INPUT

STRATEGIC MARKET PERSPECTIVE

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

Customer Services Programme

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

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Abstract

Customer services organisations have for several years been under pressure to change the nature of their business, moving beyond traditional equipment maintenance into the broader realm of value-added services. Today, vendors are having to respond to the demands of increasingly sophisticated users, who are looking not only for product support and customer service, but for *business support services*.

This customer services market report examines the *demand* side of the market, providing detailed qualitative and quantitative analysis of the trends which are changing the nature of buyer demand for customer services.

The report contains:

- Commentary and analysis of the key market trends which will influence the customer services market in Europe over the period 1995 to 2000

- Detailed commentary and analysis of the customer services markets in France, Germany and the UK-based on user research, plus market forecasts for the period 1995 to 2000

- Full quantitative analyses of the customer services market in 16 individual European country markets, plus Eastern Europe (expressed in local currencies and US dollars) for the period 1995 to 2000.

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I

Introduction

A
Objectives and Scope

This year, INPUT has decided to take an in-depth look at both the *demand* and *supply* sides of the customer services market in Europe. This study examines the demand side of the market, and provides detailed qualitative analysis of the trends which are changing the nature of buyer demand for customer services.

Qualitative information, based on user research and trend analysis, are provided for Europe plus the three largest country markets, France, Germany and the UK.

Furthermore, the report provides comprehensive quantitative analyses for Europe as a whole, and for each of 16 individual countries (plus Eastern Europe grouped as a single territory). These are:

- Market size estimates for 1994, for all six service sectors included within customer services (see Appendix A for definitions)

- Five-year growth forecasts for each service sector, for the period 1995 to 2000.

A follow-up study will focus on the supply side of the market, and on the industry in general. This will provide insights into the strategy and positioning of leading vendors, plus estimates of the revenues of the leading customer services vendors, segmented by service sector and country market.

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 Eastern European market are:

Albania	Estonia	Poland	Slovenia
Bulgaria	Hungary	Romania	Ukraine
Croatia	Latvia	Russian Federation	Serbia*
Czech Republic	Lithuania	Slovak Republic	Other CIS countries

(* and other former Yugoslav republics)

B
Methodology

INPUT's established methodology was used for deriving base year market sizes and five-year forecast analyses. The methodology is based on extensive vendor revenue collection and analysis techniques, plus user research conducted in the leading country markets of Europe.

INPUT's analysis is 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
Economic Statistics

Details of the currency conversion rates and inflation assumptions used in the compilation of the forecasts in this report are contained in Appendix C.

D
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 describes the key market trends which will influence the customer services market in Europe over the period 1995 to 2000
- Chapter IV looks in detail at the customer services market in France, providing commentary and analysis based on user research, plus market forecasts for the period 1995 to 2000
- Chapter V looks in detail at the customer services market in Germany, providing commentary and analysis based on user research, plus market forecasts for the period 1995 to 2000
- Chapter VI looks in detail at the customer services market in the UK, providing commentary and analysis based on user research, plus market forecasts for the period 1995 to 2000
- Chapter VII contains quantitative analyses of the customer services market in 16 individual European country markets, plus Eastern Europe (expressed in local currencies and US dollars) for the period 1995 to 2000
- Appendix A defines INPUT's view of the customer services market, and provides detailed definitions of service sectors and delivery modes
- Appendix B provides a reconciliation between INPUT's current market forecast and the previous market forecast made in 1994
- Appendix C provides the economic assumptions (exchange rates and inflation assumptions) used in sizing and forecasting the customer services market.

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II

Executive Overview

A

Business Support Services — The New Paradigm for Customer Services

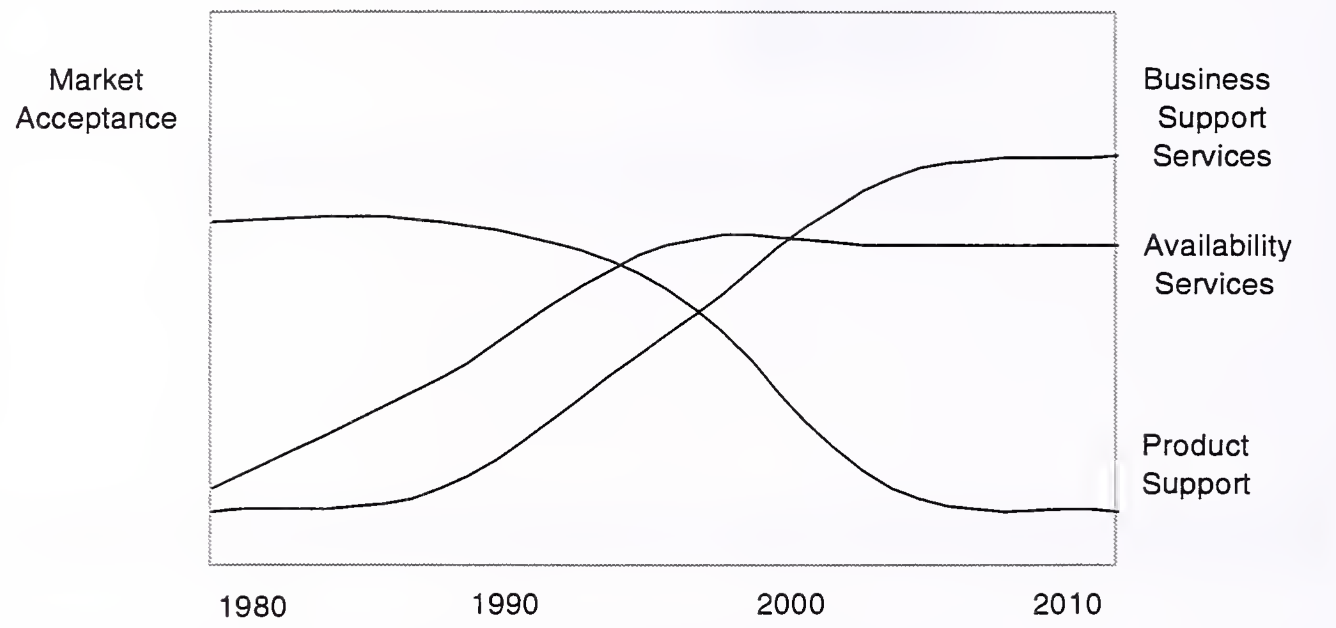
For decades, the Information Technology (IT) industry has been dominated by *technology* rather than *information*, by products rather than services. However, the rapid rate of technological advancement has created much shorter product life-cycles, and has resulted in a situation in which equipment and software products alike have become mere commodities. The resultant erosion of product prices has forced IT vendors to look beyond products to the higher-value services business.

At the same time, the increasing reliability of product technology has been steadily eroding the market for equipment maintenance services, traditionally the lifeblood of customer services organisations. Consequently, these organisations have been under pressure to move beyond maintenance into the market for various value-added services.

The pattern, and a timeline, for the evolution of the customer services market is shown in Exhibit II-1.

Exhibit II-1

Customer Services Transition to Business Support Services



Source: INPUT

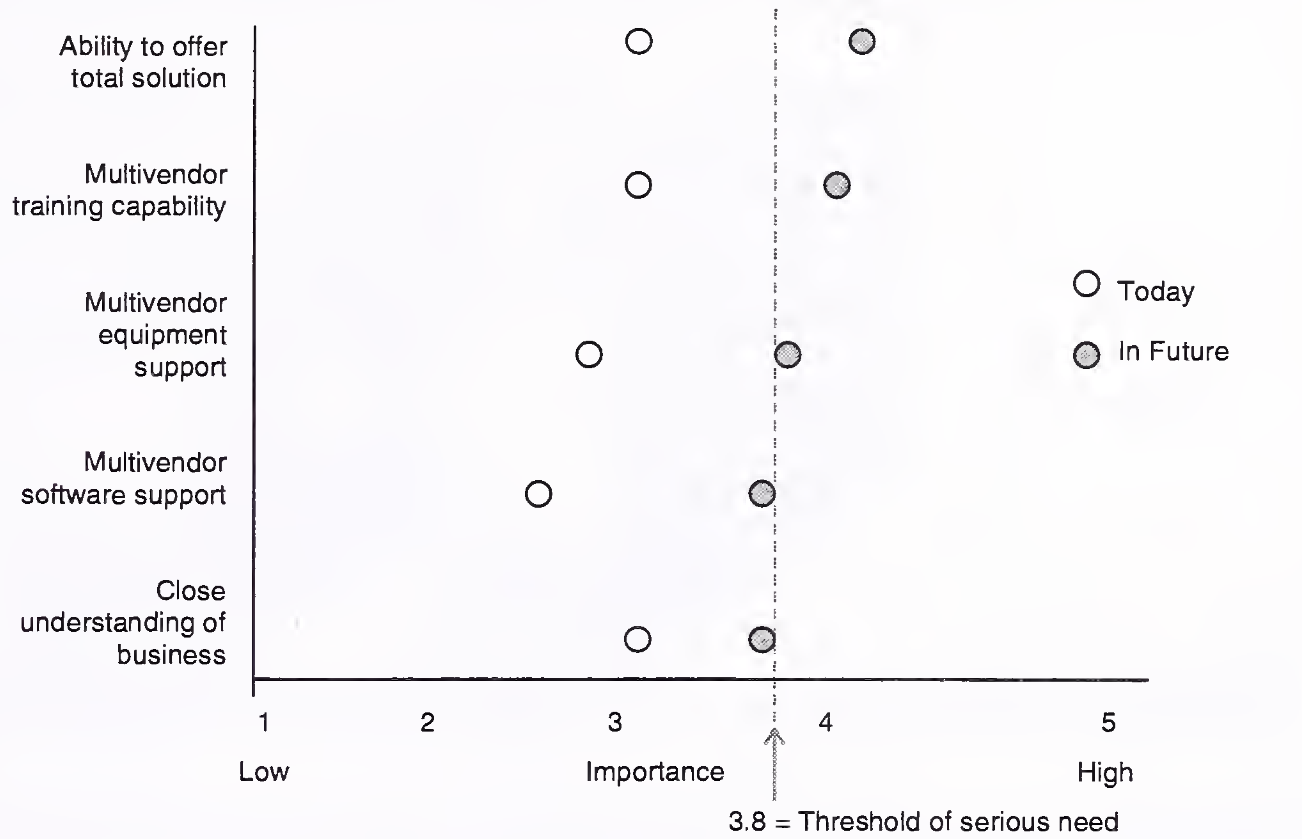
As the market is evolving, so customer services organisations are evolving. At one end of the spectrum, the leading customer services vendors are striving to make the transition from product fixers to solutions providers. At the other end, smaller maintenance providers are making every effort to focus and optimise their business operations, perhaps specialising in niche or legacy equipment, or establishing themselves as preferred third party suppliers for manufacturers and service organisations higher up the value-chain.

Successful service organisations will be those which are able to meet the demands of a new generation of business users. Users are increasingly demanding service solutions tailored to their own unique *multivendor* IT environments, and which reflect their specific business needs (see Exhibit II-2).

However, the provision of multivendor service *per se* will be insufficient to satisfy users' service requirements. Vendors must take a holistic approach to their customers' service needs, offering total solutions based upon a close understanding of the customers' business.

Exhibit II-2

Service Characteristics of Growing Importance to Users



Sample of 90 respondents *Source: INPUT*

In summary, *business support services* is fast replacing traditional product support services as the new paradigm for the industry.

Winning service organisations will also extend this paradigm to encompass the newer, fast-growing, types of user:

- Home users, who demand fast, reliable and cost-effective support for largely non-technical problems
- Mobile users, who demand convenient, consistent service wherever they may be.

Winning service organisations will come from a variety of sources: traditional equipment manufacturers, the larger independent maintenance organisations, software and services vendors, telecommunications companies and the channel. However, whatever their heritage, the successful organisations will be those which can adapt not only the *form*, but the *content* of their service offerings.

The research conducted for this study clearly illustrates the ways in which service content needs to change in order to meet the evolving needs of today's business. This can be summarised as follows:

- Equipment services are being increasingly marginalised in terms of strategic value to the business
- Software product support is becoming a highly strategic service
- Services related to the network are increasingly critical and are in greatest demand
- Businesses are beginning to see education and training as the key to realising the benefits of their IT investments.

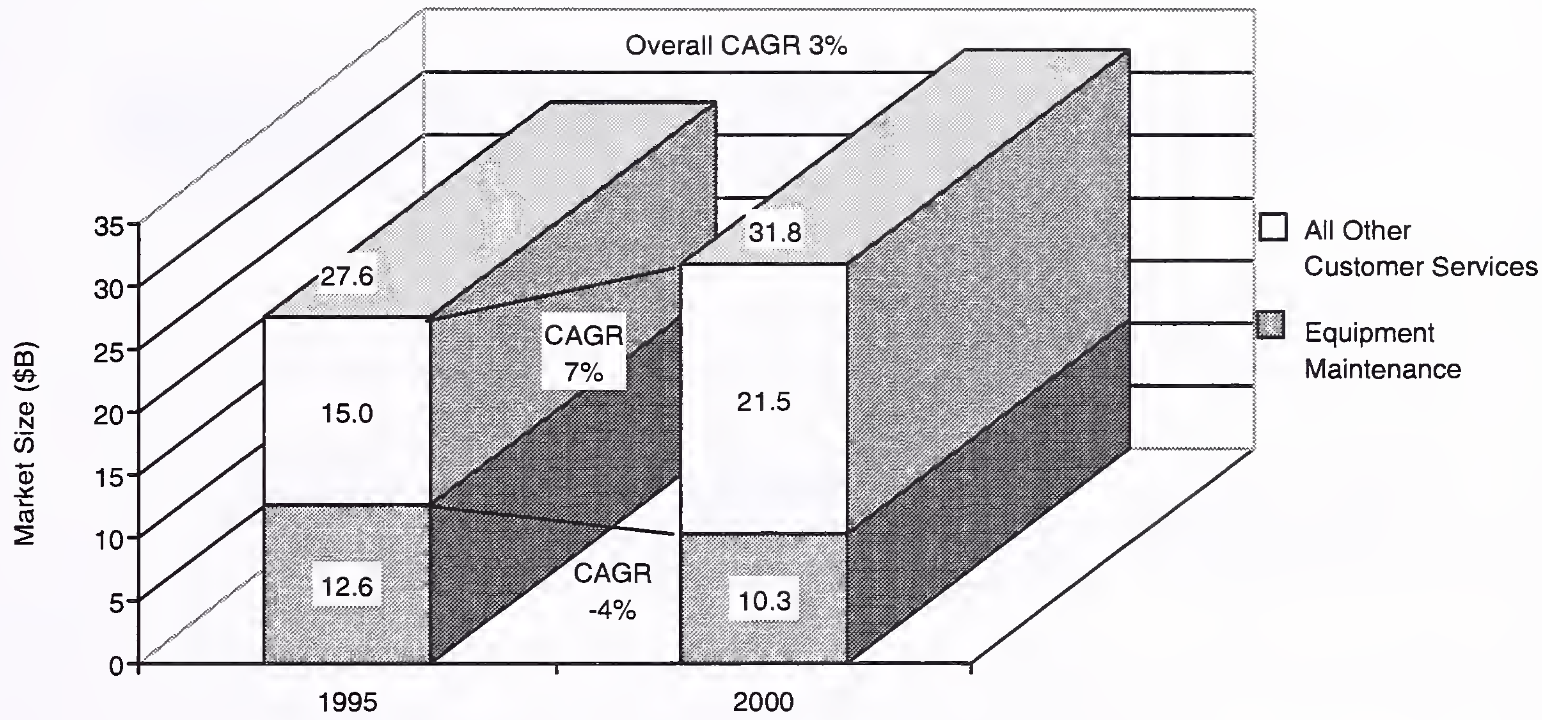
B
Equipment Maintenance — An Increasingly Marginalised Service

In 1994, the European customer services market grew by 2%, compared with 1% in 1993. However, equipment maintenance (the largest single customer services sector) fell by 4%.

Exhibit II-3 shows the growth of the customer services market between 1995 and 2000, and reveals the effect of the declining maintenance sector on the overall market. Healthy growth in the non-remedial sectors is effectively being masked by steep decline in the maintenance sector.

Exhibit II-3

European Customer Services Growth — Maintenance vs Non-Maintenance Services, 1995-2000

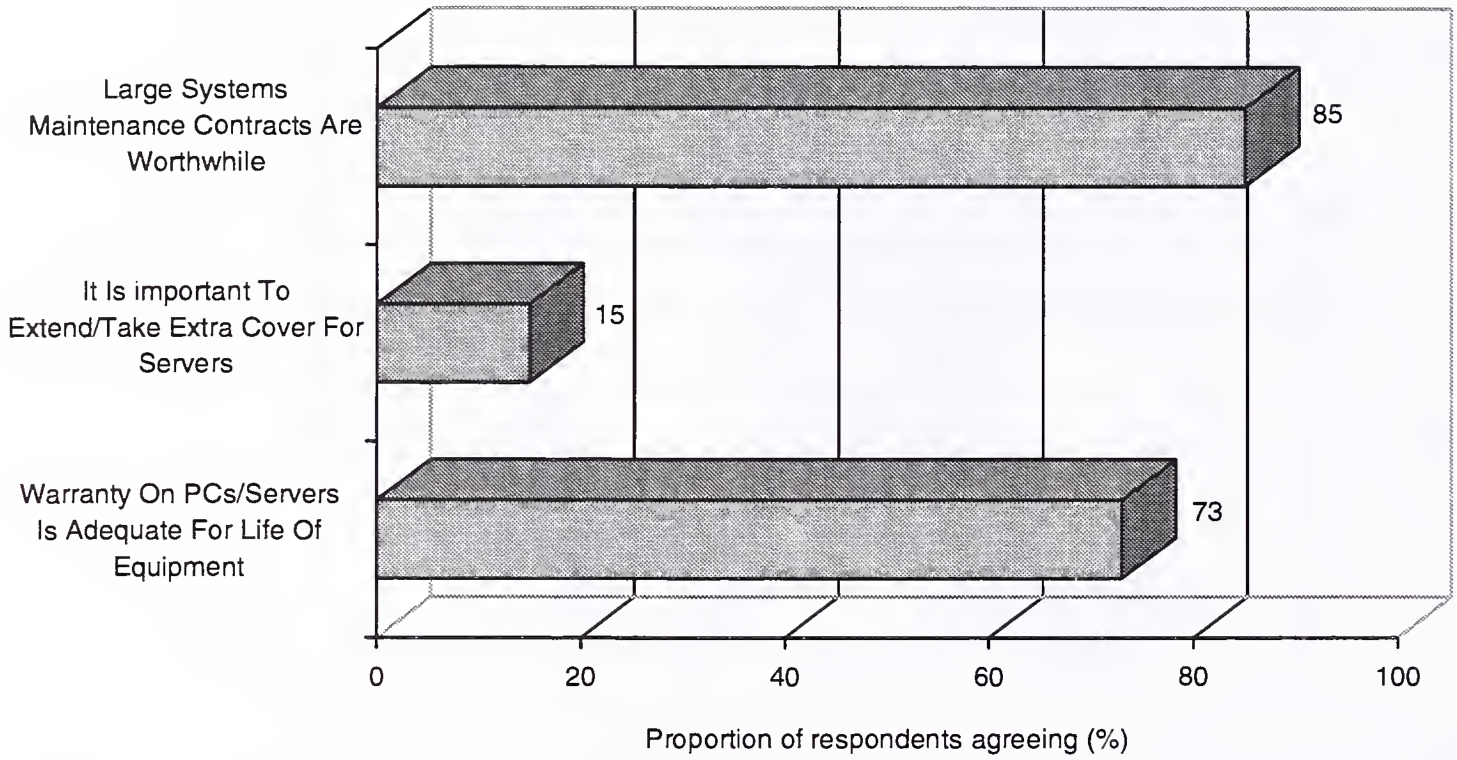


Source: INPUT

Users across Europe are unanimous in their opinions regarding the role and strategic value of equipment maintenance services, as indicated by Exhibit II-4. The reality is that while organisations still consider equipment maintenance to be a necessary service, it is not considered to be of key *strategic* value. Hence, organisations are determined to reduce their expenditure on equipment maintenance, if not by taking out fewer maintenance contracts, then by forcing down the cost of those contracts.

Exhibit II-4

User Attitudes Regarding Equipment Maintenance, Europe 1995



Sample of 90 respondents *Source: INPUT*

User attitudes can be summarised as follows:

- While the great majority of organisations surveyed regard maintenance contracts for large systems and legacy equipment to be worthwhile, they expect the *cost* of maintenance contracts to decline year on year

- With almost three-quarters of organisations believing that PC warranties provide adequate cover for the lifetime of the equipment, there is little opportunity for additional PC maintenance sales.

  The survey revealed that up to 17% of PCs may be out of warranty and have no maintenance contract. This reflects the fact that users are increasingly confident in the reliability of their PC equipment, and may hint at underlying trends such as recycling older PCs for use elsewhere within the organisation, and the growth in self-maintenance as an acceptable practice

- However, three-quarters of organisations believe it is important to extend warranties or take out additional cover for critical server equipment.

In summary, while the market for traditional proprietary maintenance is in steep decline, there is an entirely different set of dynamics in the open systems arena.

The continued shift towards implementing business-critical systems using client/server architectures is effectively redefining the nature of the maintenance market. Simple break/fix services are of limited appeal to client/server users, who expect to realise strategic value from bought-in services. In this respect, the switch from remedial service to availability service, with ever-improving up-time guarantees on offer, will continue to shape the market for equipment services in the critical open server arena.

C
Software Product Support Now A Highly Strategic Service

The reasons for the decline of the traditional equipment maintenance market are well documented and understood. The evolution of the maintenance market has followed a classic pattern from a closed, high-margin business to an open, low margin business, and is today a highly competitive and mature market.

The newly emerging market for *software product support* looks set to follow the evolution of the equipment services market. As packaged software products have reached mass markets in unprecedented numbers, and as prices have dropped, the software publishing companies have found it necessary to encourage a third party market for the support of their products.

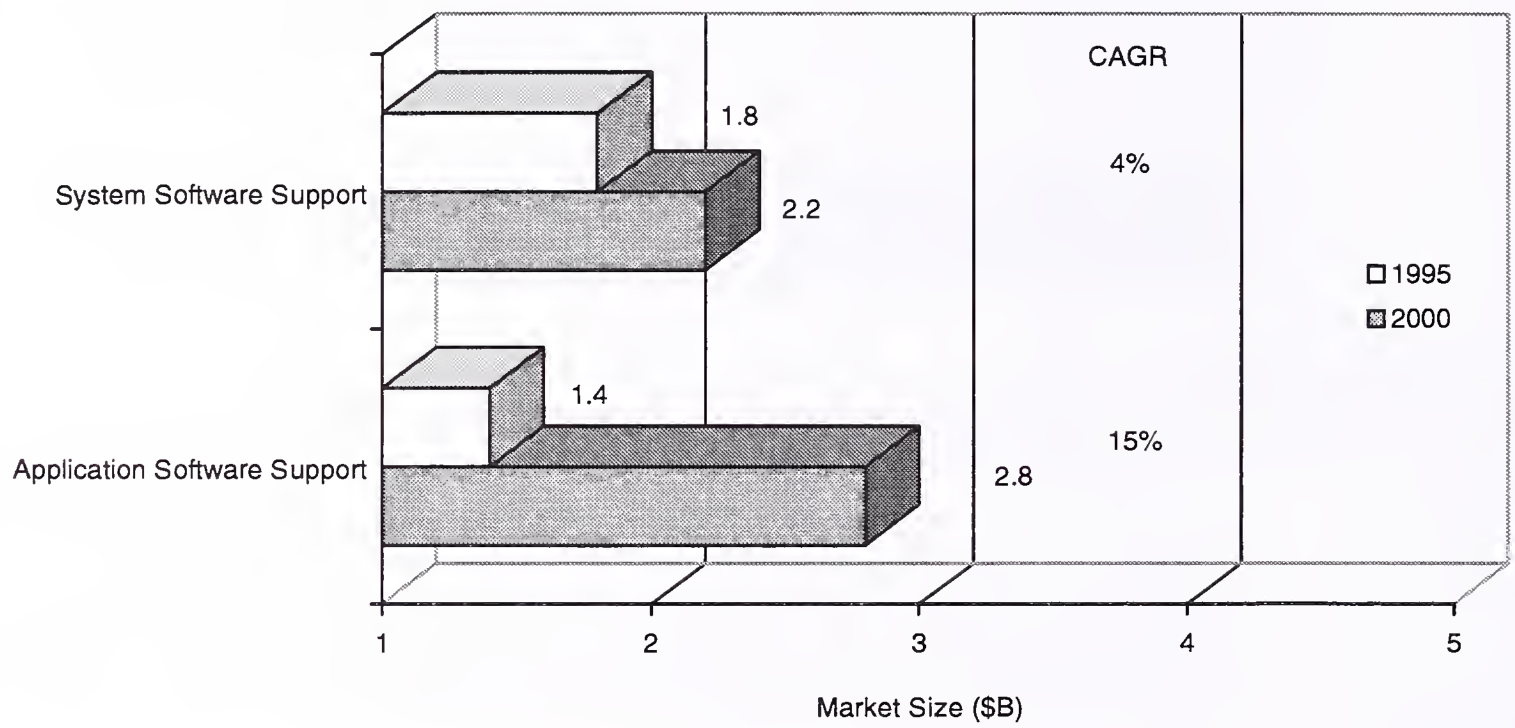
The equipment vendors have moved quickly to exploit this opportunity, and are signing up as approved support and solution providers for the leading software publishers such as Microsoft and Novell. Independent software support organisations can be expected to emerge in increasing numbers over the next few years, many with a clear focus on the increasingly important home and consumer markets.

It is now clear that software product support is becoming a key strategic service for user organisations. In the survey conducted for this study, organisations were asked to indicate the importance of a number of support services to the future viability of their IT infrastructure. Application software support was rated the most important service.

The strategic importance of application software support is reflected in INPUT's latest forecast for the development of this market. Last year, INPUT forecast that application software support would grow at 12% CAGR over a five-year period. As shown in Exhibit II-5, stronger growth (15% CAGR) is now forecast for this market for the period 1995 to 2000.

Exhibit II-5

Software Product Support Market, Europe 1995-2000



Source: INPUT

D
Network Support Services Grow Strongly As the Shift to Client/Server Continues

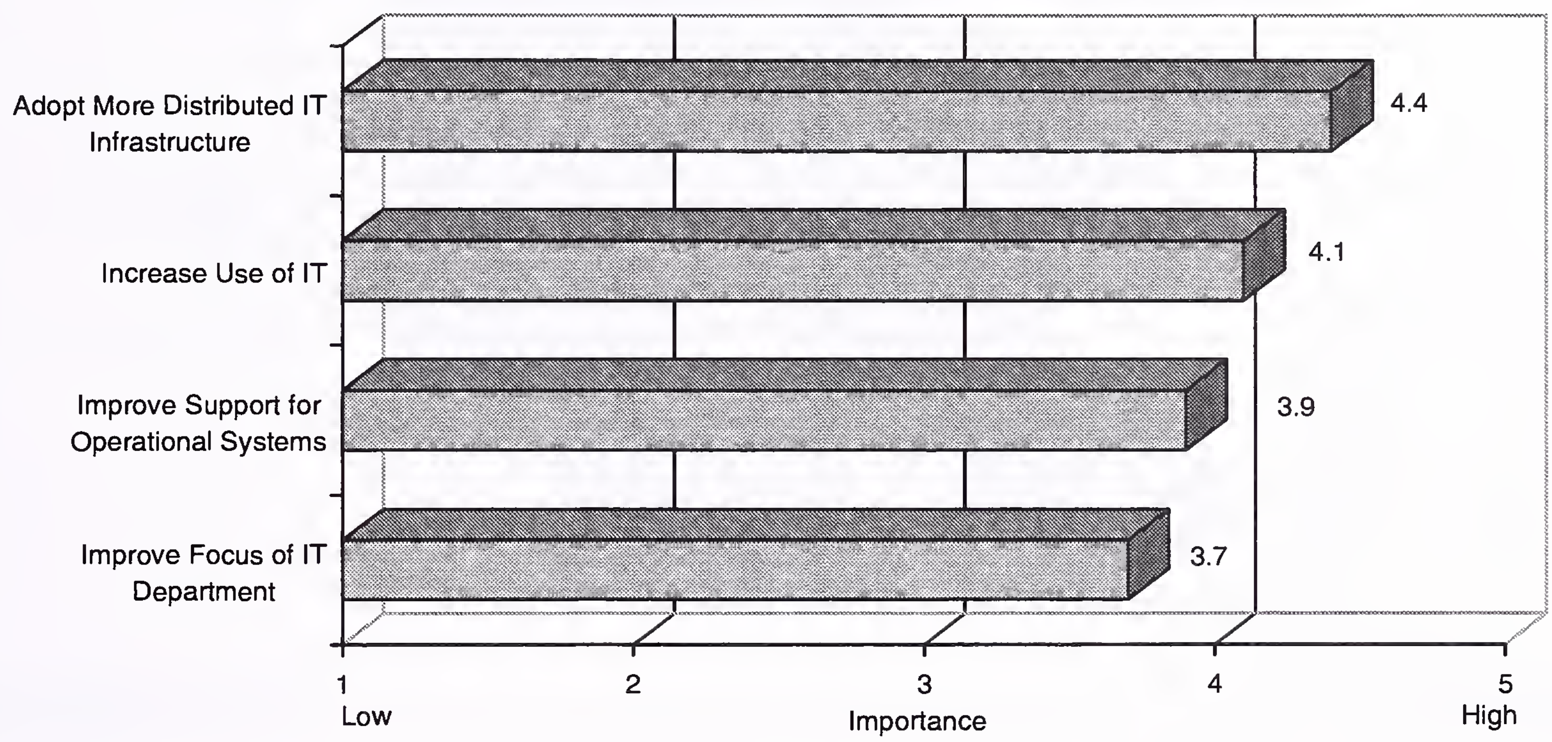
The pattern of delivery of customer services is reflecting the strong trend away from proprietary systems to open client/server computing environments. By the year 2000, 70% of all customer services will be delivered to client/server platforms.

While the shift to client/server technology is driving much of the change in the customer services market, it is the development of the underlying network technology which is enabling much of that change.

Organisations now understand that the *network-centric* model is *the* accepted business model for future development. Exhibit II-6 shows that adopting a more distributed IT infrastructure is by far the most important IT-related business issue amongst the organisations surveyed.

Exhibit II-6

Most Important IT-Related Issues, Europe 1995



Sample of 90 respondents (standard error = 0.1) *Source: INPUT*

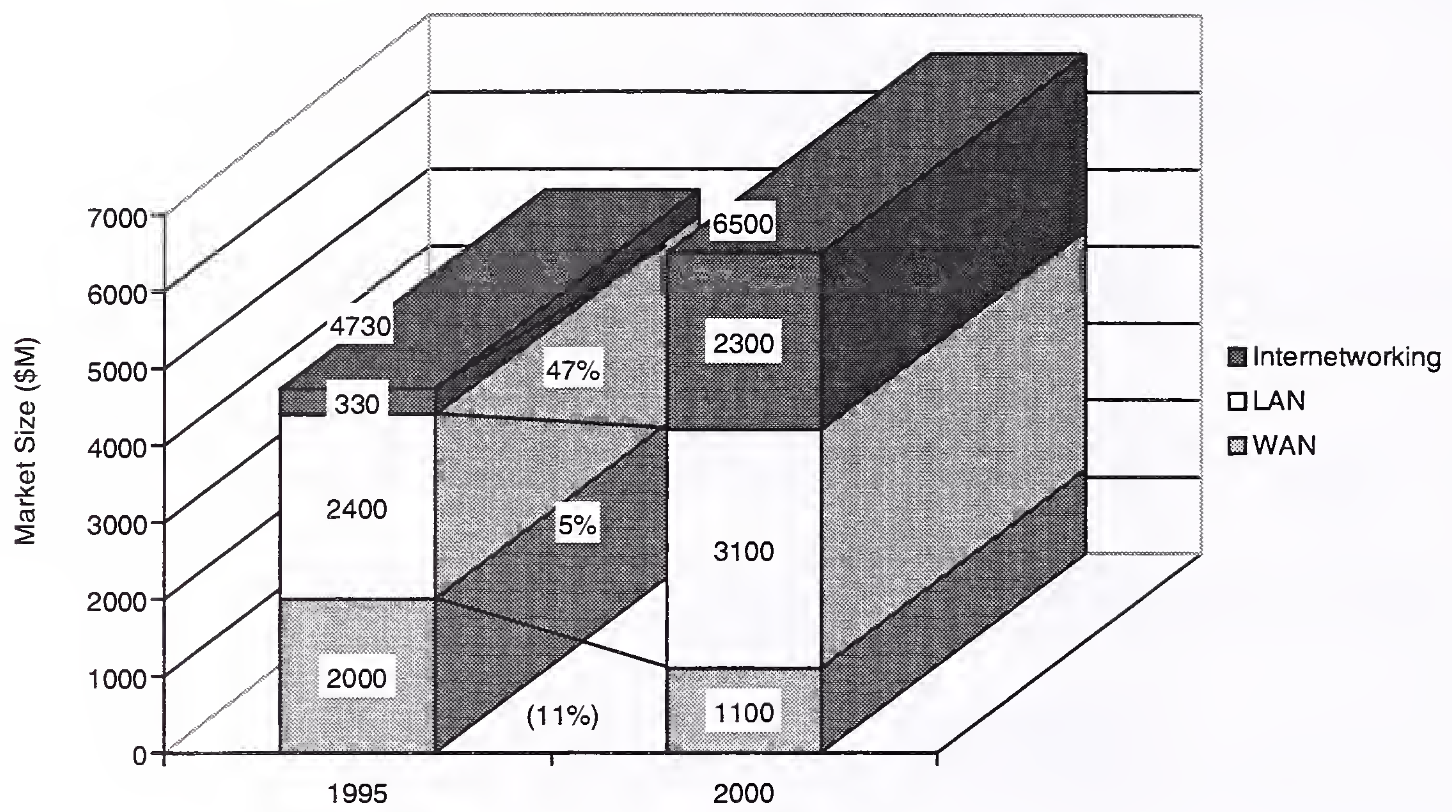
The most recent survey evidence suggests that IT managers are increasingly positive about outsourcing network-related services. There is now significant demand not only for network design, implementation and support services, but also for monitoring and management services.

