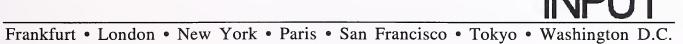


STRAILCIC MARKERBERSPECTIVE

The Eulere of IT Support Multiverser Services in Europe 1885-2000

Ouslomer Services Programma Europe

The Future of IT Support -Multivendor Services in Europe, 1995-2000





Clients make informed decisions more quickly and economically by using INPUTs services. Since 1974, information technology (IT) users and vendors throughout the world have relied on INPUT for data, research, objective analysis and insightful opinions to prepare their plans, market assessments and business directions, particularly in computer software and services.

Contact us today to learn how your company can use INPUT's knowledge and experience to grow and profit in the revolutionary IT world of the 1990s.

SUBSCRIPTION SERVICES

- Information Services Markets
 - Worldwide and country data
 - Vertical industry analysis
- Business Integration Markets
- Systems Integration and Professional Services Markets
- Client/Server Software Platforms
- Outsourcing Markets
- Information Services Vendor Profiles and Analysis
- Electronic Commerce/Internet
- U.S. Federal Government IT Markets
- IT Customer Services Directions (Europe)

SERVICE FEATURES

- Research-based reports on trends, etc. (Over 100 in-depth reports per year)
- Frequent bulletins on events, issues, etc.
- 5-year market forecasts
- Competitive analysis
- Access to experienced consultants
- Immediate answers to questions
- On-site presentations

DATABASES

- Software and Services Market Forecasts
- Software and Services Vendors
- U.S. Federal Government
 - Procurement Plans (PAR)
 - Forecasts
 - Awards (FAIT)
 - Agency Procurement Requests (APR)

CUSTOM PROJECTS

For Vendors-analyse:

- Market strategies and tactics
- Product/service opportunities
- Customer satisfaction levels
- Competitive positioning
- Acquisition targets

For Buyers-evaluate:

- Specific vendor capabilities
- Outsourcing options
- Systems plans
- Peer position

OTHER SERVICES

Acquisitions/partnerships searches

INPUT worldwide

Frankfurt

Perchstätten 16 D-35428 Langgöns Germany Tel. +49 (0) 6403 911420 Fax +49 (0) 6403 911413

London

Cornwall House 55-77 High Street Slough, Berkshire SL1 1DZ Tel: 44 (0) 1753 530444 Fax: 44 (0) 1753 577311

New York

400 Frank W. Burr Blvd. Teaneck, NJ 07666 U.S.A. Tel. 1 (201) 801-0050 Fax 1 (201) 801-0441

Paris

24, avenue du Recteur Poincaré 75016 Paris France Tel. +33 (1) 46 47 65 65 Fax +33 (1) 46 47 69 50

San Francisco 1881 Landings Drive Mountain View CA 94043-0848 U.S.A. Tel. 1 (415) 961-3300 Fax 1 (415) 961-3966

Tokyo

Saida Building, 4-6, Kanda Sakuma-cho Chiyoda-ku, Tokyo 101 Japan Tel. +81 3 3864-0531 Fax +81 3 3864-4114

Washington, D.C. 1921 Gallows Road Suite 250 Vienna, VA 22182 3900 U.S.A. Tel. 1 (703) 847-6870 Fax 1 (703) 847-6872

INPUT

Abstract

Today's typical client/server computing environment consists of processors, software products and communications equipment sourced from a variety of vendors. Consequently, IT managers face unprecedented difficulties in providing effective support for the entire IT infrastructure.

The response of most IT services vendors has been to create portfolios of services which address the *multivendor* needs of their customers. However, while most vendors today claim to be providers of *multivendor* services, the term *multivendor* has taken on various meanings, and is often used as a convenient term to describe the latest manifestations of the IT customer services market in general.

INPUT acknowledges that if the future of computing is client/server, then the future of IT support is multivendor. However, in this report, INPUT defines the market for multivendor services precisely, identifying and analysing three principle components: *equipment services, software* support and value-added services. In summary, the report:

- Defines INPUT's view of the multivendor services market, and describes the supply- and demand-side factors which are driving the market
- Provides market sizing and forecast data for the period 1995 to 2000. Analyses are provided for Europe as a whole and for each of 16 individual European country markets, plus Eastern Europe
- Provides estimates of the revenues of the leading multivendor services providers in each country
- Presents profiles of six leading multivendor services vendors, providing insights into their present and future strategies.

Published by INPUT Cornwall House, 55-77 High Street Slough, Berkshire, SL1 1DZ United Kingdom

Customer Services Programme — Europe

The Future of IT Support - Multivendor Services in Europe, 1995-2000

Copyright © 1996 by INPUT. All rights reserved. Printed in the United Kingdom. No part of the publication may be reproduced or distributed in any form, or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

The information provided in this report shall be used only by the employees of and within the current corporate structure of INPUT's clients, and will not be disclosed to any other organisation or person including parent, subsidiary, or affiliated organisation without prior written consent of INPUT.

INPUT exercises its best efforts in preparation of the information provided in this report and believes the information contained herein to be accurate. However, INPUT shall have no liability for any loss or expense that may result from incompleteness or inaccuracy of the information provided.

CST1 • 612• 1996

Table of Contents

I Introduction		1	
	A. Objectives and Scope	1	
	B. Methodology	2	
	C. Report Structure	3	
	D. Related INPUT Reports	4	
II	Executive Overview	5	
	A. Multivendor Services - A \$12 Billion Market by 2000	5	
	B. Demand for Desktop and Help Desk Services Drive the Market	8	
	C. Vendors Address Lifecycle Service Needs	9	
	D. Problem Management Key to Multivendor Service Delivery	12	
	E. Digital, ICL Sorbus, Olivetti Dominate Multivendor Services		
	Market	14	
	F. Leading Country Markets for Multivendor Services	16	
III	Multivendor Services Market Opportunities		
	and Trends	17	
	A. Putting Multivendor Services in Perspective	17	
	B. Multivendor Services Defined	20	
	C. Multivendor Services Market Segmentation and Sizing	21	
	D Major Trends in Multivendor Services	23	
	1. Desktop Trends Drive Multivendor Services Market	23	
	2. Lifecycle Services and the Rightsourcing Concept	24	
	3. Vendors Play the Cost of Ownership Card	25	
	4. Help Desk Services Take Centre Stage	27	
	4. Help Desk bervices Take Centre Stage		
	E. The Competitive Environment for Multivendor Services	29	
		29 34	
IV	E. The Competitive Environment for Multivendor Services		

B. Multivendor Services Market by Country

39

V	Multivendor Services Vendor Profiles	57
	A. Digital MCS	58
	B. ICL Sorbus	61
	C. Getronics	65
	D. ATM/Euroserv	68
	E. Unisys	70
	F. P&P	73
A	The Customer Services Market Defined	77
	A. INPUT's View of The Customer Services Market	77
	B. Customer Services Sectors	81
	C. Customer Services Vendors	83
	D. Customer Services Revenue Streams	83

B. Exchange Rates

85

Exhibits

\mathbf{II}

-1	Multivendor Services As A Component of the IT Customer Se	rvices
	Market, Europe 1995-2000 (\$ Billions)	5
-2	Multivendor Services Market Components, Europe	
	1995-2000 (\$ Billions)	7
-3	Help Desk Services Market Growth, Europe 1995-2000	
	(\$ Billions)	9
-4	Factors in Reducing the Hidden Costs of IT Ownership	11
-5	Motivations for Offering Multivendor Services	12
-6	Top 10 Multivendor Services Vendors, Europe 1995	14
-7	Leading Country Markets, Multivendor Services - Europe	
	1995	16

III

-1	The Evolution of the IT Customer Services Market	17
-2	The Growing Importance of Multivendor Services	19
-3	Multivendor Services Market Components, Europe 1995-2000	21
-4	Vendors Currently Offering Desktop Services	23
-5	IT Issues with Greatest Business Impact	24
-6	Typical Lifecycle Services Offer	25
-7	Identifying the Hidden Costs of IT Ownership	27
-8	Help Desk Services Market Growth, Europe 1995-2000	
	(\$ Billions)	28
-9	Motivations For Offering Multivendor Services -Independent	
	Services Arm of Systems Vendor	30
-10	Motivations For Offering Multivendor Services - Strongly	
	Product-Focused Vendors	31
-11	Motivations For Offering Multivendor Services - Independent	
	Services Organisations	32
-12	Motivations For Offering Multivendor Services - Dealers/	
	Resellers	33
-13	Approaches to Multivendor Service	34

 \mathbf{IV}

-1 -2	Multivendor Services Market, Europe 1995-2000 (\$ Millions) European Multivendor Services Market by Country 1995-2000	37
-	(\$ Millions)	38
-3	Leading Multivendor Services Vendors, Europe 1995	38
-4	Multivendor Services Market, France 1995-2000	
	(FF Millions)	39
-5	Leading Multivendor Services Vendors, France 1995	39
-6	Multivendor Services Market, Germany 1995-2000	
	(DM Millions)	40
-7	Leading Multivendor Services Vendors, Germany 1995	40
-8	Multivendor Services Market, UK 1995-2000 (£ Millions)	41
-9	Leading Multivendor Services Vendors, UK 1995	41
-10	Multivendor Services Market, Italy 1995-2000 (Lira Billions)	42
-11	Leading Multivendor Services Vendors, Italy 1995	42
-12	Multivendor Services Market, Netherlands 1995-2000	
	(Dfl Millions)	43
-13	Leading Multivendor Services Vendors, Netherlands 1995	43
-14	Multivendor Services Market, Sweden 1995-2000 (SK Millions)	44
-15	Leading Multivendor Services Vendors, Sweden 1995	44
-16	Multivendor Services Market, Spain 1995-2000 (Ptas Millions)	45
-15	Leading Multivendor Services Vendors, Spain 1995	45
-18	Multivendor Services Market, Switzerland 1995-2000	
	(SF Millions)	46
-19	Leading Multivendor Services Vendors, Switzerland 1995	46
-20	Multivendor Services Market, Belgium 1995-2000	
	(BF Millions)	47
-21	Leading Multivendor Services Vendors, Belgium 1995	47
-22	Multivendor Services Market, Denmark 1995-2000	
	(DK Millions)	48
-23	Leading Multivendor Services Vendors, Denmark 1995	48
-24	Multivendor Services Market, Norway 1995-2000	
~ ~	(NK Millions)	49
-25	Leading Multivendor Services Vendors, Norway 1995	49
-26	Multivendor Services Market, Austria 1995-2000 (Sch Millions)	50
-27	Leading Multivendor Services Vendors, Austria 1995	50
-28	Multivendor Services Market, Finland 1995-2000	
	(FM Millions)	51
-29	Leading Multivendor Services Vendors, Finland 1995	51
-30	Multivendor Services Market, Ireland 1995-2000 (IR£ Millions)	52
-31	Leading Multivendor Services Vendors, Ireland 1995	52

-32	Multivendor Services Market, Portugal 1995-2000	
	(Esc Millions)	53
-33	Leading Multivendor Services Vendors, Portugal 1995	53
-34	Multivendor Services Market, Greece 1995-2000	
	(Dra Millions)	54
-35	Leading Multivendor Services Vendors, Greece 1995	54
-36	Multivendor Services Market, Eastern Europe 1995-2000	
	(\$ Millions)	55
-37	Leading Multivendor Services Vendors, Eastern Europe 1995	55

-1	Customer Services Market Structure	79
-2	Software Products Market Structure	80
-3	Customer Services Revenue Streams	84

A

(Blank)



Introduction

A Objectives and Scope

The trend towards client/server computing has changed the nature of demand for IT customer services. Furthermore, the downsizing phenomenon has shifted attention away from the datacentre to the desktop, and to desktop services, while the emergence of the network as the key enabler of business computing has promoted massive interest in network services.

These factors have effectively combined to create a market for *multivendor services*, which is quickly overtaking the market for proprietary IT customer services.

However, while most vendors today claim to be providers of multivendor services, the term *multivendor* has taken on various meanings, and is often used as a convenient term to describe the latest manifestations of the IT customer services market in general.

This report clearly sets out INPUT's position regarding the definition, nature and scope of the European multivendor services market. The report contains comprehensive market analysis data, including five-year market forecasts for individual country markets. In addition, the report provides insights into the present and future strategies of leading multivendor services players, and identifies the components of likely winning strategies. Western European country markets included in this report are:

Austria	France	Italy	Spain
Belgium	Germany	Netherlands	Sweden
Denmark	Greece	Norway	Switzerland
Finland	Ireland	Portugal	UK

Countries aggregated into the Central and Eastern European market are:

Albania	Estonia	Poland	Slovenia
Bulgaria	Hungary	Romania	Ukraine
Croatia	Latvia	Russian Federation	Serbia*
Czech Republic	Lithuania	Slovakia	Other CIS
			countries
(* and the other for	rmer Yugoslay	zian republics)	

B Methodology

> INPUT's established research methodology is based on extensive vendor revenue collection and analysis techniques, plus user research conducted in the leading country markets of Europe.

> In addition, for this study, INPUT conducted face-to-face interviews with executives from six of Europe's leading suppliers of multivendor services. Information gathered from the interviews was used to develop detailed profiles, covering four key areas:

- Competitive Positioning
- Service Offer
- Organisation and Resources
- Business Development.

Industry knowledge and market data are supplemented by information from various other sources including vendor annual reports, company press releases and specialised data published by the computer market trade press.

C Report Structure

The remaining chapters of this report are as follows:

- Chapter II is an executive overview which provides a summary of the key findings of the study
- Chapter III defines INPUT's view of the multivendor services market, describes the supply- and demand-side factors which are driving the market, and examines the strategies currently being adopted by the leading vendors
- Chapter IV presents market sizing and forecast data for the period 1995 to 2000. Analyses are provided for Europe as a whole and for each of 16 individual European country markets, plus Eastern Europe. This chapter also contains estimates of the revenues of the leading multivendor services providers in each country
- Chapter V contains profiles of six leading multivendor services vendors, providing insights into their present and future strategies
- Appendix A defines INPUT's view of the IT customer services market, and provides detailed definitions of service sectors and delivery modes
- Appendix B provides the exchange rates used to convert vendor revenues in local currencies to US Dollars.

