italy, the U.K., and West Germany) exceeded $18 billion in 1986.

- INPUT also estimates that this market will grow at an average annual growth rate (AAGR) of 21% to reach $48 billion by 1991.

- The highest levels of growth will be in the software products and professional services sectors--24% AAGR. Each will increase its absolute share of the market, largely at the expense of processing and network services.

- The integrated systems sector is expected to grow at the slightly lower annual growth rate of 23% to represent nearly a quarter of the market in 1991 (up from 21% in 1985).

- Processing and network services is expected to achieve only 8% annual average growth to 1991. Thus, this sector, representing nearly 25% of the 1985 market, falls to a 13% share of the 1991 market.

- Each of these major industry sectors is discussed in more detail later.

EXHIBIT II-3

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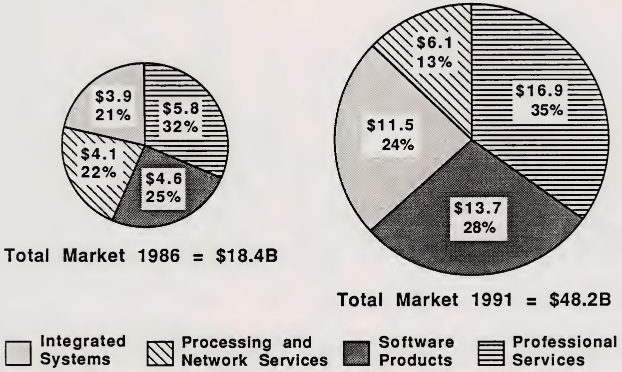
# $48B INFORMATION SERVICES MARKET BY 1991 (Western Europe)



## D. PROCESSING AND NETWORK SERVICES MARKET GROWTH

- INPUT forecasts that the processing and network services sector will achieve an AAGR of 8% to expand revenues from $4.1 billion in 1986 to $6.1 billion by 1991.

- The most significant driving force for growth during this five-year forecast period will be the convergence of computing and telecommunications technology.

- The development of value-added network services (VANS) is providing major new opportunities for services vendors in the increasingly liberalised Western European telecommunications environments.

- Processing facilities management and network facilities management are emerging as important opportunities. The market is being driven by new requirements for increasingly complex service solutions. The provision of professional services and software can far outweigh the processing element in the service.

- Processing and network service vendors must refocus their strategic thrust towards market niches in specialist application areas. In addition, it is important for vendors to develop a total service orientation that augments basic processing services with the provision of specialist applications software and consultancy expertise.

- Trends towards the development of departmental systems are providing total service opportunities as vendors can leverage their knowledge of specialised markets in combination with expertise in the provision of networked systems.

EXHIBIT II-4

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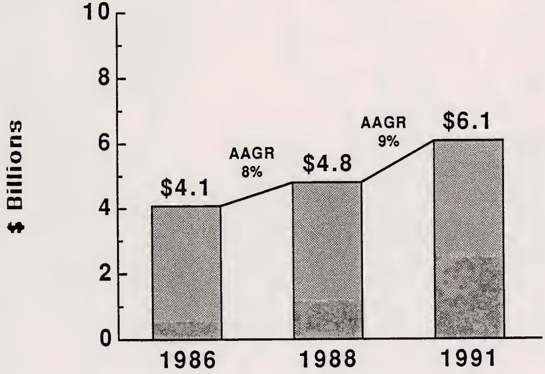
# PROCESSING AND NETWORK SERVICES MARKET GROWTH (Four Major European Countries)



## E. NETWORK SERVICE DIRECTIONS

- The major impact of computer/communications convergence on the information services industry has been long heralded and is well understood.

- Within Western Europe, the particular role of the PTTs and the vast financial resources required to build a major network capability determine the emerging structure of this new sector.

- Fundamentally, this can be viewed at three levels.

- The monopoly or duopoly of basic telcommunications bearer services that exist in Europe determines the top level.

- At the next level exists the possibility to develop major service network capability. Clearly a number of service companies, notably GEISCO and McDonnell Douglas, already offer comprehensive services of this kind.

- Increasing technical capabilities as a result of convergence are making this a key area of focus for large companies like IBM and EDS to offer managed data network services or value-added network services (VANS).

- At the third level, INPUT anticipates a highly fragmented sector in which many organisations, many small and highly specialised, will offer particular services (value-added network services, VANS).

- These organisations are likely to purchase network capacity from the second level vendors and will generate value added on the basis of the data or related information service that they can provide to their clients.

- Examples of these services include electronic data interchange (EDI), on-line data base services, and electronic funds transfer (EFT).

