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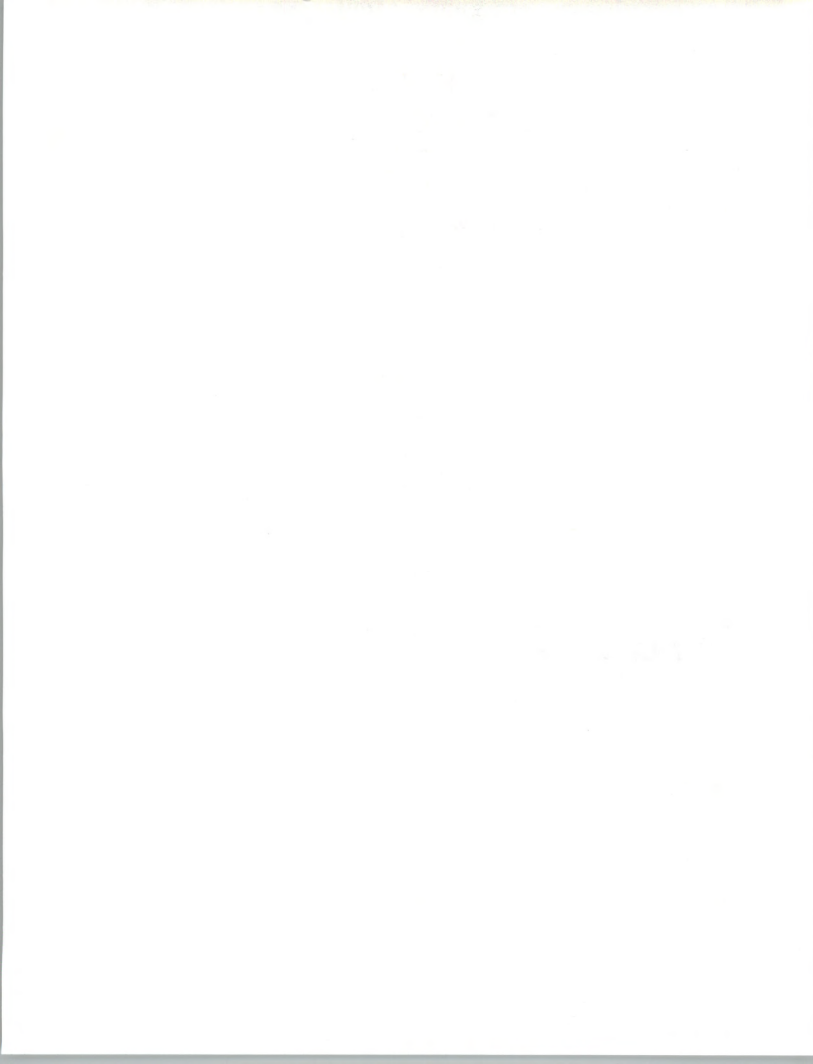
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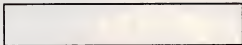
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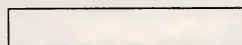
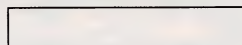
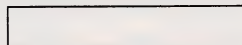
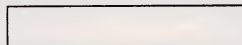
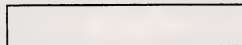
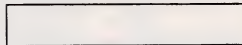
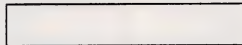
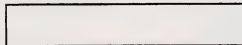
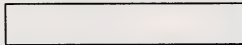
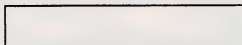
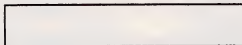
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Research Summary



EDI Intertrends Western Europe

1989-1994

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About INPUT

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.

Continuous-information advisory services, proprietary research/consulting, merger/acquisition assistance, and multient studies are provided to users and vendors of information systems and services (software, processing services, turnkey systems, systems integration, professional services, communications, systems/software maintenance and support).

Many of INPUT's professional staff members have more than 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.

Formed as a privately held corporation in 1974, INPUT has become a leading international research and consulting firm. Clients include more than 100 of the world's largest and most technically advanced companies.

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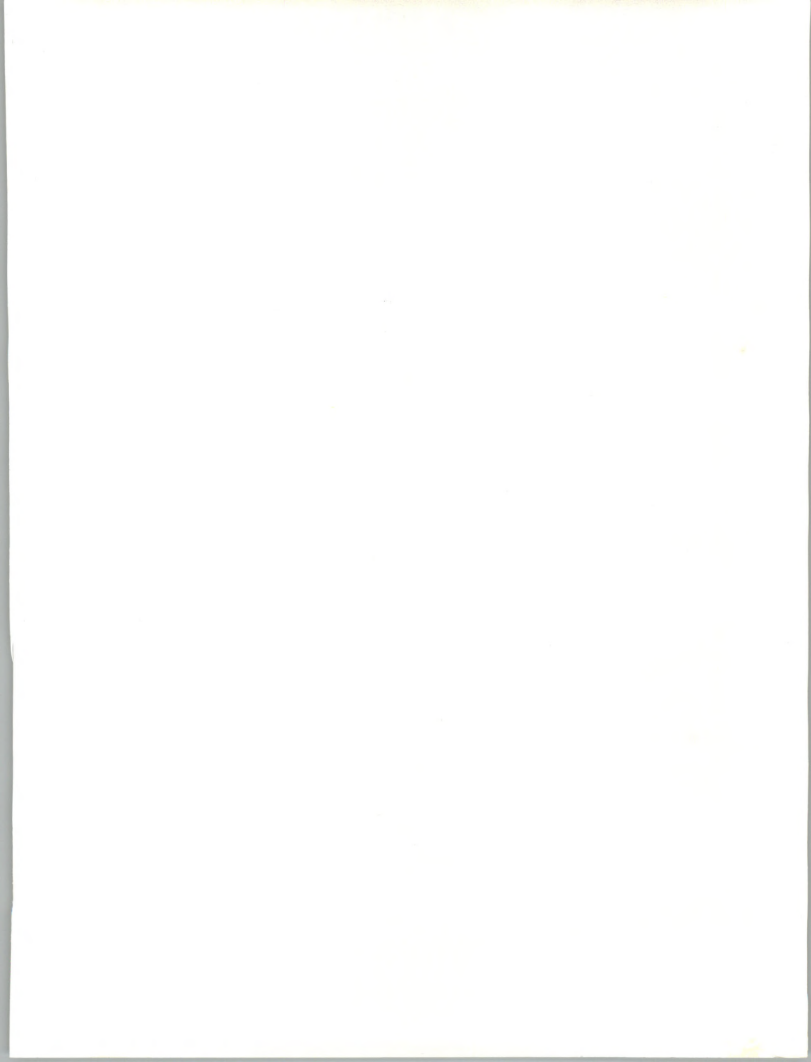


To Our Clients:

This Research Summary is a précis of a full research report, *EDI Intertrends—Western Europe, 1989-1994*, issued as part of INPUT's International EDI Programme.

To Order the Report:

Complete the enclosed order form and mail or fax it to any INPUT office listed on the back of this document.