D Related INPUT Reports

Other INPUT reports which address topics related to the subjects discussed here include the following:

IT Customer Services Competitive Analysis, - Europe 1995

IT Customer Services Market Trends and Forecast — Europe 1995-2000

Delivering Customer Service Through The VAR Channel — Europe 1995

Supporting Client / Server Systems — Europe 1994

Desktop Network Support Opportunities — Europe 1994-1999

Systems Software Support Contracts in an Open Environment — Europe 1993

Equipment Service Contracts in an Open Environment - Europe 1993

Environmental Services Opportunities in Europe, 1993-1998

Outsourcing Repair Services — Europe 1993-1998

Structuring a Vendor Organisation for Professional Services — Europe 1993

4



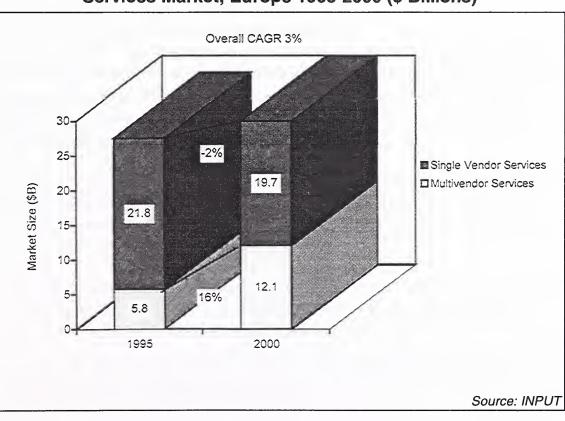
Executive Overview

A Multivendor Services - A \$12 Billion Market By 2000

In 1995, just over 20% of all IT customer services in Europe were delivered as *multivendor* service contracts. This represents a \$5.8 billion market, which is forecast to grow to over \$12 billion (38% of the total IT customer services market) by the year 2000.

Exhibit II-1 shows the growth of the multivendor services market in relation to the total customer services market in the period 1995 to 2000.

Exhibit II-1



Multivendor Services As A Component of the IT Customer Services Market, Europe 1995-2000 (\$ Billions)

The emergence of the multivendor services market has its roots in the open systems movement, and its strong growth is attributable to the continued trend towards client/server computing. Today's typical client/server computing environment consists of processors, software products and communications equipment sourced from a variety of vendors.

The response of most IT services vendors has been to create portfolios of services which nominally address the multivendor needs of their customers. However, while most vendors today claim to be providers of *multivendor services*, the term *multivendor* has taken on various meanings, and is often used as a convenient term to describe the latest manifestations of the IT customer services market in general.

INPUT uses the term *multivendor services* more precisely to mean contracted support services which relate to equipment or software from more than one vendor. For the purposes of market segmentation and analysis, INPUT has divided the multivendor services market into three components:

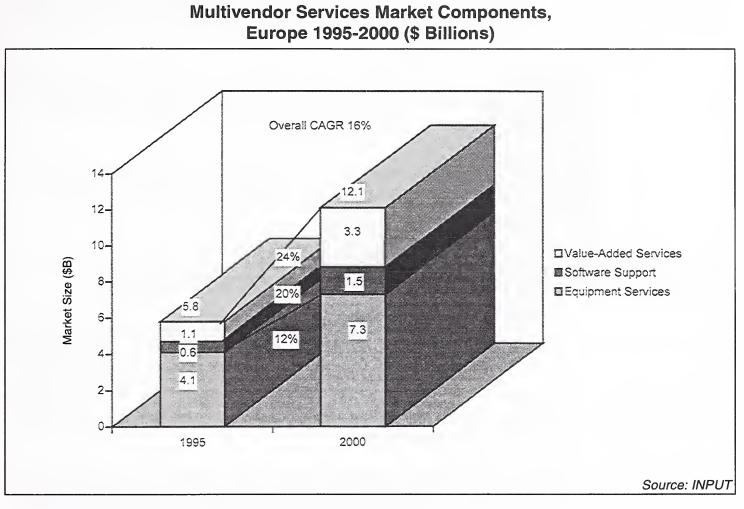
- *Multivendor Equipment Services*, a sub-set of the Equipment Maintenance and Environmental Services sectors traditionally tracked by INPUT
- *Multivendor Software Support*, which includes not only Systems Software Support, but also Application Software Support
- Value-Added Services, a category which includes the multivendor components of the Education & Training and Other Professional Services sectors. This sector also includes the relatively new breed of value-added desktop services such as procurement, asset management and help desk services.

All three components of the multivendor services market are growing strongly, as shown in Exhibit II-2.

INPUT

INPUT

Exhibit II-2



The *multivendor* equipment services sector is continuing to grow, despite the declining market for traditional maintenance services. While the total market for contracted maintenance services is in decline (-4% CAGR, 1995 to 2000), the multivendor sector is still growing at approximately 12% per annum.

The market for multivendor software support is forecast to grow strongly (20% CAGR between 1995 and 2000), with the two components of this market, systems software support and application support, growing 10% and 25% per annum respectively.

The market for various value-added services, most of which are related to the desktop, will exhibit the strongest growth of the three component sectors (24% CAGR over the next five years).

The emergence of multivendor services as a major growth market is characterised by a number of key trends:

- The emergence of desktop services and help desk services as direct responses to the diversity and complexity inherent in client/server IT environments
- The increasing tendency for vendors to go beyond the requirement for equipment and software support, and to address the service needs of the entire IT lifecycle
- The trend towards problem management as the preferred style of multivendor service delivery, in place of more product-centric approaches.

В

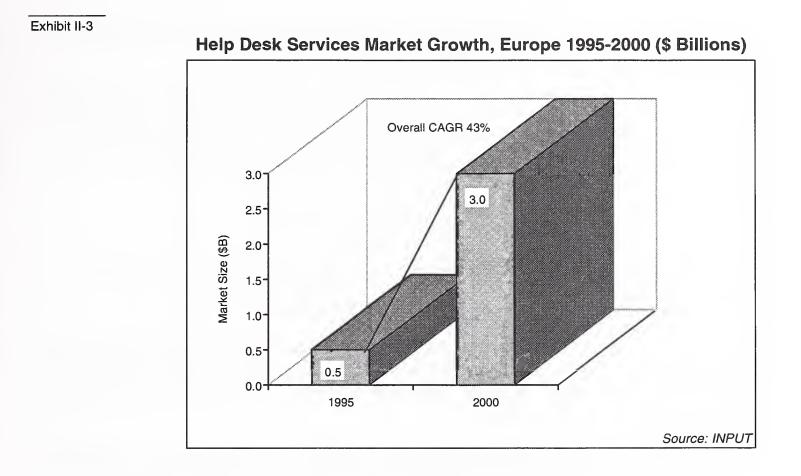
Demand For Desktop and Help Desk Services Drives the Market

The client/server phenomenon is causing market focus to shift to both the client environment (i.e. desktop) and the supporting network environment (i.e. the server and communications technology). Hence, the markets for both desktop services and related network support services have begun to emerge strongly. Most of the leading customer services vendors now offer a desktop services portfolio.

Another significant development in the multivendor services arena is the recent emergence of help desk services as a viable market. The last two years have seen a surge of interest in using external services organisations to implement, staff and run both internal and external (customer-facing) help desks.

INPUT estimates that across Europe, as much as \$11 billion of corporate IT budgets is currently spent on providing help desk services. Less than 5% of this amount (approximately \$500 million) is currently spent with external service providers. However, INPUT forecasts that this embryonic market will grow to \$3 billion by the year 2000, as shown in Exhibit II-3.

INPUT



C Vendors Address Lifecycle Service Needs

Many of the leading customer services vendors now offer a wide range of services which address the entire IT lifecycle, not just the support component. Hence, many multivendor service contracts today combine traditional support requirements with other services such as product procurement, financing, asset management and software licence management.

Furthermore, many vendors today promote their ability to act as a flexible service partner, offering to supply any combination of services from the IT lifecycle. This approach has been termed variously *rightsourcing*, *selective outsourcing*, *co-sourcing* and *smart-sourcing* and is proving popular with corporate IT managers who are increasingly seeking to:

- Strike an effective balance between in-house and external skills
- Establish fewer, closer relationships with preferred suppliers

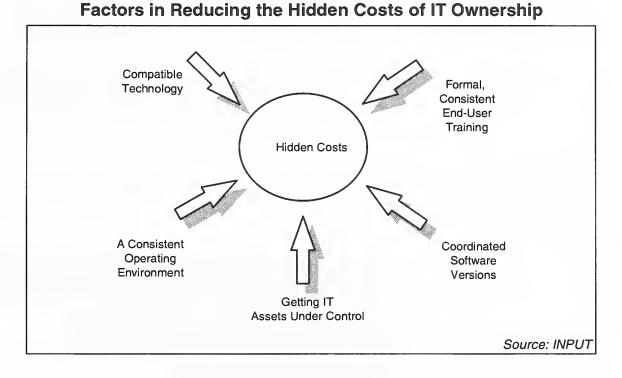
• Ensure continuity of multivendor support and service from a reliable source.

One of the tactics currently being employed to good effect by multivendor services vendors is to promote services on the promise of reducing the cost of IT ownership. In 1994 and 1995, most of the leading client/server service providers have launched services aimed at delivering lower PC and LAN ownership costs. Prominent examples are:

- Oliservice's Desktop Services portfolio
- Hewlett-Packard's Common Operating Environment concept
- Digital's PC Utility and Software Utility services.

Effective multivendor support from a single point of contact is one of the key pieces of the cost of ownership puzzle. However, services related to financing, asset management and software version control also play an important part.

While many corporates are waking up to the high costs of IT ownership, few have a clear understanding of how to quantify the costs; not surprisingly, since many of the costs are hidden. Exhibit II-4 itemises the factors which can help to reduce costs significantly. Exhibit II-4

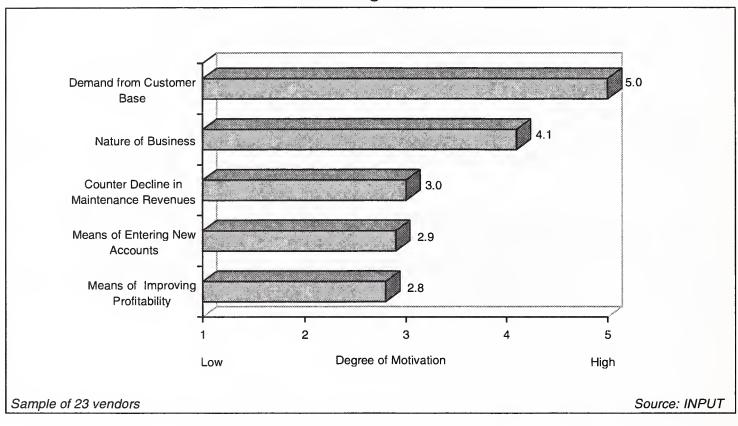


Successful vendors will be those who can not only present a case based on theoretical models of ownership costs, but who can develop cost analysis and benchmarking techniques with which to measure and demonstrate cost savings. To be worthwhile, services aimed at controlling IT ownership costs must be tangible and demonstrable.

-

D Problem Management Key to Multivendor Service Delivery

In a survey conducted for this study, 23 vendors were questioned about their motivations for offering multivendor services. Exhibit II-5 shows the extent to which a variety of factors influenced their entry into the multivendor services market.



Motivations for Offering Multivendor Services

The vendors surveyed can be categorised into four groups, as follows:

- Large systems vendors which have an independent multivendor services arm (e.g. ICL Sorbus, Digital MCS, Oliservice)
- Strongly product-focused manufacturers such as the Unix vendors (e.g. Sun Microsystems, H-P and Sequent) and the storage equipment specialists (e.g. StorageTek and Memorex Telex)
- Independent services vendors, many of whom have evolved from third party maintenance companies

Exhibit II-5

• Dealers/resellers who have turned their attention to the services marketplace.

Note that all categories of service provider indicated unanimously that the primary reason for offering multivendor services was user demand. However, there were significant motivational differences elsewhere between the categories. For example:

- The systems vendors that have established an independent services group indicated strongly that multivendor services was the reason for their being in business at all. Furthermore, this group signalled the fact that promoting multivendor services was potentially a way of entering new accounts
- The vendors with a strong product focus indicated that counteracting a decline in maintenance revenues was a strong reason for offering multivendor services. It was not thought to be a strategic way of entering new accounts, and was not considered to be a natural part of their business
- The dealers and resellers indicated most strongly that, apart from user demand, their decision to offer multivendor services was a strategic move to penetrate new accounts.

These different types of vendor take different approaches to offering multivendor services.

The most basic approach is to respond to specific demands from existing customers on a case by case basis. This is typically the approach taken by some (though not all) of the Unix vendors and the storage equipment specialists.

At the other end of the spectrum, some vendors have reacted to the call for multivendor services by offering support for equipment and software products from *all* of the leading vendors. This product-centric approach to multivendor service is typical of the independent maintenance organisations.

Arguably, the optimum approach is adopted by the systems vendors such as ICL Sorbus, Olivetti and Digital. These organisations, which have established independent multivendor services arms, tend to adopt a more strategic approach to multivendor service. This approach goes beyond the product-centric view, and offers genuine problem ownership and management on behalf of the client. The strategic approach treats each client as a unique case, but offers the same guarantee of problem resolution regardless of the cause, or source (equipment, software, network) of those problems.

INPUT believes that the problem management approach to multivendor services is the one most likely to succeed. This approach most appropriately reflects user demand for simplified, seamless support of today's complex heterogeneous IT environments.

E Digital, ICL Sorbus, Olivetti Dominate Multivendor Services Market

Exhibit II-6 lists the leading providers of multivendor services in Europe in 1995.

Exhibit II-6

*****		Estimated Multivendor Service Revenue (\$ Millions)	Market Share (%)	
1	Digital	530	9.1	
2	ICL Sorbus	470	8.1	
3	Olivetti	430	7.4	
4	Getronics	280	4.8	
5	ICG	230	4.0	
6=	IBM	225	3.9	
6=	Bull	225	3.9	
8	Granada	210	3.6	
9	Hewlett-Packard	190	3.3	
10	Thomainfor	130	2.2	
	Total Listed	2920	50	
	Total Market	5800	100	

Top 10 Multivendor Services Vendors, Europe 1995

Source: INPUT

It is interesting to note the following:

- The top three places are occupied by the systems vendors which have established independent multivendor services businesses. Digital, ICL Sorbus, and Olivetti collectively hold 25% of the market
- Three independent service providers appear in the top 10, each of which derives a major part of its revenues from one national market (Getronics in the Netherlands, Granada in the UK and Thomainfor in France)
- The fifth placed organisation, ICG, is a European-wide consortium of small, national resellers and systems integrators. The consortium approach is becoming increasingly common in the multivendor services market, with small local players seeking to reach a wider market by means of pan-European peer networks. Chapter V contains a profile of Euroserv, a European consortium made up of IMOs, including ATM in the UK.
- The top 10 vendors collectively share 50% of the market, which demonstrates the relatively fragmented nature of the multivendor services market in Europe today.