Even more significantly, however, the market for *internetworking* (LAN and WAN integration services) looks set for rapid growth, as larger corporates struggle to integrate independent networks on an enterprise-wide basis. Beyond network integration, organisations are also looking to increase the bandwidth of their networks to handle the ever-growing volume of traffic generated by client/server applications. Services related to emerging technologies such as frame relay and ATM will become highly important over the next few years.

Exhibit II-7 shows the growth of component parts of the network support market over the next five years.

Exhibit II-7

Network Support Market, Europe 1995-2000



Source: INPUT

E

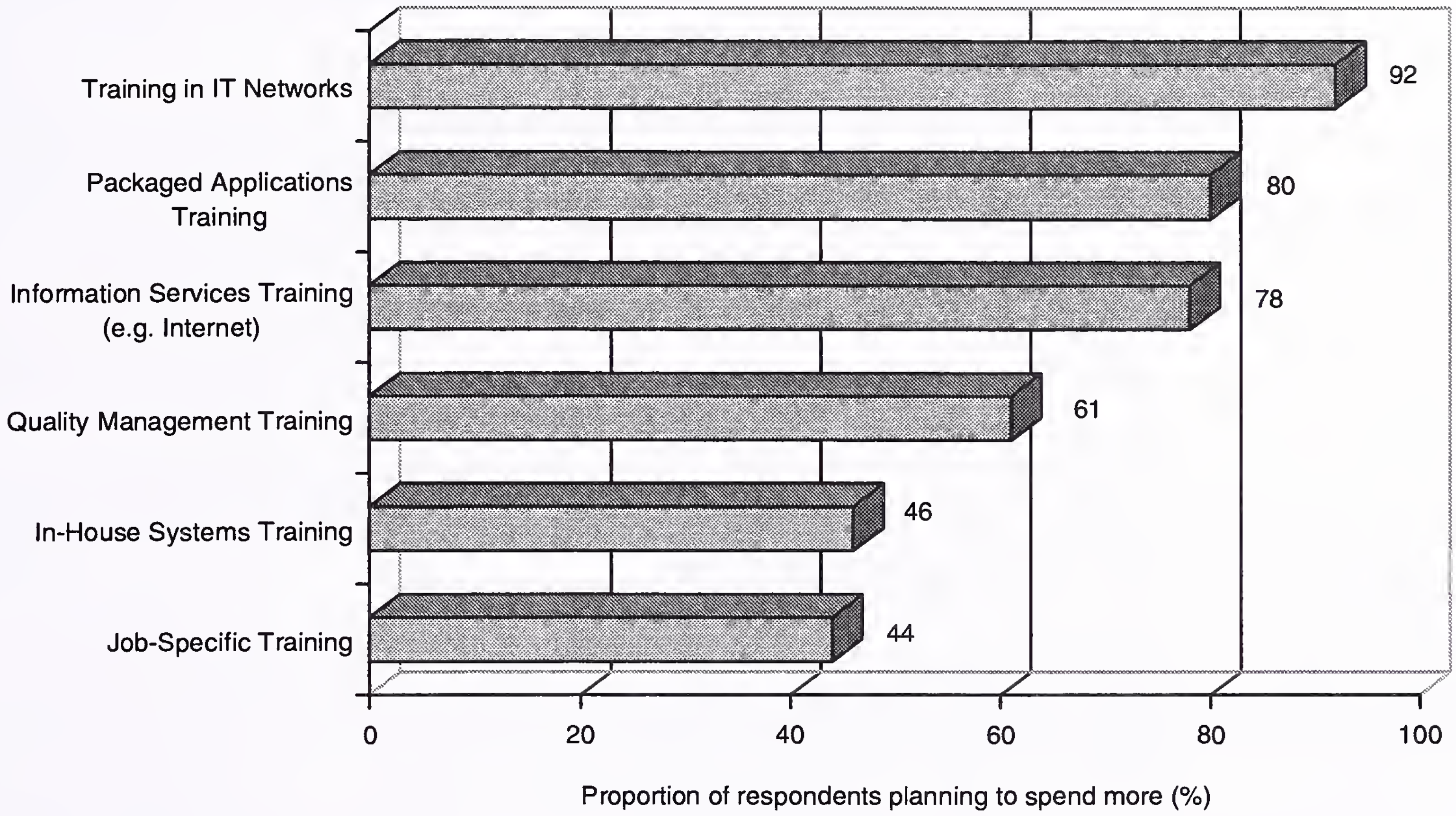
Users See Education & Training As Key to Future Success

Research carried out for this study reveals that organisations across Europe consider user education and training to be very important to their future business success. This signals a re-emergence of interest in training services following several years in which static IT training budgets have limited the potential for market growth.

Exhibit II-8 shows the proportions of organisations planning to increase expenditure in specific forms of education and training over the next few years.

Exhibit II-8

Increased Education & Training Expenditure, Europe 1995-2000



Sample of 90 respondents *Source: INPUT*

The majority of European organisations surveyed plan to increase expenditure on a variety of forms of training, though notably in-house systems and job-related training are the lowest priorities. The key areas in which users are planning to invest are:

- *IT networks*. The vital role of IT networks, revealed throughout the survey, is endorsed, with over 90% of organisations planning to increase expenditure on training specific to the use of IT networks

- *Application product support*. The strategic importance of application product support, again revealed throughout the survey, is reflected by the fact that 80% of organisations intend to increase training expenditure in that area

- *Information services*. Organisations also indicated a strong intention to invest more in training for networked information services, and in particular the Internet.

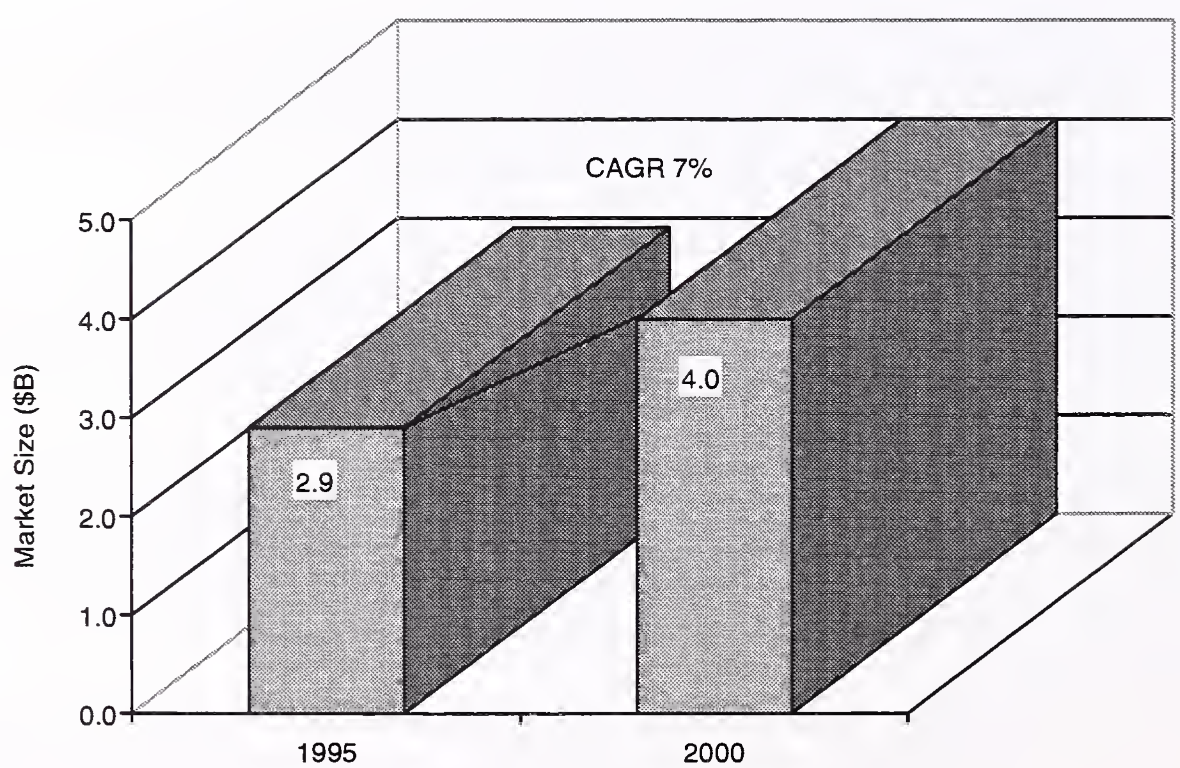
Such clear education and training needs will undoubtedly generate new opportunities for customer services vendors. However, the ability to win business will depend largely on vendors' ability to overcome business managers' reluctance to invest in external training services which do not directly support specific business objectives.

For this reason, conventional classroom training will show only modest growth in the next few years. The key to success in the education and training market lies in the exploitation of more efficient methods of knowledge transfer and distribution. Training for individuals in the workplace will increasingly be embedded within application products, or delivered as advanced multimedia technology. Internet services using the World Wide Web and Hypertext Mark-up Language (HTML) are also ideally suited to enhancing and encouraging individual learning processes, and will play a prominent part in the education and training market over the next few years.

Renewed interest in the education and training sector is reflected in INPUT's latest forecast for the development of this market. Last year, INPUT forecast that the education and training market would grow at 4% CAGR over a five-year period. As shown in Exhibit II-9, stronger growth (7% CAGR) is now forecast for this market over the period 1995 to 2000.

Exhibit II-9

Education & Training Market, Europe 1995-2000



Source: INPUT

III

Customer Services Market Trends, Europe 1995-2000

This chapter contains:

- *Section A*, an analysis of customer services market conditions in 1995
- *Section B*, forecasts for the growth of user expenditure on customer services in Europe in the period 1995 to 2000
- *Sections C to F*, commentary and analyses of the key trends which will influence the European market for customer services between 1995 and 2000.

A
Analysis of 1995 Customer Services Market

In 1994/5, the European customer services market grew by 2%, compared with 1% in 1993/4. The relatively modest growth in the overall market reflects the balancing effect of two distinct parts of the market:

- The equipment maintenance sector, still the largest customer services sector, which is in decline
- Non-remedial service sectors (sometimes referred to generically as *value-added services*) which are growing strongly.

Exhibit III-1 shows the growth of each of the principal customer services sectors in 1994/5. The slight improvement in total market growth reflects the fact that the maintenance sector fell only 4% (compared with 5% in 1993/4), while all other services combined grew 7% (compared with 6% in 1993/4).

Note that when expressed in US dollars, the European analyses show an increase of 11% on last year's figures due to exchange rate fluctuations.

Exhibit III-1

European Customer Services Growth By Sector 1994/5 ($ Millions)

Service Sector	1994	1995	CAGR (%)
Equipment Maintenance	13,250	12,700	-4
Environmental Services	7,800	8,300	6
Systems Software Support	1,730	1,790	4
Education & Training	2,750	2,910	6
Business Continuity Services	570	650	15
Other Professional Services	1,120	1,270	13
Total Customer Services (rounded)	27,220	27,620	2

Source: INPUT

User expenditure on customer services in 1995 is anticipated to be almost $28 billion. This *open market* for customer services represents approximately 75% of the total potential market, the remaining 25% forming the *captive* portion of the market.

The captive portion of the customer services market is in two parts:

- Systems software support revenues, collected as an item which is bundled with the software licence fee, accounting for over 7% of the captive market

- User self-service, primarily the in-house provision of environmental services. User self-service accounts for the remaining 93% of the captive portion of the market, of which almost 44% (46% in 1994) is related to the provision of environmental services.

Exhibit III-2 shows how the total *potential* customer services market in 1995 breaks down into user expenditure and captive market components. The total potential market is estimated to represent nearly $37 billion (compared with $33 billion in 1994).

Exhibit III-2

Total Potential Customer Services Market, Europe 1995 ($ Millions)

	Equipment Maintenance	Environmental Services	Systems Software Support	Education and Training	Professional Services	Business Continuity Services	Total Customer Services
User Expenditure	12700	8300	1790	2910	1270	650	27620
Captive Revenue (Bundled)	–	–	680	–	–	–	680
Captive Revenue (Self-service)	190	3780	160	3100	1350	–	8585
Total Potential Market (rounded)	12890	12080	2630	6010	2620	650	36880

Source: INPUT

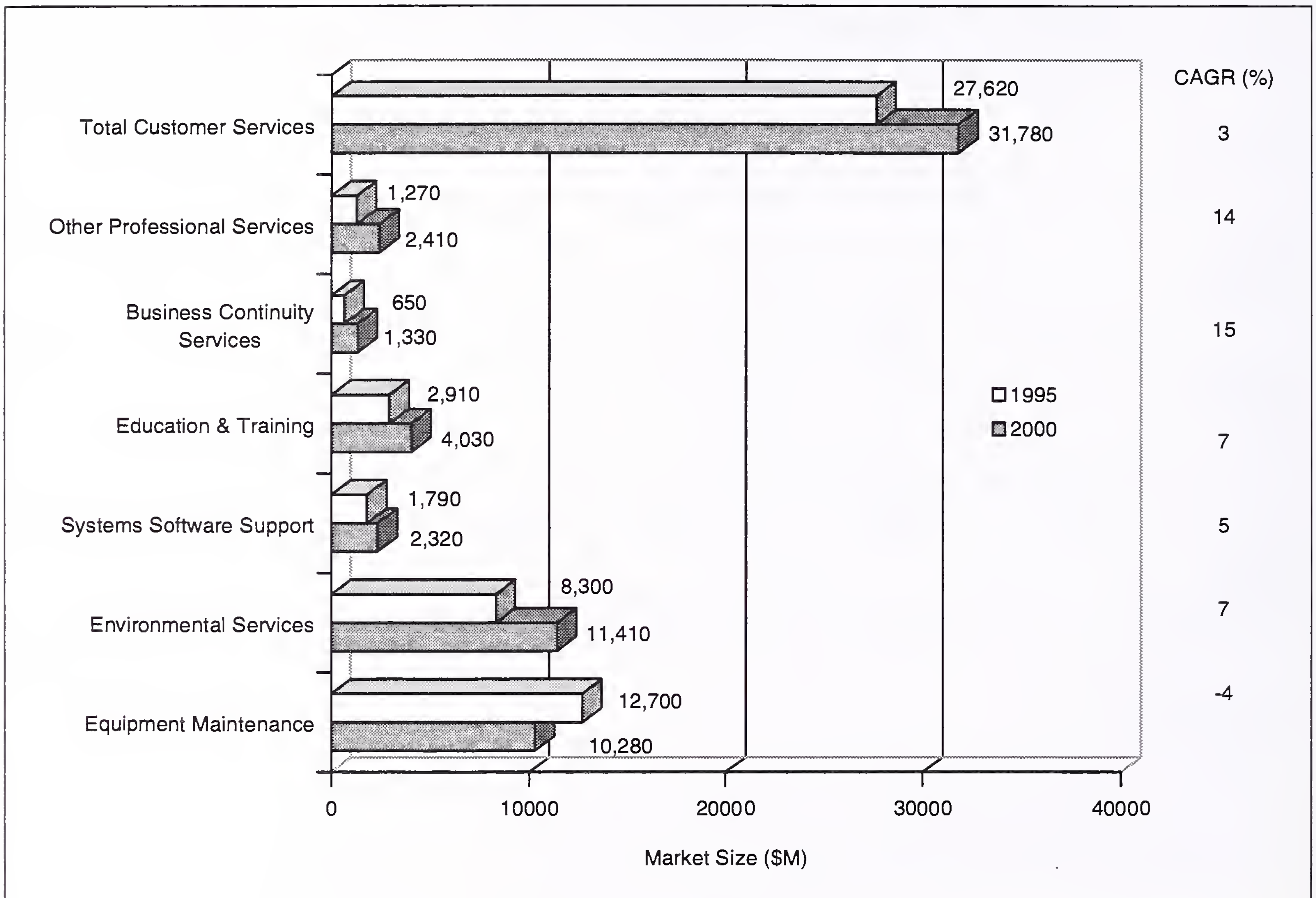
B

Customer Services Growth by Market Sector, 1995-2000

Exhibit III-3 shows the pattern of customer services growth in Europe over the next five years, broken down by market sector.

Exhibit III-3

Market Sector Growth, Europe 1995-2000 ($ Millions)



Source: INPUT

While overall market growth is relatively modest at 3% CAGR, the underlying market sectors reveal a broad variety of growth dynamics:

- The growth of the equipment maintenance sector is forecast to be negative at -4% CAGR. In 1995, user expenditure on equipment maintenance represented 46% of the total customer services market. This figure is forecast to fall to 32% by the year 2000

- Systems software support expenditure, which now accounts for just over 6% of the total market, will grow at 5% CAGR. By 2000, this will account for just over 7% of the total market

- Environmental services expenditure, which now accounts for 30% of the total market, will grow to 36% (i.e. larger than the equipment maintenance market at that time) by the year 2000

- Education and training expenditure accounts for 10% of the total market in 1995, growing to 13% by 2000

- Professional services account for almost 5% of the total market in 1995, rising to almost 8% by 2000

- Business continuity services expenditure accounts for just over 2% of the total market in 1995, and is forecast to grow to 4% by the year 2000.

C

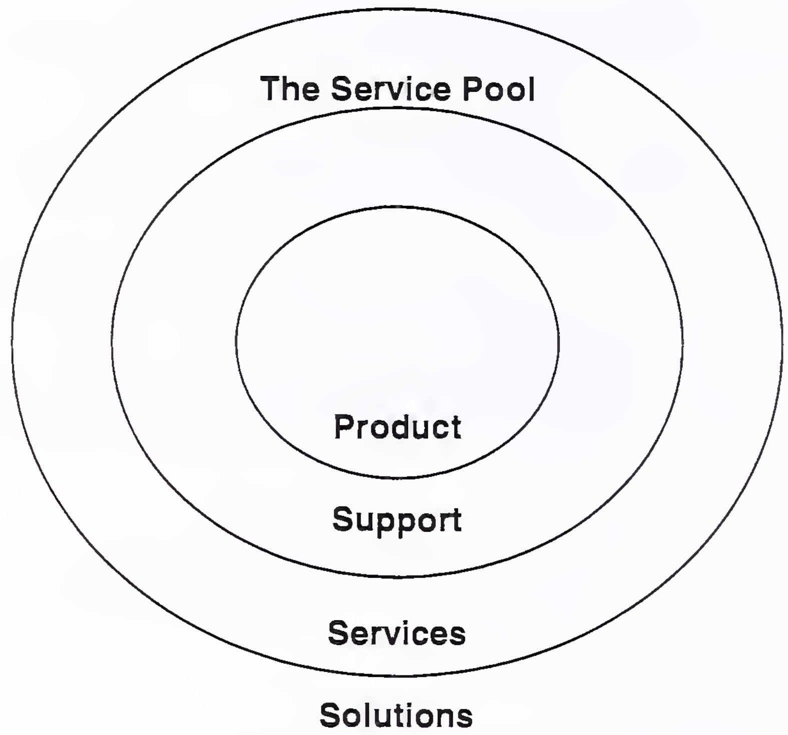
User Demand For *Business Support* Will Transform Customer Services

Rapid technological advancement and the resultant commoditisation of technology products have pushed down product prices and severely eroded margins, forcing vendors to look beyond products to the services business. This is perhaps the most fundamental trend driving change in the IT industry today.

Exhibit III-4 illustrates how, like ripples in a pool, the focus of IT vendors is moving out from products, first to product support, then to broader-based services, and ultimately to business solutions.

Exhibit III-4

Ripple Effect — The Shift from Products to Services



Source: INPUT

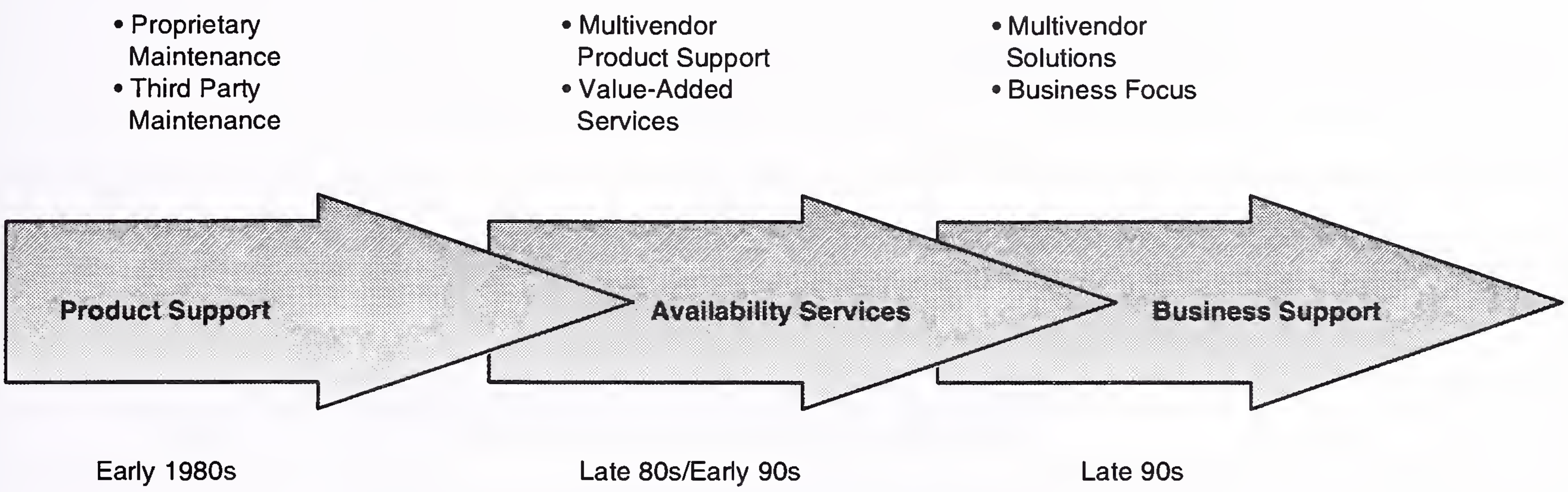
One of the consequences of product commoditisation, and of the increasing reliability of product technology, has been a steady decline in the market for equipment maintenance services. Hence, customer services organisations have for some years been under pressure to move into the broader services marketplace. In effect, customer services vendors are making the transition from *fault-fixers* to providers of *support solutions*.

However, this is not merely a supply-led quest for higher margin business. The demand side of the market is now the dominant force for change, with users increasingly seeking service solutions tailored to their own unique *multivendor* IT environments, and which reflect their specific *business* needs. These demand-side drivers will become irresistible as increasingly empowered business units seek to make sense of their IT investments on their own terms.

In summary, *business support services* is fast replacing traditional product support services as the new paradigm for the industry. See Exhibit III-5.

Exhibit III-5

Customer Services Market Evolution



Source: INPUT

D

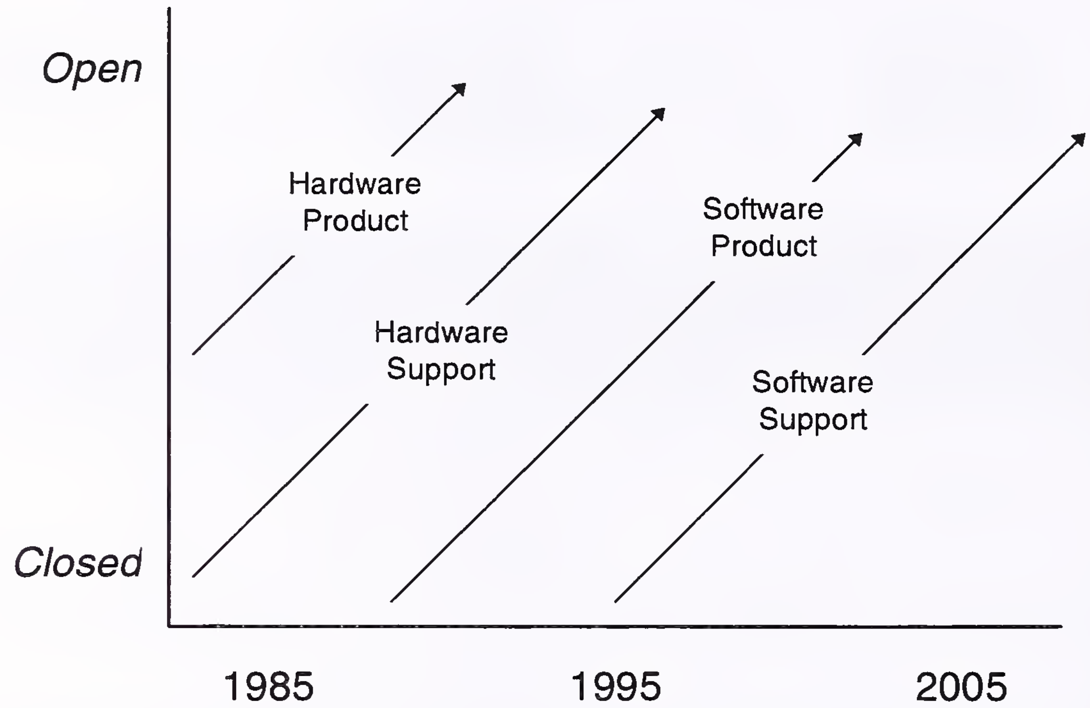
Software Support Follows Evolution of Equipment Services Market

The reasons for the decline of the traditional equipment maintenance market are well documented and understood. The evolution of the maintenance market has followed a classic pattern from a closed, high-margin business to an open, low margin business, and is today a highly competitive and mature market.

The newly emerging market for *software product support* looks set to follow the evolution of the equipment services market, as pictured in Exhibit III-6.

Exhibit III-6

The Evolution of the Software Product Support Market



Source: INPUT

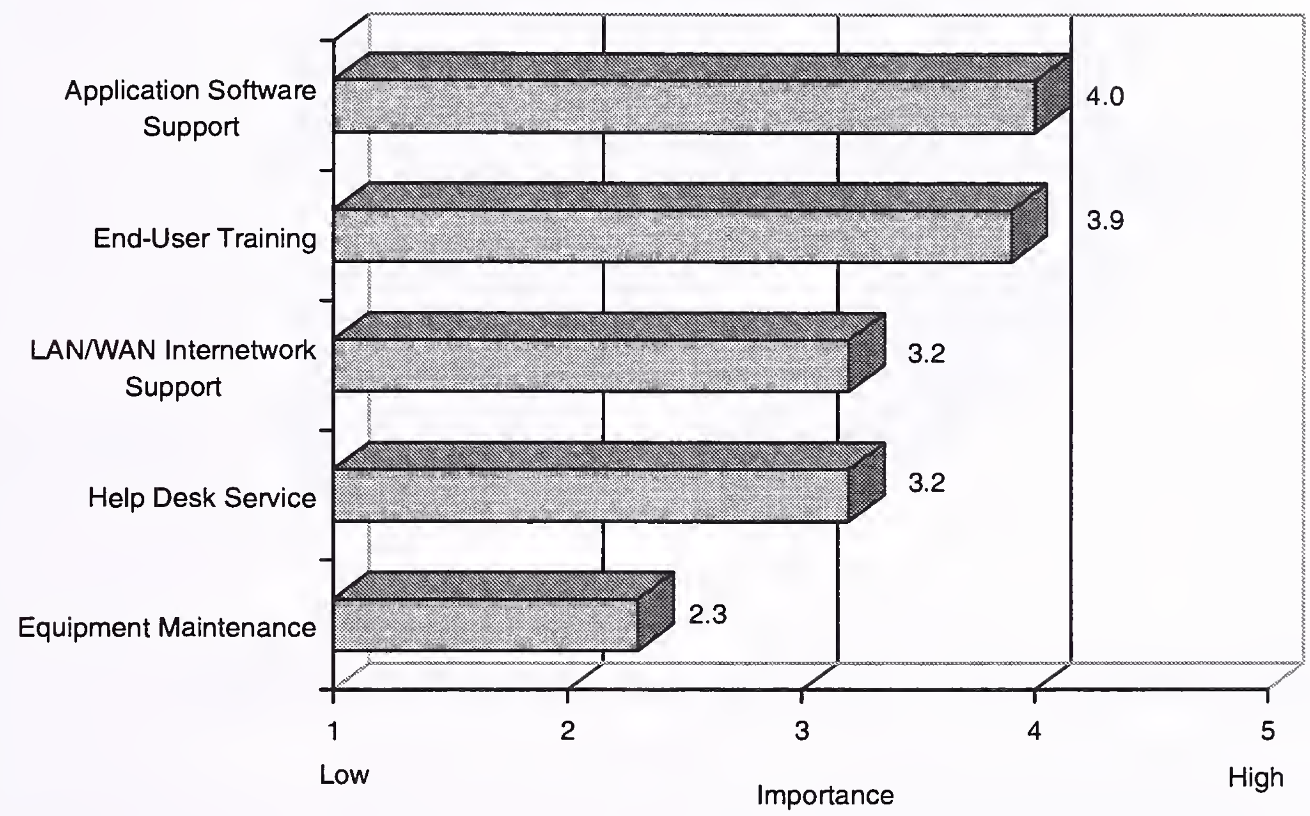
To date, the software publishing companies have controlled the market for the support of their own products. However, as packaged software products have reached mass markets in unprecedented numbers, and as prices have dropped, the software companies have found it necessary to encourage a third party market for the support of their products. The equipment vendors have moved quickly to exploit this opportunity, and are signing up as approved support and solution providers for the leading software publishers such as Microsoft and Novell.

The development of an open market for software product support mirrors exactly the situation in the early 1980s when the independent maintenance organisations (IMOs) emerged to challenge the supremacy of the equipment vendors. Independent software support organisations can be expected to emerge in increasing numbers over the next few years.

It is now clear that software product support is becoming a key strategic service for user organisations. In the survey conducted for this study, organisations were asked to indicate the importance of a number of support services to the future viability of their IT infrastructure. As shown in Exhibit III-7, application software support was rated the most important service in this regard.