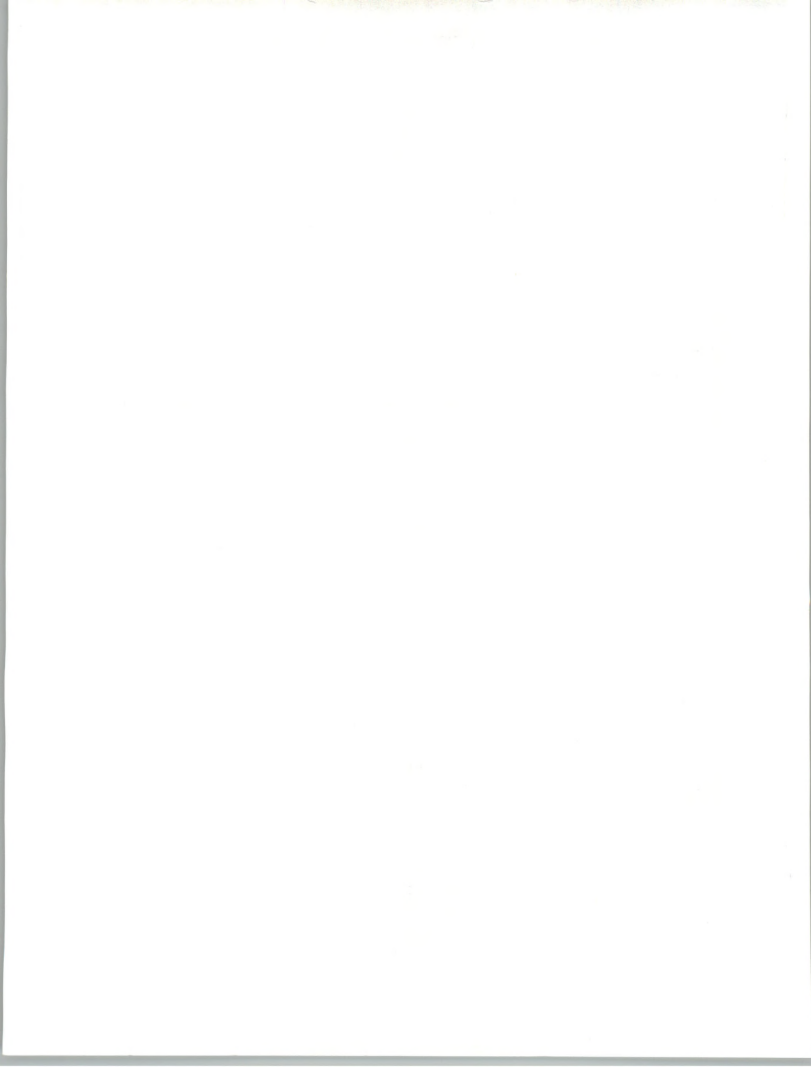


Abstract

Electronic Data Interchange (EDI) is the electronic transfer of structured business data between computer applications in different organisations. EDI is process-to-process communication in machine-readable formats that overcomes organisational difficulties in computers, protocols and data formats.

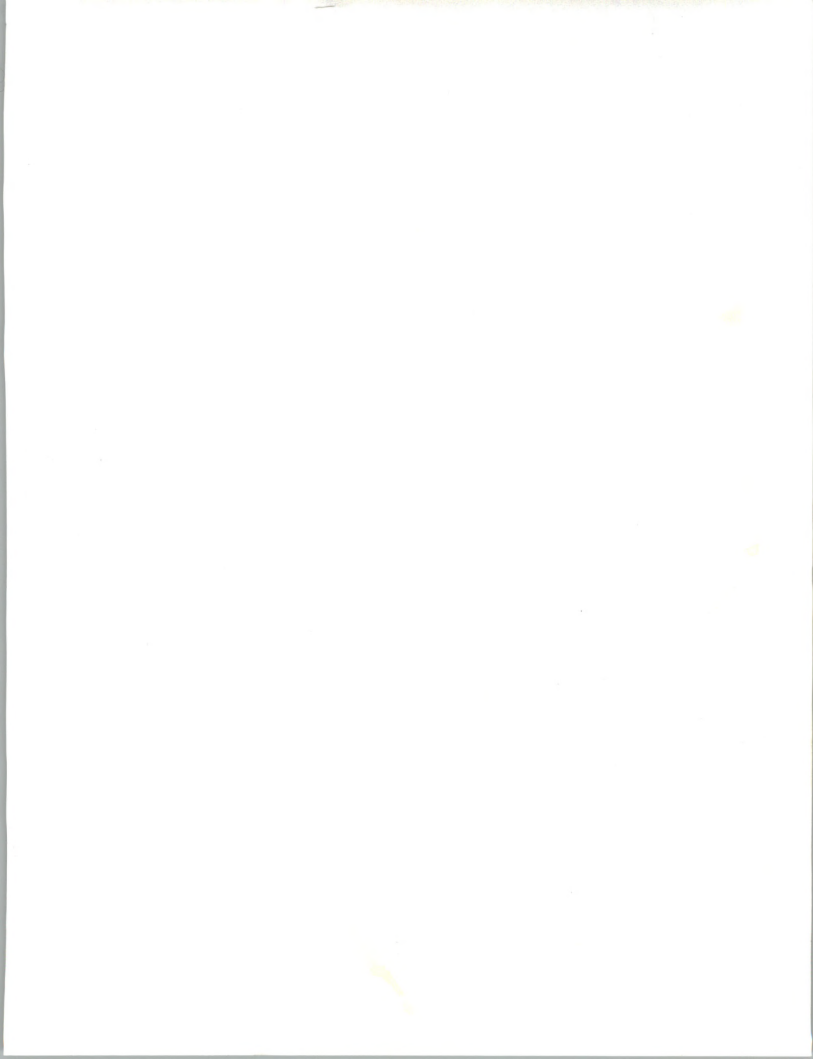
EDI is emerging as an area of increased focus, and this report examines the development of this strategically important and fast-growing market opportunity in Western Europe. The report provides an assessment of the current size of the market, the strategies employed by the leading Network Services' vendors, EDI software market directions and the growing role of professional services organisations.

The market is analysed by individual country with forecasts through to 1994, including an assessment of the major development forces that are driving market growth. The report also includes survey-based findings on EDI user managers' concerns regarding standards, integration, vendor viability and the importance of EDI in the development of the single European market.



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Research Summary

This Research Summary provides a précis of the content of INPUT's *EDI Intertrends—Western Europe, 1989-1994* report, part of INPUT's international EDI programme.

A

Introduction

INPUT's *EDI Intertrends—Western Europe, 1989-1994* report, produced as part of INPUT's international Electronic Data Interchange programme, examines the Western European EDI market, providing a comprehensive investigation and analysis of developments in this strategically important area. The report contains:

- Market analyses of the individual country markets of France, West Germany, UK, Italy, and Spain, as well as the Benelux and Scandinavian markets, with forecasts through to 1994.
- An assessment of the major development forces that are driving market growth.
- The strategies employed by the leading network services and software vendors.
- Analysis of the role of professional services in the EDI market.
- Country rankings of the leading vendors in the EDI Software and Services market based on user expenditures.
- Survey-based findings on EDI managers' concerns regarding key issues such as network and data security, standards, integration and vendor viability.
- A commentary on the key EDI issues as Europe moves towards the single European market.



EDI Intertrends—Western Europe, 1989-1994 is the definitive report for organisations interested in or involved in EDI.