Leading Country Markets For Multivendor Services

Exhibit II-7 lists the leading country markets for multivendor services in Europe in 1995.

Exhibit II-7

Leading Country	Markets,	Multivendor	Services -	Europe 1995
-----------------	----------	-------------	------------	-------------

Country	Estimated Multivendor Market Value (\$ M)
UK	1190
France	1160
Germany	1040
Italy	640
Netherlands	430
Rest of Europe	4460
Total Market	5800

Source: INPUT

Note that the top five country markets account for 77% of the total European market.

The UK has been the leading country market for multivendor services to date, followed closely by France. Germany, while the largest single market for IT customer services overall, is the third largest market for multivendor services. However, the German market is forecast to grow fastest of all the leading countries over the next five years (18% CAGR).

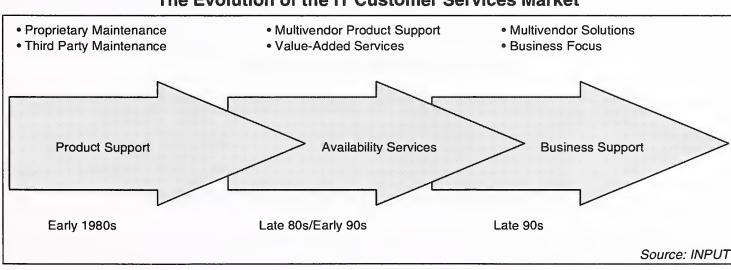


Multivendor Services Market Opportunities and Trends

Putting Multivendor Services in Perspective

For many years, IT customer services related largely to the provision of equipment services such as installation and maintenance. Customer service was something which was delivered by the original manufacturer as part of the sales agreement.

This situation has changed dramatically over the last two decades, with the emergence of an open market for a much wider range of IT services. See Exhibit III-1.



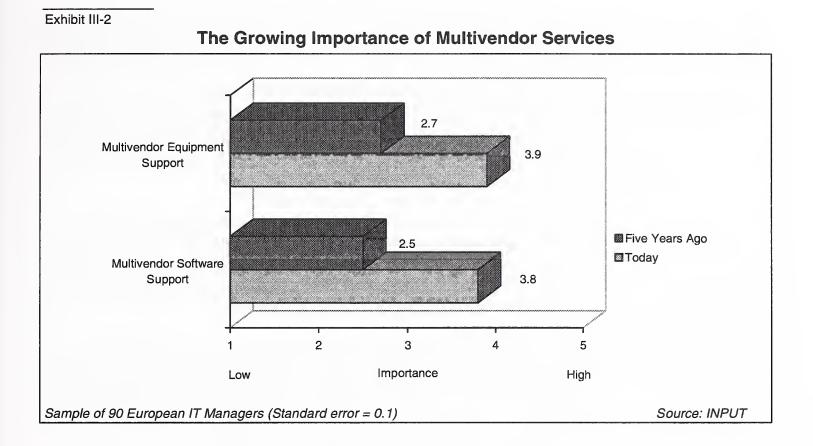
The Evolution of the IT Customer Services Market

Exhibit III-1

Today, the market for IT customer services can be characterised as follows:

- Equipment maintenance services are available from a wide variety of sources, including the equipment manufacturers, independent maintenance organisations, dealerships and specialist repair shops. The equipment maintenance market is now a mature, highly competitive and low-margin business
- Installation, cabling, and services related to the physical computer environment are offered by manufacturers and a variety of independent IT service companies, but are dominated by non-IT vendors from the building and construction industries
- Organisations are looking increasingly for support which extends beyond the provision and availability of the IT equipment, to encompass support of end-users. Hence, application software support, help desk services and training are becoming increasingly important
- The model for service delivery has shifted from equipment break/fix to IT infrastructure support and problem management. Today's customer services providers offer a range of services which support the entire lifecycle of the IT environment: from planning and design, though procurement and installation, to ongoing management and support, and eventually obsolescence
- The focus for services delivery has changed. The downsizing phenomenon has shifted attention away from the datacentre to the desktop, and to *desktop services*, while the emergence of the network as the key enabler of business computing has promoted massive interest in *network services*.

In summary, today's IT environment is a heterogeneous mix of desktop and server equipment, application and systems software, and network equipment and software. Not surprisingly, in such highly complex IT environments, organisations are seeking service solutions tailored to their own unique *multivendor* IT environments. See Exhibit III-2.



Furthermore, organisations are looking to minimise the number of suppliers they have to deal with. IT managers increasingly expect suppliers to offer a single point of contact for all IT support problems, encompassing multivendor equipment, software and networks.

Hence, it is increasingly infeasible for service providers to restrict their portfolio to just one proprietorial brand of equipment or software.

B Multivendor Services Defined

Though *multivendor* may be the key catch-phrase of today's IT customer services industry, INPUT detects considerable confusion concerning the definition of these services. In particular, the term *multivendor services* is often confused with, and used interchangeably with, terms such as *third party maintenance* and *independent maintenance*.

Third party maintenance and independent maintenance both refer to equipment maintenance services provided by a supplier other than the original manufacturer. The major players in this market are referred to either as *third party maintainers* (TPMs) or *independent maintenance organisations* (IMOs). In reality, these are the same.

The term *multivendor maintenance* emerged when the manufacturers themselves began to offer maintenance services on equipment from other vendors. This came about in the 1980s, as a response to the activities of the IMOs.

Today, INPUT uses the term *multivendor services* to include not just services which are equipment-related, but all services related to the support of the IT infrastructure. This includes the provision of software support and network support, plus the various types of value-added service (e.g. help desk services, training, asset management, etc.).

Note, however, that the definition of multivendor services is essentially a contractual one. Services are only deemed to be multivendor where the contract is for services in support of equipment or software from more than one vendor. Hence, a typical multivendor service contract may be for the support of a network consisting of many desktops; such a contract is inherently a multivendor agreement.

It is worth noting that this definition excludes the following from being considered as multivendor services:

- Maintenance and support contracts which relate to just one product, even if the product is part of a wider multivendor IT environment
- Those services which are for the support of single-vendor sites, such as an IBM or DEC datacentre. While the service provider may be capable of supporting both environments, a contract to support a single-vendor site is *not* a multivendor service contract.

Multivendor Services Market Segmentation and Sizing

INPUT's view of the *multivendor* services market cuts across most of the traditional market sectors (see Appendix A for definitions), and can be segmented as follows:

- Multivendor equipment services, a sub-set of the equipment maintenance and environmental services sectors
- Multivendor software support, which includes not only systems software support, but also application support
- Value-added services, a category which includes the multivendor components of the traditional sectors Education & Training and Other Professional Services. This sector also includes the relatively new breed of value-added desktop services such as procurement, asset management and help desk services.

Exhibit III-3 shows the market growth of these three components for the period 1995 to 2000.

Service Component	Estimated Market Size (\$Bn)		
	1995	2000	CAGR (%)
Equipment Services	4.1	7.3	12
Software Support	0.6	1.5	20
Value-Added Services	1.1	3.3	24
Total	5.8	12.1	16

Multivendor Services Market Components, Europe 1995-2000

Source: INPUT

All sectors of the multivendor services market are growing, even the equipment services sector. *Multivendor* maintenance is continuing to grow, against the overall trend in the maintenance market. While the total market for maintenance services (much of which is still proprietorial) is in decline (-4% CAGR, 1995 to 2000), the multivendor sector is still growing at approximately 12% per annum.

Exhibit III-3

While the market for multivendor software support is forecast to grow healthily (20% CAGR between 1995 and 2000), it is interesting to note that while systems software support will grow 10% per year, the market for support of application software will grow in excess of 25%.

The market for various value-added services, most of which are related to the desktop, will exhibit the strongest growth of the three component sectors (24% CAGR over the next five years).

Note also the following trends:

- Equipment services comprise the majority of multivendor services in 1995. Maintenance and installation services combined represent 70% of the total multivendor services market, though this is forecast to fall to 60% by the year 2000
- Almost 70% of multivendor equipment services relate to the maintenance of equipment, the remaining 30% relating to installation and associated services. This ratio is forecast to shift to 60:40 by the year 2000
- Software support accounts for 11% of the multivendor services market in 1995, and is expected to grow to 13% of the market within the next five years
- Value-added services account for 19% of the multivendor services market in 1995, and are expected to constitute 27% of the market by the year 2000.

D Major Trends in Multivendor Services

1. Desktop Trends Drive Multivendor Services Market

The open systems movement, and more particularly the trend towards client/server computing, have firmly established a market for multivendor customer services.

The fact that client/server computing is by nature *multivendor* is causing market focus to shift to both the client environment (i.e. desktop) and the supporting network environment (i.e. the server and communications technology). Hence, the markets for both desktop services and related network support services have begun to emerge strongly.

Most of the leading customer services vendors now offer a desktop services portfolio, as illustrated by Exhibit III-4.

Vendor	Desktop Services Brand Name
Bull	Desktop Services, part of TotalCare range
Digital	Desktop Services
Hewlett-Packard	Client/Server Management Services
IBM	Managed Desktop Services
ICL Sorbus	Desktop Services
Memorex Telex	Part of the Proserv range
Olivetti	Desktop FM
Siemens-Nixdorf	Desktop Support
Unisys	Desktop Services, part of Totality range

Vendors Currently Offering Desktop Services

Source: INPUT

In user surveys this year, the most important IT issue affecting future business prospects proved to be the need to adopt a more distributed IT infrastructure (see Exhibit III-5).

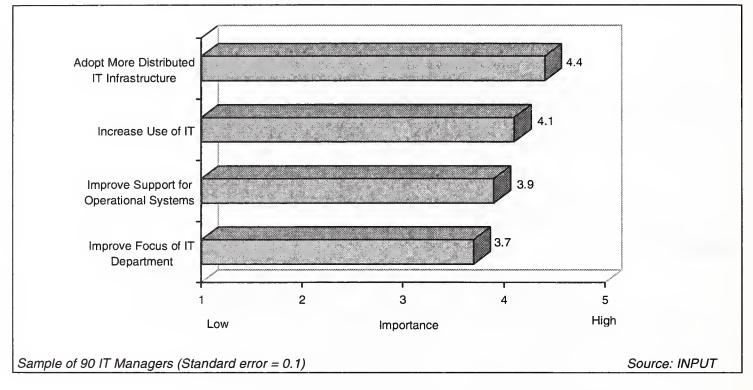
CST1

Exhibit III-4

The relentless drive towards distributed computing, and the acceptance of the network-centric business model, have fuelled demand for a range of multivendor network services, from planning, design and installation, to user support, network management and network integration services.







2. Lifecycle Services and the Rightsourcing Concept

Many of the leading customer services vendors now offer a wide range of services which address the entire IT lifecycle, not just the support component. Hence, many multivendor service contracts today combine traditional support requirements with other services such as product procurement, financing, asset management and software licence management. Exhibit III-6 shows a typical lifecycle services offer.

Furthermore, many vendors today promote their ability to act as a flexible service partner, offering to supply any combination of services from the IT lifecycle. This approach has been termed variously *rightsourcing*, *selective outsourcing*, *co-sourcing* and *smart-sourcing*. Whilst demonstrating the IT industry's tendency towards plagiarism, this style of service offer is proving popular with corporate IT managers who are increasingly seeking to:

- Strike an effective balance between in-house and external skills
- Establish fewer, closer relationships with preferred suppliers
- Ensure continuity of multivendor support and service from a reliable source.

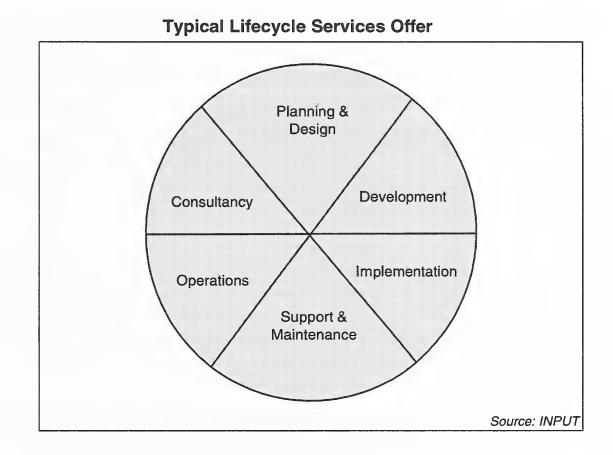


Exhibit III-6

3. Vendors Play the Cost of Ownership Card

Today, organisations are seeking much greater return on their IT investments. One way in which this is evident is that users are increasingly seeking service solutions which not only assist in the support and management of their IT infrastructure, but also deliver more tangible business benefits. These trends are described in detail in the report *IT Customer Services Trends and Forecast, Europe 1995-2000.*

An early manifestation of the trend towards delivering business benefit, rather than just IT product support, is the *cost of ownership* concept. In 1994 and 1995, most of the leading client/server service providers have launched services based on the promise of delivering lower PC and LAN ownership costs. Prominent examples are:

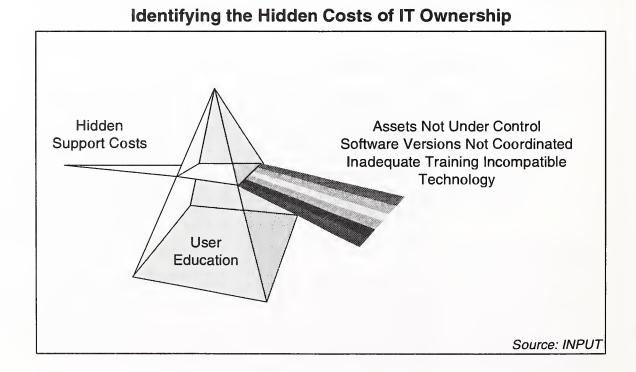
- Oliservice's Desktop Services portfolio
- Hewlett-Packard's Common Operating Environment concept
- Digital's PC Utility and Software Utility services.

The basic selling proposition of these services is the now acknowledged fact that up to 85% of the cost of desktop IT ownership is related to support, operations and administration, while direct capital costs account for only 15%. Services aimed at reducing the indirect costs substantially have great appeal for IT managers and business managers alike.

Effective multivendor support from a single point of contact is one of the key pieces of the cost of ownership puzzle. However, services related to financing, asset management and software version control also play an important part.