Exhibit III-7

Strategic Importance of Application Software Support, Europe 1995

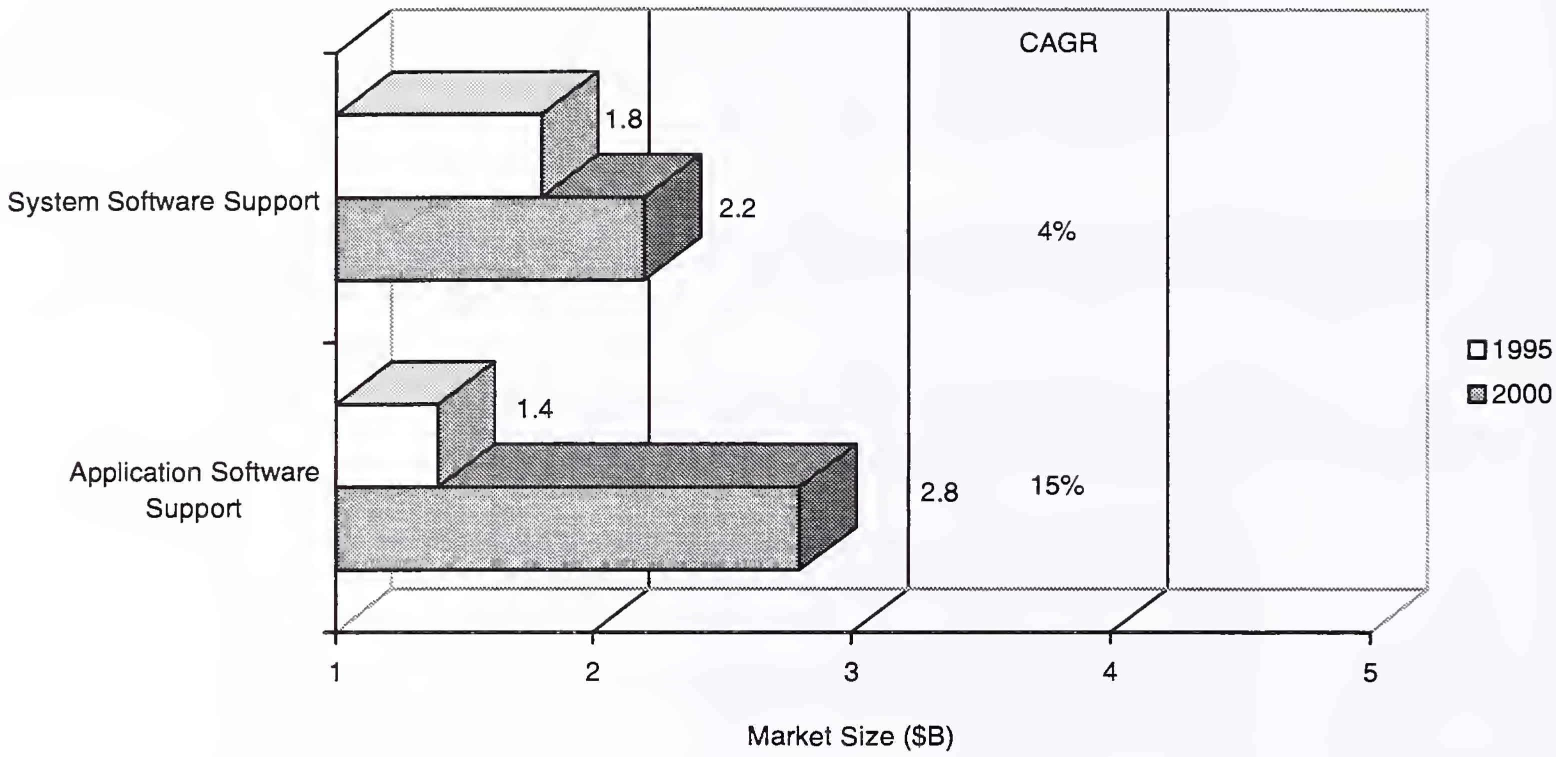


Sample of 90 respondents (standard error = 0.1) *Source: INPUT*

The strategic importance of application software support is reflected in the latest forecast for the development of this market. Last year, INPUT forecast that application software support would grow at 12% CAGR over a five-year period. As shown in Exhibit III-8, stronger growth (15% CAGR) is now forecast for this market over the period 1995 to 2000.

Exhibit III-8

Software Product Support Market, Europe 1995-2000



Source: INPUT

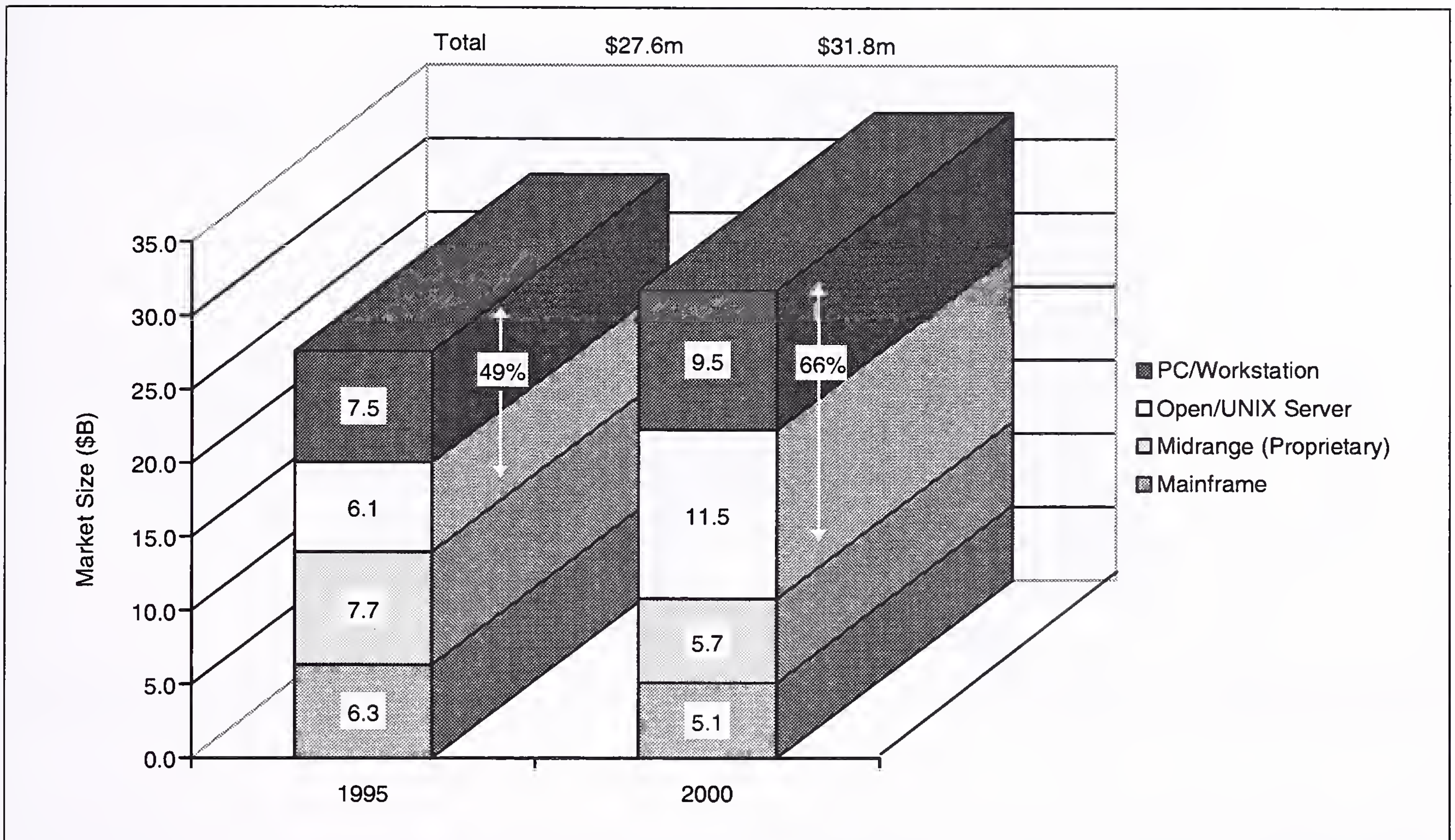
E
Client/Server Becomes the Key Platform for Customer Services

Organisations are making every effort to improve the consolidation and distribution of information. To this end, organisations are turning to client/server solutions in ever-increasing numbers. In 1995, 75% of the organisations surveyed were in transition to some form of client/server IT architecture.

The delivery of customer services is reflecting the switch from proprietary to open client/server computing environments. INPUT forecasts a dramatic shift of service delivery to open platforms (Unix/NT servers and PCs/Workstations) over the next five years. This shift is illustrated in Exhibit III-9.

Exhibit III-9

Customer Services Market Shift to Client/Server, Europe 1995-2000



Source: INPUT

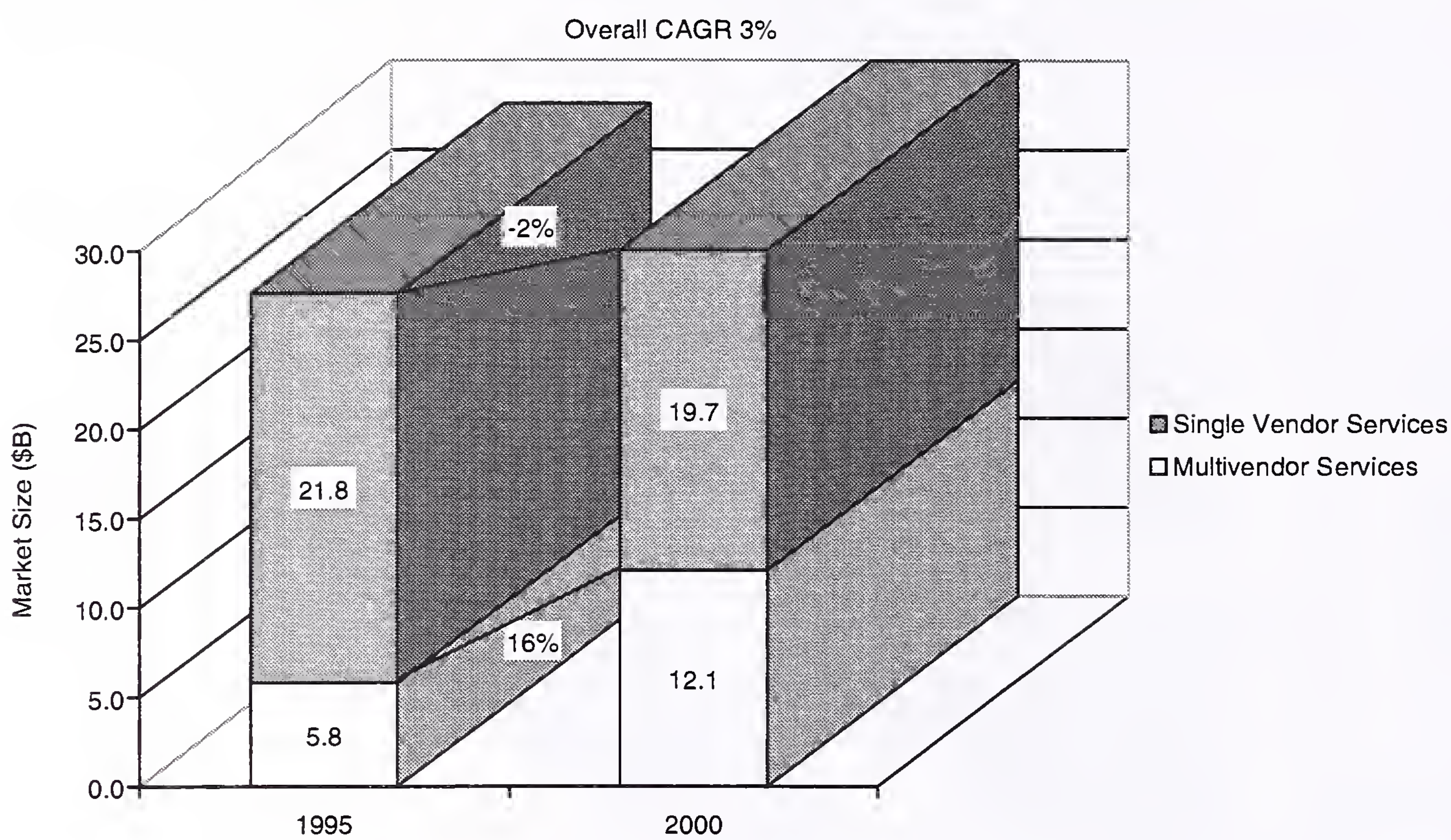
The shift to client/server platforms is having enormous consequences for service providers. The fact that client/server computing is by its nature *multivendor* is presenting major challenges for vendors in terms of:

- Reskilling the workforce
- Restructuring old business models
- Forming strategic partnerships
- Building new styles of customer relationship.

The rate at which leading customer services organisations are moving to multivendor services is accelerating, a fact which is reflected in INPUT's latest forecast for the development of this market. Last year, INPUT estimated the multivendor component to be approximately 20% of the total customer services market, and forecast this to grow to 35% over five years. As shown in Exhibit III-8, INPUT's revised analysis reflects faster growth (21% of the market in 1995, growing to 38% by the year 2000).

Exhibit III-10

Multivendor Services Market, Europe 1995-2000 ($ Billions)



Source: INPUT

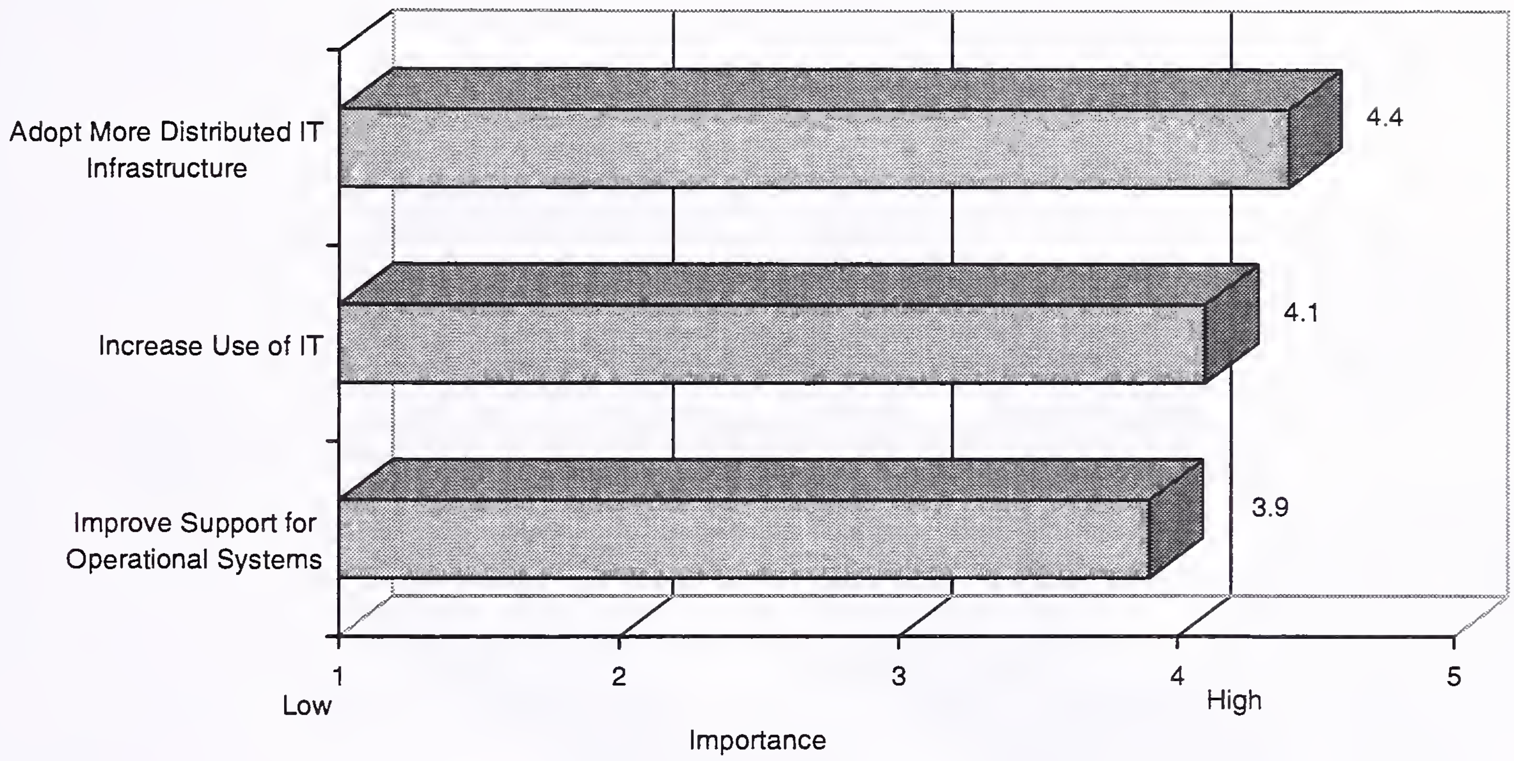
F
Network Support Services — A Major Focus For Customer Services

While the shift to client/server technology is driving much of the change in the customer services market, it is the development of the underlying network technology which is enabling much of that change. Sun Microsystem's CEO Scott McNeally envisaged the strategic importance of the network when he coined the phrase *The Network is The Computer*. To use a variant of that message, it can reasonably be said that the network is set to shape the future of customer services.

Users surveyed for this study consider various aspects of network services to be highly important for the future viability of their IT infrastructure. At a more fundamental level, the need to adopt a more distributed IT infrastructure is by far the most important IT-related business issue amongst the organisations surveyed. This is shown in Exhibit III-11.

Exhibit III-11

Distributed Computing Tops List of IT-Related Issues, Europe 1995



Sample of 90 respondents (standard error = 0.1) *Source: INPUT*

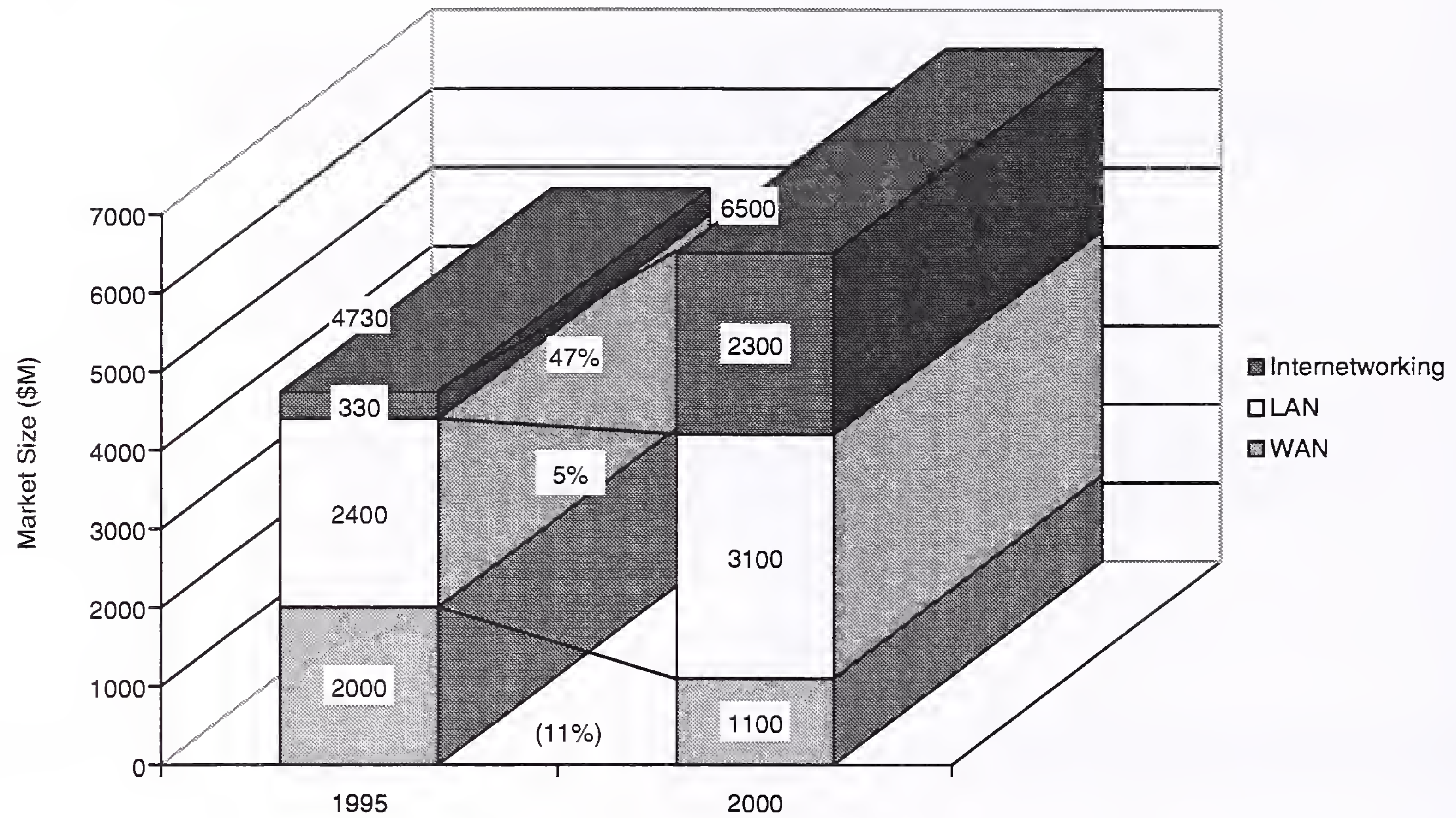
The increasing reliance on distributed computing, coupled with the often chaotic state of corporate network infrastructures, are creating powerful pressures within organisations. The result is that the reluctance of IT managers to outsource, or even seek assistance with, the management and support of their networks, at last seems to be crumbling.

As the demand for distributed computing grows, significant opportunities will continue to emerge in areas such as network design, implementation, monitoring and management. Even more significantly, however, the market for *internetworking* (LAN and WAN integration services) looks set for rapid growth, as larger corporates struggle to integrate independent networks on an enterprise-wide basis (see Exhibit III-12). With local networks having sprung up independently within organisations, the most pressing need is now for those networks to be integrated effectively.

Today, seamless integration of corporate networks is the key IT objective for most large organisations. Further to that, organisations are looking to improve the transmission capabilities of their networks to handle the ever-growing volume of traffic generated by client/server applications. To this end, services related to emerging technologies such as frame relay and ATM will become increasingly important over the next few years.

Exhibit III-12

Network Support Market, Europe 1995-2000 ($ Millions)



Source: INPUT

G
The Growing Influence of the Information Superhighway

The Information Superhighway, and specifically the Internet, are fast becoming important growth factors for the development of the information services markets. INPUT forecasts that support and development services directly related to the Internet could represent as much as 20% of the total European information services market by the year 2000.

Beyond the obvious tactic of becoming Internet Service Providers (ISPs), the broader implications of the Internet for customer services organisations have yet to fully unfold. However, recent research suggests that significant opportunities are beginning to emerge in the following areas:

- Use of the Internet as a services delivery tool
- Education and training for Internet technology and services
- Installation and support of dedicated Internet equipment.

1. The Internet as a Service Delivery Tool

The leading services organisations have begun to exploit the potential of the Internet as a service delivery tool. For example, by placing bulletin boards on the Internet, vendors can offer customers better access to the information they need to solve routine problems.

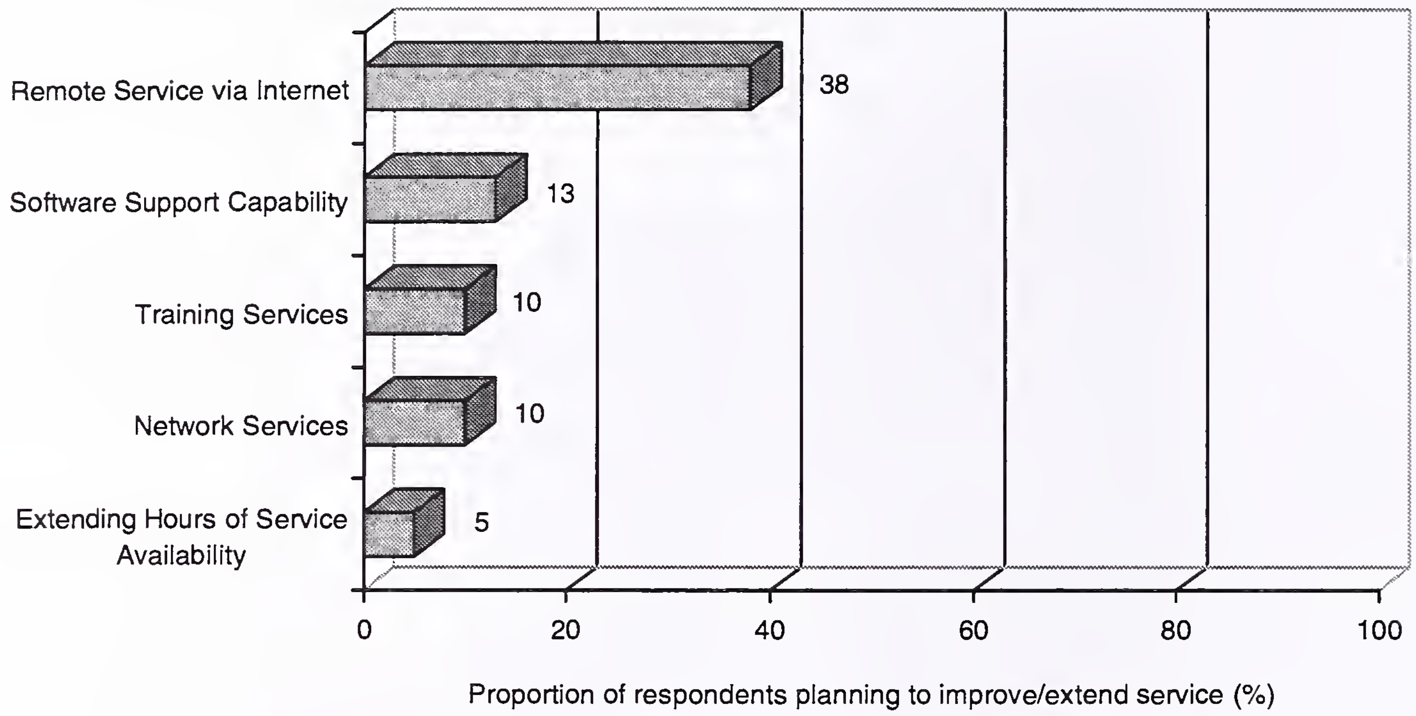
Sun was the first vendor to implement a fully-fledged service programme over the Internet. SunSolve ONLINE, launched in 1993, allows customers to query a technical database, read bug reports and download the latest software releases. Sun estimates that since its inception, the service has been accessed over a million times by more than 8,000 customers.

Organisations not offering bulletin board services are already finding themselves at a competitive disadvantage. This applies not only to the leading services vendors, but to organisations at all points on the value-chain. A recent survey of value-added resellers of PCs, servers and workstations revealed that VARs consider the development of remote service capability to be by far the most important area for future investment.

In the survey of 60 VARs across Europe, 65% of respondents indicated that they had plans to significantly improve or extend their service capability. Of this group, well over a third said that their main intention was to exploit the potential of the Internet as a medium for service delivery. See Exhibit III-13.

Exhibit III-13

VARs Look to Internet to Extend Service Capability, Europe 1995



Sample of 60 VARs *Source: INPUT*

2. Users Identify Internet Education and Training Need

Many medium-to-large organisations are currently focussing on developing and integrating their internal networks. However, the struggle to introduce effective network infrastructures is but a means to an end. Ultimately, organisations are looking to use their networks to forge electronic links with their customers, suppliers and business partners.

This *second wave* of networking services, related to the commercial implications of the network, is fuelling demand for electronic services such as EDI and VANs, and is promoting massive interest in the Internet as a vehicle for electronic commerce.

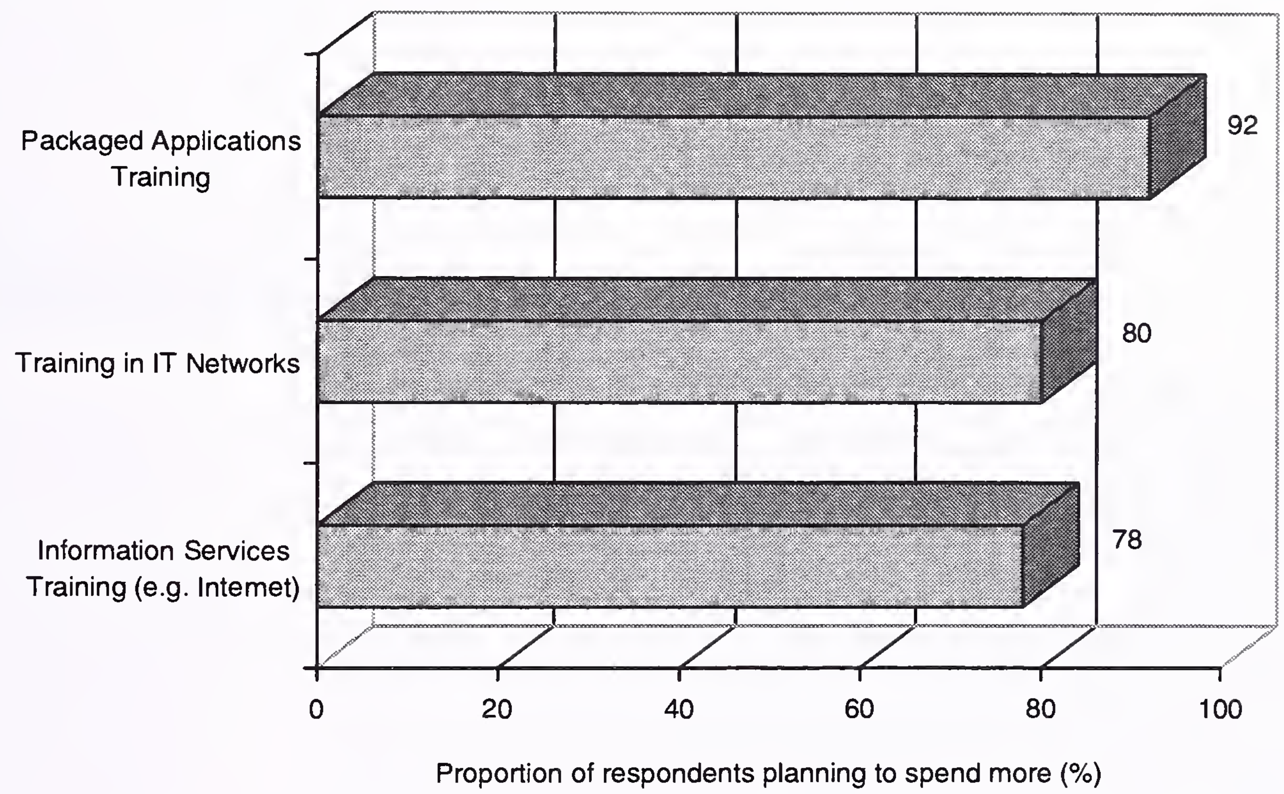
While organisations are keen to exploit the commercial possibilities presented by the Internet, they are cautious about security implications and the lack of guaranteed performance levels. Furthermore, most potential users are ignorant of both the conceptual issues and the technology issues related to Internet usage.

In order to short-circuit the knowledge gap, many organisations are hiring specialist service companies to help implement and develop an Internet presence (including, for example, designing World Wide Web pages). However, there is also growing demand for formal consultancy and education and training services.

In the user survey conducted for this study, organisations indicated that they were planning to increase expenditure on training services related to IT networks *and* networked information services including the Internet, at the expense of training for in-house systems and job-specific training. See Exhibit III-14.

Exhibit III-14

Users Intend to Spend More On Training Related to Networked Information Services, Europe 1995



Sample of 90 respondents *Source: INPUT*

3. Internet Equipment Installation and Support Opportunities

The Internet, though in existence since 1969, has only been available for commercial traffic for four years. Hence, the ISPs and information (i.e. content) providers are still largely in the investment phase of their business activities.

However, leading network specialists have already seen a significant rise in profits attributable to Internet-related business. Companies such as 3Com, Cisco and Bay Networks (formerly Wellfleet and Synoptics) are riding the current wave of demand for switches and routers to manage networks used for Internet access.

Similarly, customer service organisations offering network and server installation and support services are poised to benefit from the boom in Internet-related business. Currently, the market for Internet servers is dominated by Sun, with an estimated 56% world market share (*source: Internet Society*). Digital, H-P and IBM lead the following pack.

IV

Customer Services Market, France 1995-2000

A
Economic and Commercial Conditions in France

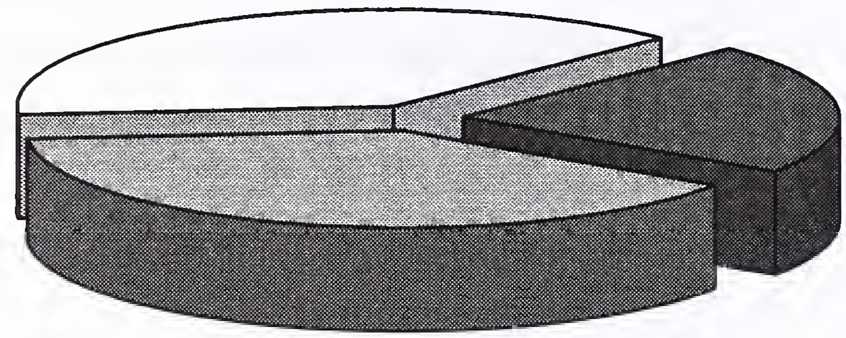
Throughout 1993, recessionary conditions persisted in France, with industrial investments at a standstill and internal demand extremely slow. However, during 1994, economic recovery strengthened significantly and consequently business confidence has started to rise.