EXHIBIT A**REASONS FOR USING EDI**

- Reduction in costs
- Fewer errors
- Faster turnaround
- Improved customer service
- Competitive tool
- Increased productivity
- Improved management control

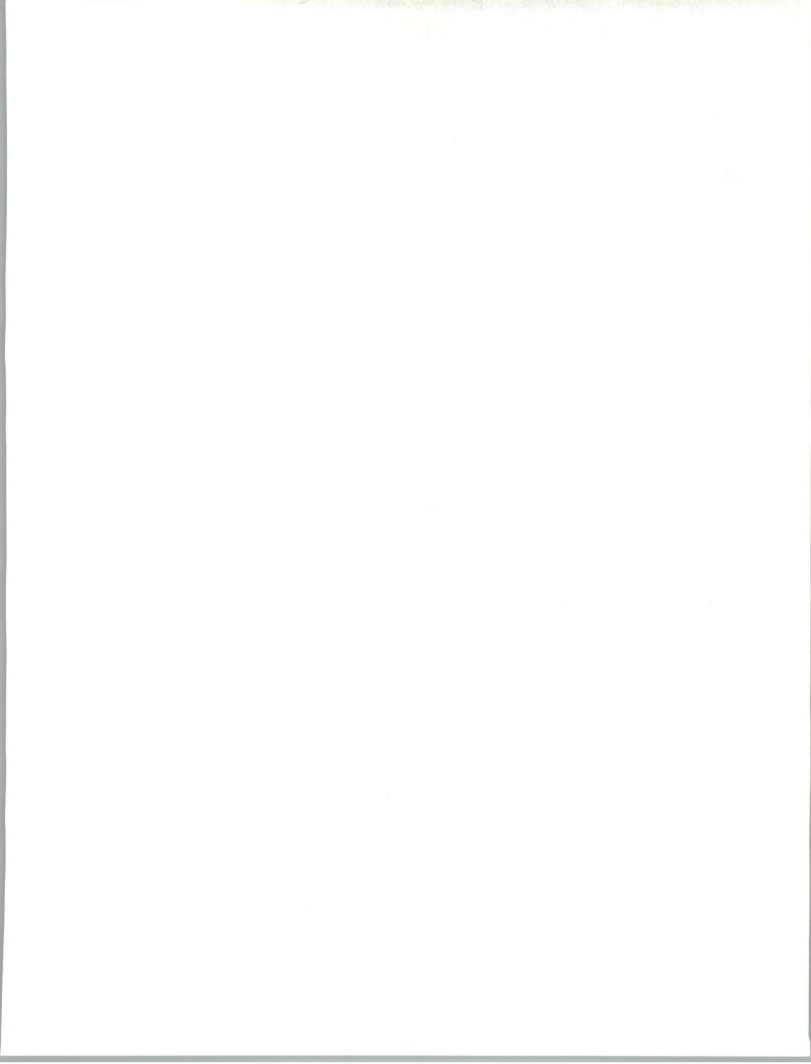
B**Market Opportunities**

INPUT's *EDI Intertrends—Western Europe, 1989-1994* report sizes the current EDI market around \$30 million in 1989, forecasting that it will grow at a compound annual growth rate in excess of 50% over the five-year forecast period.

INPUT's forecast includes third-party EDI network services, software and professional services, but excludes consumer applications such as:

- electronic shopping
- electronic banking
- automated teller networks
- point-of-sale terminals
- airline reservation systems
- credit authorisation systems
- "captive" networks

Whilst these systems do use electronic "forms" to transfer information, the applications generally use specialised terminal devices to communicate with dedicated computers and are not computer-to-computer, application-to-application implementations; that use proprietary data formats rather than public standards.

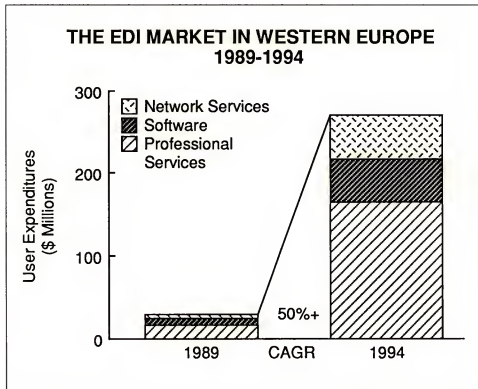


The report recognises that the UK is the only market that has reached any level of maturity, but highlights how the opening up of private, internal EDI networks, coupled with the realisation of a large number of pilot projects in Western Europe, will result in the major economies of France and West Germany showing higher rates of growth than the UK during the forecast period.

The report also looks at the development of EDI within and across industry sectors and at the small number of organisations that have fully integrated EDI into their business philosophies and external operations and are moving towards volume implementation covering a growing number of documents and messages in the trading cycle.

The report looks at the corporate requirement to streamline information flow, which is making the adoption of EDI such an important strategic application in the context of the single European market.

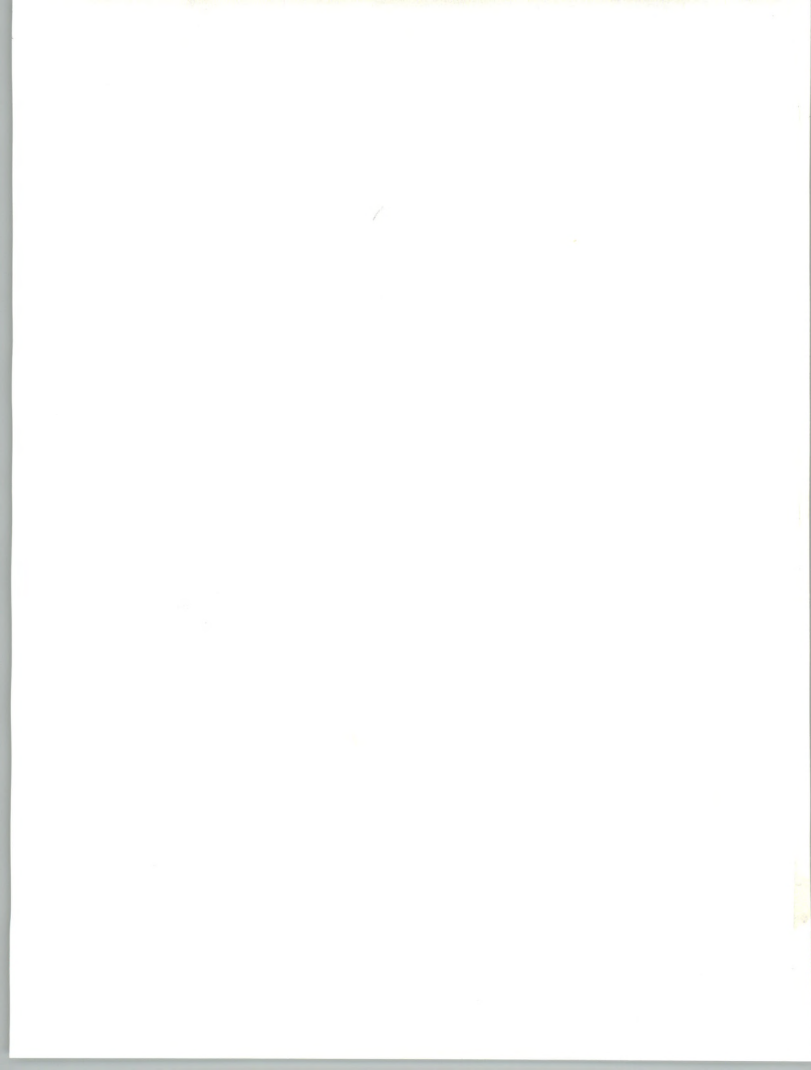
EXHIBIT B



C

Standards & Industry Associations

The report looks at the evolving role of standards in the EDI market. EDI involves the transmission of data in one of several standard formats, with EDIFACT (Electronic Data Interchange For Administration, Commerce and Transport) emerging as the most likely standard for international trade.