While many corporates are waking up to the high costs of IT ownership, few have a clear understanding of how to quantify the costs; not surprisingly, since many of the costs are hidden. Exhibit III-7 illustrates the task vendors face in filtering out the hidden costs of IT ownership in helping customers to understand the factors which can help to reduce costs significantly.

Exhibit III-7



Successful vendors will be those who can not only present a case based on theoretical models of ownership costs, but who can develop cost analysis and benchmarking techniques with which to measure and demonstrate cost savings. To be worthwhile, services aimed at controlling IT ownership costs must be tangible and demonstrable.

4. Help Desk Services Take Centre Stage

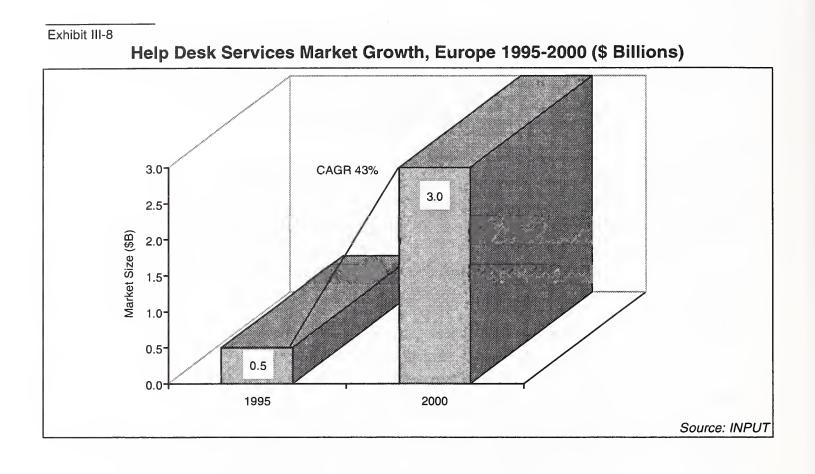
One of the most significant developments in the multivendor services marketplace is the emergence of help desk services as an accepted phenomenon, and one with enormous potential. At the start of the decade, the concept of outsourcing the help desk function to a third party was something which most organisations would simply not consider.

However, the last two years have seen an emergence of interest in using external services organisations to implement, staff and run both internal and external (customer-facing) help desks.

Many large organisations, which typically have multiple help desks supporting their various operations, have started to realise the difficulty of maintaining adequate internal help desk skills and resource levels in complex client/server environments. As desktop applications become more sophisticated and users require more advanced levels of support, so the help desk function becomes more critical.

The economics of supporting sophisticated in-house help desks are proving increasingly difficult to justify. Furthermore, as the help desk becomes the focal point for competitive advantage, it is inevitable that organisations will want to entrust that function to acknowledged experts who can demonstrate the right skills mix (customer facing skills, interpersonal and team skills, product knowledge, technology skills) and a track record of achievement.

INPUT estimates that as much as \$11 billion of corporate IT budgets is currently spent on providing help desk services in Europe. Less than 5% (\$500 million) is currently spent with external service providers. However, INPUT forecasts that as much as \$3 billion of external expenditure could realistically be achieved by the year 2000. Exhibit III-8 shows the growth of the help desk services market between 1995 and 2000.



The Competitive Environment for Multivendor Services

All of the major players in the customer services market have sought to position themselves as providers of multivendor services in recent years. However, INPUT detects distinct groups of vendors operating in the multivendor services market, each with a different approach to market. These can be categorised as follows:

- Large systems vendors which have an independent multivendor services arm (e.g. ICL Sorbus, Digital MCS, Oliservice)
- Strongly product-focused manufacturers such as the Unix vendors (e.g. Sun Microsystems, H-P and Sequent) and the storage equipment specialists (e.g. StorageTek and Memorex Telex)
- Independent services vendors, many of whom have evolved from third party maintenance companies
- Dealers/resellers who have turned their attention to the services marketplace.

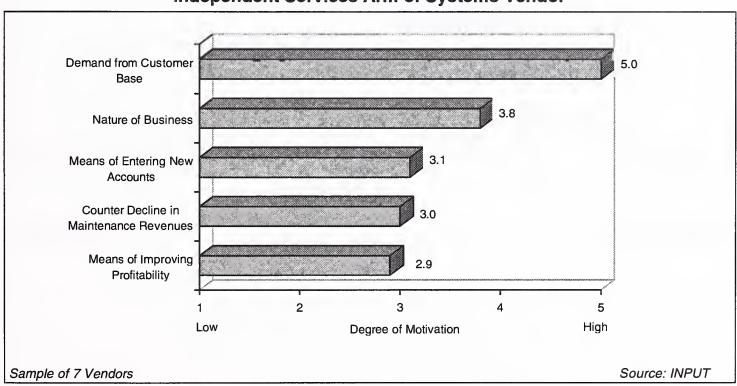
E

In a survey conducted for this study, a variety of companies offering multivendor services were asked about their motivations for operating in this market. Exhibits III-9 to III-12 illustrate the motivations of the four categories of service organisation listed above.

Note that all categories of service provider indicated unanimously that the primary reason for offering multivendor services was user demand. However, there were significant motivational differences elsewhere between the categories.

The systems vendors that have established an independent services group (Digital, ICL Sorbus, AT&T, IBM and Olivetti) indicated strongly that multivendor services was the reason for their being in business at all. Furthermore, this group signalled the fact that promoting multivendor services was potentially a way of entering new accounts. See Exhibit III-9.

Exhibit III-9

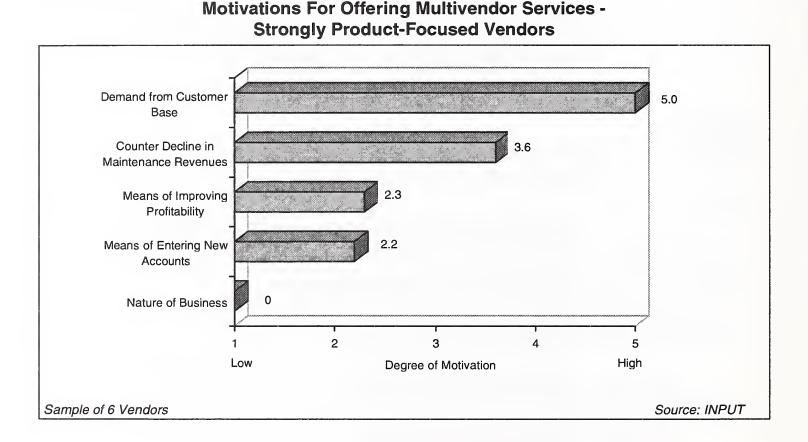


Motivations For Offering Multivendor Services -Independent Services Arm of Systems Vendor

There is a significant group of equipment manufacturers that still adopt a largely proprietorial approach to service. They offer services primarily to serve their existing installed base.

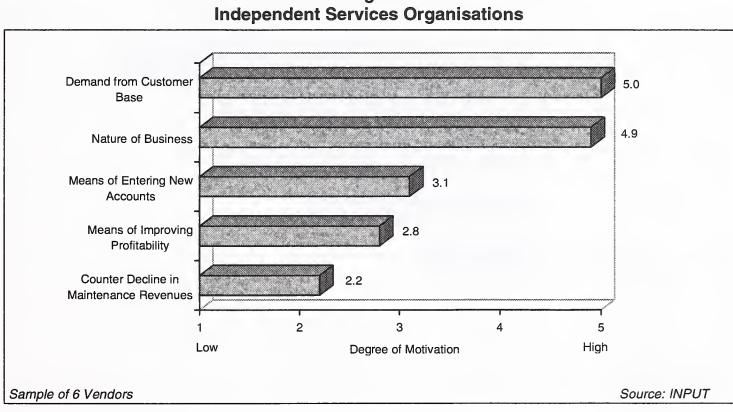
This group, which includes Sun Microsystems, H-P, Data General, Sequent, Memorex Telex, StorageTek and Comparex indicated that counteracting a decline in maintenance revenues was a strong reason for offering multivendor services. It was not thought to be a strategic way of entering new accounts, and was not considered to be a natural part of their business. See Exhibit III-10.

Exhibit III-10



Of the many independent services organisations active in the multivendor services market, many are, or have evolved from being, independent maintenance organisations.

This group, which includes Getronics, Computervision, Network Si and a host of others, clearly signalled that multivendor services is why they are in business. See Exhibit III-11.



Motivations For Offering Multivendor Services -

Exhibit III-11

The dealers and resellers, such as Computacenter and P&P, indicated most strongly that, apart from user demand, their decision to offer multivendor services was a strategic move to penetrate new accounts. See Exhibit III-12.

Exhibit III-12 **Motivations For Offering Multivendor Services -Dealers/Resellers** Demand from Customer 5.0 Base Means of Entering New 4.0 Accounts Means of Improving 4.0 Profitability 3.1 Nature of Business Counter Decline in 2.0 Maintenance Revenues 2 3 5 4 1 High Low Degree of Motivation Sample of 4 Vendors Source: INPUT

INPUT

F **Styles of Multivendor Service**

As shown in Exhibit III-13, different service organisations take different approaches in offering multivendor services.

Exhibit III-13

Approaches to Multivendor Service				
	Vendor Type			
Service Attribute	Strongly Product- Focused Vendors (e.g. UNIX vendors, storage specialists)	System Vendors With Independent Multivendor Service Unit	Independent Service Organisations	
Basic Approach to Service Offer	Not part of normal service offer. Typically only in response to demand from existing clients	Marketed as problem management service in client/server environments	Maintenance- biased. IMOs typically offer a comprehensive list of multivendor equipment maintained	
Key Feature of Service	Specific to client	Guaranteed problem resolution regardless of source	Standard service level covering all equipment	
Alliance Requirements	Specific, short-term partnerships, subcontractor arrangements	Robust back-to-back service arrangements with equipment and software vendors	Multiple arrangements with maintenance subcontractors; software certified engineers	

Source: INPUT

INPUT

The most basic approach is to respond to specific demands from existing customers on a case by case basis. This is typically the approach taken by the storage equipment specialists and some (though not all) of the Unix vendors.

SunService, a division of Sun Microsystems, is known for its strong product focus and allegiance to Unix. However, it has recently launched a multivendor services offer aimed at satisfying the broader support needs of its clients. While SunService will not actively promote multivendor services to non-Sun customers, it has nevertheless developed an effective multivendor service for its customer base, founded upon strong

partnership agreements with other product vendors. The resultant offer blends own product service quality with the convenience of multivendor product support from the same source.

At the other end of the spectrum, some vendors have reacted to the call for multivendor services by offering support for equipment and software products from *all* of the leading vendors. This product-centric approach to multivendor service is typical of the independent maintenance organisations.

Arguably, the optimum approach is adopted by the systems vendors such as ICL Sorbus, Olivetti and Digital. These organisations, which have established independent multivendor services arms, tend to adopt a more strategic approach to multivendor service. This approach goes beyond the product-centric view, and offers genuine problem ownership and management on behalf of the client.

The strategic approach treats each client as a unique case, but offers the same guarantee of problem resolution regardless of the cause, or source (equipment, software, network) of those problems.

INPUT believes that the problem management approach to multivendor services is the one most likely to succeed. This approach most appropriately reflects user demand for simplified, seamless support of today's complex heterogeneous IT environments.



Multivendor Services Market Europe 1995-2000

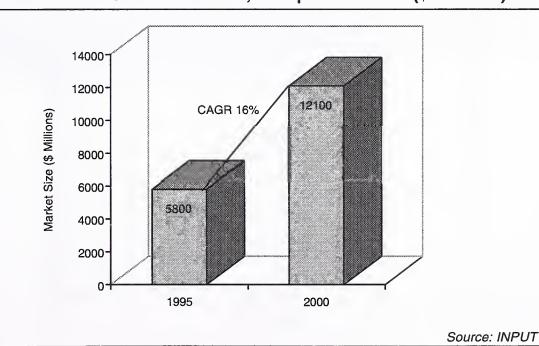
This chapter presents market sizing and forecast data for the European multivendor services market and for period 1995-2000.

Analyses are provided for Europe as a whole and for each of 16 individual European country markets, plus Eastern Europe.

In addition, estimates of the revenues of the leading multivendor services providers are given for each territory.

Multivendor Services Market, Europe 1995-2000

Exhibit IV-1



Multivendor Services Market, Europe 1995-2000 (\$ Millions)

European Multivendor Services Market by Country, 1995-2000 (\$ Millions)

* + + + + + + + + + + + + + + + + + + +	1995 Total Customer Services (\$m)	1995 Multivendor Services (\$m)	2000 Total Customer Services (\$m)	2000 Multivendor Services (\$m)	Multivendor Services CAGR (%) 1995-2000
France	4940	1160	5570	2290	15
Germany	5980	1040	6630	2400	18
UK	4950	1190	5670	2360	15
Italy	2760	640	3090	1350	16
Sweden	1030	230	1330	510	17
Denmark	640	120	720	250	17
Norway	550	120	625	240	16
Finland	440	90	515	190	17
Netherlands	1910	430	2310	850	15
Belgium	795	170	830	330	13
Spain	1060	230	1210	460	15
Switzerland	1330	200	1580	400	14
Austria	530	120	580	210	12
Greece	53	6	59	12	16
Ireland	169	30	205	75	20
Portugal	137	17	176	50	23
E. Europe	427	12	872	120	58
Europe Total	27700	5800	31800	12100	16

Source: INPUT

INPUT

Exhibit IV-3

Leading Multivendor Services Vendors, Europe 1995

		Estimated Multivendor Service Revenue (\$ Millions)	Market Share (%)
1	Digital	530	9.1
2	ICL	470	8.1
3	Olivetti	430	7.4
4	Getronics	280	4.8
5	ICG	230	4.0
6=	IBM	225	3.9
6=	Bull	225	3.9
8	Granada	210	3.6
9	Hewlett-Packard	190	3.3
10	Thomainfor	130	2.2
	Total Listed	2920	50
	Total Market	5800	100