IT budgets will continue to be under considerable constraint, however. Exhibit IV-1 shows that French organisations are cautious about the level of their IT budgets over the next few years. Only 39% of French organisations anticipate an increase in their IT budgets, compared with 48% of German and 52% of UK organisations.

IT budget constraints will generate increased competition amongst service providers, with consequent pressure on prices and margins. Budgetary constraints are also expected to fuel greater interest in the outsourcing concept. French organisations will turn to outsourcing strategies in increasing numbers in their search for lower-cost customer service solutions.

Exhibit IV-1

IT Budget Levels, France 1995-2000

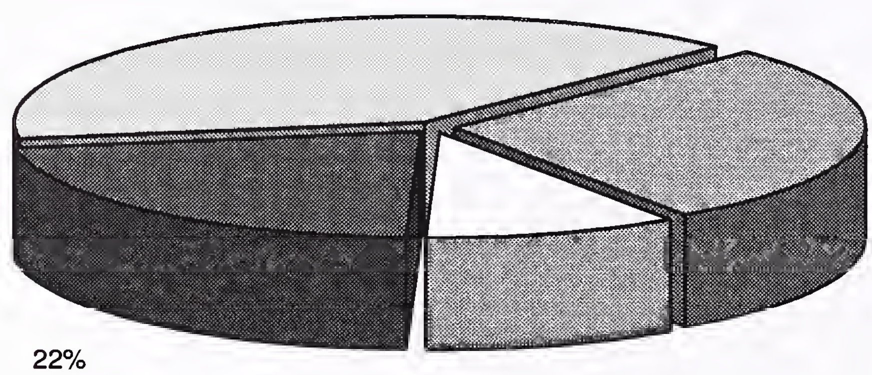


Sample of 30 respondents *Source: INPUT*

Exhibit IV-2 shows how IT budgets are currently allocated. French organisations already devote a significant portion of their IT budget (almost 30%) to external services; only the UK spends more on external IT services. Nevertheless, organisations intend to increase the level of expenditure on external support services still further over the next few years, as indicated by Exhibit IV-3.

Exhibit IV-2

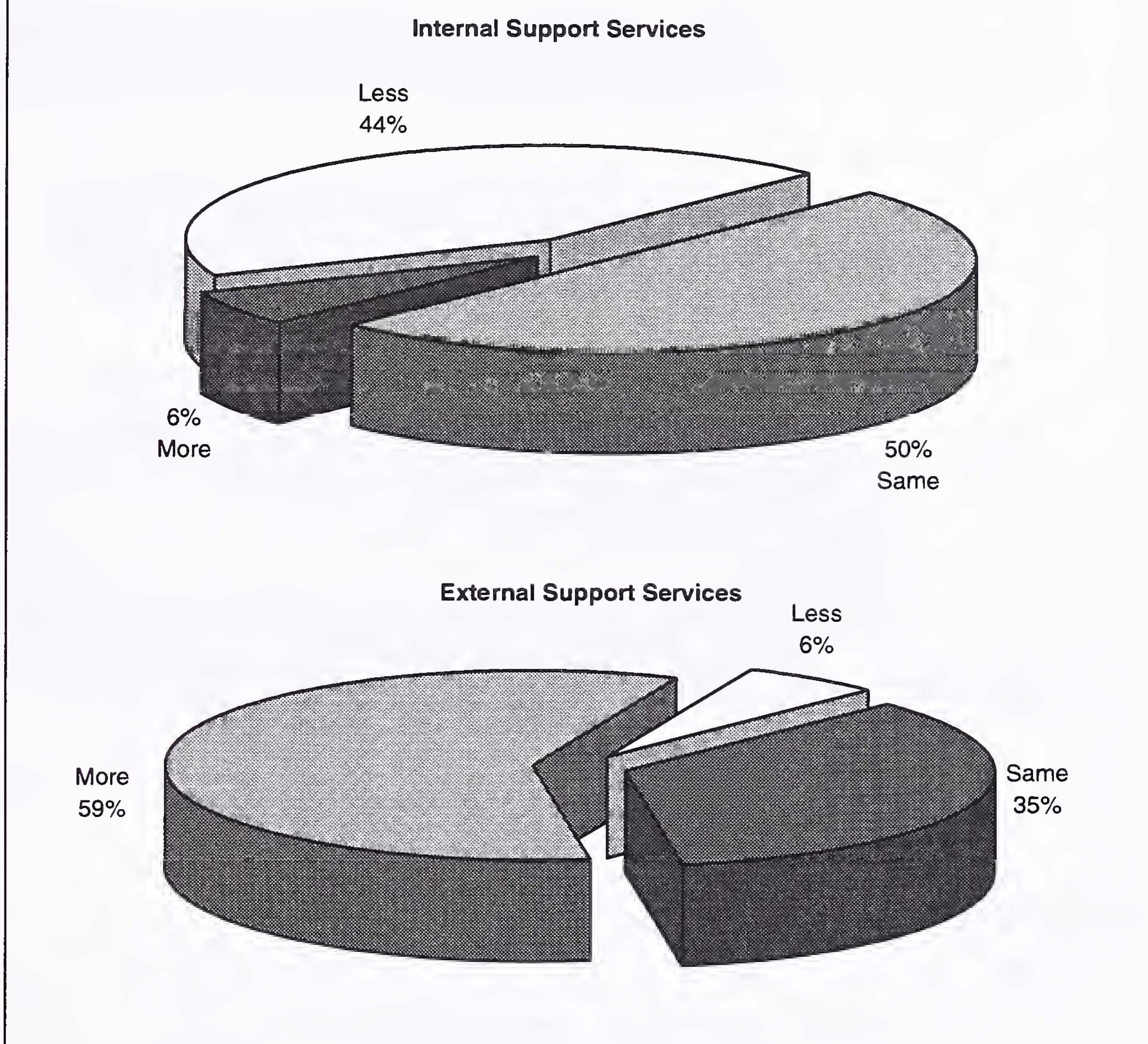
Allocation of IT Budgets, France 1995



Source: INPUT

Exhibit IV-3

Internal vs External Expenditure — Support Services, France 1995-2000



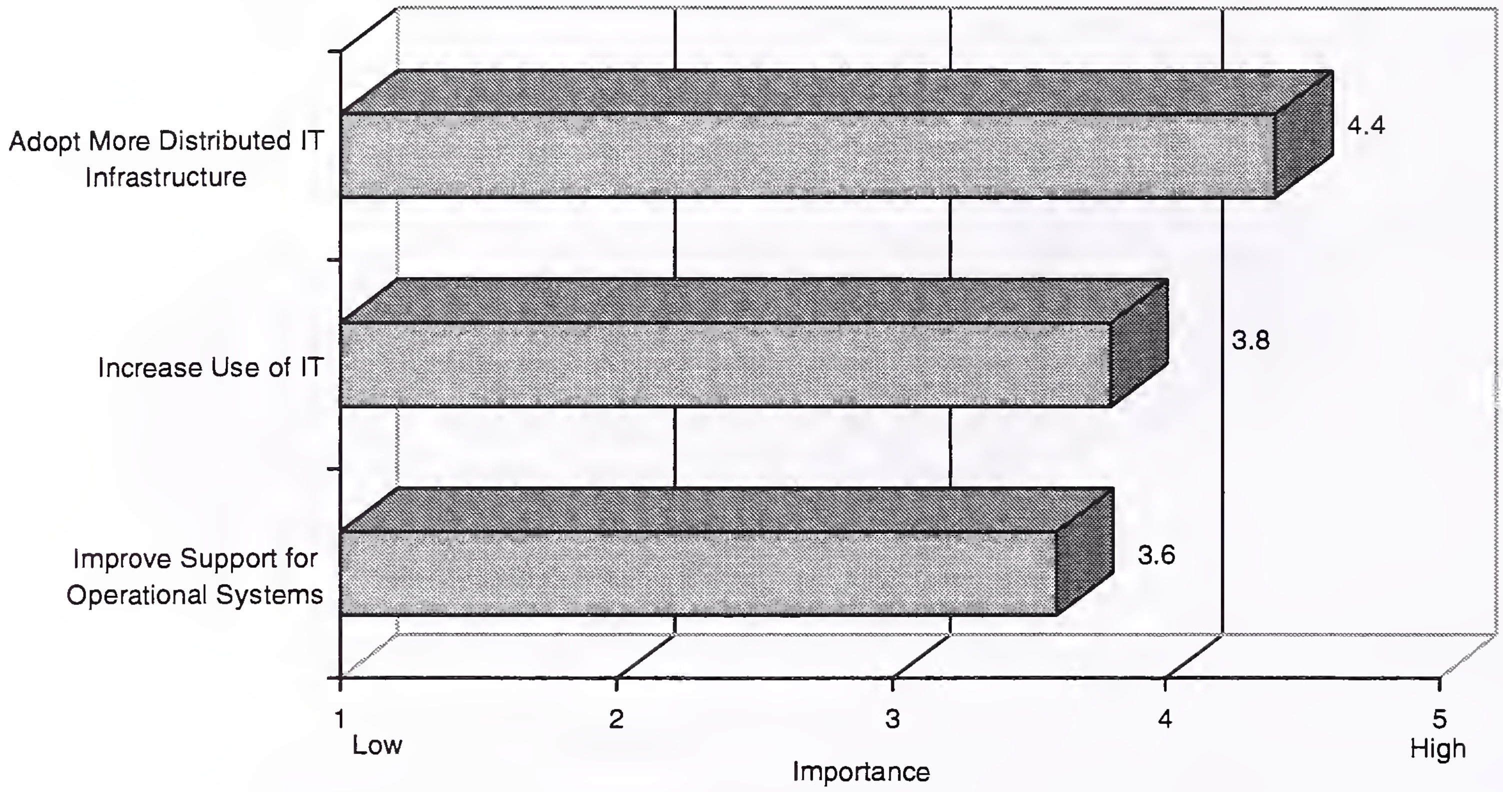
Sample of 30 respondents *Source: INPUT*

French organisations report a number of significant trends in their use of IT, which provide clues to the direction that spending on external IT services will take in the next few years. Exhibit IV-4 reveals that by far the most important IT consideration is the need to adopt a more distributed IT infrastructure.

As increasing numbers of organisations migrate to client/server architectures, and as the need for enterprise-wide IT integration becomes paramount, so demand for value-added customer services will grow. Services related to the design, implementation and support of client/server networks, covering both LAN and WAN, will become the most sought after.

Exhibit IV-4

Trends Driving Increased Support Expenditure, France 1995-2000



Sample of 30 respondents (standard error = 0.1) *Source: INPUT*

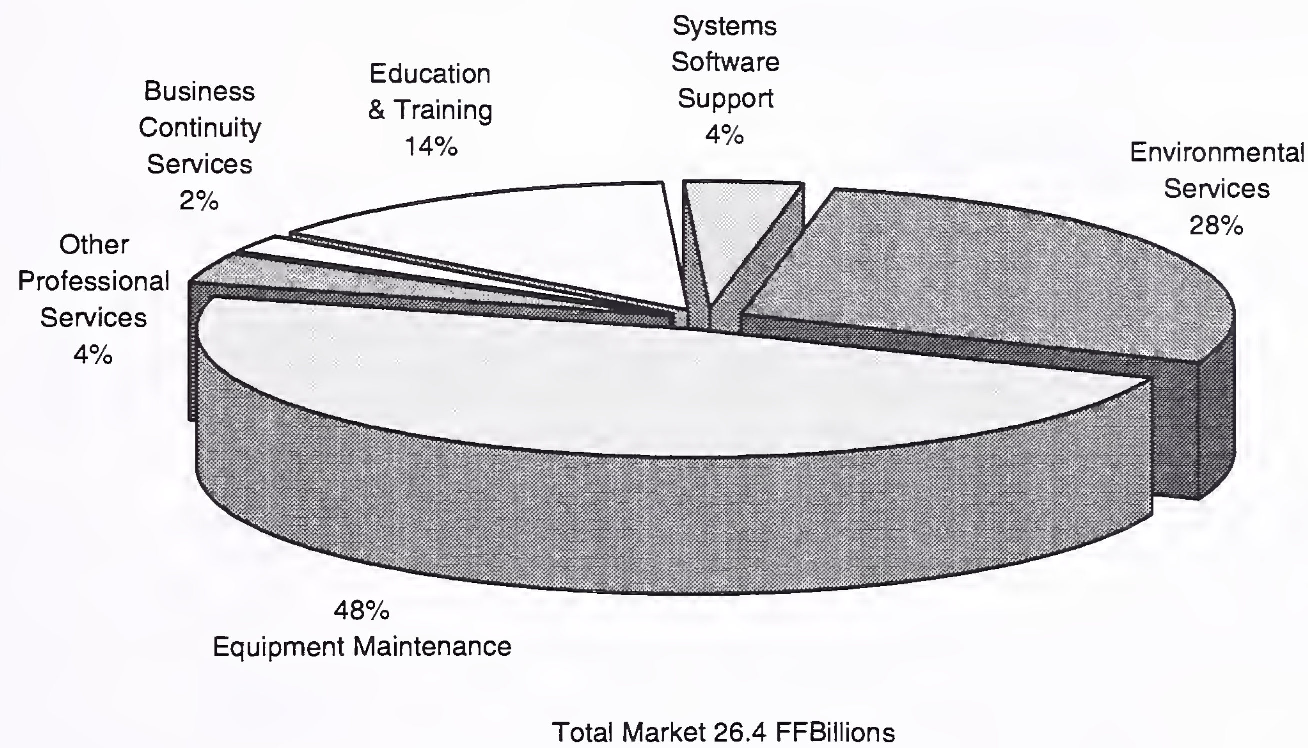
B

Customer Services Expenditure Trends

User expenditure for customer services in France is broken down by service sector in Exhibit IV-5.

Exhibit IV-5

Customer Services Expenditure by Market Sector, France 1995

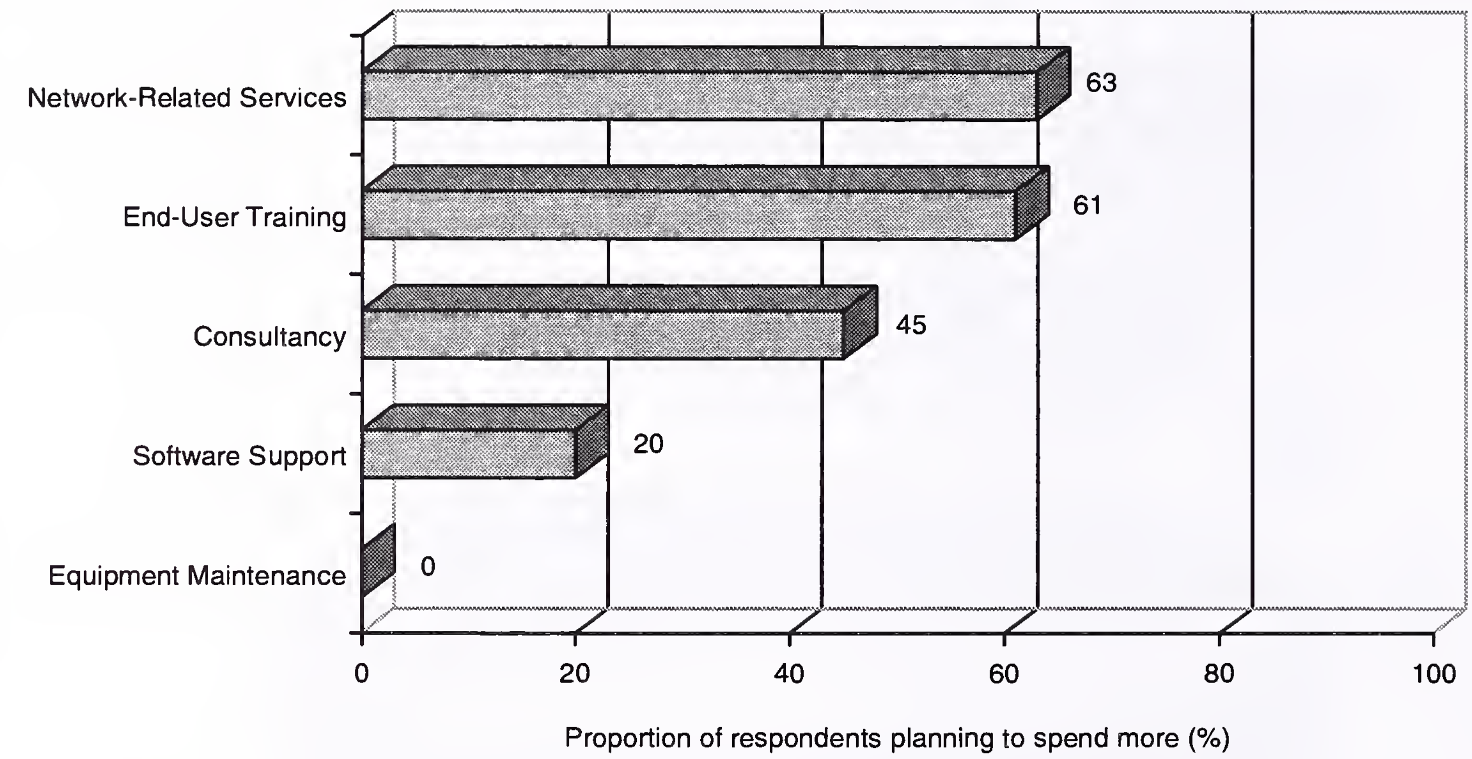


Source: INPUT

When questioned about future spending patterns, French organisations clearly signalled their intention to spend less on remedial equipment services and to increase spending on a range of value-added services. Exhibit IV-6 shows the key areas in which the organisations surveyed intend to increase expenditure over the next few years.

Exhibit IV-6

Where Users Intend to Spend More — Support Services, France 1995-2000



Sample of 30 respondents *Source: INPUT*

Almost two-thirds of the IT managers surveyed expected to increase external expenditure on network-related services. This finding supports the intention of most organisations to adopt a more distributed IT infrastructure (Exhibit IV-4). While there was a clear intention to spend more on physical network services, there were also signs that respondents were willing to invest more in tools and external services to assist the day-to-day management of corporate networks. To date, IT managers have been reluctant to outsource, or even seek assistance with, the task of network management.

It is perhaps surprising to find that relatively few organisations expect to increase spending in the area of software support, though 56% of respondents expected expenditure to remain at current levels rather than decline. This may reflect the fact that users have yet to fully accept the value of paying for desktop support which until relatively recently was offered for free by the leading software publishers such as Microsoft.

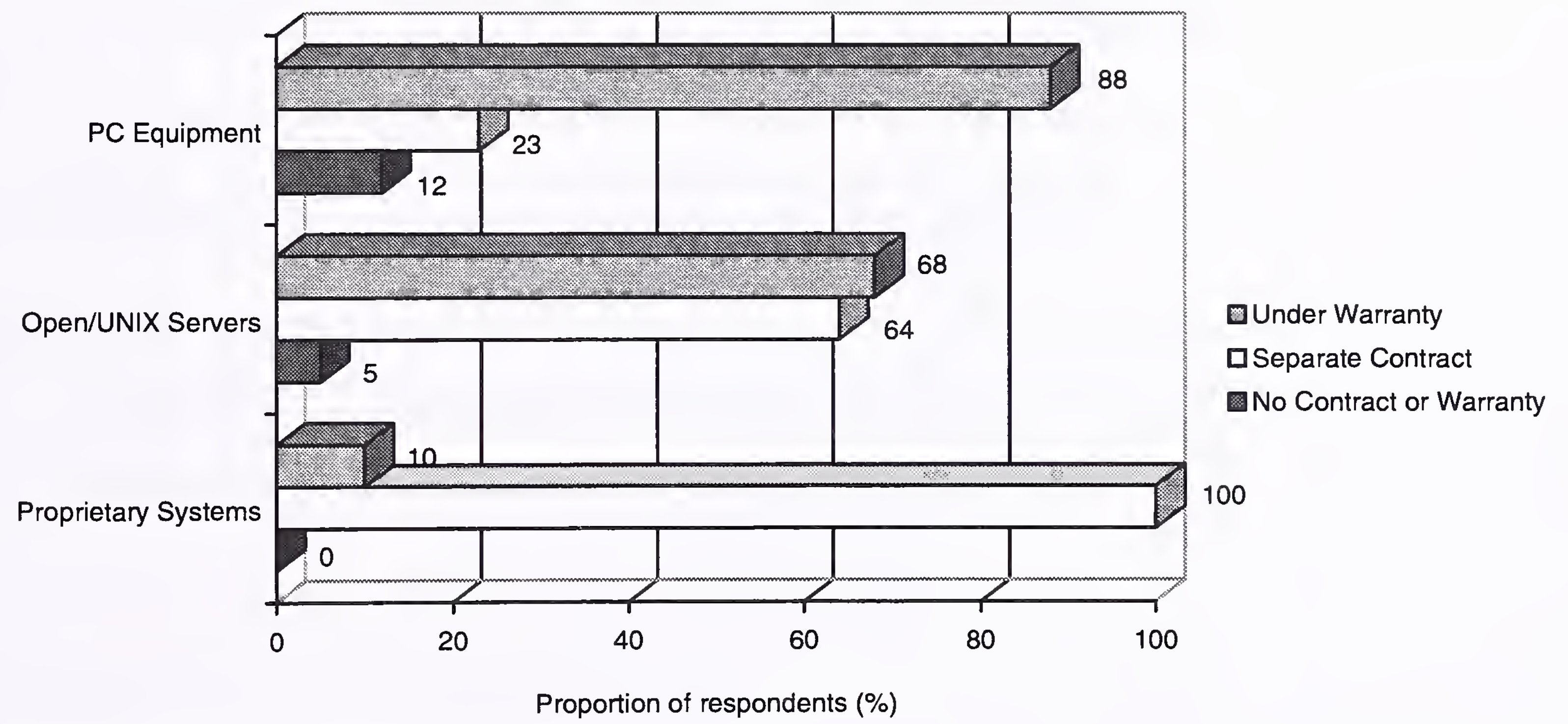
It is less surprising to find that organisations have no plans to increase expenditure on equipment maintenance services.

C
Equipment Services Trends

Exhibit IV-7 shows the current arrangements for equipment maintenance amongst French organisations. Almost 90% of PC equipment is covered by a warranty agreement, though nearly a quarter of PCs have additional contractual cover. French organisations have a higher proportion of open systems servers under warranty than elsewhere (almost 68%, compared with 53% in Germany and 44% in the UK); however, almost two-thirds of servers are also under separate or extended maintenance contracts.

Exhibit IV-7

Equipment Maintenance Arrangements, France 1995



Sample of 30 respondents (multiple responses permissible) *Source: INPUT*

Seventy-eight per cent of the organisations surveyed expect to reduce the level of their equipment maintenance expenditure over the next few years. The remaining 22% expect maintenance expenditure to remain static.

Organisations are now quite clear about the direction they are taking with regard to maintenance provision. This can be summarised as follows:

- Over 90% of organisations consider maintenance contracts for large systems and legacy equipment to be worthwhile, but expect the cost of maintenance contracts to decline year on year

- Almost 80% of organisations consider the warranty on PCs and workstations to provide adequate cover for the lifetime of the equipment

- However, over 60% of organisations believe it is important to extend warranties or take out additional cover for critical server equipment.

In summary, organisations are determined to reduce their expenditure on equipment maintenance, either by taking out fewer maintenance contracts, or by continuing to force down the cost of those contracts. Either way, expenditure on mainframe and proprietary midrange equipment is set for steep decline.

In the open systems arena, the situation is different. Much of the maintenance market is now embedded into the product cost as warranty. With the installed base of PCs in France expected to rise from about 7 million to almost 12 million by the year 2000, the warranty market will be the real battleground for maintenance business over the next few years.

Also, the continued shift towards implementing business critical systems using client/server architectures is effectively redefining the market for server maintenance. The switch from remedial service to availability service, with ever-improving up-time guarantees on offer, will continue to shape the market for high-end equipment services.

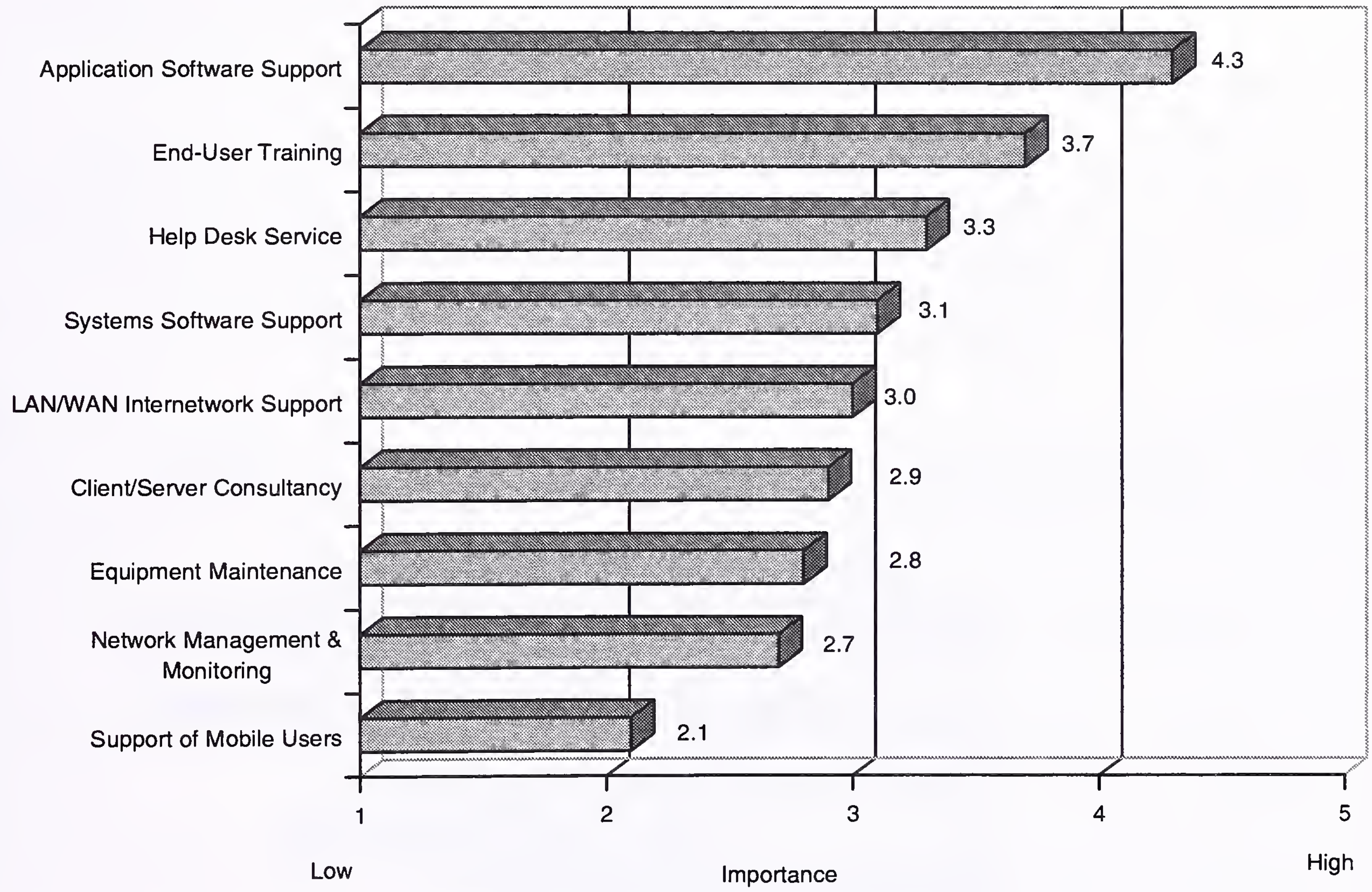
D

Value-Added Service Trends

Organisations were asked to indicate the importance of a number of support services to the future viability of their IT infrastructure. Exhibit IV-8 indicates that services related directly to the support of end-users are considered to be the most critical.

Exhibit IV-8

Most Strategic Support Services, France 1995



Sample of 30 respondents *Source: INPUT*

It is interesting to note that support for end-users in the shape of application software support, formal training and help desk services, is considered more important than IT product-and network-related services. This would not have been the expected finding even five years ago.

Given the clear intention of respondents to increase expenditure on services such as network management and external consultancy, it is perhaps surprising to find these services scoring relatively low importance ratings. The rating for network management (2.7) is most surprising when compared to the ratings given in Germany and the UK (3.4 and 3.5 respectively).

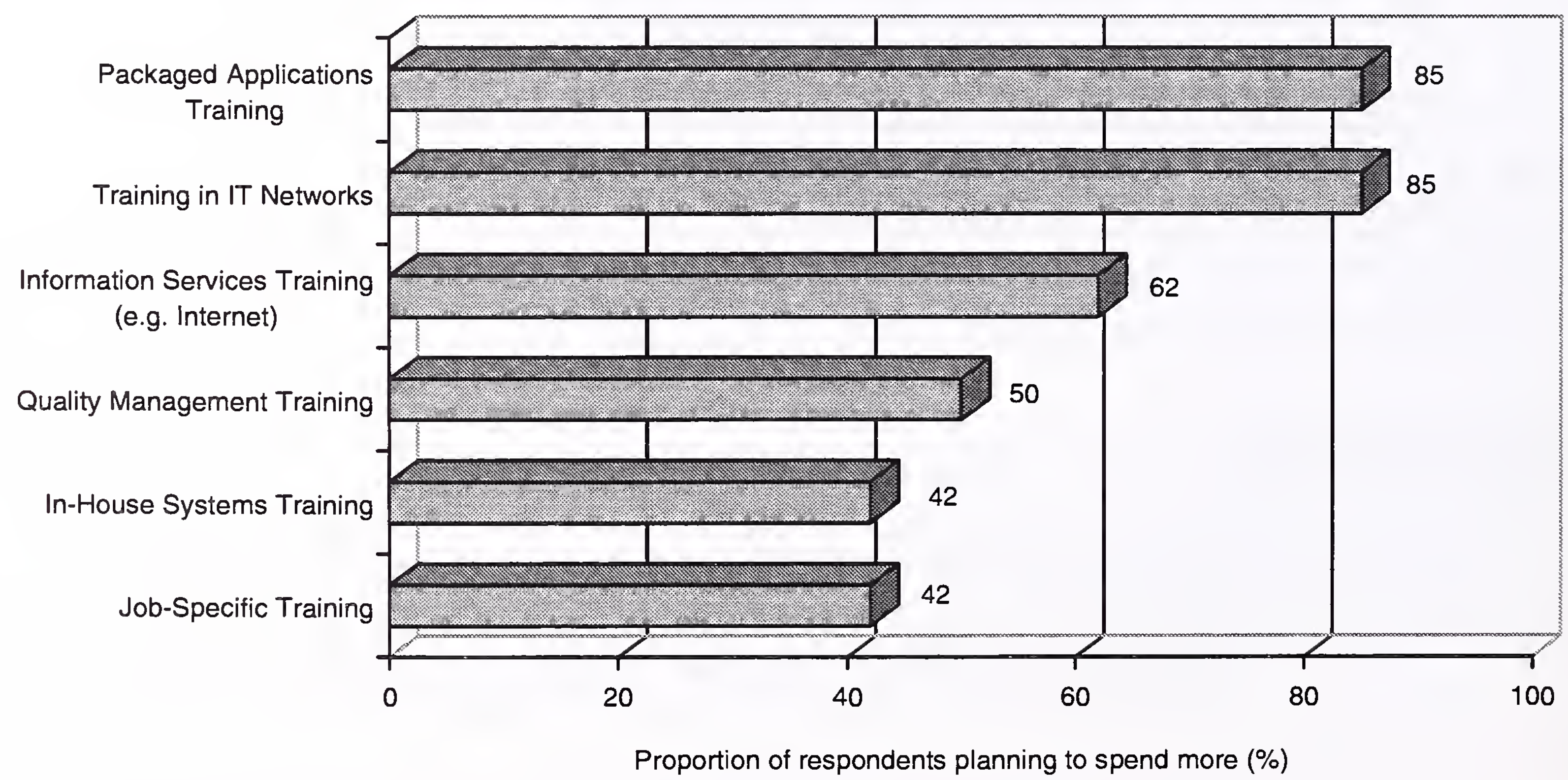
However, these results should be interpreted in the widest context. Organisations are beginning to understand that the ability of end-users to make effective use of IT in their day-to-day business is ultimately what matters. Services related to the operation of the physical IT infrastructure are necessary expedients in achieving this ultimate goal.