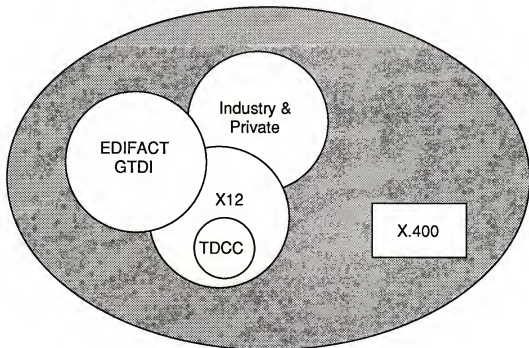


Whilst conceding that the widespread use of EDIFACT will enable communication across industry lines and will create a market for additional interchange applications, INPUT notes that the majority of users are still at an early stage with EDI and argues that industry-specific or national standards (e.g., ODETTE and TRADACOMS) will continue to play a vital role in the development of the market. INPUT concludes that multiple standards will not represent a significant impediment to the development of the EDI market: standards supporting international trade are increasingly available and X.400 is working to overcome incompatible systems and support internetwork communications.

The report also looks at the role of industry and trade associations, usually comprising competitors who are working together to define the messages required, using whatever is available internationally with regard to syntax and message standards. INPUT assesses the importance of development groups, which mirror the different sectors of the industry, in stimulating EDI growth.

EXHIBIT C

EDI STANDARDS RELATIONSHIPS



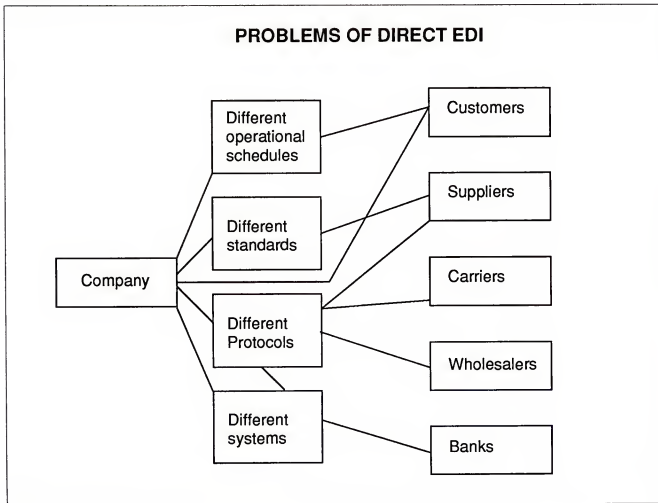


D**Vendor Opportunities**

The report highlights the varieties of EDI: Point-to-point, directly between trading partners; or the most widely used option, by means of third-parties. INPUT reviews the role of these third-party firms, which serve as collection and switching services, and which perform store-and-forward tasks as well as other processing services.

The report also considers the new lines of business that EDI is providing for software vendors and professional services firms: The integration of EDI with other applications is a key issue, as is the implementation of EDI in several functional areas in order to incorporate the application into the overall strategy of an organisation. INPUT concludes that it will be users who will ultimately benefit from this intense industry competition through a variety of choices in competitive pricing and improved features. Profitability for vendors, however, remains elusive and is likely to remain so for some time.

EXHIBIT D





E

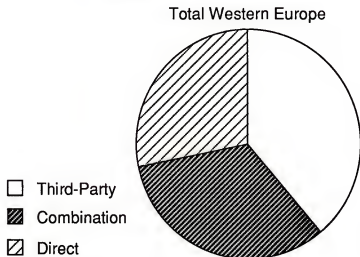
Country Markets

The report looks at how telecommunications deregulation has helped to maintain the buoyancy of the EDI market, in particular the UK, where the market benefitted from the liberalisation of service provision in the early 80s with the privatisation of British Telecom and the introduction of competition in the form of Mercury.

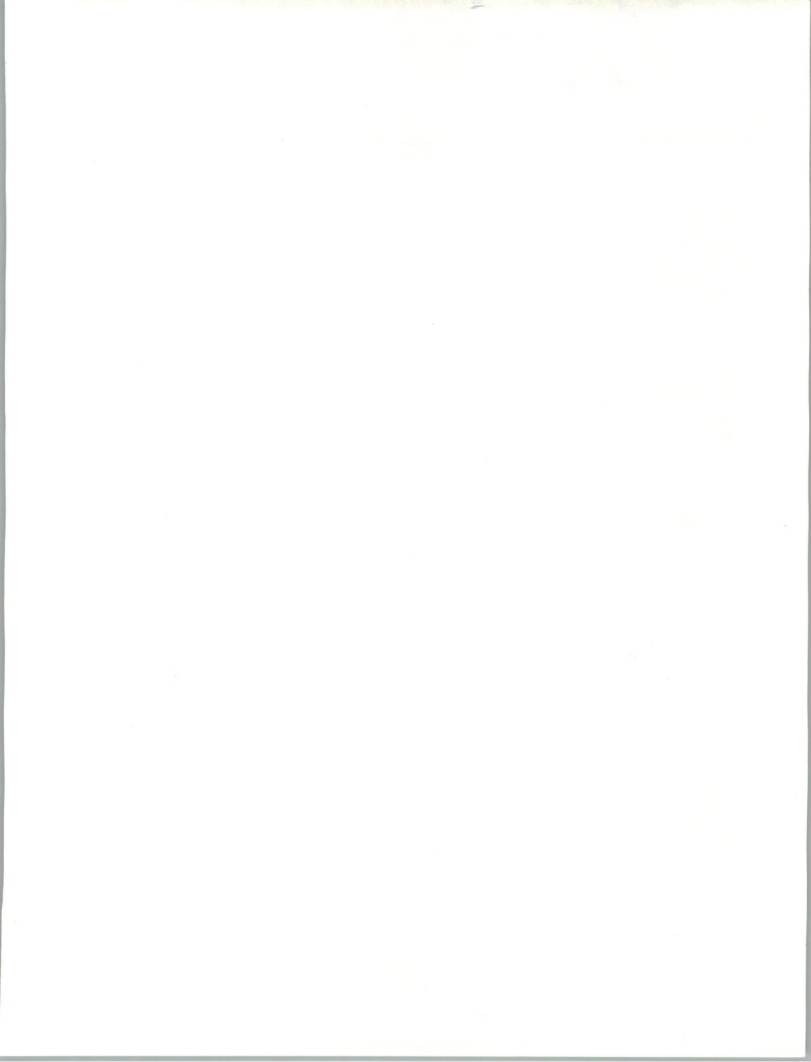
Against this, the UK has seen the arrival of a number of multinational players attracted by the rewritten rules and the promise of profitable investment as traffic can be diverted from the national networks onto their own systems.

The report shows how the stages of EDI development vary markedly across Western Europe. INPUT notes how a higher percentage of EDI communications in mainland Europe is being carried out via direct links between trading partners rather than the UK clearinghouse approach.