B Multivendor Services Market by Country

Exhibit IV-4

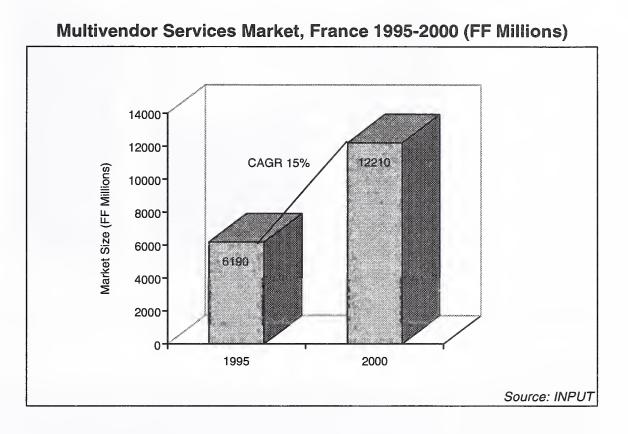
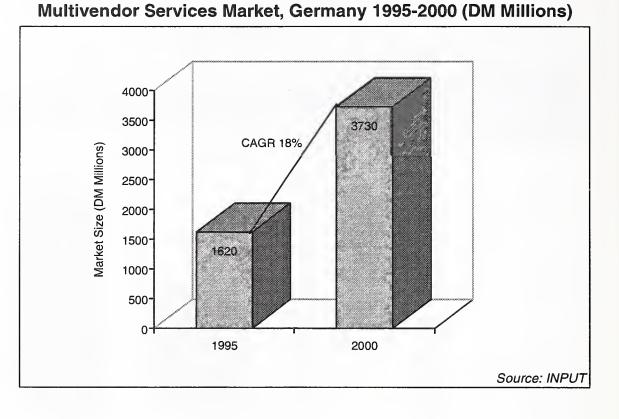


Exhibit IV-5

Leading Multivendor Services Vendors, France 1995

		Estimated Multivendor Service Revenue (FF Millions)	Market Share (%)
1	Bull	710	11.5
2	Thomainfor	530	8.6
3	Digital	420	6.8
4	ICL	220	3.6
5=	Olivetti	215	3.5
5=	IBM	215	3.5
7	HP	160	2.6
8	ECS	130	2.1
9	AT&T	100	1.6
10	Unisys	70	1.1
	Total Listed	2769	44.7
	Total Market	6190	100





Leading Multivendor Services Vendors,	Germany 1995
---------------------------------------	--------------

		Estimated Multivendor Service Revenue (DM Millions)	Market Share (%)
1	Digital	160	9.9
2	SNI	115	7.1
3	IBM	90	5.6
4	HP	60	3.7
5	Olivetti	45	2.8
6	Info AG	40	2.5
7=	Bull	35	2.2
7=	ICL	35	2.2
9	Comparex	30	1.9
10	Unisys	25	1.5
	Total Listed	635	39.2
	Total Market	1620	100

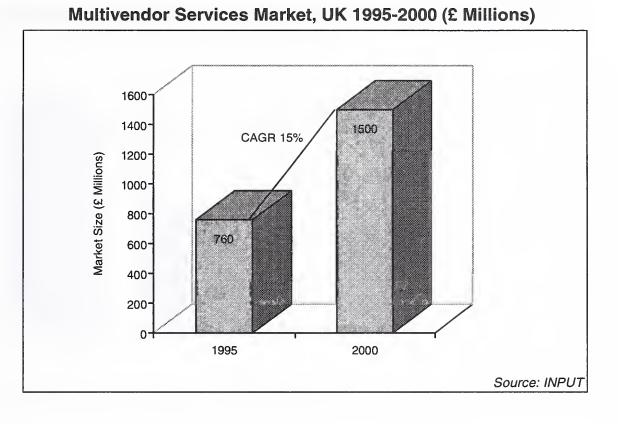
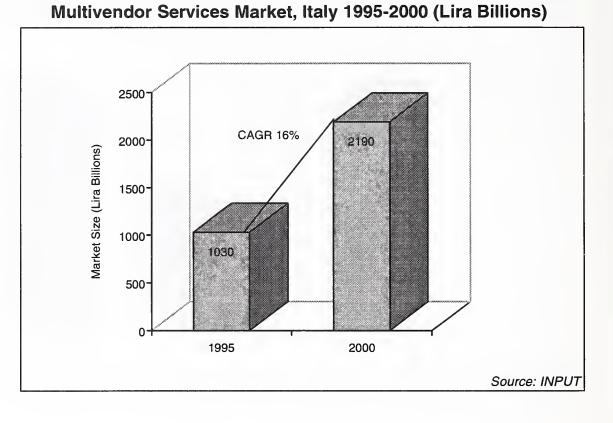


Exhibit IV-9

Leading Multivendor Services Vendors, UK 1995

		Estimated Multivendor Service Revenue (£ Millions)	Market Share (%)
1	ICL	180	23.7
2	Digital	115	15.1
3	Granada	80	10.5
4	Network Si	40	5.3
5	IBM	35	4.6
6=	Olivetti	30	3.9
6=	HP	30	3.9
8=	AT&T	20	2.6
8=	Computeraid	20	2.6
8=	Bull	20	2.6
	Total Listed	570	75.0
	Total Market	760	100



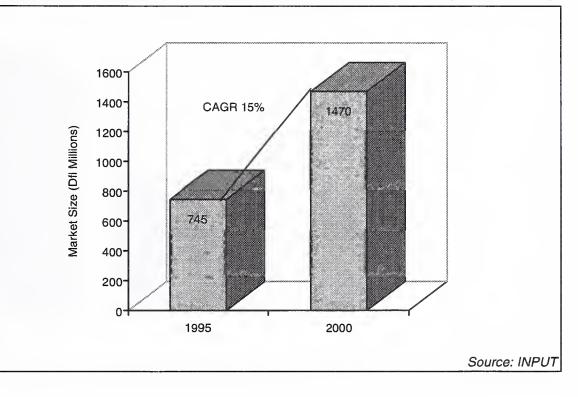


Leading Multivendor Services Vendors, Italy 1995

		Estimated Multivendor Service Revenue (Lira Billions)	Market Share (%)
1	Olivetti	380	36.9
2	Digital	65	6.3
3	IBM	60	5.8
4	Bull	40	3.9
5	HP	30	2.9
6	Granada	20	2.0
7=	Unisys	15	1.5
7=	ICL	15	1.5
9=	AT&T	10	1.0
9=	ComputerVision	10	1.0
	Total Listed	645	62.7
	Total Market	1030	100



Multivendor Services Market, Netherlands 1995-2000 (Dfl Millions)



		Estimated Multivendor Service Revenue (Dfl Millions)	Market Share (%)
1	Getronics	425	57.0
2	Digital	80	10.7
3	Triple P	32	4.3
4	Olivetti	28	3.7
5	ICL	26	3.5
6	IBM	25	3.4
7	Granada	20	2.7
8	HP	17	2.3
9	Bull	15	2.0
10	AT&T	10	1.3
	Total Listed	678	91.0
	Total Market	745	100

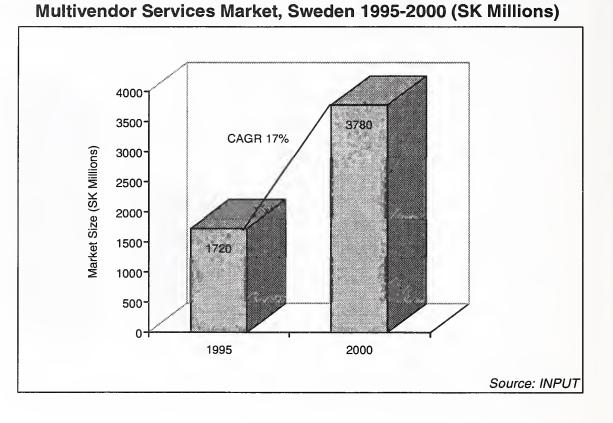


Exhibit IV-15

Leading Multivendor Services Vendors, Sweden 1995

		Estimated Multivendor Service Revenue (SK Millions)	Market Share (%)
1	Nexor Perinet AB	265	15.4
2	ICL	225	13.1
3	Digital	210	12.2
4	IBM	65	3.8
5	Olivetti	50	2.9
6	Comma (ND)	45	2.6
7	ComputerVision	40	2.3
8=	Granada	35	2.0
8=	HP	35	2.0
10	Bull	30	1.7
	Total Listed	1000	58.1
	Total Market	1720	100

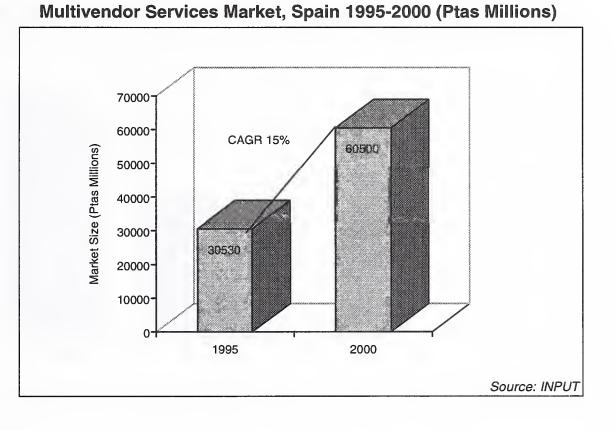


Exhibit IV-17

Leading Multivendor Services Vendors, Spain 1995

		Estimated Multivendor Service Revenue (Ptas Millions)	Market Share (%)
1	Eltec	3680	12.1
2	Olivetti	2320	7.6
3	Digital	2300	7.5
4	HP	2180	7.1
5	Granada	1660	5.4
6	AT&T	1620	5.3
7	IBM	1390	4.6
8	Getronics	1370	4.5
9	ICL	1340	4.4
10	Bull	1300	4.3
	Total Listed	19160	62.8
	Total Market	30530	100

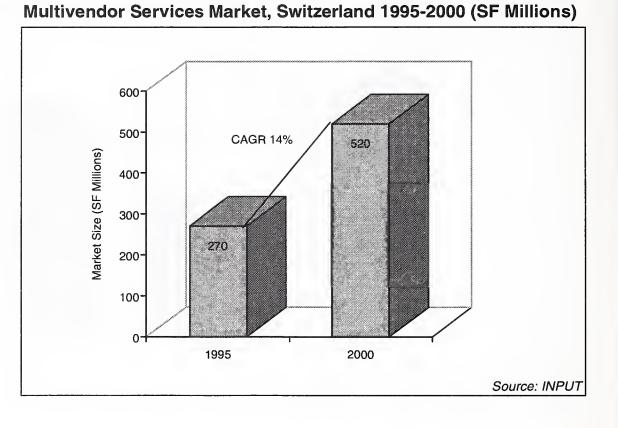


Exhibit IV-19

Leading Multivendor Services Vendors, Switzerland 1995

		Estimated Multivendor Service Revenue (SF Millions)	Market Share (%)
1	Digital	23	8.6
2	AT&T	20	7.4
3	HP	10	3.6
4	IBM	10	3.6
5	Unisys	9	3.5
6	Granada	9	3.5
7	ICL	8	2.9
8=	Olivetti	6	2.4
8=	Bull	6	2.3
8=	Wang	6	2.3
	Total Listed	108	40.2
	Total Market	270	100

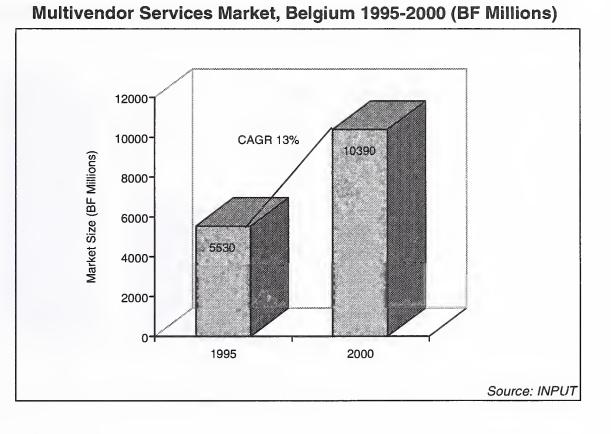


Exhibit IV-21

Leading Multivendor Services Vendors, Belgium 1995

		Estimated Multivendor Service Revenue (BF Millions)	Market Share (%)
1	Getronics	790	14.3
2	Digital	640	11.6
3	Olivetti	440	8.0
4	Bull	280	5.1
5=	Unisys	260	4.7
5=	Granada	260	4.7
7	HP	235	4.3
8	IBM	195	3.5
9=	SNI	165	3.0
9=	Thomainfor	165	3.0
	Total Listed	3430	62.0
	Total Market	5530	100

Source: INPUT

INPUT

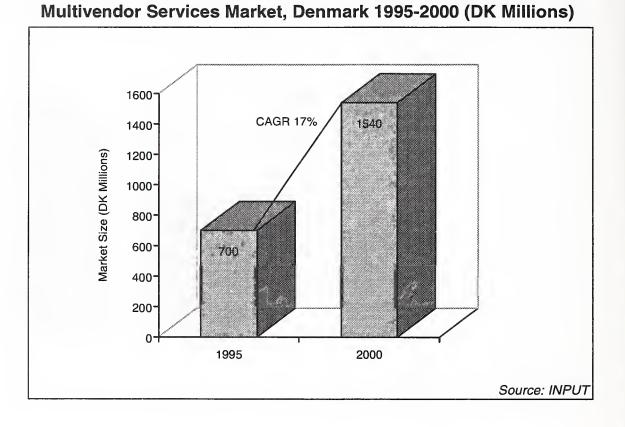


Exhibit IV-23

Leading Multivendor Services Vendors, Denmark 1995

		Estimated Multivendor Service Revenue (DK Millions)	Market Share (%)
1	ICL	100	14.3
2	Olivetti	65	9.3
3	Comma (ND)	60	8.6
4	Digital	58	8.3
5	IBM	50	7.2
6	Nexor Perinet AB	38	5.4
7	AT&T	35	5.0
8	HP	17	2.4
9	ComputerVision	16	2.3
10	Datapoint	12	1.7
	Total Listed	451	64.4
	Total Market	700	100

Source: INPUT

CST1

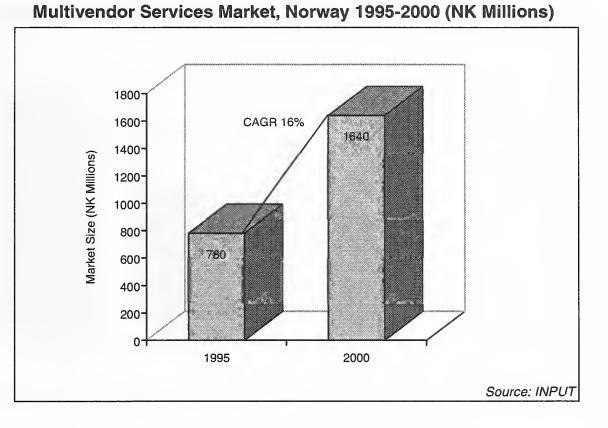
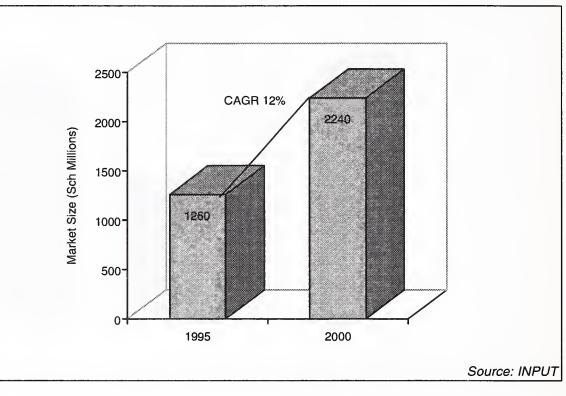