Whatever interpretation is placed on organisations' support priorities, Exhibit IV-8 clearly reflects the growing demand for a whole range of value-added services at the expense of traditional remedial services.

The renewed focus on end-user training signals the re-emergence of interest in training services, following several years in which static IT training budgets have limited the potential for market growth. Exhibit IV-9 shows the proportions of organisations planning to increase expenditure on specific forms of education and training over the next few years.

Exhibit IV-9

Increased Education & Training Expenditure, France 1995-2000



Sample of 30 respondents *Source: INPUT*

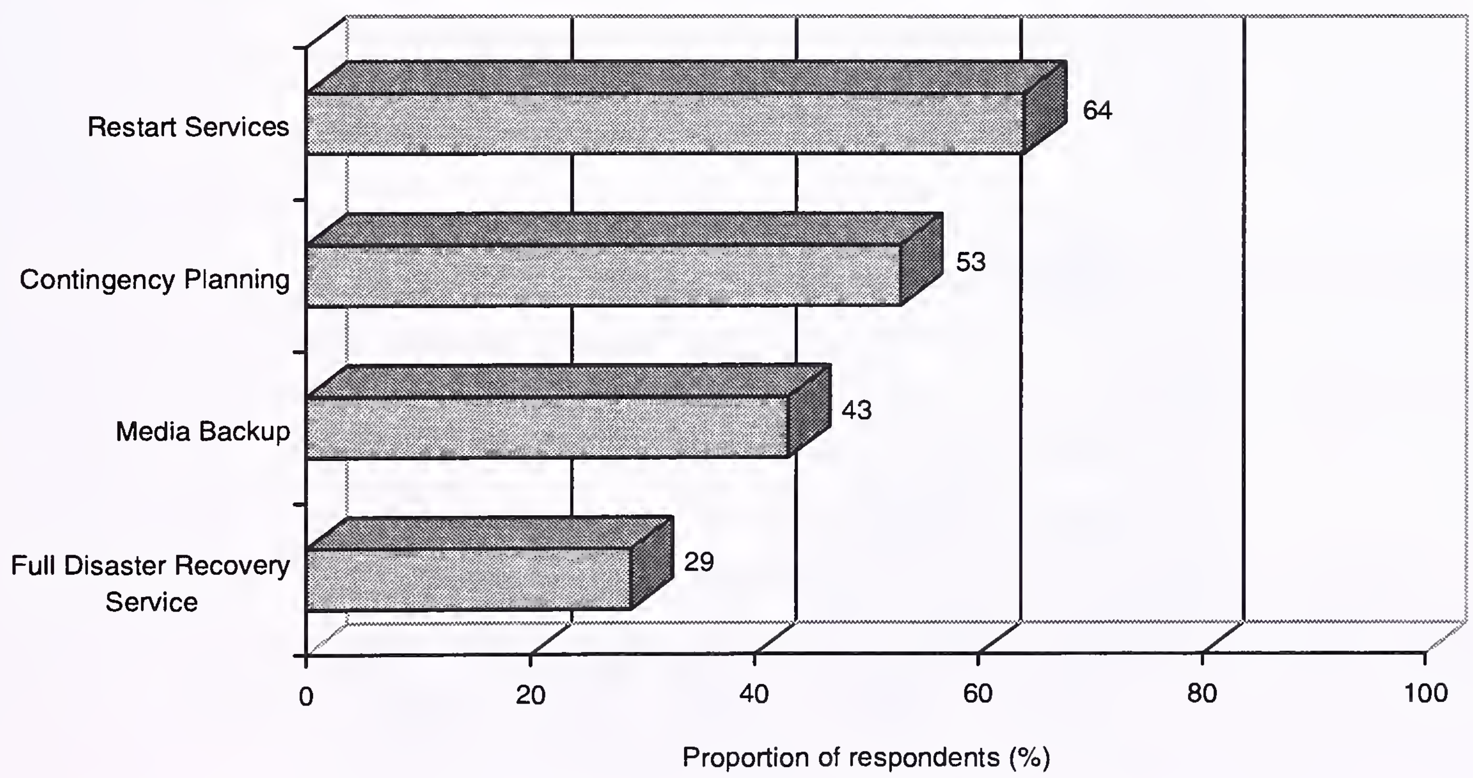
The great majority of organisations plan to spend more on training end-users in specific packaged application products. By contrast, only 42% of organisations plan to increase expenditure on training for in-house systems; the other 58% expect expenditure on in-house systems training to decrease in real terms.

The other significant area of focus is training in the use of IT networks, and allied to this is a strong intention to bring end-users up to speed in the use of networked information services. Training in the Internet and related services is expected to be a significant driver in the education and training market over the next five years.

As organisations look to create more distributed IT infrastructures, and especially as business-critical systems are implemented using those infrastructures, so the issues of security and reliability are increasing in importance. Sixty-two per cent of organisations surveyed have already made some provision for major incidents which may put their IT infrastructure out of action. Exhibit IV-10 shows the sorts of business continuity provisions currently in place.

Exhibit IV-10

Business Continuity Provisions Currently In Place, France 1995



Sample of 30 respondents *Source: INPUT*

However, of the organisations which have not yet invested in some form of business continuity service, only 13% plan to do so in the near future (compared with 33% in the UK and 27% in Germany).

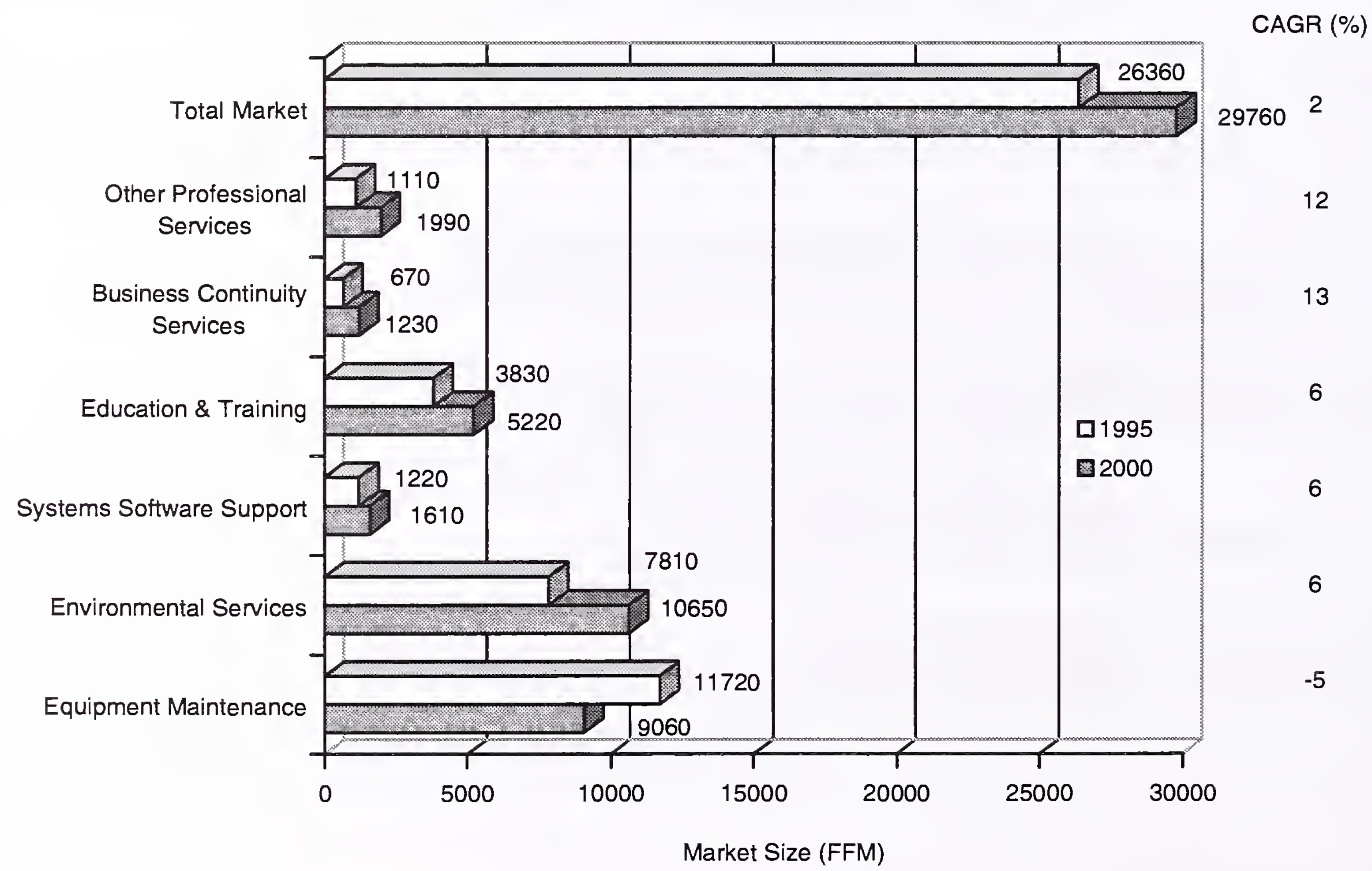
E
Customer Services Growth by Market Sector, 1995-2000

Exhibit IV-11 shows the pattern of customer services growth in France over the next five years, broken down by market sector. Market sizing for the base year 1994, and detailed forecasts for the following years, were derived using INPUT's established methodology based on both vendor and user research.

Chapter VII contains complete country market forecasts in tabular format, in both local currency and US dollars.

Exhibit IV-11

Market Sector Growth, France 1995-2000



Source: INPUT

V

Customer Services Market, Germany 1995-2000

A
Economic and Commercial Conditions in Germany

Germany is undergoing a robust recovery in the west, while growth in the east of the country is becoming increasingly widespread. The strong and steady demand for software and services in the east, coupled with the rapid migration towards client/server technology, especially amongst medium-sized organisations, are creating powerful conditions for growth.

The German market is moving quickly towards open systems, particularly Unix, where demand from the financial and manufacturing sectors is very strong.

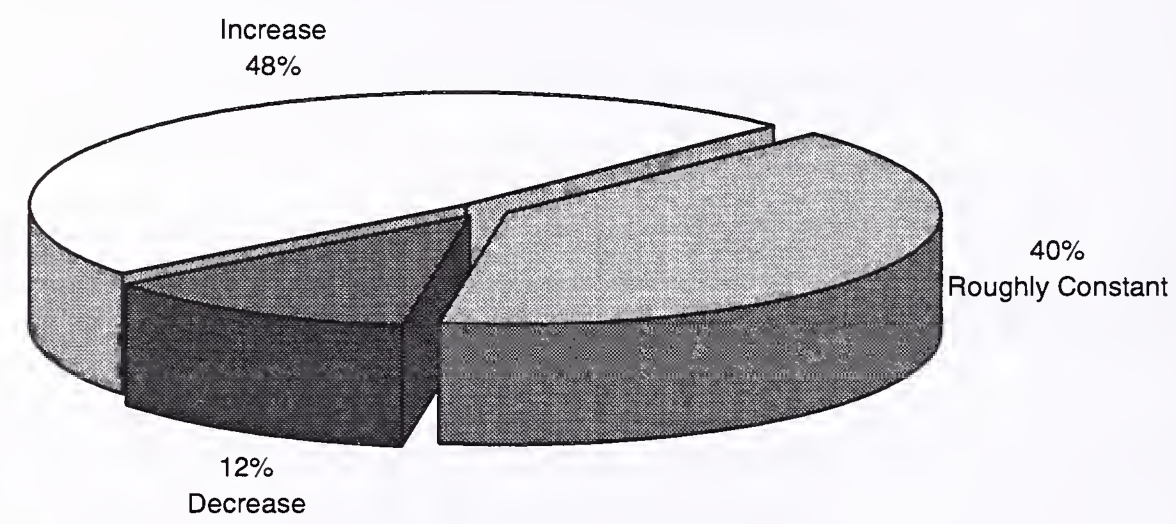
Signs of cultural change within the German market are beginning to emerge. The renowned loyalty of German organisations to the larger equipment manufacturers, though still strong, is showing signs of weakening. In the area of desktop services in particular, organisations are looking increasingly towards the dealer channel rather than the big vendors.

Attitudes to outsourcing IT services are also changing. German organisations have traditionally been reluctant to relinquish control over IT systems, citing confidentiality and security as the main reasons. However, partial and full outsourcing arrangements are now increasingly common.

Organisations are optimistic about their IT budgets over the next few years. Exhibit V-1 shows that almost half of German organisations surveyed expect budget levels to rise, while most of the rest predict budgets to remain static. Only 12% of German organisations take a more pessimistic view, forecasting reduced IT budgets in the near future.

Exhibit V-1

IT Budget Levels, Germany 1995-2000



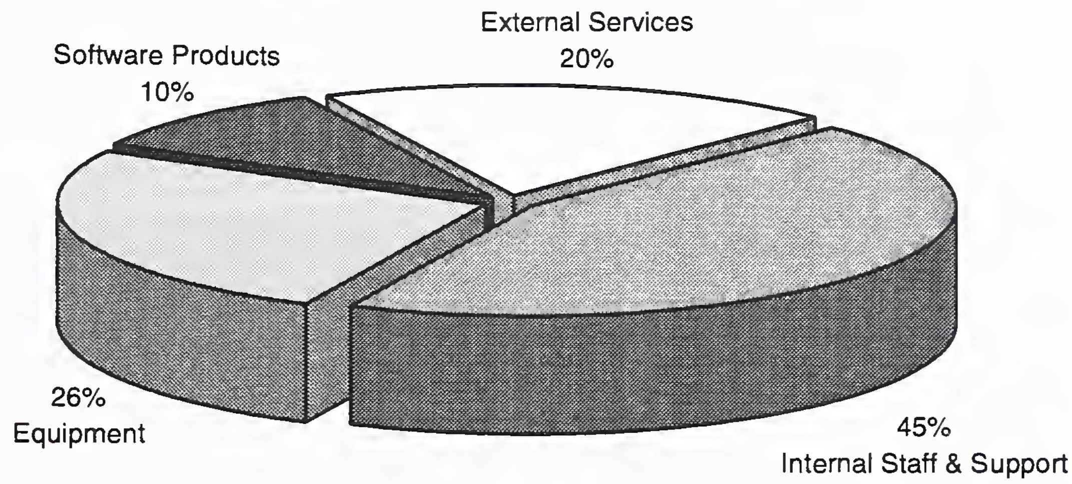
Sample of 30 respondents *Source: INPUT*

Exhibit V-2 shows how IT budgets are currently allocated. German organisations:

- Spend marginally more on equipment than their French and UK counterparts
- Spend significantly more on internal staff and support (45% of the IT budget, compared with 40% in France and 36% in the UK)
- Consequently, spend less on external services (20% of the IT budget, compared with 28% in France and 31% in the UK).

Exhibit V-2

Current Allocation of IT Budgets, Germany 1995



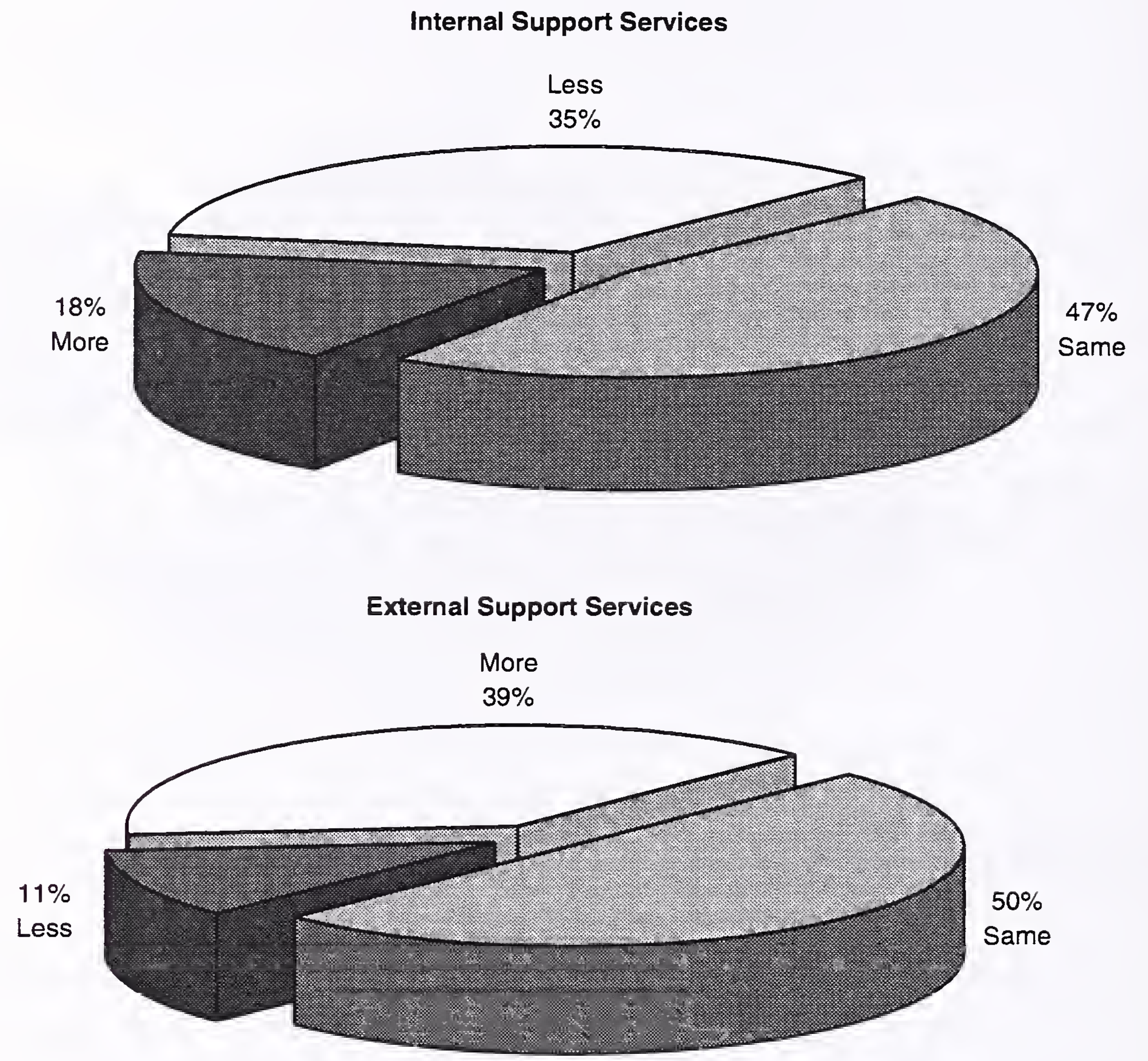
Source: INPUT

German organisations plan to increase expenditure on external support services at the expense of internal services. However, they are notably more cautious than their French and UK counterparts in their intentions to switch the pattern of support expenditure.

Thirty-nine per cent of German organisations expect to spend more externally over the next five years, compared with 59% of French and 50% of UK organisations. Exhibit V-3 shows how the pattern of support expenditure is expected to shift between 1995 and 2000.

Exhibit V-3

Internal vs External Expenditure Support Services, Germany 1995-2000

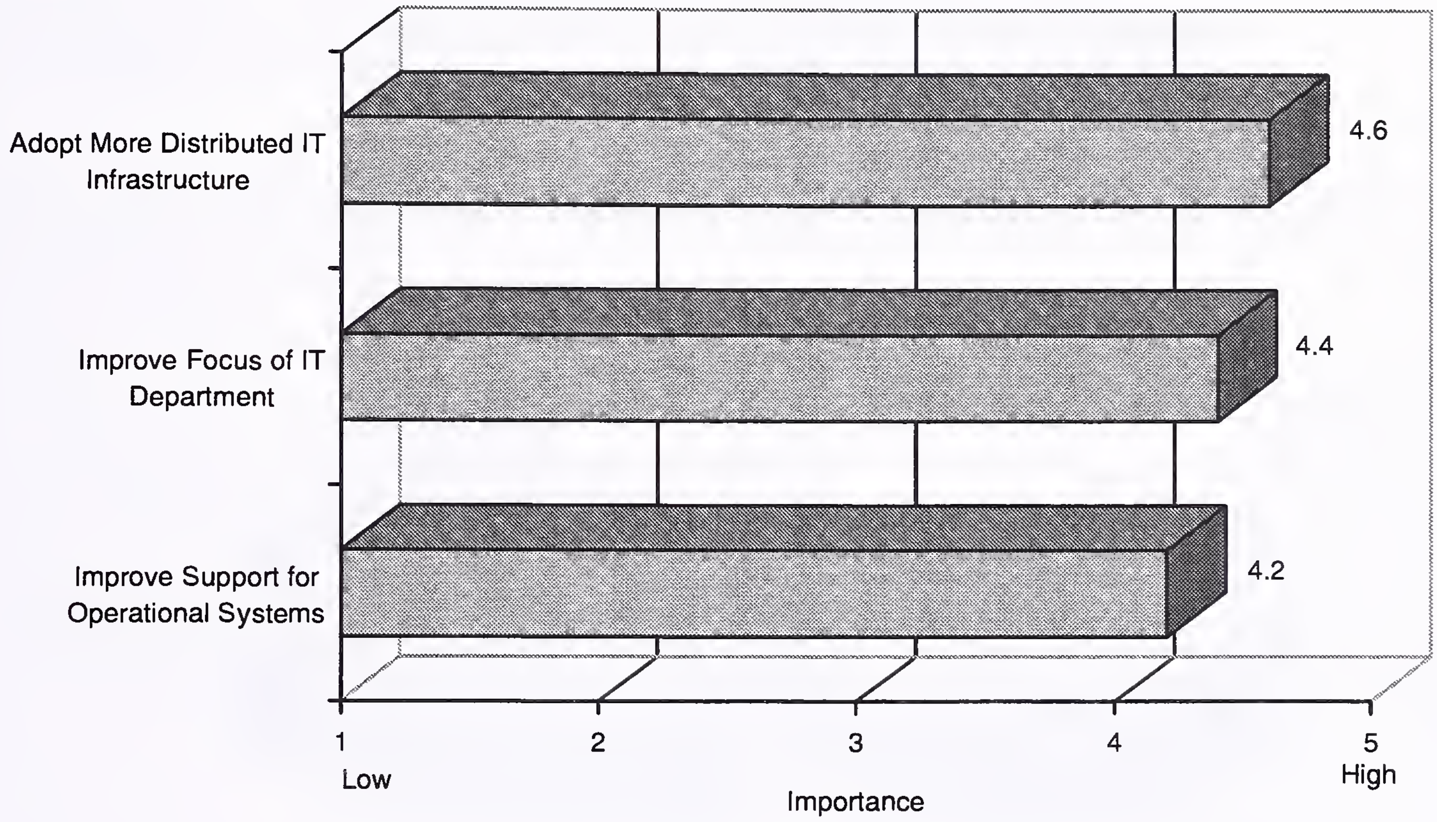


Sample of 30 respondents *Source: INPUT*

The strategic IT trends which are driving the shift towards external services are shown in Exhibit V-4.

Exhibit V-4

Trends Driving Increased Support Expenditure, Germany 1995-2000



Sample of 30 respondents (standard error = 0.1) *Source: INPUT*

In common with their counterparts in other countries, the most important IT consideration for German organisations is the need to adopt a more distributed IT infrastructure.

Increasing numbers of German organisations are migrating to client/server architectures, with demand for Unix solutions growing rapidly. As a consequence, demand for value-added customer services is growing significantly. Services related to the design, implementation and support of client/server networks are now in greatest demand.

The organisations surveyed also indicated that improving the focus of the IT department was a key component of their IT strategy. The clear intention of most respondents was that the IT department should focus on key development and operational tasks in future, while devolving more responsibility for support services to third parties.

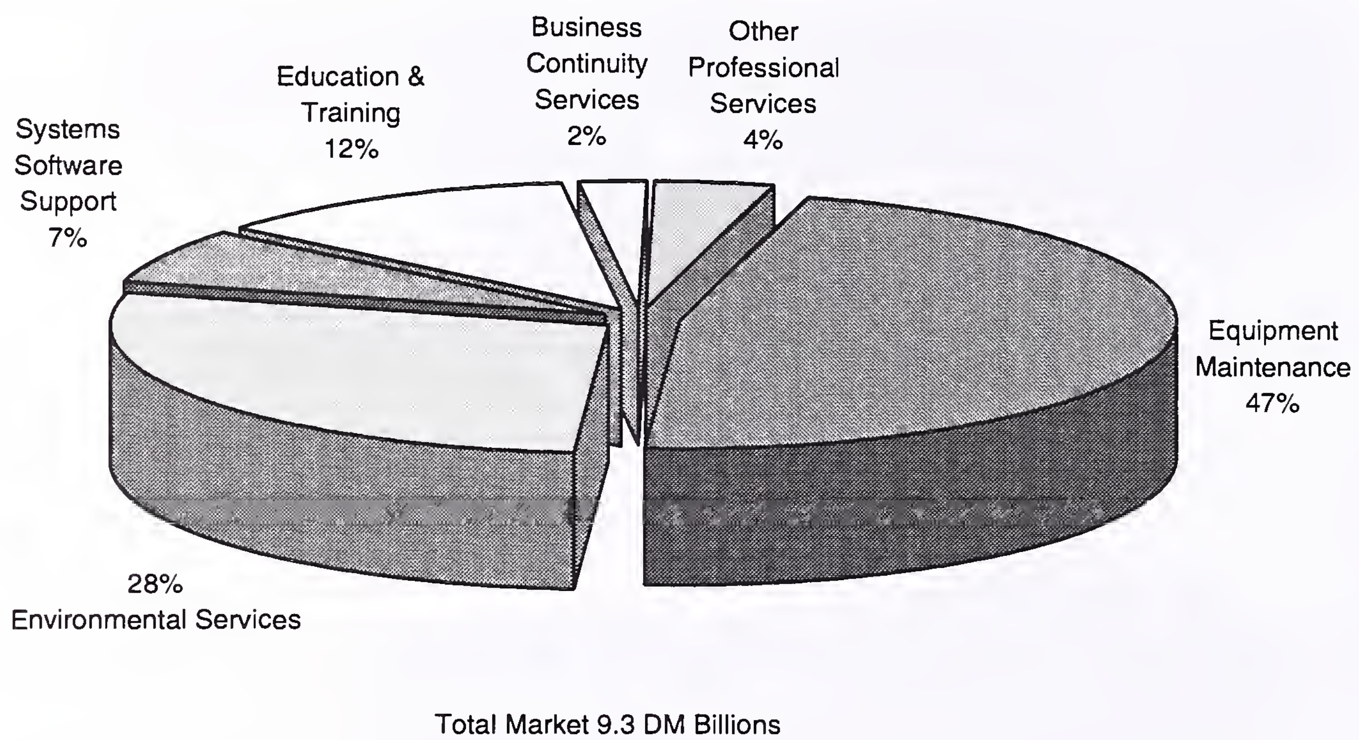
B

Customer Services Expenditure Trends

User expenditure for customer services in Germany is broken down by service sector in Exhibit V-5.

Exhibit V-5

Customer Services Expenditure by Market Sector, Germany 1995

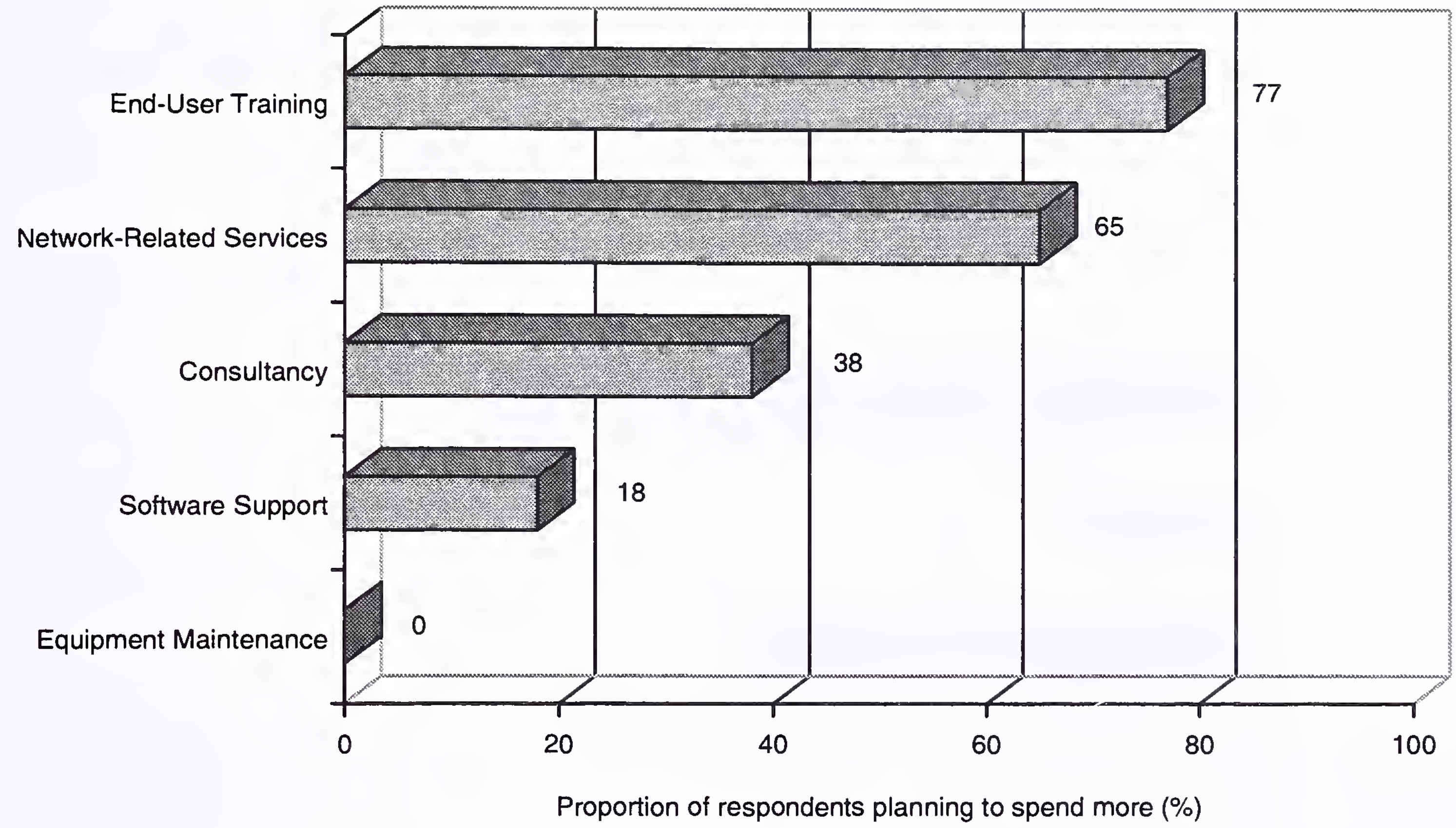


Source: INPUT

Exhibit V-6 shows the key areas in which the organisations surveyed intend to increase expenditure over the next few years.

Exhibit V-6

Where Users Intend to Spend More — Support Services, Germany 1995-2000



Sample of 30 respondents *Source: INPUT*

Perhaps surprisingly, end-user training dominates the spending plans of the organisations surveyed; significantly more German organisations intend to increase investment in training services than in other countries (77%, compared with 61% in both France and the UK). This is discussed further in section D.

Network services also feature prominently in the plans of German organisations, who are looking primarily to extend their network infrastructures in the medium term. The increasing reliance on distributed computing, coupled with the slow but distinct change in attitude towards outsourcing of key IT services, are creating strong demand for an entire range of network-related skills: from planning, design, through installation and support, to network integration.

While organisations are planning to invest more in a variety of value-added services, they see a definite need for consultancy services to advise on forward strategy, and to assist in making the correct purchasing decisions.