EXHIBIT E

**THIRD-PARTY VERSUS DIRECT EDI
(Western Europe)**

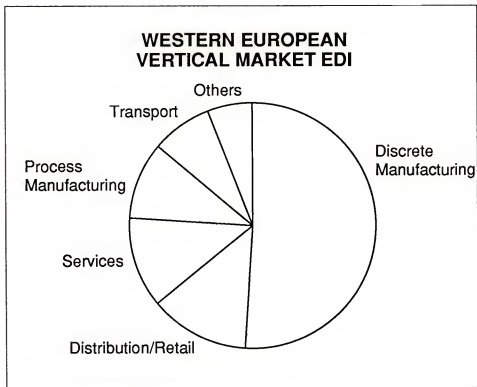
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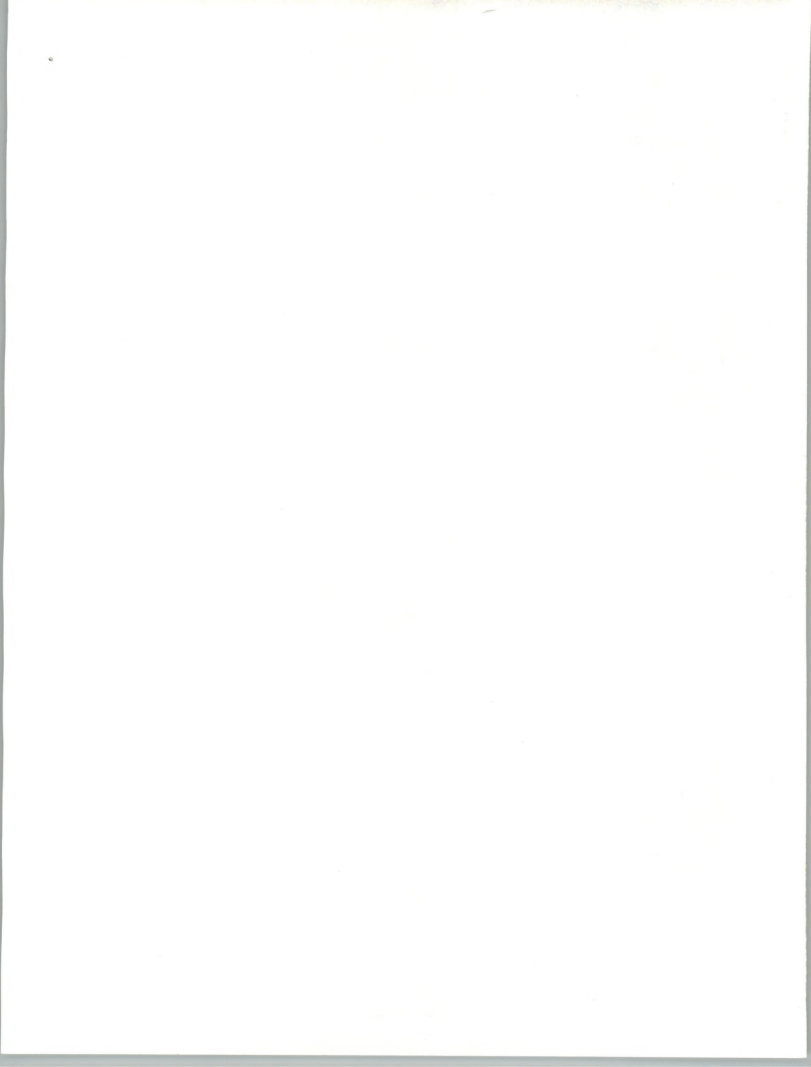


F**Vertical Sectors**

The report provides a vertical market sector analysis and forecast, which shows the manufacturing sector to be the largest EDI user, reflecting the benefits of EDI in enabling just-in-time manufacturing techniques and consequent improvements in inventory levels.

The retail and distribution sectors are also key markets for EDI, reflecting the reach of the large third-party networks and the drive towards improving pan-European communications, as evidenced by the number of projects being carried out in the areas of transport, customs and distribution throughout Europe. Additionally, INPUT anticipates that the banking and financial sectors will show high rates of growth over the forecast period.

EXHIBIT F



G

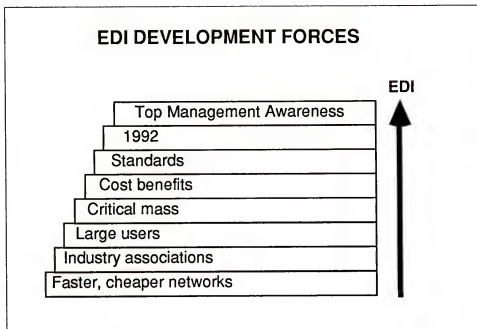
Development Forces

Finally, INPUT considers the development forces—the “intertrends”—that are driving EDI. The deregulation of the public telecommunications networks in Western Europe; the lack of technological distinction between data processing, office automation and telecommunications; and the growing commitment to the network as a framework for conducting business are all leading to the existence of faster, cheaper networks.

The report highlights the problems associated with the development of a critical mass of trading partners, where user organisations have been forced by suppliers to adopt EDI without being adequately prepared for the changed business practices required for the integration of EDI into the company's operations.

INPUT concludes that where office automation failed to fulfill the hype surrounding its introduction and had a minimal effect on an organisation's infrastructure, EDI—because it imports external influences and, more crucially, because it cuts across internal functions and departments—will have a much greater influence in fundamentally altering the way companies conduct business.