Exhibit IV-25

Leading Multivendor Services Vendors, Norway 1995

		Estimated Multivendor Service Revenue (NK Millions)	Market Share (%)
1	Comma (ND)	450	57.7
2	Olivetti	70	9.0
3	ICL	40	5.1
4	Digital	40	5.1
5	Nexor Perinet AB	35	4.5
6	IBM	33	4.2
7	Bull	25	3.2
8	ComputerVision	20	2.6
9	AT&T	15	1.9
10	HP	14	1.7
	Total Listed	742	95.1
	Total Market	780	100



Multivendor Services Market, Austria 1995-2000 (Sch Millions)

Exhibit IV-27

Leading Multivendor Services Vendors, Austria 1995

		Estimated Multivendor Service Revenue (Sch Millions)	Market Share (%)
1	Digital	240	19.0
2	Olivetti	100	7.9
3	IBM	55	4.4
4	HP	45	3.6
5	Bull	43	3.4
6=	Thomainfor	40	3.2
6=	SNI	40	3.2
8	Unisys	38	3.0
9	ICL	33	2.6
10	AT&T	28	2.2
	Total Listed	661	52.5
	Total Market	1260	100

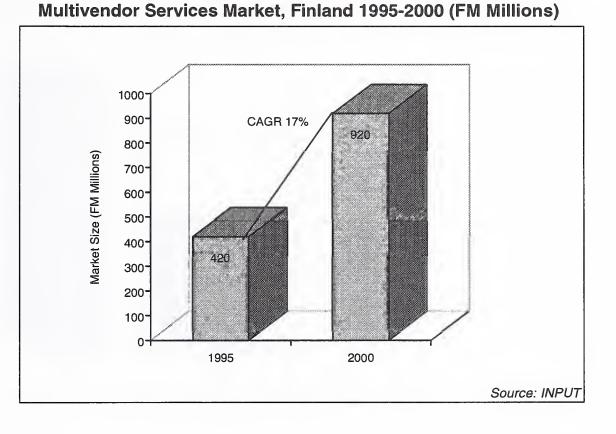


Exhibit IV-29

Leading Multivendor Services Vendors, Finland 1995

		Estimated Multivendor Service Revenue (FM Millions)	Market Share (%)
1	ICL	230	54.8
2	Digital	50	11.9
3	Tietotehdas	25	6.0
4	Nexor Perinet AB	20	4.8
5	IBM	15	3.6
6	ComputerVision	12	2.9
7	Comma (ND)	9	2.3
8	AT&T	6	1.4
9	Unisys	5	1.2
10	SNI	4	0.9
	Total Listed	376	89.6
	Total Market	420	100

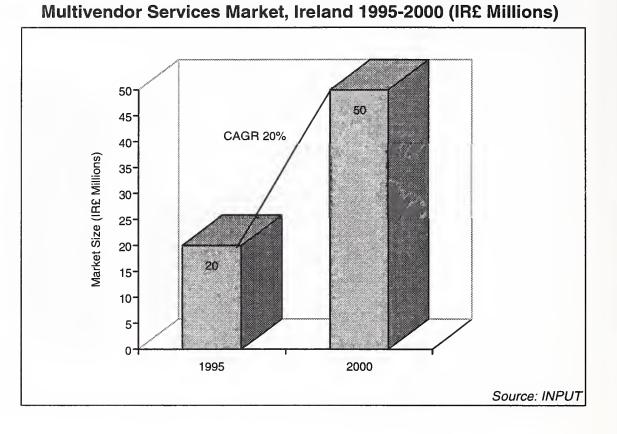


Exhibit IV-31

Leading Multivendor Services Vendors, Ireland 1995

		Estimated Multivendor Service Revenue (IR£ Millions)	Market Share (%)
1	Digital	5	25.6
2	ICL	3	17.5
3=	Comma (ND)	2	9.7
3=	HP	2	9.1
3=	Unisys	2	7.8
6=	AT&T	1	3.9
6=	IBM	1	3.4
8=	ComputerVision	0.4	2.1
8=	Wang	0.4	2.1
8=	Bull	0.4	1.9
	Total Listed	17	83.0
	Total Market	20	100

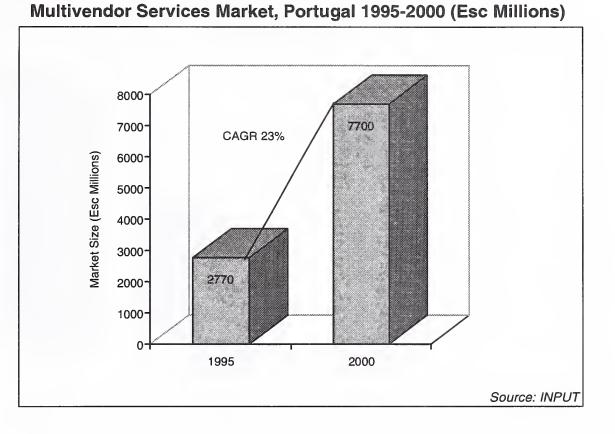
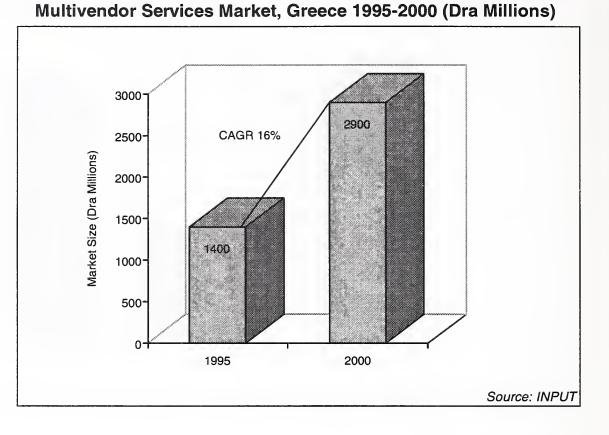


Exhibit IV-33

Leading Multivendor Services Vendors, Portugal 1995

		Estimated Multivendor Service Revenue (Esc Millions)	Market Share (%)
1	Digital	650	23.5
2	Olivetti	550	19.9
3	ICL	430	15.5
4	Unisys	280	10.1
5	HP	240	8.7
6	Bull	140	5.1
7	IBM	120	4.3
8	ComputerVision	80	2.9
9	SNI	60	2.2
10	AT&T	55	2.0
	Total Listed	2605	94.0
	Total Market	2770	100





Leading Multivendor Services Vendors, Greece 1995

		Camilas Devenue	Market Share (%)
1	Digital	280	20.0
2	IBM	220	15.7
3	Bull	190	13.6
4	ComputerVision	150	10.7
5	ICL	140	10.0
6	Olivetti	130	9.3
7	Wang	70	5.0
8	AT&T	60	4.3
9	SNI	50	3.6
10	Unisys	35	2.5
	Total Listed	1325	94.6
	Total Market	1400	100

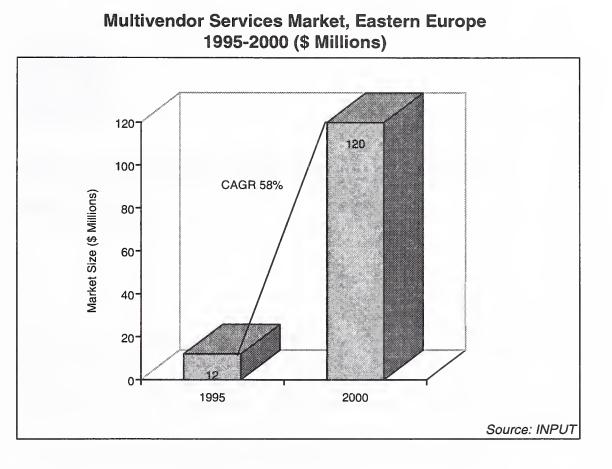


Exhibit IV-37

		Estimated Multivendor Service Revenue (\$ Millions)	Market Share (%)
1=	Digital	3.0	25.0
1=	Unisys	2.8	23.3
3=	ICL	2.0	16.7
4	IBM	1.8	15.0
5	SNI	0.6	4.7
6	Olivetti	0.5	4.2
7=	Bull	0.3	2.5
7=	AT&T	0.3	2.5
9	HP	0.2	1.7
10	Comparex	0.1	0.8
	Total Listed	11.6	96.3
	Total Market	12	100

Source: INPUT

INPUT

(Blank)



Multivendor Services Vendor Profiles

This chapter contains profiles of six multivendor services providers. The choice of vendors profiled does not reflect market share or ranking. Rather, the vendors selected are representative of the variety of organisations currently offering multivendor services today, and include:

- The independent service arms of two computer equipment manufacturers (Digital and ICL Sorbus)
- A large independent services organisation (Getronics)
- A European-wide consortium of independent maintenance organisations (Euroserv) and one of its members (ATM Technology)
- An equipment manufacturer which has repositioned itself as a systems integrator (Unisys)
- A traditional reseller organisation which is repositioning itself as a services provider (P&P).

A Digital MCS

1. Competitive Positioning

Digital's Multivendor Customer Services division (MCS) has established itself as the biggest revenue earner within the organisation, contributing over 30% to Digital's current worldwide revenues.

While Digital's professional services and computer systems groups have suffered in recent years, the MCS group has continued to flourish, building on its early lead in the increasingly important multivendor services market.

However, an interesting fact about MCS's advance is that the group has consciously played down the significance of multivendor capability *per se*. It has chosen instead to focus on developing innovative service offerings which, while essentially multivendor, appeal much more to users' real business needs.

Digital MCS launched its new strategy for IT support towards the end of 1994, the key aspects of which are:

- Renewed focus on client/server computing
- The launch of several new services aimed at easing the burdens of IT ownership and support.

Digital MCS is repositioning itself as a solutions provider, rather than a straightforward provider of multivendor product services. As part of this initiative, MCS implemented a worldwide change programme in 1994 to re-engineer its business model in four key areas:

- Service delivery
- Selling model
- Infrastructure
- Offer portfolio.

MCS has created a dedicated salesforce for service delivery, enhanced its channel partner strategy, and reorientated its internal business practices to become more customer focused. In addition to re-engineering its internal business model, MCS has also looked outside to establish technical and marketing alliances with key players in the client/server computing arena.

Digital was the first vendor to become a full Novell Technical Support Alliance Partner, and MCS operates a number of Novell Authorised Service Centres across Europe. MCS is also a Microsoft partner, and was first to offer a wide range of services for Microsoft NT.

MCS has prime access to development teams within Novell and Microsoft, and has similar arrangements with WordPerfect and Lotus.

2. Content and Scope of Offer

MCS also revised the structure of its offer by rationalising its service portfolio. All MCS services now fall into one of four simple categories:

- *Getting Started* (LAN design, installation and startup, software installation and updates, interoperability testing)
- *Keeping IT Going* (Parts, part-exchange, methods & tools, software update distribution, license subscription, equipment maintenance)
- *Improving Productivity* (software publishing, information services, user application support, developer support, software operational support, technical advice)
- *Managing IT* (system management, asset management, system healthchecks, availability reviews, product disposition and LAN management support).

To coincide with its re-launch at the end of 1994, MCS also announced key programmes which demonstrate its commitment to tackling the problems of client/server computing.

Two programmes which have been given a particularly high profile are *Software Utility* and *PC Utility*.

These "umbrella" programmes, which encompass a variety of individual service components, are being promoted on the promise of reducing the cost of IT ownership. One of the key messages MCS is conveying is the fact that between 60% and 80% of the cost of running PC hardware and software is made up of direct and hidden costs for management, support

and administration. The two new services aim to reduce these costs substantially.

Customers effectively buy a tailored package made up from a variety of multivendor service options, many of which Digital already offers. Charging is on a per month basis ("pay-as-you-go") to reduce the need for large cash outlays and capital expenditures.

The typical offering is a 3 year, all-inclusive contract. Terms and pricing structures apply worldwide.

3. Business Development

In setting the new agenda for his group, John Rando, Worldwide Director of Digital MCS, has turned the spotlight on client/server computing. This is illustrated by the MCS mission statement:

"To be the leader in supporting customers and their investments today, and as they evolve to client/server computing".

Rando has based his vision for MCS on the anticipated decline in mainframe and midrange computing, at the expense of client/server architecture. Key to MCS's strategy is the belief that successful client/server service providers will be those which take the risk of owning customers' IT problems, and guarantee effective resolution regardless of how, or from where, the problems arise.

Digital's multivendor service focus has enabled it to maintain a prominent position in the European customer services marketplace. INPUT ranks Digital as the leading multivendor services provider in 1995 (see ranking in Chapter V), and second only to IBM in terms of total European customer services revenues.

B ICL Sorbus

1. Competitive Positioning

In February 1995, ICL Customer Service and Sorbus merged to create a major European multivendor services player. Prior to this, Sorbus had been jointly owned by ICL (51%) and Bell Atlantic Business Systems (49%).

ICL Sorbus defines its key competitive differentiators as:

- Breadth of service offer, both technically and geographically
- Established pedigree and reputation as an open systems company
- Genuine independence as a supplier of service solutions
- Advanced service management processes and infrastructure.

In addition, pre-merger Sorbus had established a reputation for the following:

- Use of leading edge technology for remote support
- Use of information systems underpinning all aspects of the business
- Extensive marketing agreements and alliances globally
- Ability to leverage Bell Atlantic's R & D resources.

The merger of the two organisations represents a potent force in delivering pan-European (and global) multivendor and enterprise-wide service.

2. Content and Scope of Offer

The full portfolio of services addresses the entire lifecycle of IT service needs and includes:

- Environmental planning and preparation (contingency & back-up sites)
- Procurement services

- Installation
- Maintenance
- Helpdesk provision
- Asset management and audit services
- Network management and services
- Software support services
- Tuning, sizing, enhancement services
- Migration, redeployment and disposal services
- Project services.