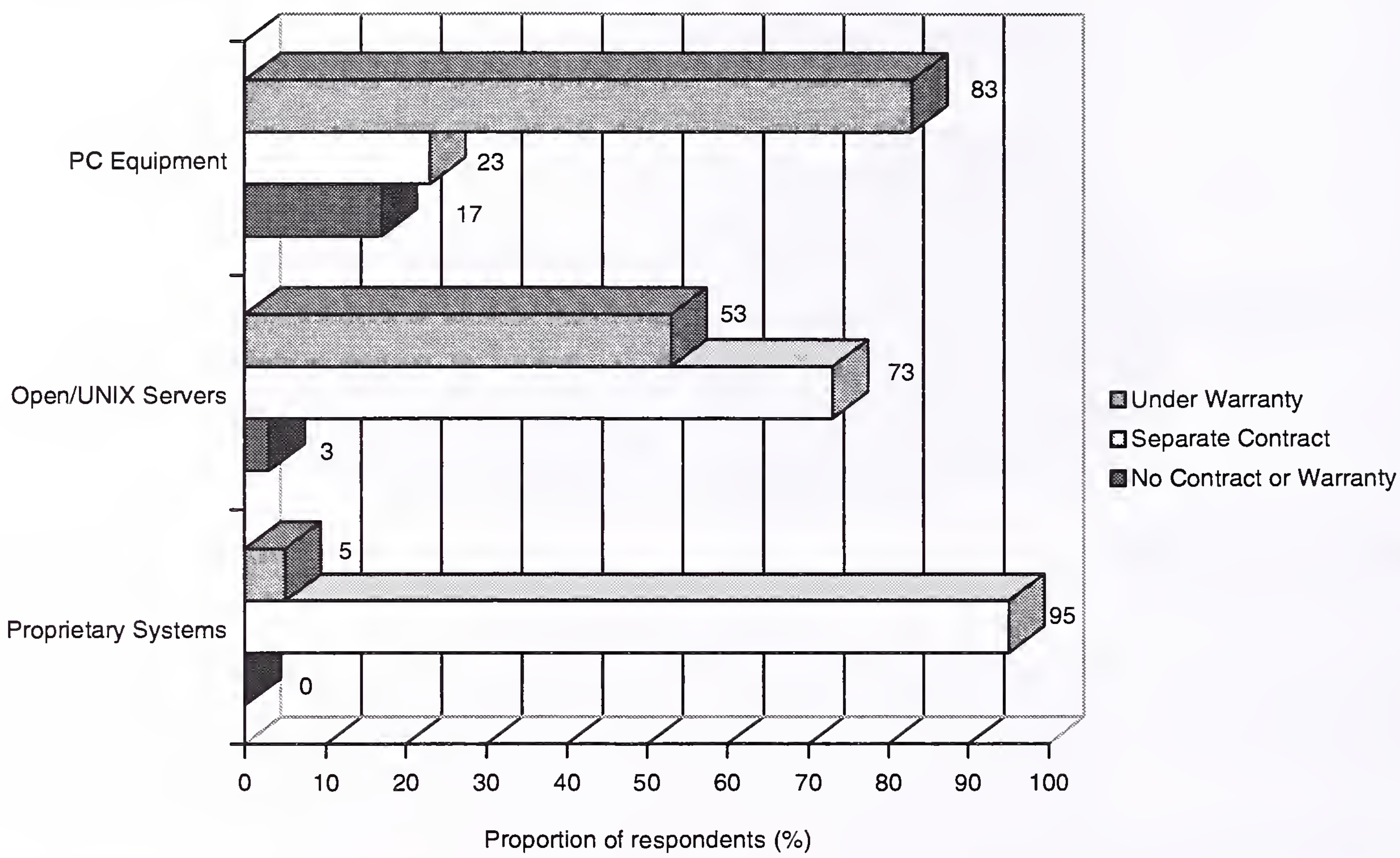
C

Equipment Services Trends

Exhibit V-7 shows the current arrangements for equipment maintenance amongst German organisations.

Exhibit V-7

Equipment Maintenance Arrangements, Germany 1995



Sample of 30 respondents (multiple responses permissible) *Source: INPUT*

Over 80% of PC equipment is under warranty, compared with just over half of all open server equipment. However, almost three-quarters of servers have some form of extended or additional maintenance cover.

German organisations report the highest incidence of PCs without any form of maintenance cover (17%, compared with 12% in France and 11% in the UK), which reflects users' increasing confidence in the reliability of low-end equipment.

The following survey results reveal the extent to which equipment maintenance has become a *non-strategic* service:

- Eighty-six per cent of the organisations surveyed expect to reduce the overall level of equipment maintenance expenditure over the next few years. The remaining 14% predict spending to remain static in this area

- Over 90% of organisations consider maintenance contracts for large systems and legacy equipment to be worthwhile, but expect the cost of maintenance contracts to decline year-on-year

- Exactly 60% of organisations consider the warranty on PCs and workstations to provide adequate cover for the lifetime of the equipment

- However, three-quarters of organisations believe it is important to extend warranties or take out additional cover for critical server equipment.

In summary, organisations plan to reduce equipment maintenance expenditure overall, whether by taking out fewer maintenance contracts or by forcing down the cost of those contracts. Clearly, expenditure on mainframe and proprietary mid-range equipment maintenance is in decline.

The dynamics in the market for low-end (client/server) equipment maintenance are different for two main reasons:

- The warranty factor, which has internalised the market for PC maintenance, since the maintenance cost is embedded in the product cost

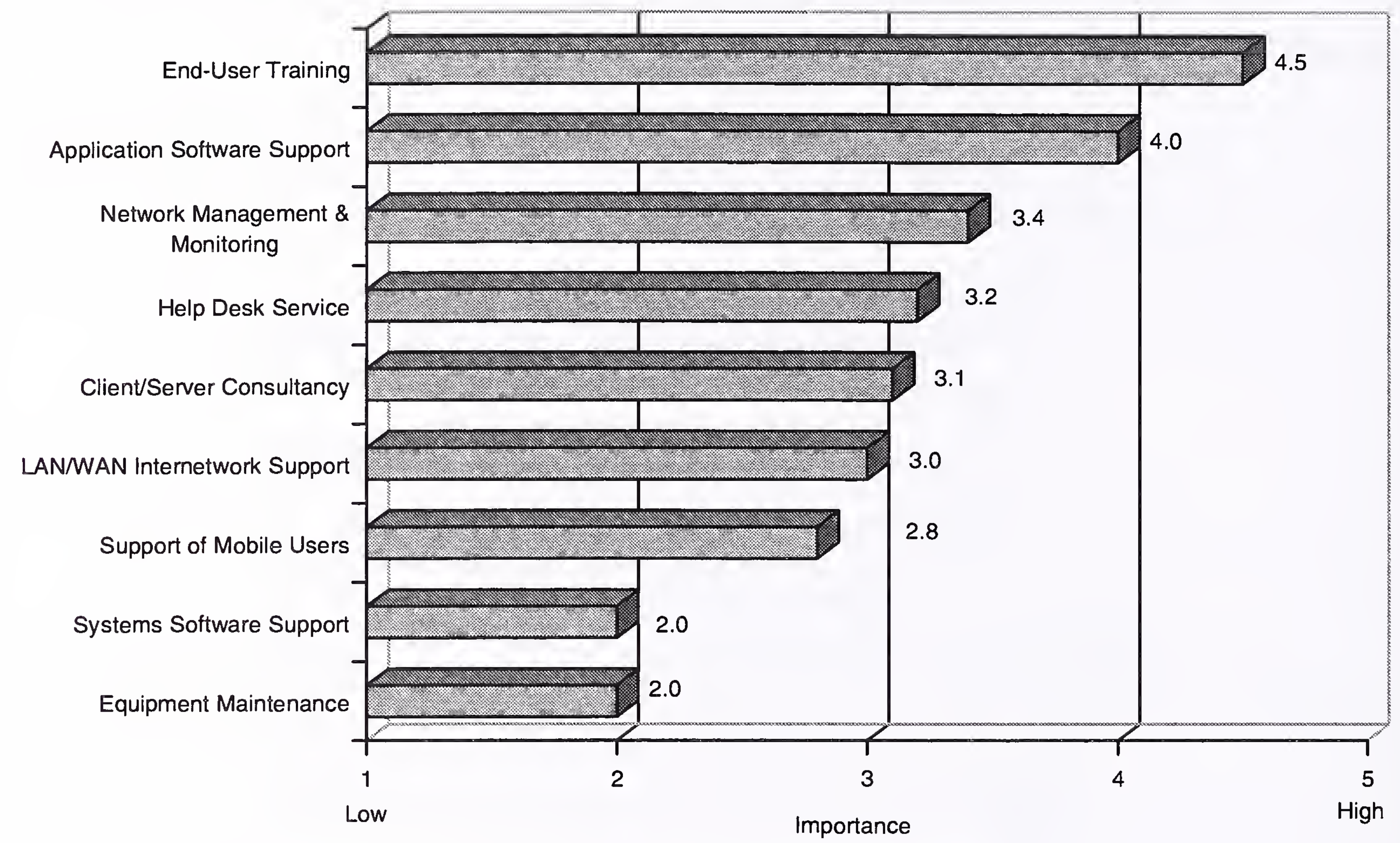
- The need for resilient, high-availability service for server equipment. Here, remedial services have given way to techniques such as predictive maintenance and remote diagnostics, and is still a significant growth area.

D
Value-Added Service Trends

Organisations were asked to indicate the importance of a number of support services to the future viability of their IT infrastructure. The results are shown in Exhibit V-8.

Exhibit V-8

Most Strategic Support Services, Germany 1995



Sample of 30 respondents (standard error =0.1) *Source: INPUT*

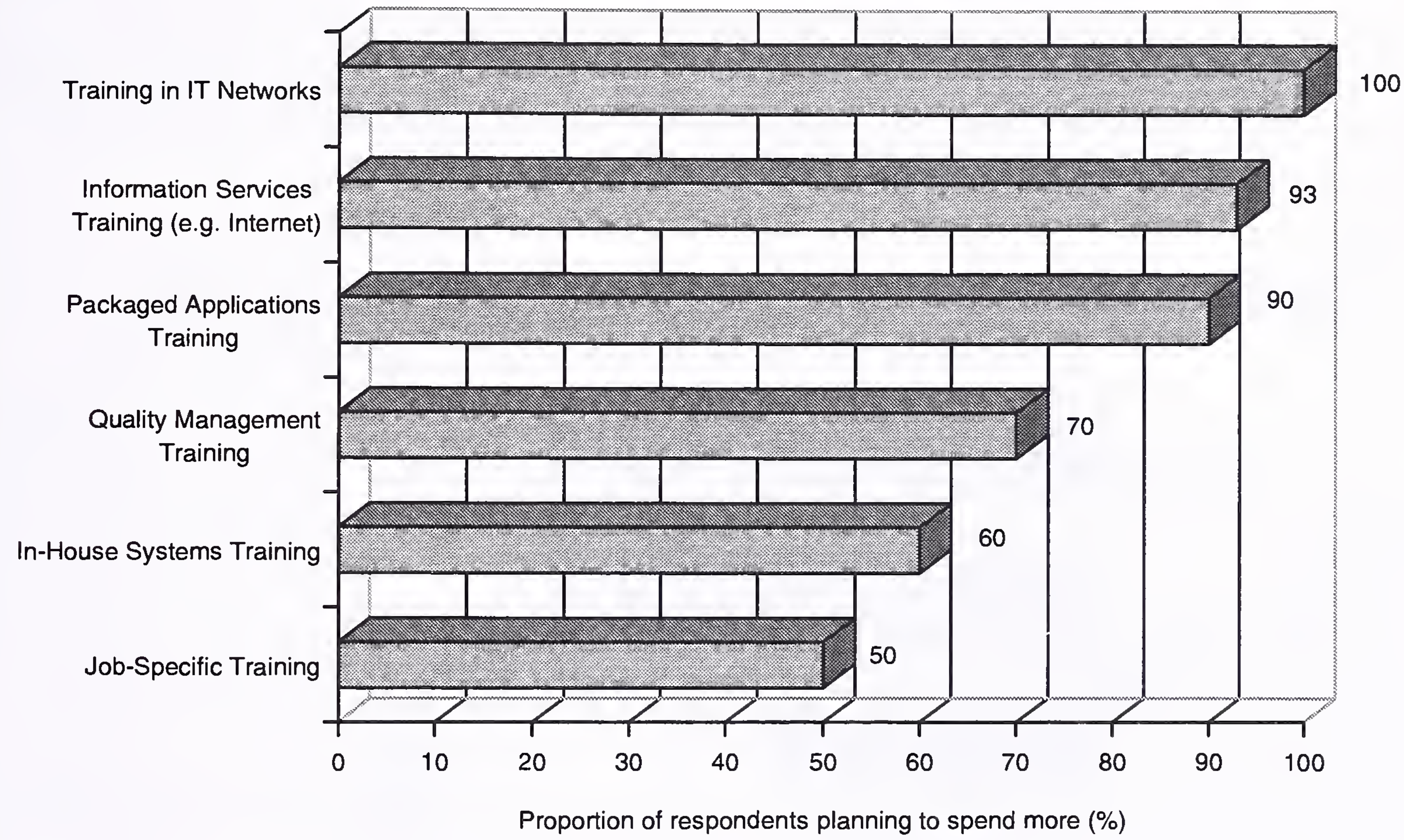
The present survey indicates that network management and monitoring has grown in terms of its acceptance as a strategic service. Findings throughout the survey suggest that German organisations are focusing increasingly on developing and supporting their local area networks, though the need for internetworking services (connecting LANs via WANs) is not yet perceived to be great.

German organisations clearly perceive the support of end-users to be most important. End-user training and application software support were considered significantly more important than the other services in terms of their impact on the future viability of organisations' IT strategy.

The strong accent on end-user training is further illustrated by Exhibit V-9, which shows the proportions of organisations planning to increase expenditure on specific forms of education and training over the next few years.

Exhibit V-9

Increased Education & Training Expenditure, Germany 1995-2000



Sample of 30 respondents *Source: INPUT*

Overall, significantly more German organisations intend to increase investment in training services than in other countries (77%, compared with 61% in both France and the UK). The majority of German organisations surveyed are planning to increase expenditure on a variety of forms of training, though notably in-house systems and job-related training are the lowest priorities.

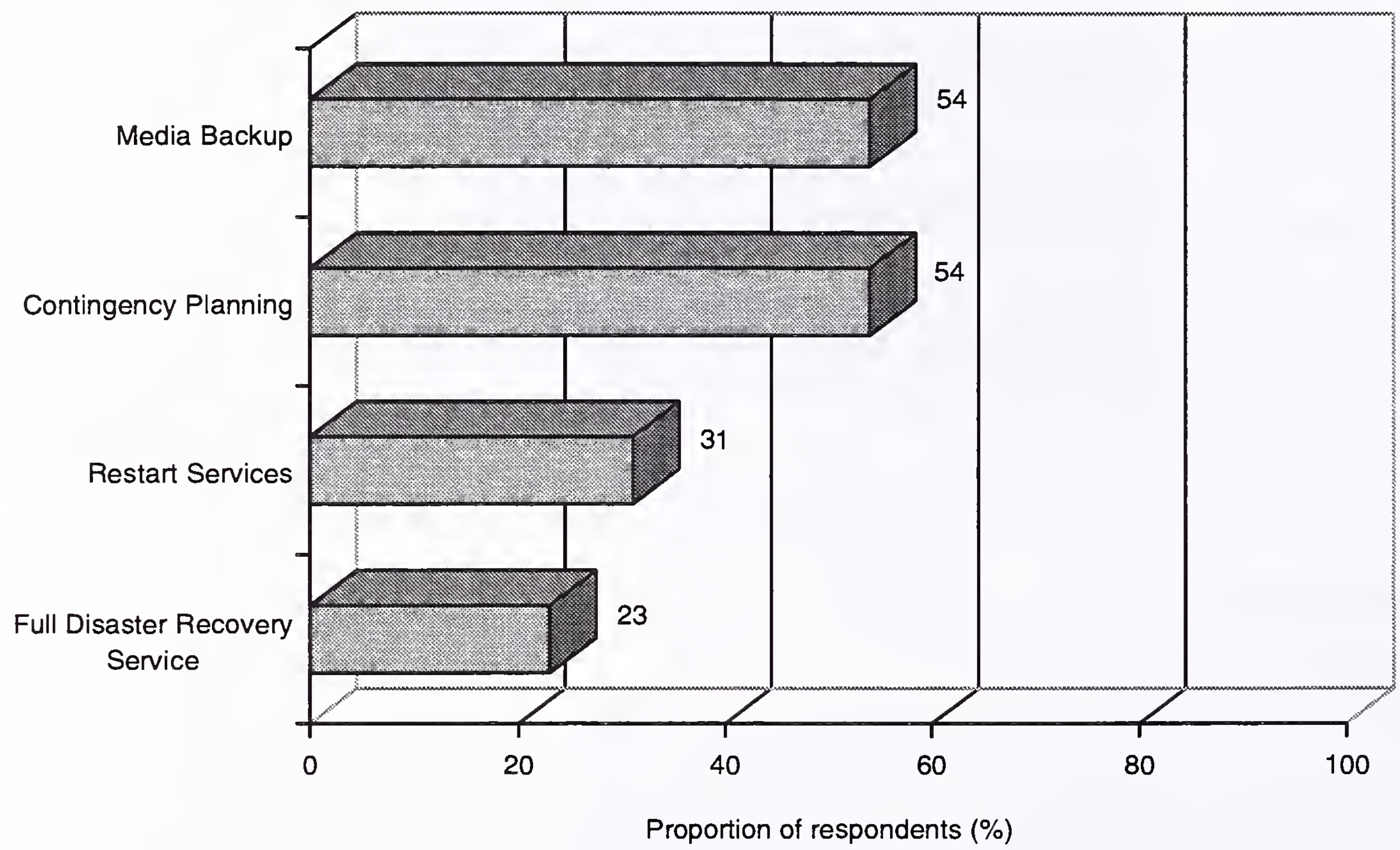
Respondents were unanimous in their intention to promote training in the use of IT networks. Equally striking was the finding that over 90% of organisations consider training in information services such as the Internet to be a high priority for investment (compared with 62% in France and 76% in the UK). Many respondents suggested that they were actively investigating the commercial possibilities presented by the Internet, though almost all were unsure of the direction that this would take.

A consequence of developing highly distributed IT infrastructures is the fact that security, resilience and reliability issues become extremely important. Major incidents which debilitate the network, though rare, are potentially disastrous to business. Hence, business continuity services should be a key component of distributed IT strategies.

Of the organisations surveyed, only 43% have already made some provision for major incidents which may put their IT infrastructure out of action. Exhibit V-10 shows the sorts of business continuity provisions currently in place.

Exhibit V-10

Business Continuity Provisions Currently In Place, Germany 1995



Sample of 30 respondents *Source: INPUT*

Fifty-seven per cent of organisations have made no provision for major incidents affecting their IT systems. However, of these, only 27% have plans to do so in the near future.

Given that the great majority of these organisations are actively developing and extending their IT networks, the lack of interest in continuity services suggests that the significance of such services is not entirely understood. Vendors who are active in this market might conclude that user education is the key to future success in this area.

E

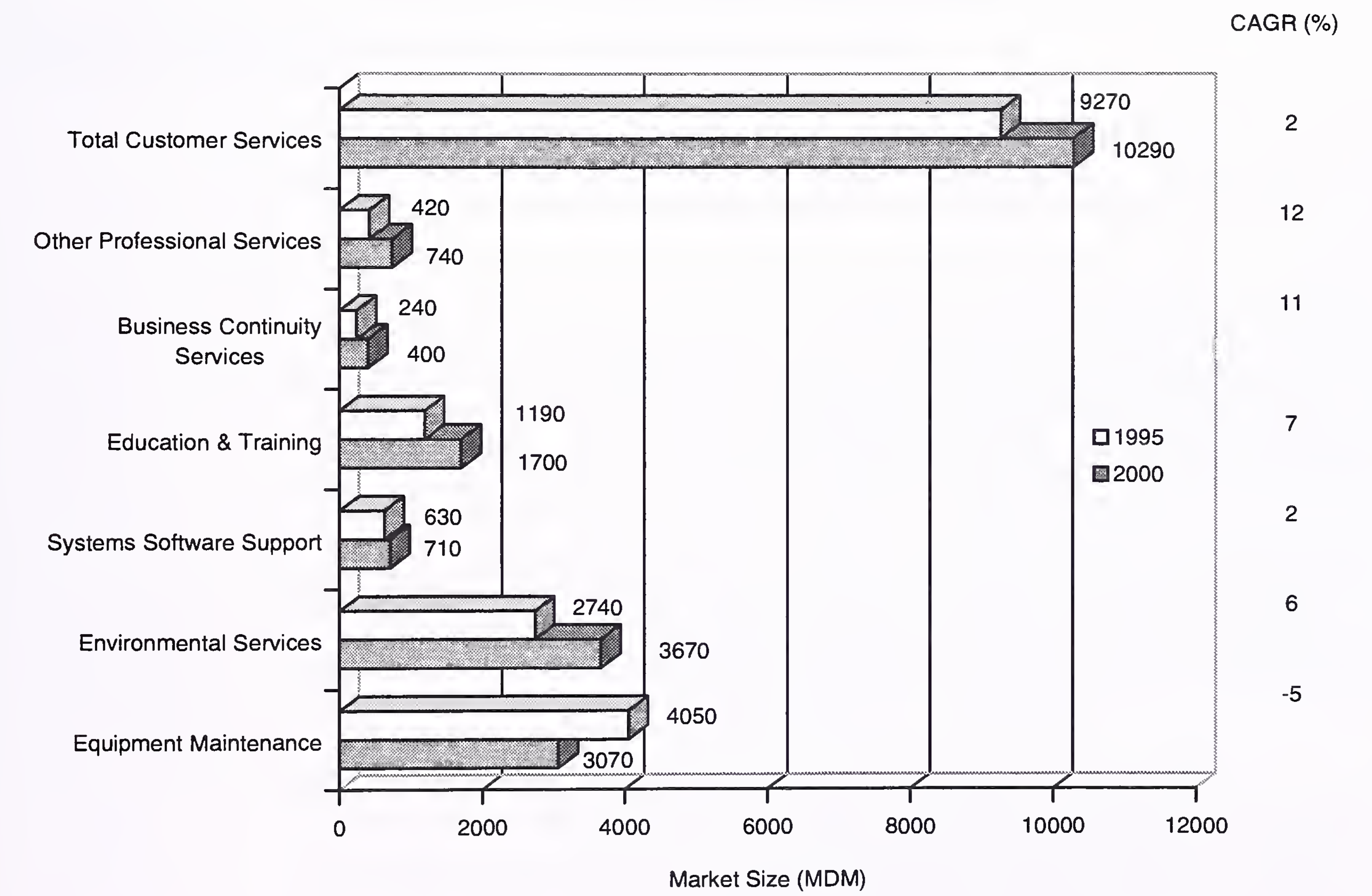
Customer Services Growth by Market Sector, 1995-2000

Exhibit V-11 shows the pattern of customer services growth in Germany over the next five years, broken down by market sector. Market sizing for the base year 1994, and detailed forecasts for the following years, were derived using INPUT's established methodology based on both vendor and user research.

Chapter VII contains complete country market forecasts in tabular format, in both local currency and US dollars.

Exhibit V-11

Market Sector Growth, Germany 1995-2000



Source: INPUT

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VI

Customer Services Market, UK 1995-2000

A Economic and Commercial Conditions in the UK

The UK economy has technically been out of recession for over two years since the downturn of the early 1990s, but the early years of recovery have seen organisations meeting highly competitive forces in the IT markets.

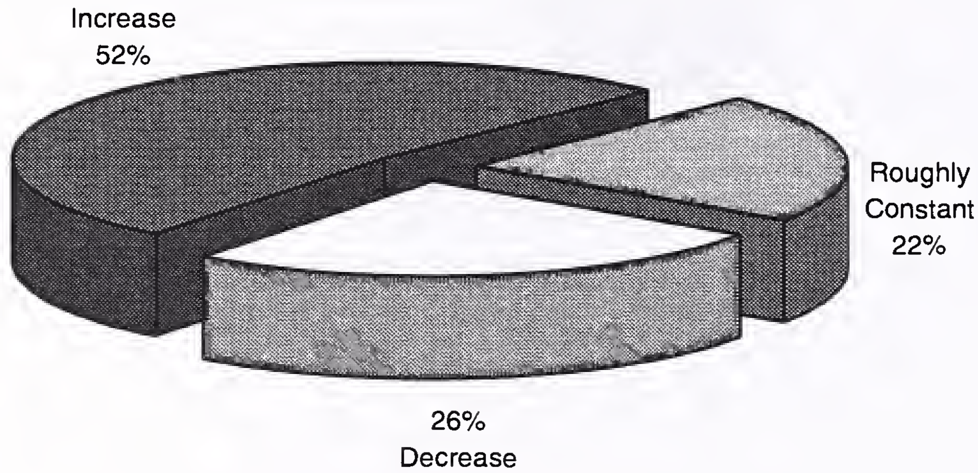
However, a more robust economic recovery is now evident, with exports and manufacturing output both rising, and business investment increasing. In 1994, the overall market for software and services grew faster than expected, with many IT vendors recording significant revenue growth in areas such as outsourcing and the SOHO sector.

Customer services organisations, dependent traditionally on equipment services revenues, are still in a state of transition, though the leading manufacturers and independents are increasingly optimistic about their ability to win and retain higher value service business.

The solid recovery in the UK is reflected by the attitudes of UK organisations; for example, most organisations are optimistic about their IT budgets over the next few years. Exhibit VI-1 shows that over half of the organisations surveyed expect budget levels to rise, while over 20% expect budgets to remain stable. A significant minority, however, remain pessimistic about the short term outlook.

Exhibit VI-1

IT Budget Levels, UK 1995-2000

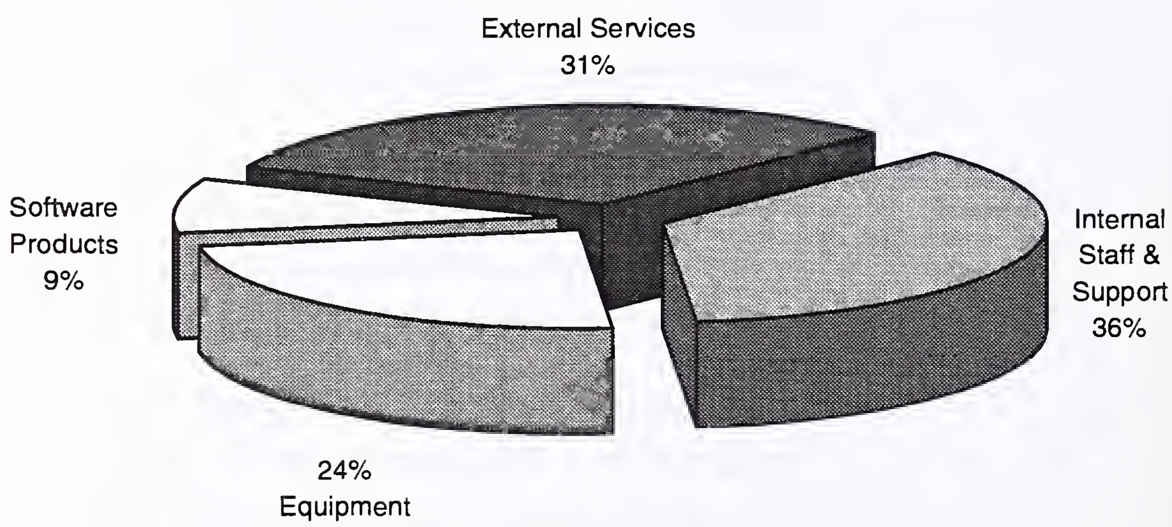


Sample of 30 respondents *Source: INPUT*

Exhibit VI-2 shows how IT budgets are currently allocated. UK organisations spend significantly more on external services than other leading European countries (31% of the IT budget, compared with 28% in France and 20% in Germany). Conversely, UK organisations spend the least on internal staff and support (36% of the IT budget, compared with 40% in France and 45% in Germany).

Exhibit VI-2

Current Allocation of IT Budgets, UK 1995



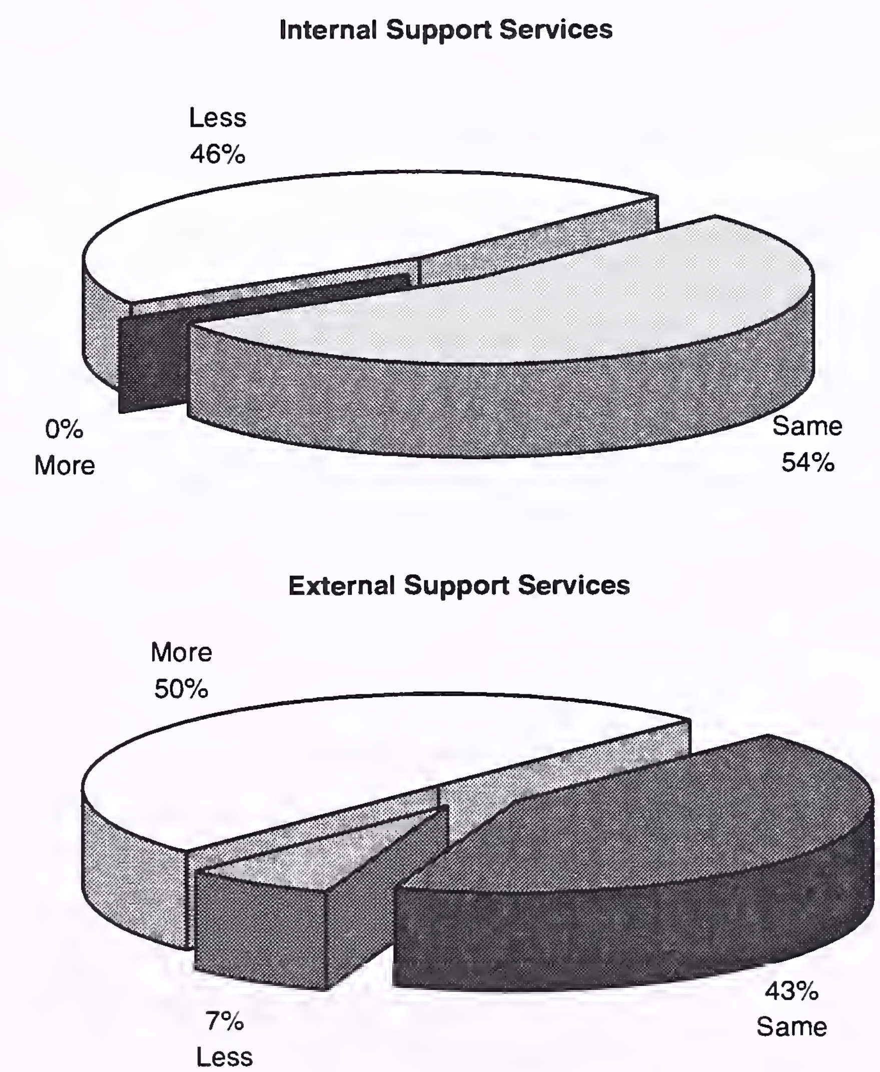
Source: INPUT

IT users in the UK, acknowledged for their pioneering outlook, have moved faster than other European countries to shift the pattern of IT spending towards external suppliers; the outsourcing ethic has been adopted far more readily in the UK than elsewhere. However, UK organisations are planning to shift IT support expenditure even further towards external sources.

Half of the UK organisations surveyed expect to spend more externally over the next five years, compared with 59% of French and 39% of German organisations. Only 7% of respondents expect to spend less externally. Exhibit VI-3 shows how the pattern of support expenditure is expected to shift between 1995 and 2000.