EXHIBIT G



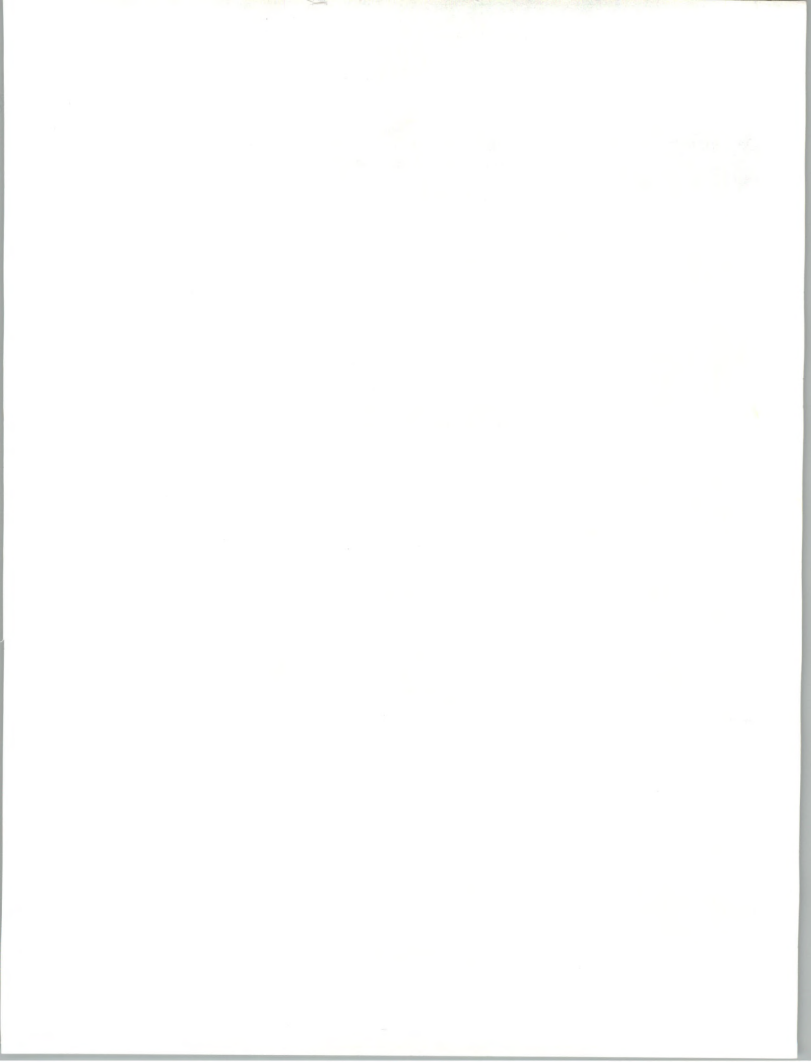


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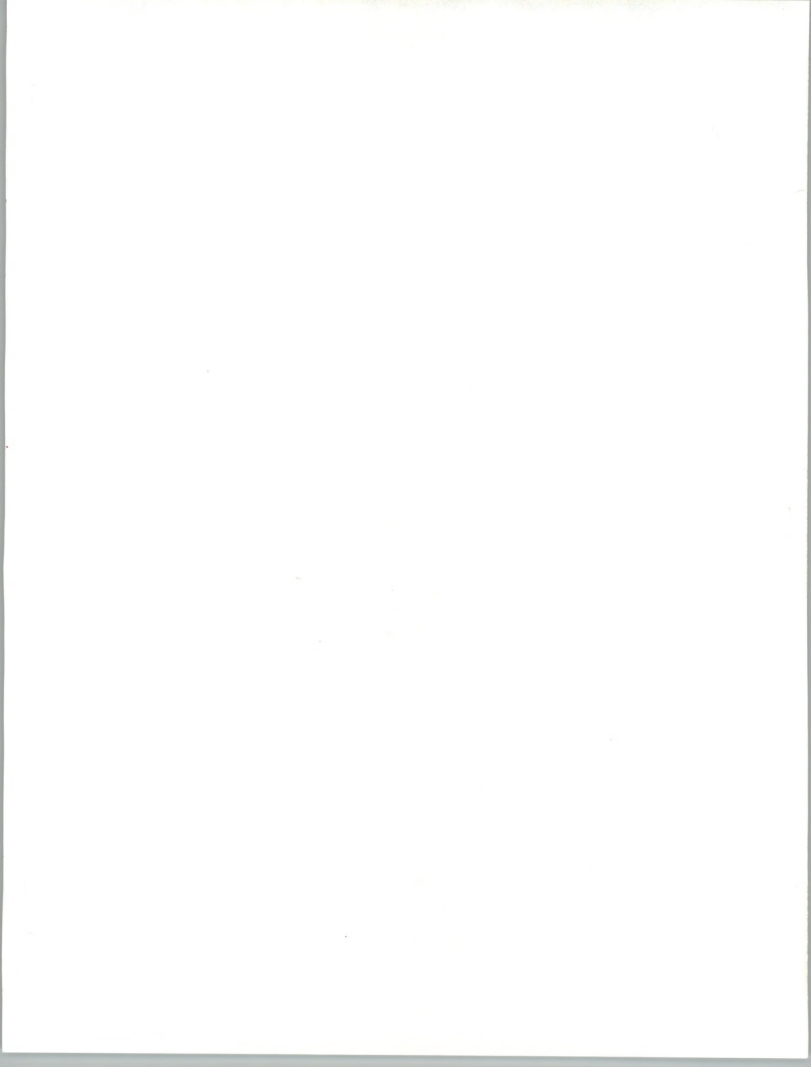


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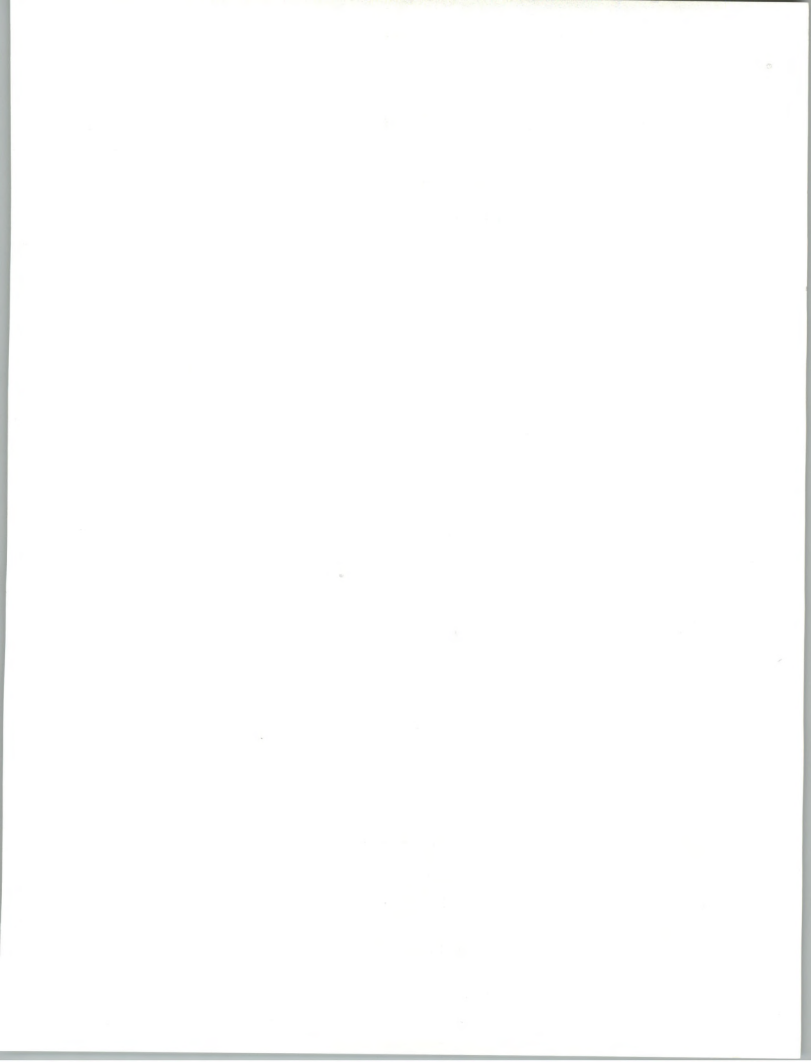


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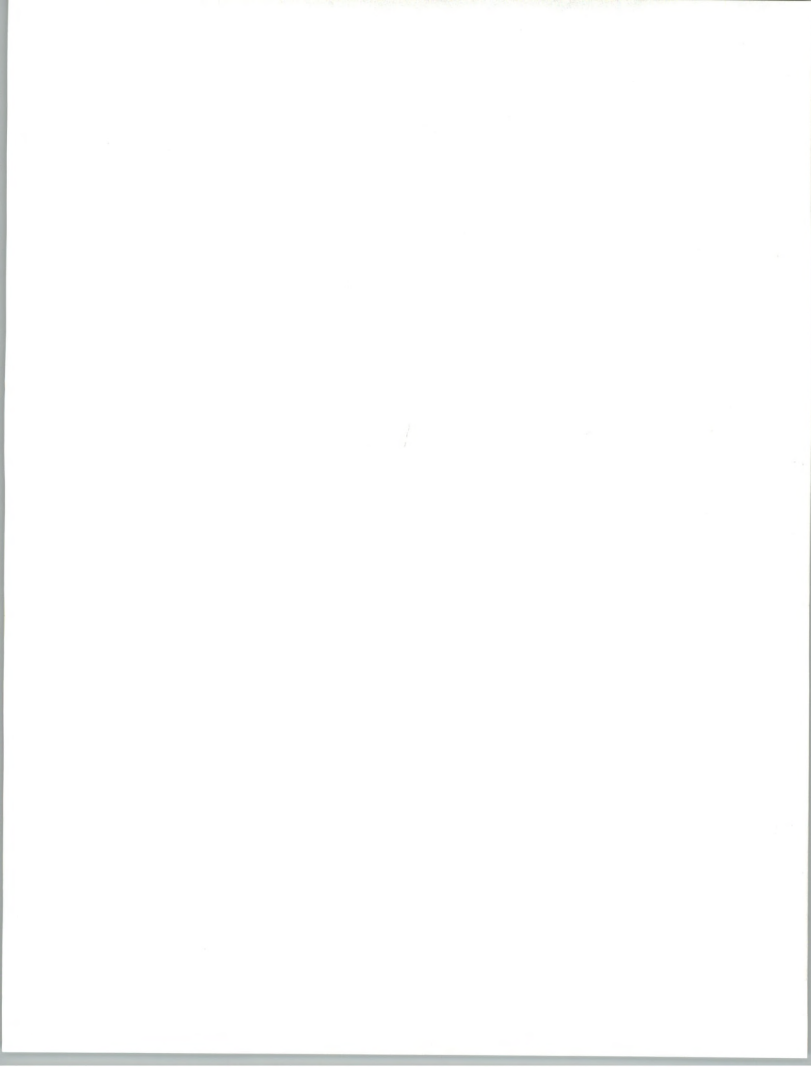