The offer extends across all computer platforms and to virtually all product types (IBM, ICL and DEC mainframes, IBM, HP and Sun midrange, and most networks, peripherals and PC equipment).

The Edge is a total services concept, backed up by 200 engineers and 40 consultants who aim to provide:

- 365 x 24 hour helpdesk
- On-site help by hour/day
- Fixed term financing, and no hidden costs.

The Edge is notable in particular for its innovative approach to services branding and use of marketing communications.

3. Organisation and Resources

ICL Sorbus operates in 16 European countries (22 worldwide), employing 6,000 staff across 247 service locations.

The ICL Sorbus organisation is divided essentially into two major areas: UK & Infrastructure, and Europe. ICL Sorbus Europe is sub-divided into individual country units. UK & Infrastructure is sub-divided into five semi-autonomous business units as follows:

- Datacentre Services. Responsible for UK public sector and Times Top 100 accounts, maintaining head office and core systems, as well as developing strategic alliances with other companies (for example, EDS, Sema and Hoskyns).
- *Desktop Services*, providing managed service for PC and Unix environments
- *Point of Service*, offering the full range of ICL's specialist retail services, including back-office and systems support. Customers include retailers, hotels, travel and leisure companies, financial services institutions and all National Lottery outlets
- Service Logistics, offering comprehensive access to service spares
- Power of 4, providing vendor-independent project management, consultancy and system integration services. Power of 4 partnerships and accreditations include Microsoft, Novell, IBM, Computer Associates, Oracle, Prince, ISEB and BS5750.

4. Business Development

ICL Sorbus has the declared aim of becoming "the number one provider of multivendor services across Europe". INPUT currently ranks ICL Sorbus as second behind Digital MCS (see rankings in Chapter V).

Future services strategy will continue to focus on desktop, network and software support, and particularly on the provision of helpdesk services.

An important part of the ICL Sorbus campaign to become Europe's leading multivendor services supplier is a re-engineering programme entitled *Project Dawn*. Established soon after the February 1995 merger announcement, the project's aim is to conduct a thorough analysis of the company's service offerings across 247 locations in 16 countries throughout Europe. The project will seek the suggestions and views of everyone in the organisation, as well as customers.

Project Dawn has divided the ICL Sorbus operation into 11 main areas, each of which has a team assigned to investigate and analyse the business using "best of breed" methodologies and practices.

Project Dawn also acknowledges the need for efficient back-up systems that provide an integrated technology platform for call centre, sales and service management control. To that end, Astea's ACES (Astea Customer

INPUT

Enterprise Series) suite of integrated tools for call centre management, contract administration, distribution/logistics and depot and financial management has recently been implemented.

Implementation of ACES began in September 1995 in the UK, and will be rolled out across European business units throughout 1996. The eventual aim is to have the entire operation controlled by two fully resilient computer centres, one in the UK and the other in continental Europe.

C Getronics

1. Competitive Positioning

Getronics N.V. has grown strongly in recent years under the guidance of Peter K. van Voorst, whose management philosophy is based upon organisational strength and operational efficiency. The company has grown by means of a shrewd acquisitions strategy and strong financial management, to become the leading independent customer services organisation in Europe today.

Key to Getronics' development has been its successful transition from a maintenance provider to a full services company capable of supplying services in support of the entire IT lifecycle. This ranges from installation of networks and systems, through multivendor support, maintenance and management, to eventual removal and possible recycling.

In providing what it terms *Integrated Services*, the Getronics Service declared mission is to minimise the cost of ownership for its customers and guarantee the maximum availability of their desktop and network systems.

2. Content and Scope of Offer

Primarily, Getronics Service operates in the desktop automation, networking, client/server and communications sectors. Networking services cover local and wide area networking, including PABX.

Equipment maintenance is offered over a wide range of products including almost all makes of PCs, peripherals and communications equipment.

Standard service offerings include the traditional on-site All in Service, and other options such as Carry in Service, Standby Service and a Time and Materials Service.

Contracts and response times are tailored to individual customer requirements and may include 24 hours by 7-day coverage, if required.

Getronics offers software support for common operating systems and application software products including networking software such as AppleTalk, Banyan Vines, IBM LanServer, MS Lan Manager, MS Advanced NT Server and Novell Netware. In addition, File Server Recovery Support, Helpdesk Services and an Anti-virus service are available. Networking hardware from 3Com, Chipcom, Cisco, Codex/Motorola, Newbridge, Synoptics, UB Networks and Wellfleet, and PABXs from Northern Telecom are supported.

In 1993 Getronics signed a co-operation agreement with Sorbus Europe to offer service on a wider range of products including mainframes, and hence provide it with the capability of offering total coverage for many of its major users. Coverage of larger systems extends to manufacturers such as Digital, Hewlett-Packard and IBM.

In June 1994 the company signed a similar co-operation agreement with ITS in order to expand its coverage of network services. ITS is a wholly owned subsidiary of SITA, a leading provider of network services operating in 38 countries in the world.

Disaster recovery services are provided by Computer Uitwijk Centrum BV and are aimed principally at the mid-range system user with Digital VAX, HP 9000 and IBM AS/400 platforms.

The Getronics Group also provides a wide range of associated professional services, which include:

- Consultancy services
- Outsourcing and facilities management
- Refurbishment services
- Training.

3. Business Development

Getronics Service is part of the Getronics Group, one of the largest Dutch owned companies operating in the IT marketplace.

Getronics Service is the result of a number of significant acquisitions in the Dutch marketplace. Its origins lie in Geveke Electronica Service, which was founded in 1968 to provide after-sales service on the computer and peripheral products sold by Geveke Electronica.

In 1983 it separated from its former parent and the Getronics Group (Getronics NV) was formed, of which Getronics Service is a wholly owned subsidiary.

INPUT

In the decade since then, the group has grown both organically and via acquisition to its present position, dominating the Dutch market. However, the group now looks set to expand its presence significantly outside its home market. It took a significant step towards this goal in 1995 by announcing a new alliance with Roccade Informatica Group, with whom they will combine to buy out privately-held Raet NV.

In 1994, group revenues were \$840 million, of which INPUT estimates \$360 million is derived from customer services; of this, \$280 million is estimated to come from multivendor service contracts.

D ATM/Euroserv

1. Competitive Positioning

ATM Technology Management group (ATM) is a well-established UK independent maintenance organisation, and a member of the Euroserv consortium. Euroserv is a network of independent companies offering pan-European support services, whose other members are:

- TASQ International
- Bitronic GmbH
- Assist Italia Srl
- Telub AB
- Itris Maintenance AG
- Metrolico SA.

The objectives of Euroserv are stated to be:

To act as an association to promote and develop a market for pan-European service and support contracts. These contracts will be performed locally throughout Europe by the member or their affiliates for that country. The association will also promote the exchange of local market and technical knowledge through its members.

As a small national service provider, ATM understands the leverage to be gained by operating within a network of similar organisations across Europe. Euroserv operates on similar principles to the International Computer Group (ICG), a consortium of European resellers and systems integrators.

ATM Technology Management group has diversified its activities in recent years. The group has two main subsidiaries, ATM and Pulse (a fourth party repairer); in addition it holds a minority interest in Cambridge Telecom (a designer and manufacturer of pay telephones).

ATM targets its services primarily at small and medium-sized enterprises, a strategy which ATM believes to be successful. However, larger contracts (in excess of £1 Million) have recently been won with Elf and Dairy Crest.

2. Content and Scope of Offer

Although ATM still derives the major share of its revenues from independent hardware maintenance, its other activities include:

- Computersource (procurement of PC and other desktop products)
- Ambassador (providing services and warranties on behalf of manufacturers, resellers and other partners)
- Network support services
- Software support (of most common PC operating systems and applications)
- Technology Management (desktop facilities management)
- Disaster Recovery Services (offering network disaster recovery services)
- Skillshop (IT recruitment)
- IT Training.

These services are also available throughout Europe by using other members of Euroserv.

Pulse, the fourth party repair operation of the ATM group based in South Wales, has one of the largest workshop operations in the UK. Initially focusing on disk drive repair and data recovery, its skills have expanded to cover a wide variety of products.

The group's reported revenues in 1994 were $\pounds 5.6$ Million (ATM) and $\pounds 2.6$ Million (Pulse). In 1995, these are forecast to be $\pounds 6.5$ Million for ATM, $\pounds 2.7$ Million for Pulse and $\pounds 0.6$ Million for Cambridge Telecom.

3. Business Development

ATM has developed and expanded its service offerings in recent years to meet a greater number of customer needs. It is expected that future focus will continue to address the small/medium enterprise marketplace.

In addition, ATM's Computersource procurement operation is more developed than many of its independent competitors and this is expected to provide increasing revenues in future years. Unlike the manufacturers and some of the dealers this is a truly independent source of advice and procurement, which may appeal to some customers.

<u>E</u> Unisys

1. Competitive Positioning

Following the merger in 1986 of Burroughs and Sperry, the new Unisys at first suffered major losses. However, since then the company has staged a steady, if slow, recovery. To this day, restructuring and divestment programmes continue to affect parts of the business.

In one of several restructurings, Unisys attempted to move away from its mainframe heritage and adopted a *Go To Market* strategy focused on the needs of client/server and desktop environments. Since 1986, Unisys has placed great emphasis on Unix and has migrated many of its applications from proprietary to Unix environments. In addition, it has launched several series of Unix systems, some of which are re-badged versions of systems from Arix, AT&T (NCR) and Sequent.

Although Unisys claims to have started offering multivendor services in the late 1980's, it was not until the 1990's that it became a serious contender in this market.

Following its initial foray into multivendor services, servicing Automated Teller Machines (ATMs), Unisys branched into other equipment in the financial sector. Other services were aimed at the desktop marketplace although now its targets include midrange servers and other networking equipment. It now offers support across a wide range of products, although in many cases it only manages the service and uses another company, often the original supplier, to provide the service.

Unisys' success in the multivendor marketplace has been based largely on large distributed multi-site operations, often where it has an existing supplier relationship with the customer.

Recently, the Unisys marketing efforts have been focused on Information Services (IS), offering management consultancy, systems integration, project management and technical consultancy. Expansion and recruitment in these areas continues, while some redundancies have occurred in the Customer Services Division. Unisys now considers itself to be a systems integration company rather than a manufacturer. Although its services are aimed at any medium to large customer, Unisys still finds many of its customers from its traditional sectors and base of:

- Finance
- Retail and Hospitality
- Transport
- Government.

The Unisys European operation encompasses Africa and provides approximately one-quarter of its world-wide revenues. In this area, its main competition in the service arena comes from the equipment manufacturers, including Hewlett-Packard, Digital, IBM, AT&T GIS and Olivetti.

Few of the independent maintenance companies have made sizeable inroads into the Unisys base and it is only the largest of these, such as Granada and Thomainfor, which are perceived as serious threats in this area.

With the growth of the Unisys IS division, new threats are being faced from the large outsourcing companies such as EDS.

2. Content and Scope of Offer

Unisys offers a comprehensive range of services. Initially launched in April 1992 under the *Totality* banner, these are grouped into three main areas:

- Planning for the Future
- Day to Day Operations
- Managing Change.

These services are offered across a wide variety of products and Unisys aims to offer the same standard of service, whether it is on its own products or those of another manufacturer.

Its *A La Carte* menu of services ranges from a basic assistance service through to a comprehensive support package covering both Unisys and non-Unisys products. The A La Carte menu concept is admired and much copied by others in the industry.

INPUT

Unisys, particularly in the UK, has also adopted a *Logistics First* philosophy, which ensures that spares are despatched to arrive before, or at the same time as, the engineer making a site visit. By ensuring the correct spares are despatched, the first time fix rate is held at the maximum possible.

The help-desk operation covers a wide range of PC hardware and software.

3. Business Development

In October 1995, Unisys announced that it will restructure into three distinct business units, effectively dismantling the existing independent matrix management structure.

The rationale is to allow the three principle business streams (Computer Systems, Information Consulting and Integration Services, and Global Support Services) to compete more effectively, whilst strengthening the company's ability to provide coordinated solutions to its customers' information management needs.

Global Support Services has a clear mission to promote the multivendor service capabilities of the organisation, and to leverage Unisys's worldwide support infrastructure in the quest for new high-growth opportunities in desktop services, network integration and multivendor product support.

F P&P

1. Competitive Positioning

P&P Group is best known for its reseller operation in the UK, but has recently begun to migrate, by means of internal change and acquisitions, towards multivendor reselling and services.

Although P&P has operations in Belgium and Sweden and some QA training centres elsewhere, 80% of P&P revenues in 1994 were earned in the UK.

Since 1988, the group has introduced a large number of services and expanded its product offerings into client/server architectures and a variety of midrange systems. The pace of these changes has accelerated since the sale of its volume distribution business in 1993.

P&P was one of the first Apple resellers, and today still sells and services PCs from many major manufacturers, including IBM, Compaq, Toshiba, Digital and AST.

Services are mainly aimed at medium and large corporate users of desktop products. However, P&P's skills extend beyond the desktop boundary, with network services a key competence. Companies in the Financial Times 500 form a sizeable share of the P&P base, although its direct marketing arm will also sell products to any size of organisation.

P&P has three main operational areas:

- Products & Services
- Specialist Services
- Specialist Distribution.

However, the group has a large number of technical specialists who may be called upon to assist with any customer activity. Using a matrix management structure, resources may be sourced from anywhere within the group to meet an individual customer need.

The main operational areas are supported by the Corporate Services area, providing functions such as Human Resources, Finance and Administration, Logistics, Purchasing, IT and Marketing. Training is an important area for P&P, and the acquisition of QA Training in 1994 makes P&P one of the largest training organisations in the UK.

P&P branding of services is strong throughout the range, and includes Managed Services, and an overall portfolio entitled Integrated Desktop Management.

It is P&P's intention to assist its customers to manage their own business, and not to replace the IT manager (unlike some of the traditional outsourcing suppliers).

2. Content and Scope of Offer

P&P offers a wide variety of services focused on the desktop and client/server arena. Backing up these services is a large number of technical specialists with an array of accreditations including AT&T (Systimax Authorised System Integrator), IBM (Referenced Installer), Microsoft (Solution Provider) and Novell (Authorised Systems House).

Similar accreditations are commonplace throughout the rest of the P&P organisation.

However, P&P's emphasis is on providing the customer with choice and the flexibility to take any number of services without constraints on choice or bundling. Examples of its provisions in the desktop market are:

- Products (hardware, software and communications)
- Services (procurement, networking, installation and system integration)
- Support (help desks, training, maintenance and technical support)
- Strategy (consultancy).