Exhibit VI-3

Internal vs External Expenditure — Support Services, UK 1995-2000

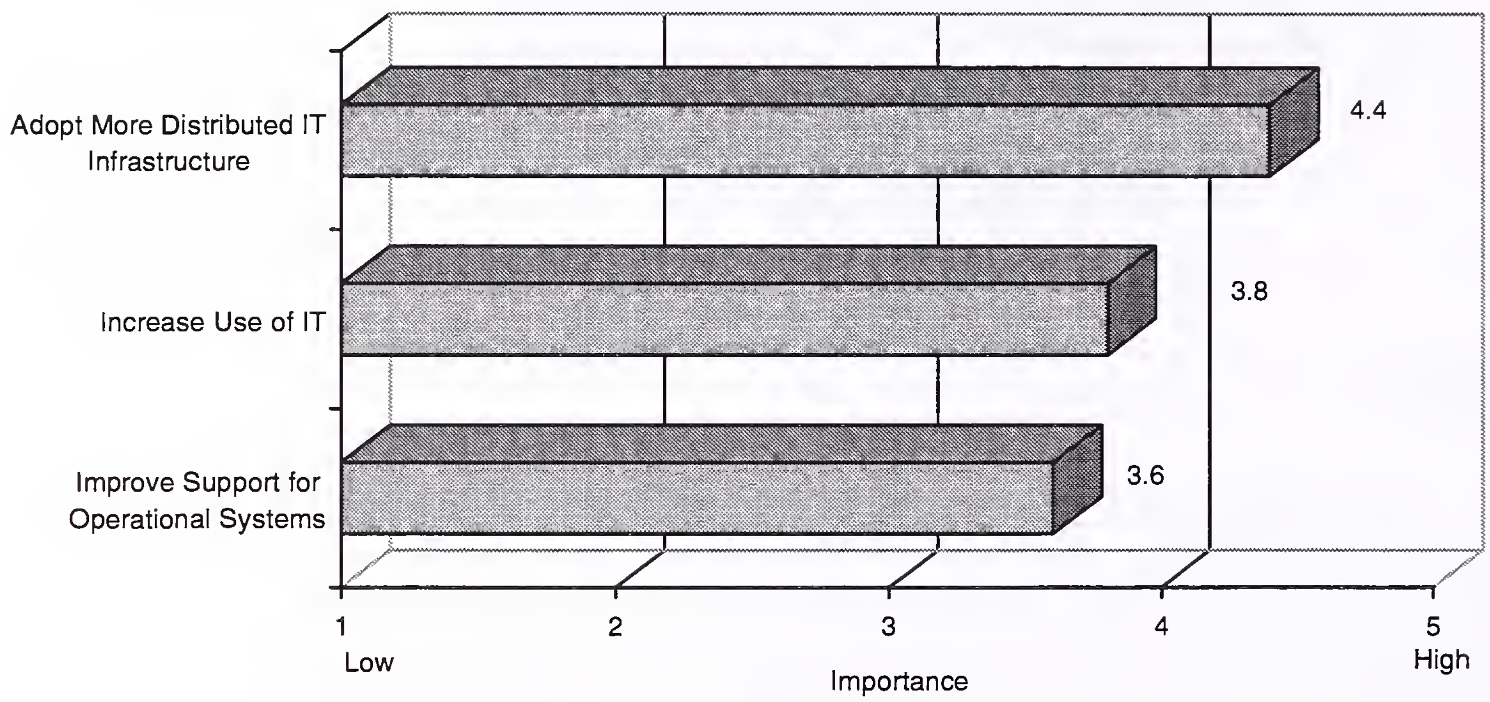


Source: INPUT

The strategic IT trends which are driving the shift towards external services are shown in Exhibit VI-4.

Exhibit VI-4

Trends Driving Increased Support Expenditure, UK 1995-2000



Sample of 30 respondents (standard error = 0.1) *Source: INPUT*

By far the most important trend for UK organisations is the continuing shift to a more distributed IT infrastructure. UK organisations are ahead of their European neighbours in terms of their adoption of distributed computing, and have moved to client/server platforms more quickly. However, the drive towards more network-centric computing continues.

UK organisations, in common with those in France and Germany, consider the need to make better use of IT, and to improve the level of support for operational systems, to be very important. Other factors which were considered important in the UK (though not elsewhere) were:

- The need to replace mainframe-based systems. UK organisations consider downsizing to be an important component of their IT strategy, though this was considered far less important in France and Germany

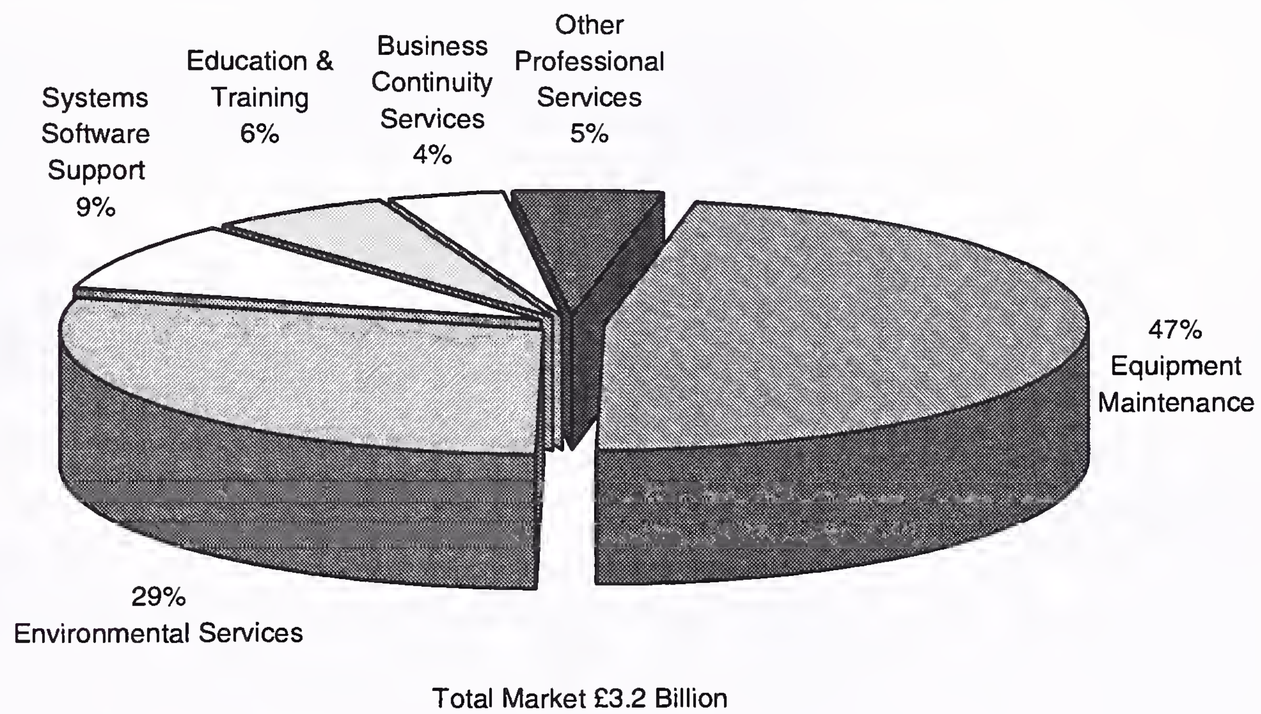
- The need to improve co-ordination of IT internationally. Larger UK companies are focusing increasingly on the need to have consistent IT platforms and operating environments internationally.

B
Customer Services Expenditure Trends

User expenditure for customer services in the UK is broken down by service sector in Exhibit VI-5.

Exhibit VI-5

Customer Services Expenditure by Market Sector, UK 1995

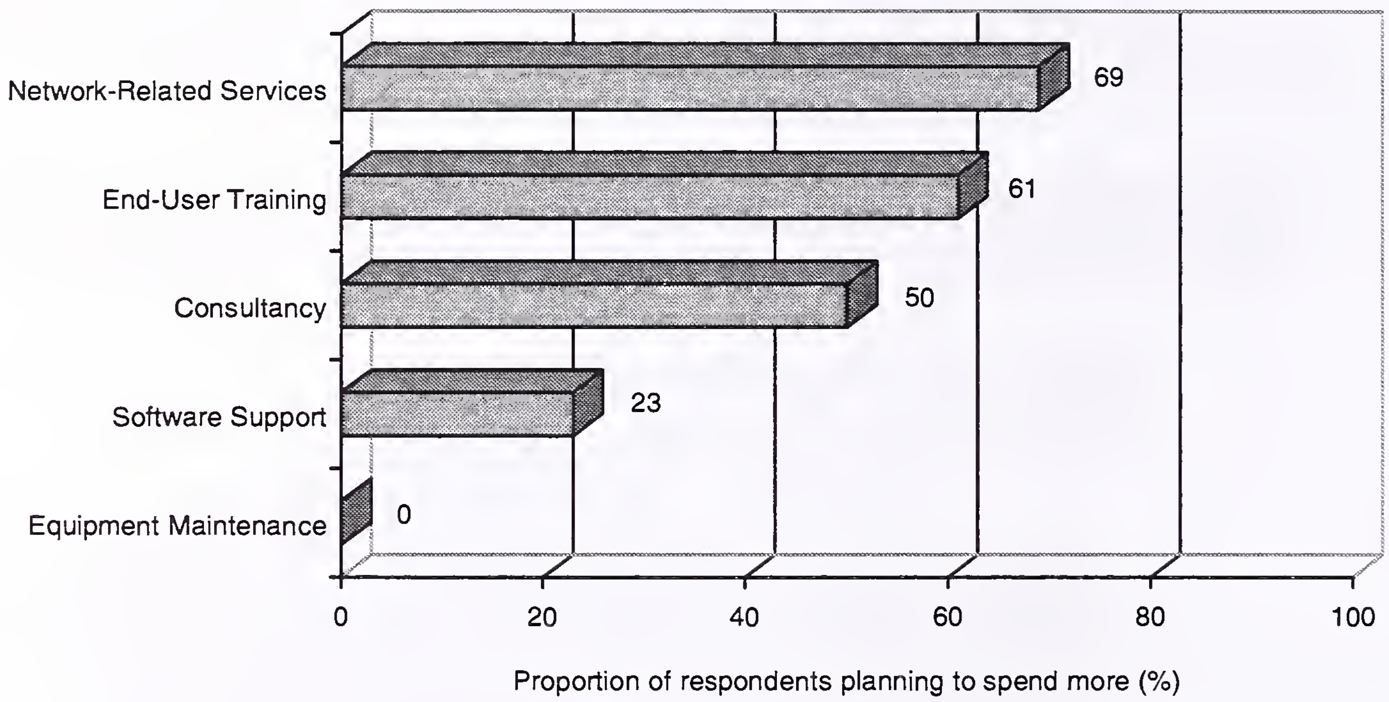


Source: INPUT

Exhibit VI-6 shows the key areas in which the organisations surveyed intend to increase expenditure over the next few years.

Exhibit VI-6

Where Users Intend to Spend More — Support Services, UK 1995-2000



Sample of 30 respondents *Source: INPUT*

The spending intentions of UK organisations are broadly similar to those in France and Germany, though German organisations placed highest priority on end-user training.

However, of the countries surveyed, the UK registered the highest proportion of companies planning to invest further in network-related services (almost 70%). It was also notable that UK organisations expressed a much greater interest in advanced services, such as remote network monitoring and integration services, than their counterparts in other countries.

Half the UK companies expected to use more external consultants in future, while almost a quarter anticipated spending more on software support services. As elsewhere, the question of whether UK organisations will fully embrace the principle of paying for hitherto free software support remains unanswered.

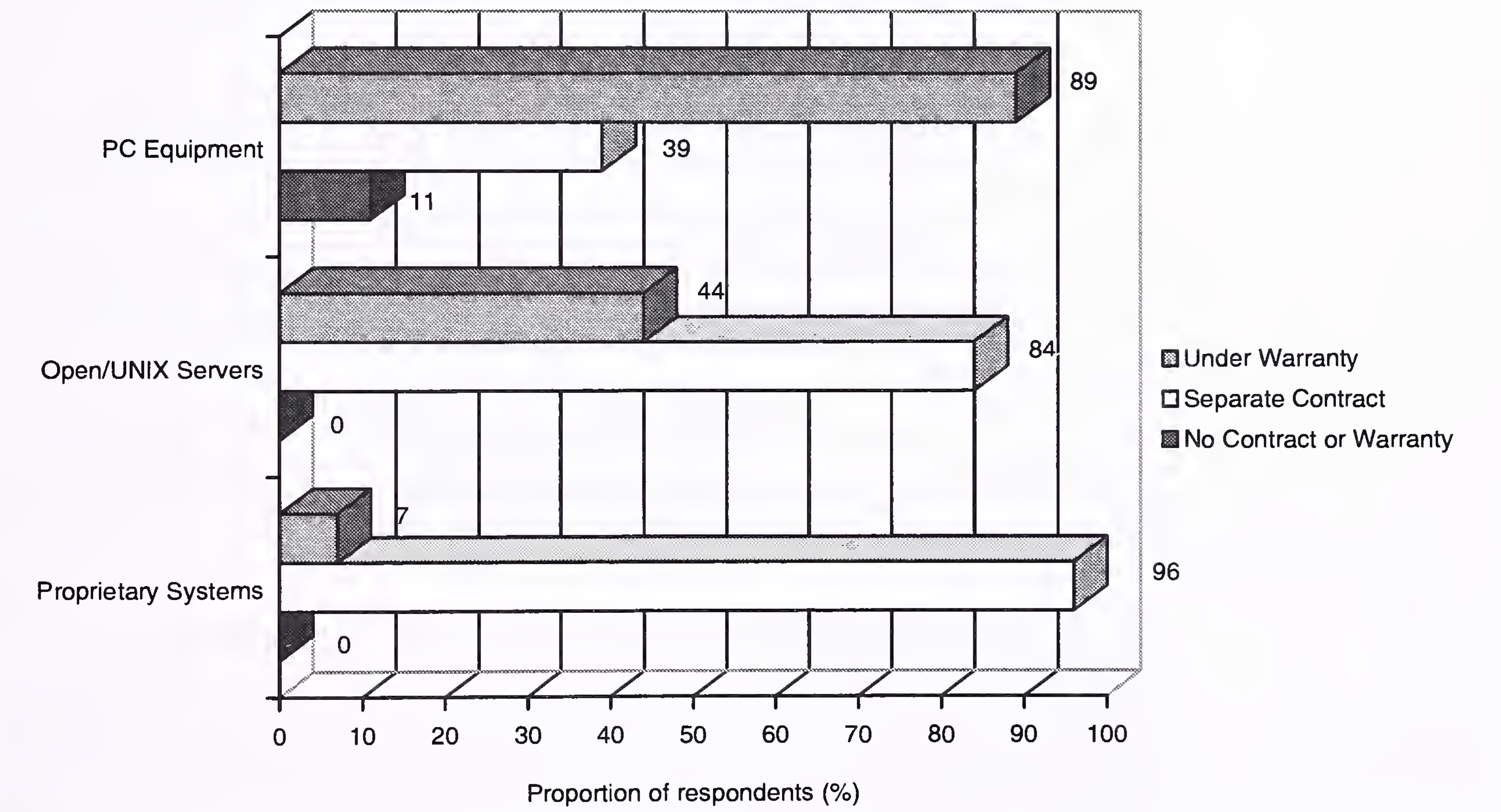
C

Equipment Services Trends

Exhibit VI-7 shows the current arrangements for equipment maintenance amongst UK organisations.

Exhibit VI-7

Equipment Maintenance Arrangements, UK 1995



Sample of 30 respondents (multiple responses permissible) *Source: INPUT*

Almost 90% of PC equipment is under warranty, compared with less than half of open server equipment. However, over 80% of servers have some form of extended or additional maintenance cover (higher than in France and Germany). A surprisingly high proportion of PCs are covered by separate maintenance contracts (39%, compared with 23% in both France and Germany).

The following survey results summarise the attitudes of UK organisations towards equipment maintenance services:

- All of the UK respondents indicated that they would spend less overall on equipment maintenance over the next few years
- Ninety per cent of organisations consider maintenance contracts for large systems and legacy equipment to be worthwhile, but expect the cost of maintenance contracts to decline year-on-year
- Over 80% of organisations consider the warranty on PCs and workstations to provide adequate cover for the lifetime of the equipment
- However, 85% of organisations believe it is important to extend warranties or take out additional cover for critical server equipment.

In summary, organisations plan to reduce equipment maintenance expenditure overall, whether by taking out fewer maintenance contracts or by forcing down the cost of those contracts.

The market for mainframe and proprietary midrange equipment maintenance is in decline. However, as in the other leading European countries, the market for low-end (client/server) equipment maintenance is still relatively healthy. With PC and server shipments growing strongly, the value of the captive warranty market is set to increase. The market for contracted maintenance of critical server equipment, and associated high availability services, will also remain strong in the next few years.

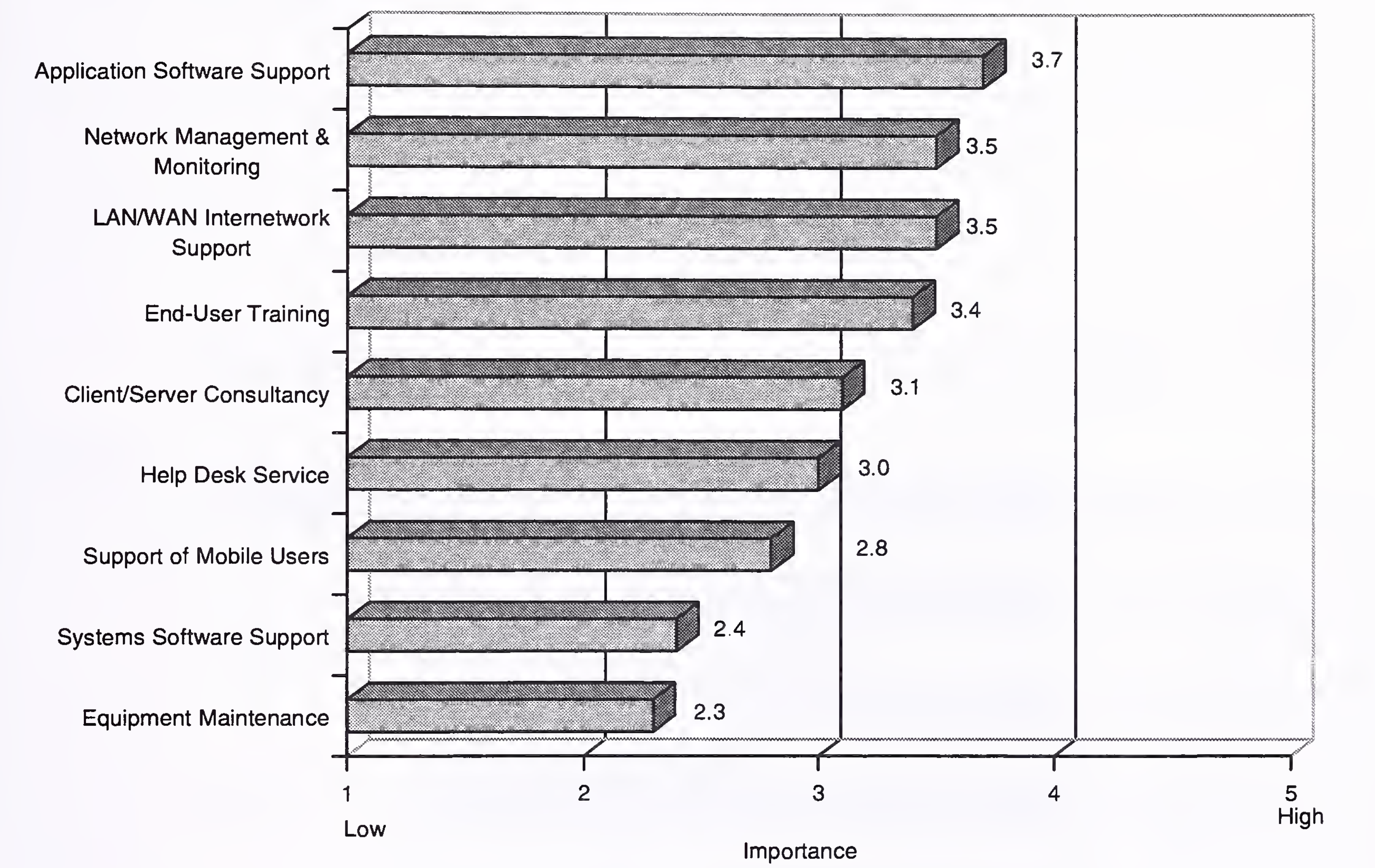
D

Value-Added Service Trends

Organisations were asked to indicate the importance of a number of support services to the future viability of their IT infrastructure. The results are shown in Exhibit VI-8.

Exhibit VI-8

Most Strategic Support Services, UK 1995



Sample of 30 respondents *Source: INPUT*

Application support was considered the most strategic service, with network-related services also prominent.

A survey of UK IT managers in 1994 suggested very low levels of interest in external network management and monitoring services, though the survey revealed that many large corporate networks were in a state of near chaos. However, in the present survey there were distinct indications that UK organisations are beginning to actively seek help in the management of their corporate networks.

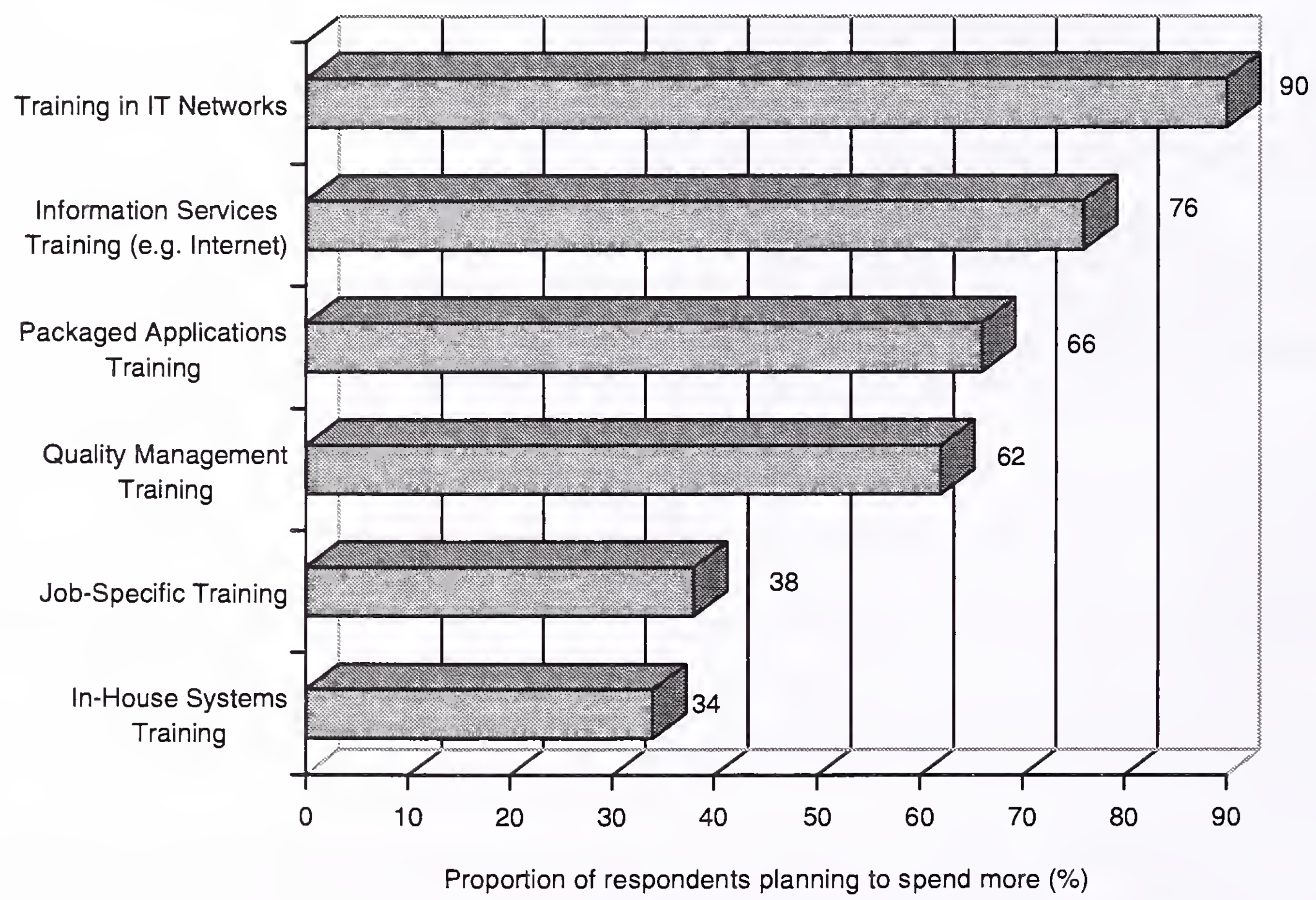
Furthermore, the growing strategic importance of connecting disparate LANs via WAN technology suggests an emerging need for internetworking services. This is further supported by the results of a recent survey into the propensity of UK organisations to outsource support of their WANs. The survey revealed that most corporate WANs are inadequate for supporting multi-site client/server computing, failing to meet required performance levels for data and E-Mail transmission;

the vast majority of WANs also have insufficient bandwidth to cope with multimedia, including voice and image. In the survey, organisations clearly signalled their intention to outsource WAN support.

It is interesting to note that in the present survey, French and German organisations placed greater emphasis on the importance of end-user training. However, UK respondents indicated that they were planning to increase expenditure on various forms of education and training, as shown in Exhibit VI-9.

Exhibit VI-9

Increased Education & Training Expenditure, UK 1995-2000



Sample of 30 respondents *Source: INPUT*

The majority of UK organisations surveyed plan to increase expenditure on a variety of forms of training, though notably in-house systems and job-related training are the lowest priorities.

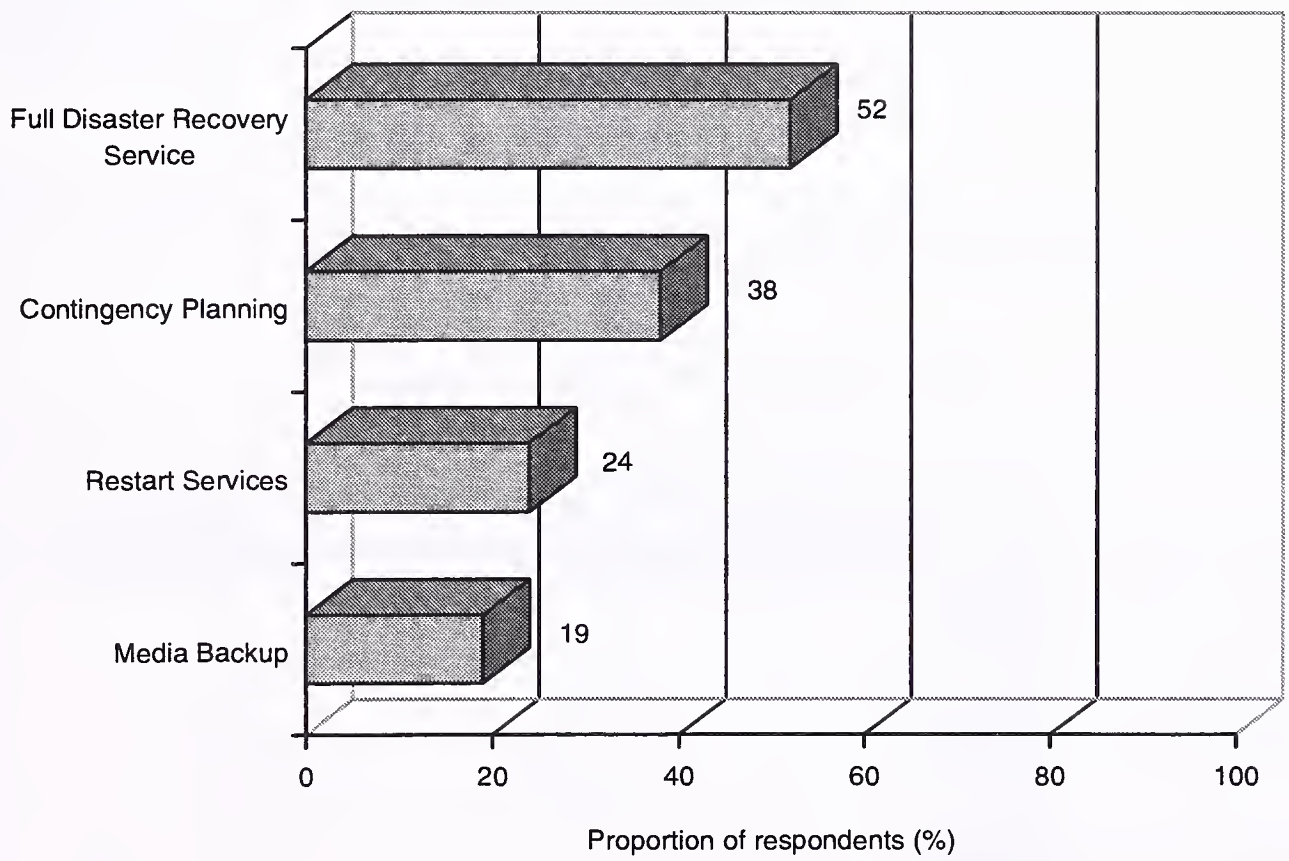
The key strategic role of IT networks, revealed throughout the survey, is again endorsed, with 90% of UK organisations planning to increase expenditure on training specific to the use of IT networks. A high proportion of organisations (though not as high as in Germany) also plan to promote training in information services such as the Internet.

Having led Europe in the development of distributed IT computing, UK organisations are arguably more aware of the consequences of serious incidents which can damage network operations, or take the network out entirely. Certainly, the UK has been more sensitive to the possibility of major disasters, given the recent history of terrorism on mainland Britain.

It is therefore not surprising to find that the great majority of organisations have already made some provision for major incidents which may put their IT infrastructure out of action (80%, compared with 62% in France and 43% in Germany). Exhibit VI-10 shows the sorts of business continuity provisions currently in place in the UK.

Exhibit VI-10

Business Continuity Provisions Currently In Place, UK 1995



Sample of 30 respondents *Source: INPUT*

Over half of the UK organisations surveyed claimed to have a full disaster recovery service in place, approximately double the number in both France and Germany. However, the surprising finding was that much smaller proportions of UK organisations have invested in other forms of business continuity service. For example, just under 20% of UK organisations have invested in a media backup service, compared with 43% of French and 54% of German organisations.

More encouraging is the finding that, of those organisations that currently have no business continuity provisions, a third plan to invest in these services in the near future.

Business continuity services for distributed IT infrastructures is a relatively small market, but is expected to grow significantly as increasing numbers of business critical systems are implemented across LANs and WANs. However, there is a suggestion that vendors may need to do more to educate potential users of these critical services.

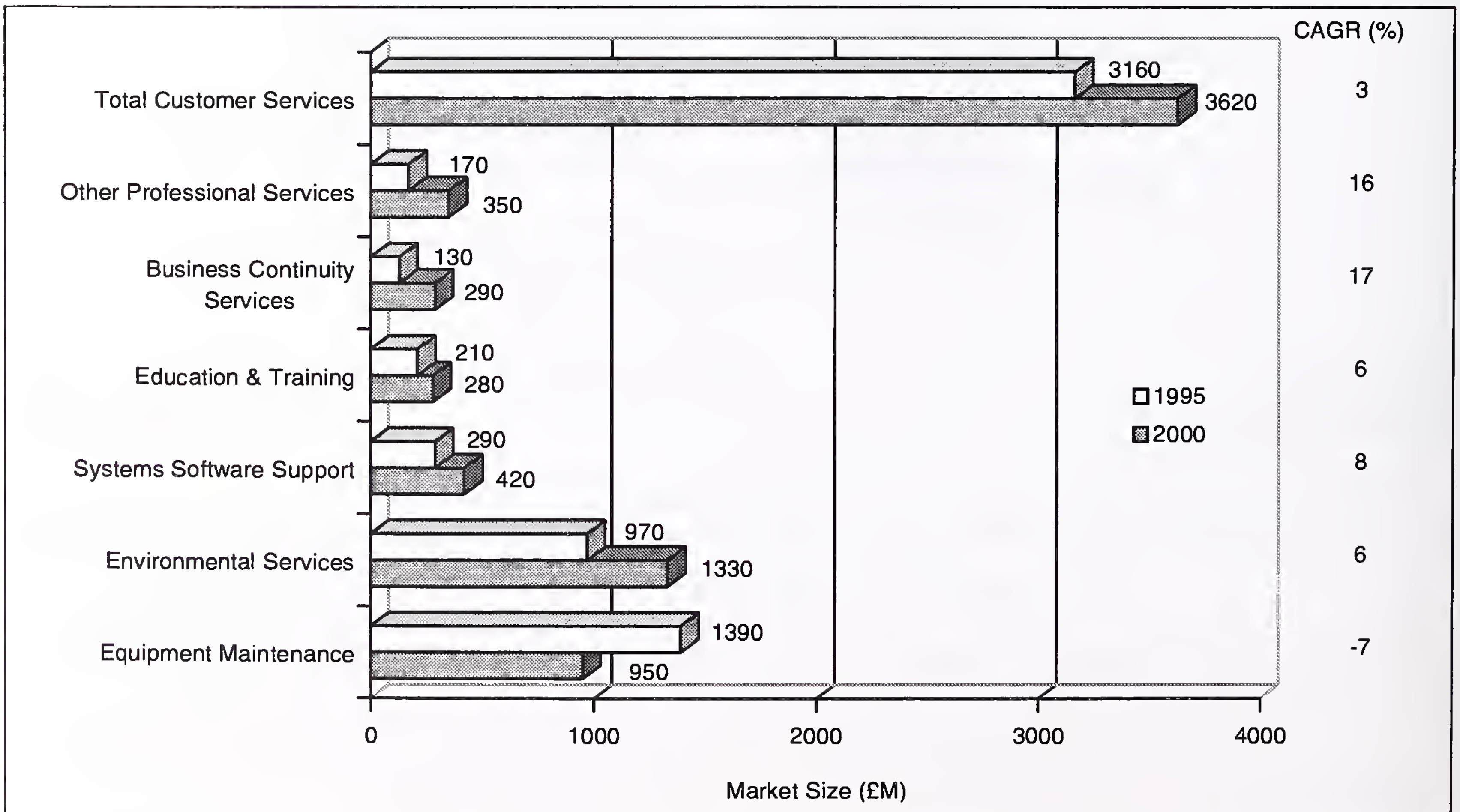
E
Customer Services Growth by Market Sector, 1995-2000

Exhibit VI-11 shows the pattern of customer services growth in the UK over the next five years, broken down by market sector. Market sizing for the base year 1994, and detailed forecasts for the following years, were derived using INPUT's established methodology based on both vendor and user research.