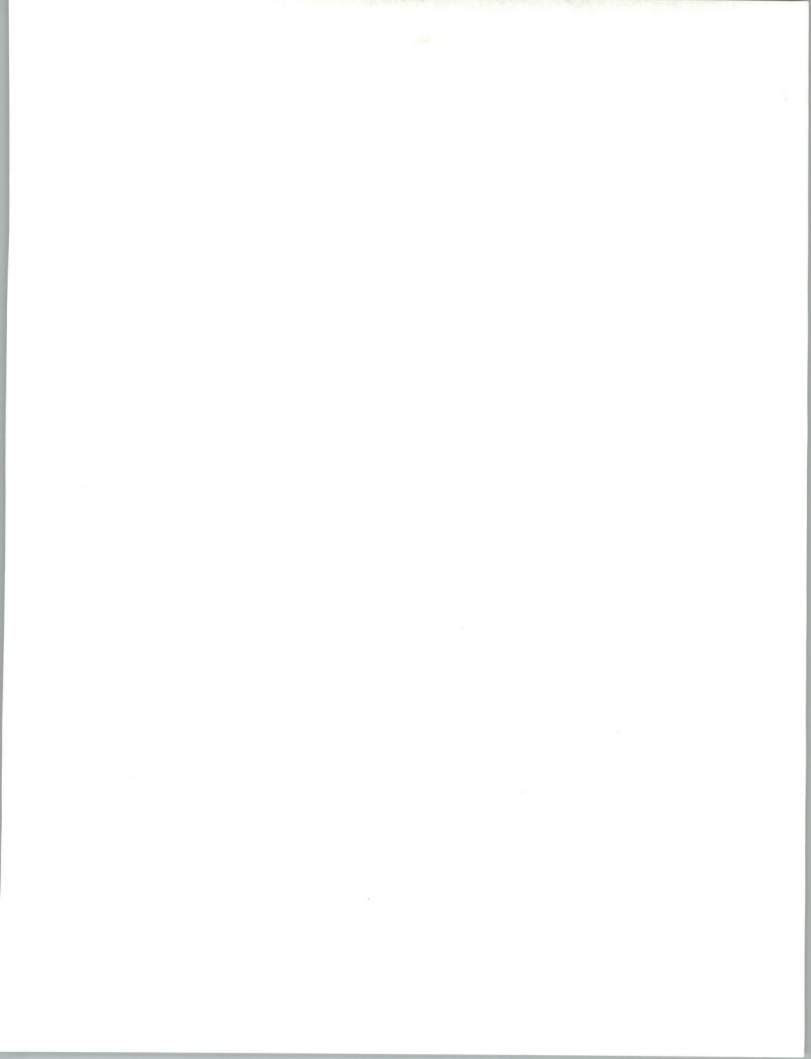
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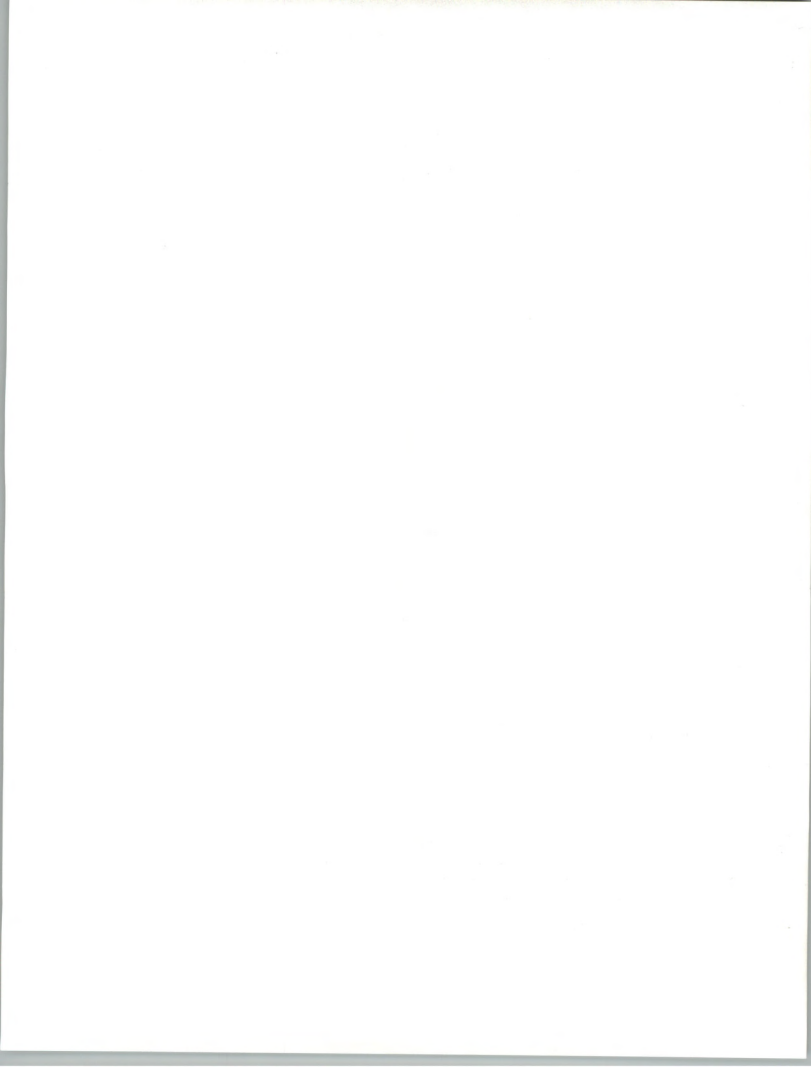
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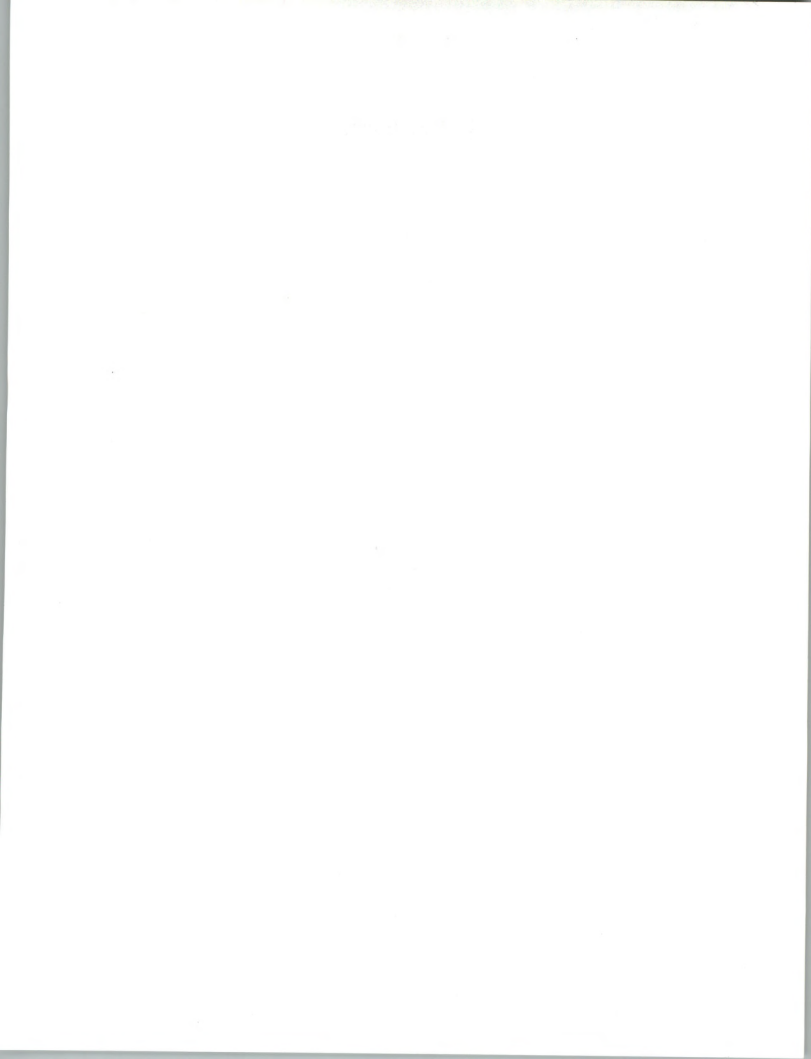
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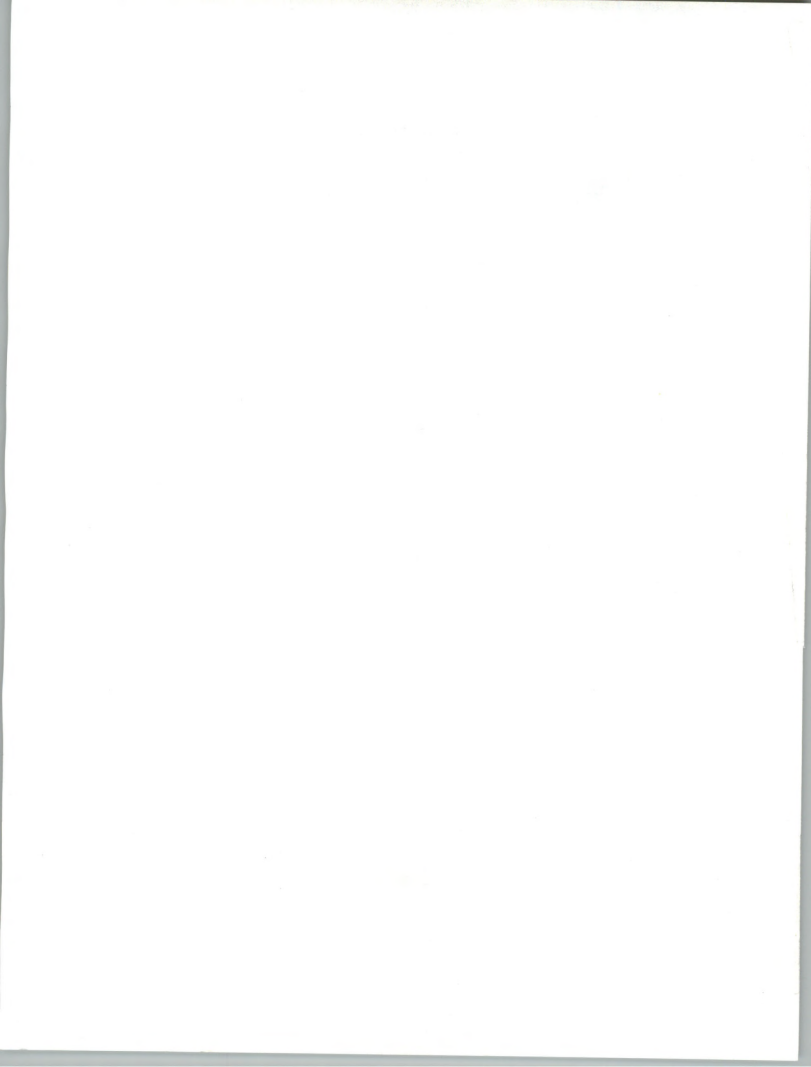
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- 7 EDI Issues: How Important Is Network Interconnection?
 - 8 Reasons for Network Interconnection
 - 9 Buy or Build EDI Software Decisions (W. Europe)
 - 10 Buy or Build EDI Software Decisions (by Country)
 - 11 Software Features Importance (W. Europe)
 - 12 Software Features Importance (by Country)
 - 13 EDI Drivers
 - 14 EDI Start-Up Reasons (Strategic)
 - 15 EDI Implementation (W. Europe)
 - 16 Computer Used for EDI (W. Europe and by Country)
 - 17 EDI Usage (Western Europe)
 - 18 Key Applications Integrated with EDI (W. Europe)
-