EXHIBIT II-5

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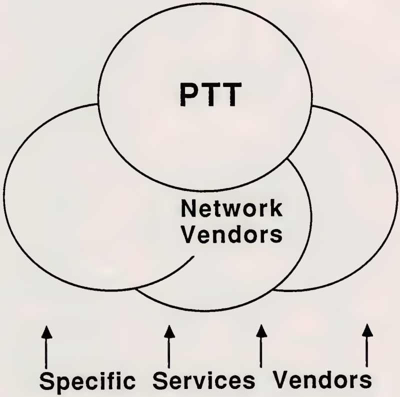
## NETWORK SERVICES DIRECTIONS



## F. SOFTWARE PRODUCTS MARKET GROWTH

- INPUT forecasts a gradual maturation of the software products market and a slowdown in rates of growth in the period up to 1991.

- It is anticipated that the four major European country markets will grow at an annual rate of 26% for the period through to 1988 to reach $7.3 billion. Growth is expected to fall to 23% during the period 1988 through 1991 with the market size expected to reach nearly $14 billion.

- One of the major threats to the growth of the software products market is the decline in prices for low-end products resulting largely from highly competitive 'commodity-like' characteristics in the PC area.

- Consideration has also to be given to the capability of organisations and individuals to continuously absorb new products.

- Nevertheless, marketing clearly superior value-added software products in key application areas will continue to offer major opportunities.

- Major customer bases, hitherto not great absorbers of software application packages (e.g., the VAX base), are likely to represent a sizeable opportunity in this five-year timeframe.

EXHIBIT II-6

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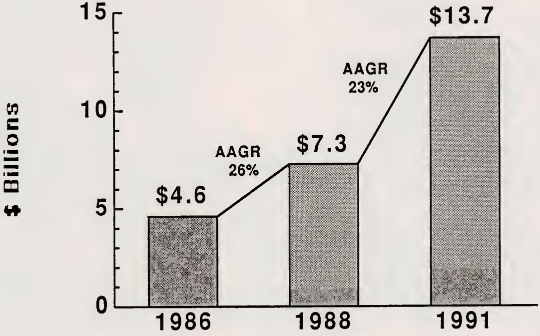
## SOFTWARE PRODUCTS MARKET GROWTH
## (Four Major European Countries)



## G. SOFTWARE VENDOR OUTLOOK

- The marketplace for software products remains a fast changing as well as rapidly growing opportunity.

- Key characteristics are the shortening life cycles for products, the competitive turmoil, the ever present threat in the complex systems area from the professional services approach, and the activity of the equipment manufacturers.

- Important vendor concerns must be to constantly improve or replace products in order to remain 'state of the art' and, perhaps more importantly, keep abreast of rapid changes in market demand.

- As 'low-end' product prices continue to fall greater emphasis will be needed on unique (and valuable) features to products which will be able to justify higher prices in order to cover heavy development and marketing costs.

- Major new opportunities over the next five years are seen in areas like the application of artificial intelligence technology to software products in general.

- An exciting area of opportunity is also seen in the area of productivity tools. The application of artificial intelligence technology to this area will be very significant.

- Increasing specialisation is also observed in the software products market. Vendors will need to provide products targetted at specialist markets and to demonstrate their knowledge of the relevant business area when marketing and supporting them.

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## SOFTWARE VENDOR OUTLOOK

- Increasing Competition
- Life-Cycle Contraction
- Professional Services Threat
- Opportunities
  - Artificial Intelligence
  - Productivity Tools
  - Specialist Markets

## H. PROFESSIONAL SERVICES MARKET GROWTH

- The growth rate for the professional services sector is currently assessed by INPUT at around 25% per year, leading to an annual market of $9 billion in the four major countries of Western Europe by 1988.

- In the longer term, uncertainties concerned with the availability of skilled staff and the speed with which productivity development tools can be utilised are likely to represent supply-side constraints.

- On the demand side, there are many development opportunities as users increasingly seek total service solutions.

- Education and training has emerged as a major growth opportunity due to:

  - Rapid changes in technology.

  - Growing complexity of software development tools.

  - Increased penetration of microcomputers amongst inexperienced end users.

- The provision of consultancy services is growing in importance as users seek to implement company-wide systems strategies.

- Specialisation is the key to success for system implementation owing to the proliferation of increasingly complex technology and the need to demonstrate specific knowledge of target sectors.

EXHIBIT II-8

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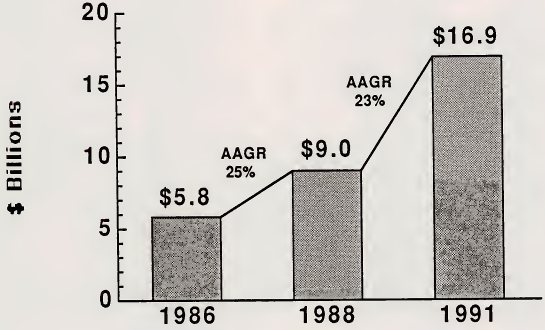
## PROFESSIONAL SERVICES MARKET GROWTH
## (Four Major European Countries)



## I. PROFESSIONAL SERVICES DRIVERS

- The trend towards the use of information systems as a key strategic weapon is driving the demand for professional services.

- The increased demand for large and complex systems, particularly with dependency on telecommunications networks, leads to the need for contractors to take on overall responsibility for systems integration projects.