P&P's integrated Desktop Management service links many services under one umbrella to assist/partner IT managers in carrying out their function without the threat of full outsourcing or facilities management.

Likewise, although P&P has dealer accreditations from many companies (including 3Com, Compaq, Digital, IBM, Hewlett-Packard, Lotus, Microsoft and Novell), its independence allows the customer to choose the most appropriate products for its needs. P&P sees this as a competitive advantage over the equipment manufacturers who may have fewer skills in multivendor products, and possibly less objectivity in product selection.

P&P is building its expertise in midrange, client/server and network integration. Many of these services are provided directly by P&P, though it has partnerships with some third parties to provide services on its behalf.

3. Organisation and Resources

Approximately half of its 1300 staff are employed in an IT Customer Service function, including network support, maintenance, consultancy and training.

Acquisitions throughout the last two years, including Computers for Business (Scotland), QA Training, The Technology Training Centre and the consultancy and network support business of Space Consultancy, have all increased these numbers considerably and it is believed that this growth will continue.

As described earlier, the three main business areas do not pose constraints upon its operation, and specialist and consultancy skills may be called upon from any area within the group as required.

The backing and accreditation of many manufacturers and suppliers ensure that P&P has the skills to perform many tasks itself, although some other companies are used in partnership to provide individual services.

P&P has 20 offices throughout the country and two large centres in Haslingden, Lancashire.

4. Business Development

The recent changes in P&P since the divestment of its volume distribution business in 1993 have placed more emphasis on value-added services, without losing its skills on the sale of products.

Acquisitions have been made in several areas and it would not be surprising to see others in the future. It is not unreasonable to surmise that these will be in the midrange system and high-skill areas.

Within the group, there is strong emphasis on offering an increasing range of high quality multivendor (and vendor-independent) services.

Training, both for customers and in-house staff, is likely to see additional growth with new course developments being made on a regular basis.

Throughout the difficult economic circumstances in the UK in the 1990's, P&P's turnover has held firm and its profit before tax (PBT) has shown considerable improvements. These improvements continue, and in the first half of 1995 (to 31st May) profits before tax on continuing operations were $\pounds 6.2M$ on turnover of $\pounds 172M$, compared with $\pounds 2.7M$ and $\pounds 119M$, respectively in 1994.

INPUT's assessment is that focus on higher value services and renewed growth will bring substantial improvements in the next few years. The success of P&P and its range of activities highlight the changes in the multivendor marketplace in the last few years.



The Customer Services Market Defined

INPUT's View of The Customer Services Market

INPUT's view of the customer services market is illustrated in schematic form in Exhibit A-1. This exhibit illustrates the overall structure of the hardware products or equipment market for systems, and the relationship between customer services and the other segments of the equipment market.

Included within INPUT's definition of customer services are six service sectors:

- Equipment maintenance
- Environmental services
- Systems software support
- Education and training
- Professional services
- Business continuity services.

Excluded from INPUT's definition of the customer services market, as essentially product markets, are:

• Sales of spare parts

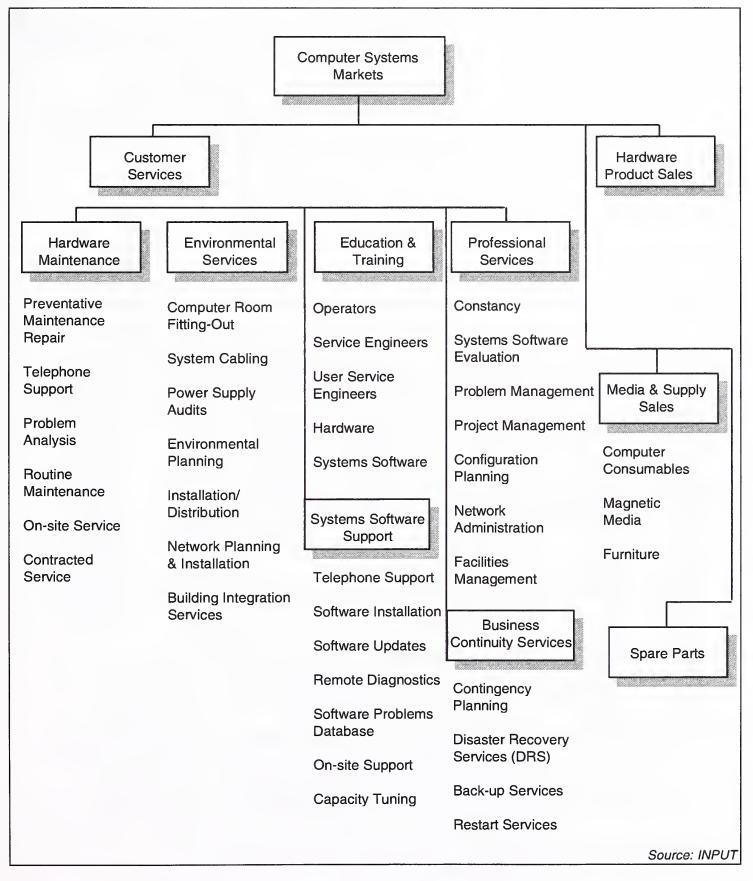
- Media and supplies sales
- Hardware product sales themselves.

Exhibit A-1 indicates the principal activities undertaken within each of the six service sectors. In each service sector, INPUT's definition of user expenditure includes only those services provided to users by an external organisation on a chargeable basis. Services provided by subsidiaries or internal resources are considered unavailable for open tender. They are therefore excluded from the open market but included in the captive market potential.

Software support activities that are included in the customer services market are those activities related to the support of systems software. Exhibit A-2 illustrates INPUT's definition of the software products market. Aspects of software support included in the customer services market are restricted to those areas highlighted in the exhibit with the rectangular box. They relate to system control and data centre management software products.

Exhibit A-1

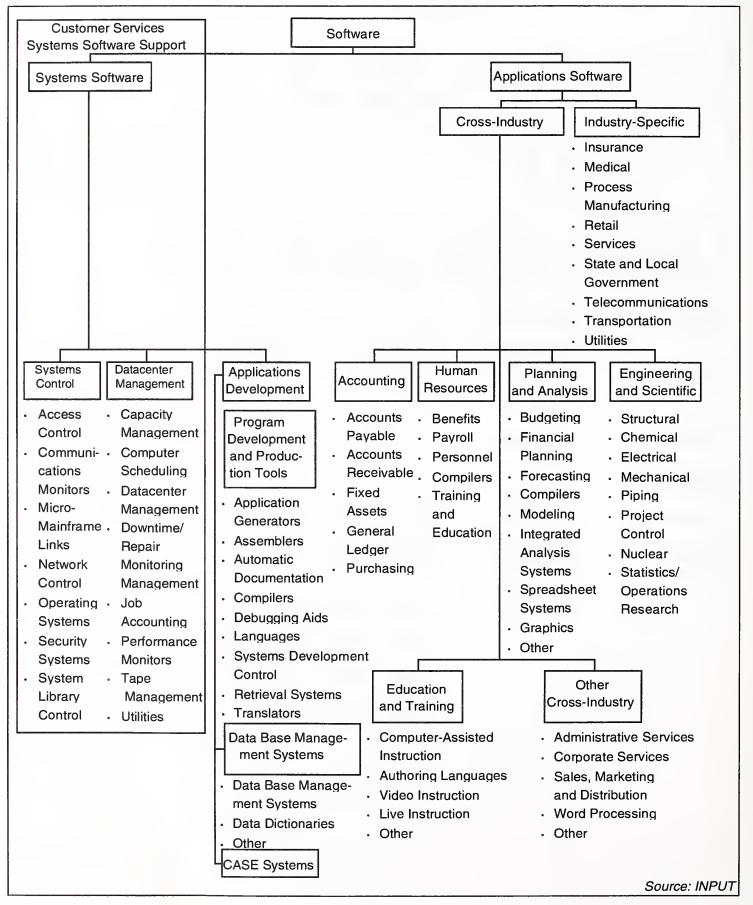
Customer Services Market Structure



INPUT

Exhibit A-2

Software Products Market Structure



B Customer Services Sectors

Customer services sectors are defined by INPUT as follows:

- Equipment maintenance: the repair or routine preventive maintenance of computer systems hardware or hardware components. Included are associated support activities such as telephone support, problem analysis and remote diagnostics. Contracts may be for one or more years; alternating repairs may be effected on an ad hoc basis.
- Environmental services are defined as all planning and implementation services which affect the environments in which computer platforms are expected to run. For these purposes, environment can mean any of the following:
 - The computer room fixtures and fittings
 - Cabling between computers and other devices in a system or network
 - Physical environment, such as: electrical power, air conditioning, water cooling, smoke or fire detection equipments
 - Network attachments
 - Buildings in which computers or network devices or terminals must reside.

Environmental services normally involve the installation, upgrade, repair or de-installation of some piece of equipment, but may be restricted to planning only.

- **Systems software service/support**: software maintenance activities that relate to systems software (not applications software). Included are associated support activities such as telephone support, problem analysis and software diagnostics.
- Education and training: all education and training expenditures for IT industry applications are included within the definition of customer services.

- **Professional services**: within the definition of customer services, this sector of the market refers only to those elements of professional services that are concerned with the support of the systems platform or network and its operating environment, including areas such as:
 - Consultancy
 - Network Administration
 - System Software Evaluation
 - Problems Management
 - Project Management
 - Configuration or Capacity Planning.

To distinguish them from environmental services, these professional services are normally restricted to planning, design or management services, without any installation of platform or ancillary equipment. It is important to acknowledge that these services are only part of the more widely defined professional services marketplace.

- **Business continuity services** include a number of service elements related to keeping a business running in the event of a major incident which temporarily puts its IT platform or network completely out of action. They include:
 - Planning for such a contingency
 - Disaster Recovery Services
 - Back-up services for magnetic or optical media
 - Restart services, covering all activities which contribute to reinstating on a permanent basis the platform or network which as suffered the major incident.

These services can be sold together in any combination or as free-standing services.

C Customer Services Vendors

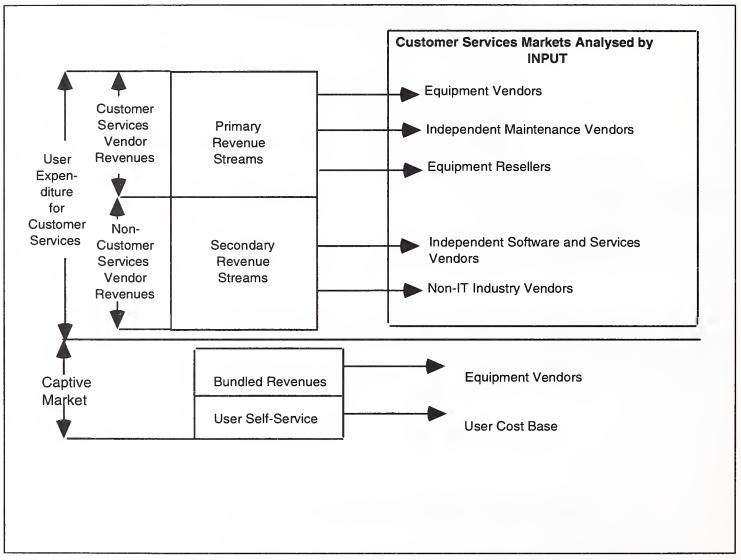
INPUT's definitions of the three primary categories of customer services vendor are as follows:

- Equipment vendors are defined as companies that manufacture computer hardware/equipment and may service equipment manufactured by themselves or other equipment manufacturers
- Independent maintenance organisations (IMOs) are defined as companies that service computer equipment and are independent of the manufacturer or agent who sold the equipment
- **Dealers and distributors** are defined as vendors that service equipment that is sold by them, either as an agent of the equipment manufacturer or as a value-added reseller (VAR).

INPUT

D Customer Services Revenue Streams

Exhibit A-3 provides a diagrammatic representation of the total customer services market. This model indicates the captive and non-captive revenue components of the total customer services market and the various revenue streams that combine to form the total market.



Customer Services Revenue Streams

User expenditure for customer services forms that portion of the market where users are provided with vendor services for which they pay separately. This portion of the market sub-divides into two components:

Exhibit A-3

- **Customer services vendor revenues**. This portion of the customer services market refers to vendors for whom customer services revenues are considered to be a primary revenue stream:
 - Equipment Vendors
 - Independent Maintenance Companies
 - The Dealer/Distributor portion of the indirect equipment resellers market.
- Non-customer services vendor revenues refer to user expenditure, for customer services, with vendors for whom customer services revenues are not considered to be a primary stream. This portion of the market results from the following activities:
 - The system integration (SI) and turnkey systems segments of the indirect equipment resellers market. In a minority of cases, these vendors provide service and support for the system platform
 - Software and services vendors whose primary source of revenue results from such items as custom software development will sometimes also provide systems support
 - Non-industry vendors such as building/construction companies or specialist product and building services companies that provide environmental services. Provision of these services is a secondary aspect to the vendor's main line of business; for example, a specialist air conditioning company might service many industry sectors, with systems for a whole range of applications besides computer room air-conditioning.

The captive portion of the customer services market relates to the provision of services for which the user does not pay separately. For example:

- Systems software support charges may be bundled as part of the software license fee rather than paid for separately by the user
- Users who wholly or partly provide their own customer services from the use of in-house resources. In this case the charges for services are accrued as an in-house cost and therefore do not result in external expenditure.

INPUT



Exchange Rates

Exhibit B-1 shows the exchange rates used for all INPUT's European forecasts during 1995.

Exhibit B-1

	· · · · · · · · · · · · · · · · · · ·			
Country	Currency	US Dollar	ECU	
Europe	\$	1	0.815	
France	FF	5.34	6.54	
Germany	DM	1.55	1.90	
United Kingdom	PS	0.639	0.784	
Italy	Lira (K)	1.62	1.99	
Sweden	Sek	7.43	9.11	
Denmark	DK	6.08	7.46	
Norway	NK	6.76	8.29	
Finland	FM	4.74	5.82	
Netherlands	Dfl	1.74	2.13	
Belgium	BF	31.8	39.00	
Switzerland	SF	1.31	1.60	
Austria	Sch	10.9	13.40	
Spain	Ptas	131.6	161.40	
Ireland	IP	0.647	0.794	
Portugal	Esc	159.2	195.20	
Greece	Dra	240.6	295.20	
Eastern Europe	\$	1	0.815	

US Dollar and ECU Exchange Rates: 1995

Source: Financial Times January 1995

(Blank)