VII

- 1 EDI Development Forces
- 2 EDI Vendor Recommendations
- 3 EDI User Recommendations



INPUT

PRODUCTION WORK ORDER

(Please fill out both sides)

DATE IN: 6/9/89 DATE DUE: _____

AUTHORIZED BY: PETER LINES

PROJECT CODE: AENG-EDIF

NEW REPEAT REPEAT W/CHANGE

WORK SPECIFICATIONS

DATE OF PRESENTATION: _____

Additional Information

- 35mm Slides
- Folios
- Exhibits
- Questionnaire
- Letter
- Business Card
- Note Paper
- Newsletter
- News Release
- Form
- Brochure
- Cover Design
- Other

FOUR EITE

Number of pages submitted _____ Text _____ Graphics _____

PRINTING SPECIFICATIONS

- Quantity/Slides/Folios _____
- Quantity/Hard Copy _____
- Paper Size 1,000
- Finished Size _____
- Number of Pages _____
- Outside Printer _____
- Photocopy _____
- Single side _____
- Double side _____
- Three hole punch _____
- Velobind punch _____
- Trim to _____ X _____
- Binding _____
- Cover _____
- Paper Color _____
- Ink Color _____
- Copyright Paper _____
- Fold 1/2 fold 1/3 fold
- Pad _____
- Saddle Stitch _____
- Box _____
- Shrink Wrap _____
- Staple Corner 2 on side

SPECIAL INSTRUCTIONS

**AS PER EXECUTIVE O'VIEWS
SEPARATELY BOUND.**

MAILING SPECIFICATIONS

envelopes: No. 10 9 x 12 10 x 13 Reply Envelope Quantity _____
 First Class Bulk Address Labels (Zip Code Order)

enclosures:
Letter _____
Questionnaire _____
Newsletter _____
News Release _____
Form _____
Brochure _____
Business Reply Envelope _____
Other _____

Distribution: _____ Quantity _____

- Initial Mailing _____
- Shelf Stock 200
- NJ _____
- DC _____
- London (1,000)
- Paris _____
- Japan _____

TOTAL 1200

IL _____ COPIES DIRECTLY TO: _____

Handwritten title or header text, possibly including a date or page number.

Main body of handwritten text, consisting of several lines of cursive script. The text is mostly illegible due to blurring and fading.

**QUALITY CONTROL
 PROOFREADING SIGNOFF**

DESCRIPTION EDI REPORT BROCHURE
PROJECT CODE AENG-EDIE
AUTHOR TIM STEVENS

DATE TO PROOFREADER	TO BE PROOFED BY	INITIAL	DATE
<u>6/12</u>	<u>HG</u>	<u>HG</u>	<u>6/13</u>
<u>6/13</u>	<u>Andrea</u>	<u>AJ</u>	<u>6/13</u>
<u>6/14</u>	<u>FAX TO UK / changes made</u>		
<u>6/15</u>	<u>PETER C.</u>	<u>OK Peter</u>	
FINAL Q.C. <u>6/16</u>	<u>NIC WHEATMAN</u>	<u>NW</u>	<u>6/16</u>

READY FOR PRINTER

*Andrea
 or P/Moham,
 cut out
 100 pages /
 74 exc
 line -
 not necessary!
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Handwritten text, possibly a title or header, enclosed in a rectangular box. The text is illegible due to blurriness.

Main body of handwritten text, consisting of several lines of cursive script. The text is extremely faint and illegible.

Bottom section of handwritten text, possibly a signature or footer. The text is illegible.