- A key trend here is the move towards prime contracting and the emergence of systems integrators.

- Factors stimulating the systems integration marketplace include:

    - Scarcity of skills by one vendor for developing a total complex automated solution.

    - Proliferation of technological options which produce buyer challenges and system compatibility changes.

- Consultancy services are being utilised in areas where rapid technological development leads to a scarcity of in-house skills. Telecommunications and expert systems are good examples of this.

- The 'Big 8' accounting firms have increased the market for professional services and enhanced levels of professionalism in the sector. However, there is still a cloud over the ethical issue of impartiality in relation to their auditing activities.

EXHIBIT II-9

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## PROFESSIONAL SERVICES DRIVERS

- Information Systems - A Competitive Weapon
- Systems Complexity
- Prime Contracting
- Skill Shortage
- The 'Big 8'

## J. INTEGRATED SYSTEMS MARKET GROWTH

- The integrated systems market encompasses three main areas--CAD/CAM, small- to medium-sized business systems, and specialist vertical or niche market systems. Vendors typically provide a combination of hardware, software, and services.

- Currently, a relatively high rate of growth (25% AAGR) is being experienced in Europe. INPUT forecasts that the market will reach $11.5 billion in 1991, having reached $6.1 billion by 1988 from its level of $3.9 billion in 1986.

- The major forces driving this growth are:

  - Increased awareness of the use of automation as a major competitive weapon. This attitude is fuelling demand for rapid implementation which favours "ready-to-go" integrated systems solutions.

  - The increasing appeal of a "one-stop" service, which relieves confused buyers of a time-consuming, complex, and error-prone approach to hardware/software evaluation and selection.

  - The continuously improving price/performance of both mini and microcomputers which opens up new markets by lowering the entry threshold of integrated system solutions.

  - The healthy growth of the software products marketplace. Integrated system vendors will have a constantly expanding menu of innovative software solutions available for bundling into a total integrated system.

EXHIBIT II-10

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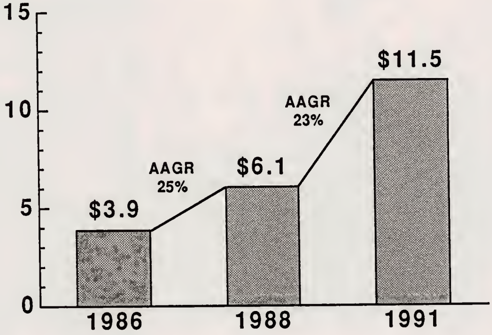
## INTEGRATED SYSTEMS MARKET GROWTH
## (Four Major European Countries)



## K. INTEGRATED SYSTEMS CHALLENGES

- Increasing specialisation of user needs has allowed vendors to leverage expertise in specific market segments. It is important that vendors provide all the value-added service factors for specialist markets.

- The provision of implementation consultancy and support is a key success factor. Specifically, it is suggested that vendors evaluate undertaking more extensive pre-installation systems consulting, education of users in the management principles underlying the architecture of the application, and innovative hardware/software problem reconciliation methods (e.g., remote diagnostics and on-line access to fault diagnostics data bases).

- Sophisticated software engineering is a major challenge, and it is suggested that vendors focus on multiuser applications and the customisation of standard modules of software in order to enhance development productivity and maximise market penetration.

- The CAD/CAM market has undergone a phase of mild 'shake-out' as vendors have adjusted to slowing growth rates, falling unit prices, and increasing implementation of CAD systems on standard hardware (especially micro-computers) rather than expensive proprietary systems. It is suggested that vendors concentrate on growing opportunities in software publishing and the provision of value added via comprehensive support, consultancy, and training services.

EXHIBIT II-11

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## INTEGRATED SYSTEMS CHALLENGES

- Specialisation Is the Key
- Professional Services Orientation
- Software Engineering
- CAD/CAM

## MAJOR WESTERN EUROPEAN MARKETS FOR INFORMATION SERVICES
## ANALYSIS AND FORECASTS, 1986-1991

### CONTENTS

## MAJOR WESTERN EUROPEAN MARKETS FOR INFORMATION SERVICES
## ANALYSIS AND FORECASTS, 1986-1991

### EXHIBITS

# SOFTWARE AND SERVICES PLANNING SERVICE WESTERN EUROPE (SSPS)

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- Successful marketing strategies.
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- "What is the size and future growth rate of the processing services market in the Benelux countries?"
- "What are the current market shares and market share projections in 1990 for the top five turnkey systems vendors in Italy and France?"
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INPUT provides planning information, analysis, and recommendations to managers and executives in the information processing industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions. Continuing services are provided to users and vendors of computers, communications, and office products and services.

The company carries out continuous and in-depth research. Working closely with clients on important issues, INPUT's staff members analyze and interpret the research data, then develop recommendations and innovative ideas to meet clients' needs. Clients receive reports, presentations, access to data on which analyses are based, and continuous consulting.

Many of INPUT's professional staff members have nearly 20 years' experience in their areas of specialization. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

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