Chapter VII contains complete country market forecasts in tabular format, in both local currency and US dollars.

Exhibit VI-11

Market Sector Growth, UK 1995-2000



Source: INPUT

VII

Market Analysis and Forecast by Country, 1995-2000

A Introduction

This chapter contains quantitative analyses of the customer services market (for the period 1995 to 2000) in:

- Europe as a whole (expressed in US dollars and ECUs)
- Sixteen individual European country markets (expressed in local currencies and US dollars)
- Eastern Europe (expressed in US dollars).

Western European country markets included in this chapter are:

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

Countries aggregated into the Eastern European market are:

Albania	Estonia	Poland	Slovenia
Bulgaria	Hungary	Romania	Ukraine
Croatia	Latvia	Russian Federation	Serbia*
Czech Republic	Lithuania	Slovak Republic	Other CIS countries

(* and other former Yugoslav republics)

B

Changes in Country Market Analysis & Forecast Since 1994

The country analysis and forecast information in this chapter updates the information published in the report *Customer Services Market Analysis And Forecast, Europe 1994-1999 (December 1994).*

The latest information reflects changes in market sizes and forecast growth rates, based on INPUT's continuous research in the individual country markets. There are minor changes within individual delivery modes for most countries. The following, more substantial, changes have also been made:

- The size of the Business Continuity Services market has been marked up substantially in Germany, France and Italy
- The size of the Education & Training market in Italy has been revised upwards
- For many countries, the forecast reflects stronger growth in the Education & Training market than previously. The five-year growth rate for Europe as a whole is 7% CAGR, compared with the previously published figure of 4%.

Also, at the European level, note that:

- Slightly stronger growth is reported in professional services, environmental services and systems software support for 1995-2000 than for the previous period (1994-1999)
- The growth rate for equipment maintenance remains at -4% CAGR for the period 1995-2000
- Overall, the customer services market is forecast to grow 3% CAGR for the period 1995-2000, compared with 2% CAGR, reported previously.

C

Country Markets

Exhibit VII-1

Customer Services Market Forecast, 1995-2000 Europe (US$ Millions)

	Market Size US$ Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	13,246	-4	12,697	12,166	11,633	11,167	10,712	10,285	-4
Environmental Services	7,796	6	8,302	8,891	9,500	10,108	10,747	11,414	7
Systems Software Support	1,727	4	1,788	1,875	1,972	2,079	2,195	2,324	5
Education & Training	2,749	6	2,912	3,118	3,337	3,556	3,789	4,033	7
Business Continuity Services	571	15	655	756	875	1,009	1,159	1,333	15
Other Professional Services	1,125	13	1,273	1,447	1,647	1,881	2,130	2,414	14
Total Customer Services	27,210	2	27,630	28,250	28,960	29,800	30,730	31,800	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-2

Customer Services Market Forecast, 1995-2000 Europe (ECU Millions)

	Market Size ECU Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	16,253	-4	15,579	14,927	14,273	13,701	13,143	12,620	-4
Environmental Services	9,566	6	10,186	10,910	11,656	12,403	13,186	14,005	7
Systems Software Support	2,118	4	2,194	2,301	2,420	2,551	2,694	2,852	5
Education & Training	3,373	6	3,572	3,826	4,095	4,364	4,649	4,948	7
Business Continuity Services	701	15	804	928	1,074	1,238	1,422	1,635	15
Other Professional Services	1,380	13	1,562	1,775	2,021	2,308	2,614	2,961	14
Total Customer Services	33,390	2	33,900	34,670	35,540	36,560	37,710	39,020	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-3

Customer Services Market Forecast, 1995-2000 France (FF Millions)

	Market Size FF Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	12,600	-7	11,718	11,015	10,354	9,836	9,443	9,065	-5
Environmental Services	7,300	7	7,811	8,436	9,026	9,568	10,142	10,649	6
Systems Software Support	1,200	2	1,224	1,273	1,337	1,417	1,502	1,607	6
Education & Training	3,610	6	3,827	4,094	4,381	4,644	4,923	5,218	6
Business Continuity Services	600	12	672	759	866	978	1,096	1,227	13
Other Professional Services	1,000	11	1,110	1,243	1,405	1,587	1,778	1,991	12
Total Customer Services	26,310	0	26,360	26,820	27,370	28,030	28,880	29,760	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-4

Customer Services Market Forecast, 1995-2000 France (US$ Millions)

	Market Size US $ Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	2,360	-7	2,194	2,063	1,939	1,842	1,768	1,698	-5
Environmental Services	1,367	7	1,463	1,580	1,690	1,792	1,899	1,994	6
Systems Software Support	225	2	229	238	250	265	281	301	6
Education & Training	676	6	717	767	820	870	922	977	6
Business Continuity Services	112	12	126	142	162	183	205	230	13
Other Professional Services	187	11	208	233	263	297	333	373	12
Total Customer Services	4,930	0	4,940	5,020	5,120	5,250	5,410	5,570	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-5

Customer Services Market Forecast, 1995-2000 Germany (DM Millions)

	Market Size DM Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	4,360	-7	4,055	3,771	3,545	3,367	3,199	3,071	-5
Environmental Services	2,590	6	2,745	2,938	3,143	3,332	3,498	3,673	6
Systems Software Support	610	3	628	647	667	680	693	707	2
Education & Training	1,100	8	1,188	1,295	1,399	1,496	1,601	1,697	7
Business Continuity Services	220	9	240	264	293	325	361	397	11
Other Professional Services	380	10	418	464	520	587	658	737	12
Total Customer Services	9,260	0	9,270	9,380	9,560	9,790	10,010	10,280	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-6

Customer Services Market Forecast, 1995-2000 Germany (US$ Millions)

	Market Size US$ Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	2,813	-7	2,616	2,433	2,287	2,173	2,064	1,981	-5
Environmental Services	1,671	6	1,771	1,895	2,028	2,150	2,257	2,370	6
Systems Software Support	394	3	405	418	430	439	447	456	2
Education & Training	710	8	766	835	902	965	1,033	1,095	7
Business Continuity Services	142	9	155	170	189	210	233	256	11
Other Professional Services	245	10	270	299	335	379	424	475	12
Total Customer Services	5,970	0	5,980	6,050	6,170	6,310	6,460	6,630	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-7

Customer Services Market Forecast, 1995-2000 United Kingdom (£ Millions)

	Market Size £ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	1,460	-5	1,387	1,304	1,213	1,128	1,037	954	-7
Environmental Services	910	7	974	1,042	1,115	1,182	1,253	1,328	6
Systems Software Support	280	5	294	315	337	364	393	424	8
Education & Training	200	5	210	225	238	252	268	284	6
Business Continuity Services	110	18	130	154	182	213	247	287	17
Other Professional Services	140	20	168	198	230	267	304	347	16
Total Customer Services	3,100	2	3,160	3,240	3,310	3,400	3,500	3,620	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-8

Customer Services Market Forecast, 1995-2000 United Kingdom (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	2,285	-5	2,171	2,040	1,898	1,765	1,624	1,494	-7
Environmental Services	1,424	7	1,524	1,630	1,745	1,849	1,960	2,078	6
Systems Software Support	438	5	460	492	527	569	614	664	8
Education & Training	313	5	329	352	373	395	419	444	6
Business Continuity Services	172	18	203	242	285	334	387	449	17
Other Professional Services	219	20	263	310	360	417	476	543	16
Total Customer Services	4,850	2	4,950	5,070	5,190	5,330	5,480	5,670	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-9

Customer Services Market Forecast, 1995-2000 Italy (Lira Billions)

	Market Size Lira Billions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	2,355	0	2,355	2,331	2,262	2,194	2,128	2,043	-3
Environmental Services	1,205	4	1,253	1,316	1,382	1,465	1,552	1,661	6
Systems Software Support	235	4	244	259	277	297	317	343	7
Education & Training	410	5	431	461	497	532	564	598	7
Business Continuity Services	50	23	62	72	83	96	110	126	15
Other Professional Services	120	10	132	145	161	181	202	228	12
Total Customer Services	4,370	2	4,480	4,580	4,660	4,760	4,870	5,000	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-10

Customer Services Market Forecast, 1995-2000 Italy (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	1,454	0	1,454	1,439	1,396	1,354	1,313	1,261	-3
Environmental Services	744	4	774	812	853	904	958	1,025	6
Systems Software Support	145	4	151	160	171	183	196	212	7
Education & Training	253	5	266	284	307	329	348	369	7
Business Continuity Services	31	23	38	44	52	59	68	78	15
Other Professional Services	74	10	81	90	99	111	125	141	12
Total Customer Services	2,700	2	2,760	2,830	2,880	2,940	3,010	3,090	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-11

Customer Services Market Forecast, 1995-2000 Sweden (SK Millions)

	Market Size SK Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	3,650	0	3,650	3,687	3,723	3,761	3,798	3,836	1
Environmental Services	2,200	9	2,398	2,638	2,849	3,077	3,323	3,555	8
Systems Software Support	350	6	371	397	425	450	477	506	6
Education & Training	680	5	714	757	817	875	936	1,001	7
Business Continuity Services	95	11	105	119	135	151	169	189	12
Other Professional Services	340	13	384	446	517	600	690	786	15
Total Customer Services	7,310	4	7,620	8,040	8,470	8,910	9,390	9,870	5

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-12

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	491	0	491	496	501	506	511	516	1
Environmental Services	296	9	323	355	383	414	447	479	8
Systems Software Support	47	6	50	53	57	61	64	68	6
Education & Training	92	5	96	102	110	118	126	135	7
Business Continuity Services	13	11	14	16	18	20	23	25	12
Other Professional Services	46	13	52	60	70	81	93	106	15
Total Customer Services	980	4	1,030	1,080	1,140	1,200	1,260	1,330	5

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-13

Customer Services Market Forecast, 1995-2000 Denmark (DK Millions)

	Market Size DK Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	1,765	-3	1,712	1,644	1,578	1,499	1,424	1,339	-5
Environmental Services	1,305	8	1,409	1,522	1,629	1,726	1,830	1,922	6
Systems Software Support	230	3	237	249	264	277	291	302	5
Education & Training	270	5	284	301	319	334	351	369	5
Business Continuity Services	22	19	26	32	39	49	61	75	23
Other Professional Services	200	10	220	246	276	309	343	381	12
Total Customer Services	3,800	2	3,890	3,990	4,100	4,190	4,300	4,390	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-14

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	290	-3	282	270	260	247	234	220	-5
Environmental Services	215	8	232	250	268	284	301	316	6
Systems Software Support	38	3	39	41	43	46	48	50	5
Education & Training	44	5	47	49	52	55	58	61	5
Business Continuity Services	4	19	4	5	6	8	10	12	23
Other Professional Services	33	10	36	41	45	51	56	63	12
Total Customer Services	620	2	640	660	670	690	710	720	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-15

Customer Services Market Forecast, 1995-2000 Norway (NK Millions)

	Market Size NK Millions							
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	1,780	-2	1,744	1,710	1,675	1,642	1,593	1,545	-2
Environmental Services	1,110	2	1,132	1,166	1,201	1,261	1,337	1,417	5
Systems Software Support	220	8	238	257	280	302	326	349	8
Education & Training	355	3	366	380	399	419	440	462	5
Business Continuity Services	60	18	71	84	99	117	136	158	17
Other Professional Services	160	8	173	188	207	230	258	288	11
Total Customer Services	3,690	1	3,720	3,780	3,860	3,970	4,090	4,220	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-16

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions							
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	263	-2	258	253	248	243	236	229	-2
Environmental Services	164	2	167	173	178	187	198	210	5
Systems Software Support	33	8	35	38	41	45	48	52	8
Education & Training	53	3	54	56	59	62	65	68	5
Business Continuity Services	9	18	10	12	15	17	20	23	17
Other Professional Services	24	8	26	28	31	34	38	43	11
Total Customer Services	545	1	550	560	570	590	605	625	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-17

Customer Services Market Forecast, 1995-2000 Finland (FM Millions)

	Market Size FM Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	990	-3	960	922	885	850	807	767	-4
Environmental Services	625	7	669	722	780	835	893	956	7
Systems Software Support	150	2	153	158	164	172	182	195	5
Education & Training	150	1	152	156	162	170	179	190	5
Business Continuity Services	50	20	60	71	84	99	115	134	17
Other Professional Services	90	12	101	114	130	148	167	189	13
Total Customer Services	2,060	2	2,090	2,140	2,200	2,270	2,340	2,430	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-18

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	209	-3	203	194	187	179	170	162	-4
Environmental Services	132	7	141	152	165	176	188	202	7
Systems Software Support	32	2	32	33	35	36	38	41	5
Education & Training	32	1	32	33	34	36	38	40	5
Business Continuity Services	11	20	13	15	18	21	24	28	17
Other Professional Services	19	12	21	24	27	31	35	40	13
Total Customer Services	435	2	440	450	465	480	495	515	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-19

Customer Services Market Forecast, 1995-2000 Netherlands (Dfl Millions)

	Market Size Dfl Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	1,490	-4	1,430	1,373	1,305	1,239	1,177	1,118	-5
Environmental Services	950	8	1,026	1,108	1,197	1,292	1,409	1,536	8
Systems Software Support	190	1	192	194	196	198	202	206	1
Education & Training	360	7	385	412	441	476	514	561	8
Business Continuity Services	55	18	65	77	90	106	124	145	17
Other Professional Services	200	15	230	265	304	347	395	451	14
Total Customer Services	3,250	2	3,330	3,430	3,530	3,660	3,820	4,020	4

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-20

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	856	-4	822	789	750	712	677	643	-5
Environmental Services	546	8	590	637	688	743	810	883	8
Systems Software Support	109	1	110	111	113	114	116	118	1
Education & Training	207	7	221	237	253	274	296	322	8
Business Continuity Services	32	18	37	44	52	61	71	83	17
Other Professional Services	115	15	132	152	175	199	227	259	14
Total Customer Services	1,870	2	1,910	1,970	2,030	2,100	2,200	2,310	4

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-21

Customer Services Market Forecast, 1995-2000 Belgium (BF Millions)

	Market Size BF Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	13,200	-4	12,672	12,165	11,679	11,211	10,651	10,118	-4
Environmental Services	6,750	5	7,088	7,442	7,814	8,127	8,452	8,790	4
Systems Software Support	1,900	2	1,938	2,016	2,096	2,201	2,311	2,427	5
Education & Training	2,420	2	2,468	2,542	2,619	2,697	2,805	2,917	3
Business Continuity Services	240	10	264	298	340	391	450	522	15
Other Professional Services	760	13	859	970	1,097	1,228	1,388	1,554	13
Total Customer Services	25,300	0	25,290	25,430	25,640	25,850	26,060	26,330	1

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-22

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	415	-4	398	383	367	353	335	318	-4
Environmental Services	212	5	223	234	246	256	266	276	4
Systems Software Support	60	2	61	63	66	69	73	76	5
Education & Training	76	2	78	80	82	85	88	92	3
Business Continuity Services	8	10	8	9	11	12	14	16	15
Other Professional Services	24	13	27	31	34	39	44	49	13
Total Customer Services	795	0	795	800	805	815	820	830	1

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-23

Customer Services Market Forecast, 1995-2000 Spain (Ptas Millions)

	Market Size Ptas Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	75,200	-2	7,3696	72,222	70,055	67,954	65,236	62,626	-3
Environmental Services	40,300	8	4,3524	47,006	50,766	54,320	58,122	62,191	7
Systems Software Support	7,250	2	7,395	7,691	7,998	8,398	8,818	9,259	5
Education & Training	8,500	1	8,585	8,843	9,196	9,656	10,139	10,747	5
Business Continuity Services	550	13	622	715	836	987	1,174	1,397	18
Other Professional Services	4,950	15	5,693	6,603	7,726	9,117	10,757	12,801	18
Total Customer Services	137,000	2	139,510	143,080	146,580	150,430	154,250	159,020	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-24

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	571	-2	560	549	532	516	496	476	-3
Environmental Services	306	8	331	357	386	413	442	473	7
Systems Software Support	55	2	56	58	61	64	67	70	5
Education & Training	65	1	65	67	70	73	77	82	5
Business Continuity Services	4	13	5	5	6	7	9	11	18
Other Professional Services	38	15	43	50	59	69	82	97	18
Total Customer Services	1,040	2	1,060	1,090	1,110	1,140	1,170	1,210	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-25

Customer Services Market Forecast, 1995-2000 Switzerland (SF Millions)

	Market Size SF Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	775	0	775	775	775	767	760	752	-1
Environmental Services	580	5	609	639	671	712	754	800	6
Systems Software Support	95	2	97	100	104	109	114	121	5
Education & Training	160	2	163	168	175	184	193	204	5
Business Continuity Services	24	19	29	33	39	44	50	56	14
Other Professional Services	63	12	71	80	91	105	118	133	14
Total Customer Services	1,700	3	1,740	1,795	1,855	1,920	1,990	2,070	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-26

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	592	0	592	592	592	586	580	574	-1
Environmental Services	443	5	465	488	513	543	576	610	6
Systems Software Support	73	2	74	76	79	83	87	93	5
Education & Training	122	2	125	128	133	140	147	156	5
Business Continuity Services	18	19	22	26	30	34	38	43	14
Other Professional Services	48	12	54	61	69	80	90	102	14
Total Customer Services	1,300	3	1,330	1,370	1,420	1,470	1,520	1,580	3

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-27

Customer Services Market Forecast, 1995-2000 Austria (Sch Millions)

	Market Size Sch Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	2,890	-2	2,832	2,747	2,665	2,558	2,456	2,333	-4
Environmental Services	1,740	6	1,844	1,974	2,112	2,259	2,395	2,515	6
Systems Software Support	430	4	447	470	488	503	518	528	3
Education & Training	430	4	447	465	484	498	513	529	3
Business Continuity Services	60	20	72	87	106	130	161	199	23
Other Professional Services	130	9	142	154	168	184	202	222	9
Total Customer Services	5,680	2	5,780	5,900	6,020	6,130	6,240	6,330	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-28

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	265	-2	260	252	244	235	225	214	-4
Environmental Services	160	6	169	181	194	207	220	231	6
Systems Software Support	39	4	41	43	45	46	48	48	3
Education & Training	39	4	41	43	44	46	47	48	3
Business Continuity Services	6	20	7	8	10	12	15	18	23
Other Professional Services	12	9	13	14	15	17	19	20	9
Total Customer Services	520	2	530	540	555	565	575	580	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-29

Customer Services Market Forecast, 1995-2000 Greece (Dra Millions)

	Market Size Dra Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	7,910	-5	7,515	7,064	6,640	6,308	5,992	5,693	-5
Environmental Services	800	6	848	907	971	1,049	1,132	1,223	8
Systems Software Support	1,600	7	1,712	1,849	2,015	2,217	2,439	2,707	10
Education & Training	1,780	6	1,887	2,000	2,120	2,268	2,450	2,646	7
Business Continuity Services	155	23	191	236	293	366	462	577	25
Other Professional Services	650	10	715	801	897	1,013	1,166	1,352	14
Total Customer Services	12,900	0	12,870	12,860	12,940	13,220	13,640	14,200	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-30

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	33	-5	31	29	28	26	25	24	-5
Environmental Services	3	6	4	4	4	4	5	5	8
Systems Software Support	7	7	7	8	8	9	10	11	10
Education & Training	7	6	8	8	9	9	10	11	7
Business Continuity Services	1	23	1	1	1	2	2	2	25
Other Professional Services	3	10	3	3	4	4	5	6	14
Total Customer Services	54	0	53	53	54	55	57	59	2

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-31

Customer Services Market Forecast, 1995-2000 Ireland (IR £ Millions)

	Market Size IR £ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	48	-4	46	44	42	40	38	36	-5
Environmental Services	22	5	23	24	25	27	28	30	5
Systems Software Support	11	9	12	13	14	15	16	17	8
Education & Training	9	2	9	9	10	10	11	11	4
Business Continuity Services	4	15	5	5	6	7	8	10	16
Other Professional Services	13	13	14	16	18	21	24	28	15
Total Customer Services	107	2	109	113	117	121	126	132	4

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-32

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	74	-4	71	68	66	62	59	56	-5
Environmental Services	34	5	36	37	39	41	44	46	5
Systems Software Support	17	9	19	20	22	24	25	27	8
Education & Training	14	2	14	15	15	16	16	17	4
Business Continuity Services	6	15	7	8	10	11	13	15	16
Other Professional Services	19	13	22	25	28	33	38	43	15
Total Customer Services	165	2	169	174	180	187	195	205	4

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-33

Customer Services Market Forecast, 1995-2000 Portugal (Esc Millions)

	Market Size Esc Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	12,700	2	12,954	13,213	13,477	13,612	13,748	13,886	1
Environmental Services	5,000	8	5,400	5,886	6,416	7,057	7,763	8,539	10
Systems Software Support	1,000	10	1,100	1,199	1,307	1,411	1,524	1,631	8
Education & Training	900	12	1,008	1,119	1,242	1,366	1,503	1,638	10
Business Continuity Services	300	20	360	425	489	557	629	711	15
Other Professional Services	840	10	924	1,016	1,128	1,264	1,415	1,599	12
Total Customer Services	20,700	5	21,750	22,860	24,060	25,270	26,580	28,000	5

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-34

Customer Services Market Forecast, 1995-2000 (US$ Millions)

	Market Size US$ Millions								
Service Sector	1994	94-95 Growth (%)	1995	1996	1997	1998	1999	2000	95-2000 CAGR (%)
Equipment Maintenance	80	2	81	83	85	86	86	87	1
Environmental Services	31	8	34	37	40	44	49	54	10
Systems Software Support	6	10	7	8	8	9	10	10	8
Education & Training	6	12	6	7	8	9	9	10	10
Business Continuity Services	2	20	2	3	3	3	4	4	15
Other Professional Services	5	10	6	6	7	8	9	10	12
Total Customer Services	130	5	137	144	151	159	167	176	5

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-35

Customer Services Market Forecast, 1995-2000 Eastern Europe (US $ Millions)

	Market Size US$ Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	195	9	213	232	255	283	308	333	9
Environmental Services	48	18	57	68	82	101	127	163	24
Systems Software Support	10	15	12	13	16	18	22	27	18
Education & Training	41	15	47	55	64	76	89	105	17
Business Continuity Services	2	55	3	5	8	14	23	38	65
Other Professional Services	14	20	17	20	25	30	37	45	22
Total Customer Services	310	12	348	393	449	522	607	710	15

Note: Totals may not add up due to rounding *Source: INPUT*

Exhibit VII-36

Customer Services Market Forecast, 1995-2000 Central & Eastern Europe (ECU Millions)

	Market Size ECU Millions								
Service Sector	**1994**	**94-95 Growth (%)**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**95-2000 CAGR (%)**
Equipment Maintenance	239	9	261	284	313	347	378	409	9
Environmental Services	59	18	69	83	100	124	156	200	24
Systems Software Support	12	15	14	16	19	23	27	33	18
Education & Training	50	15	58	67	79	93	109	129	17
Business Continuity Services	2	55	4	6	10	17	28	46	65
Other Professional Services	17	20	21	25	30	37	46	55	22
Total Customer Services	380	12	427	482	550	640	745	872	15

Note: Totals may not add up due to rounding *Source: INPUT*

A

The Customer Services Market Defined

A
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:

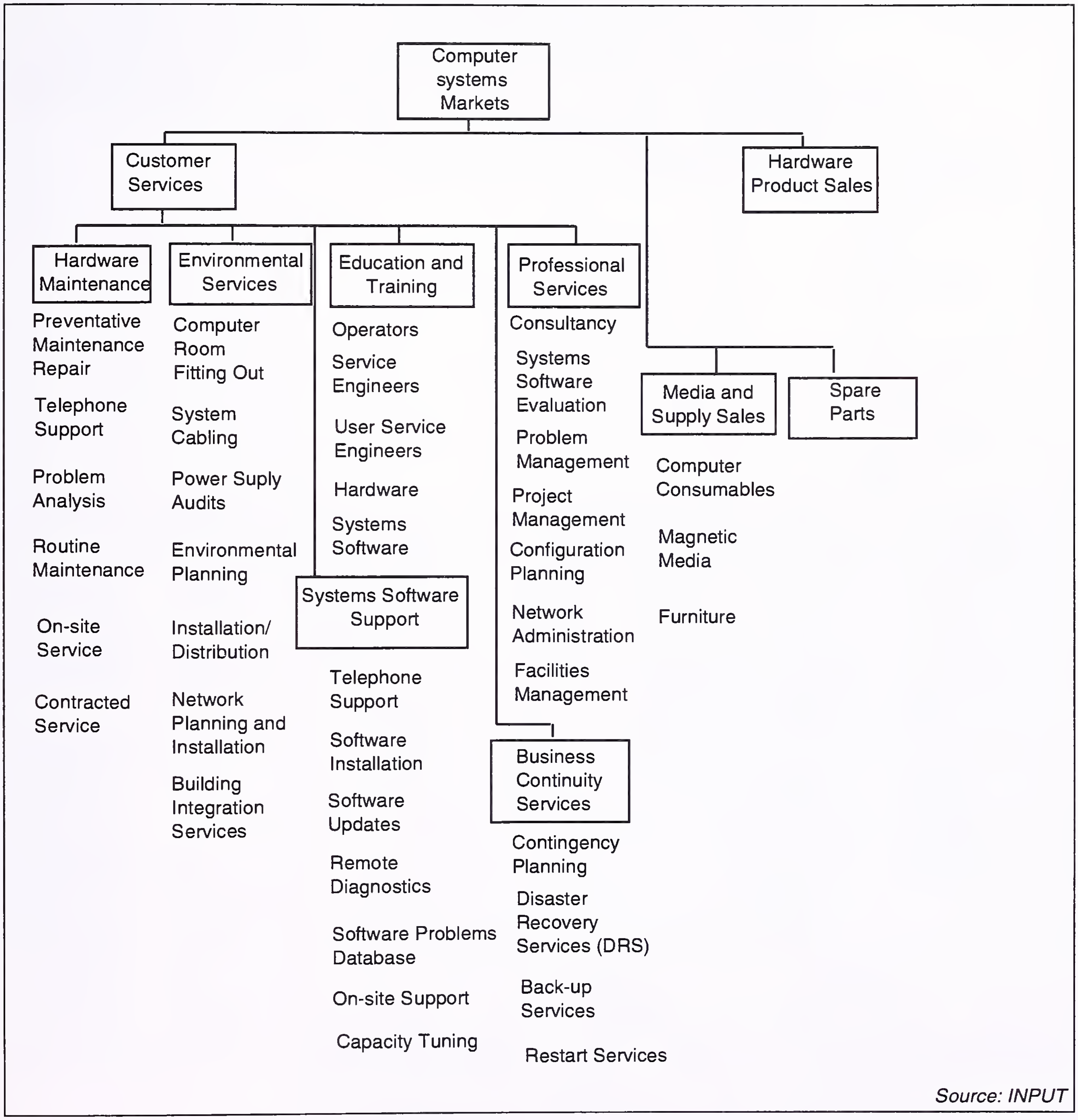
- Sales of spare parts
- Media and supplies sales

- 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.

Exhibit A-1

Customer Services Market Structure

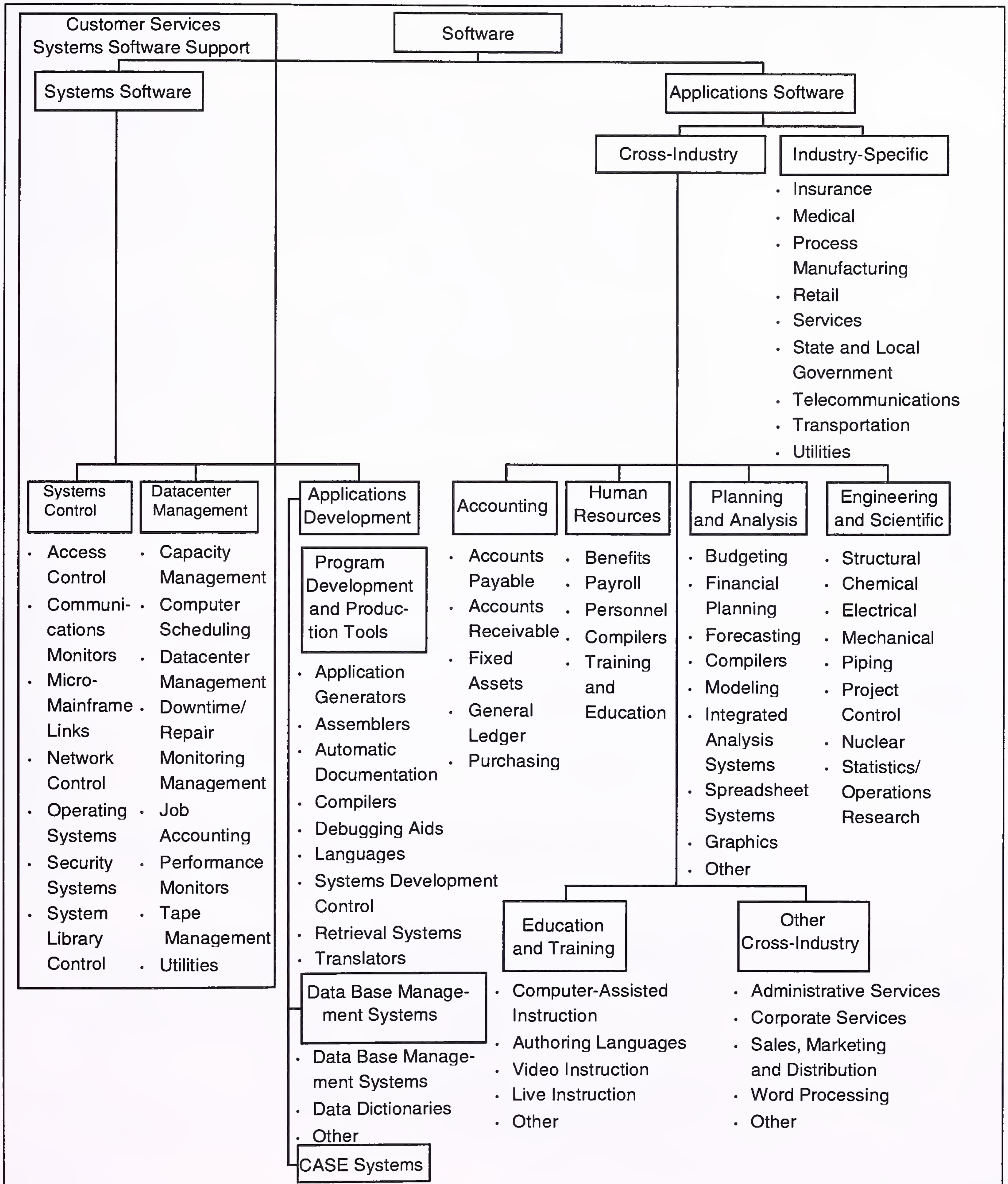


Source: INPUT

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 by placing them inside a rectangular box. They relate to system control and datacentre management software products.

Exhibit A-2

Software Products Market Structure



Source: INPUT

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; alternatively repairs may be effected on an ad hoc basis.

- **Environmental services** are defined as all those 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 equipment
  - Network attachments
  - Buildings in which computers or networking 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). This includes associated support activities such as telephone support, problem analysis and software diagnostics.

- **Education and training**: all education and training expenditure for IT industry applications is 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
    - Backup services for magnetic or optical media
    - Restart services, covering all activities which contribute to reinstating on a permanent basis the platform or network which 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:

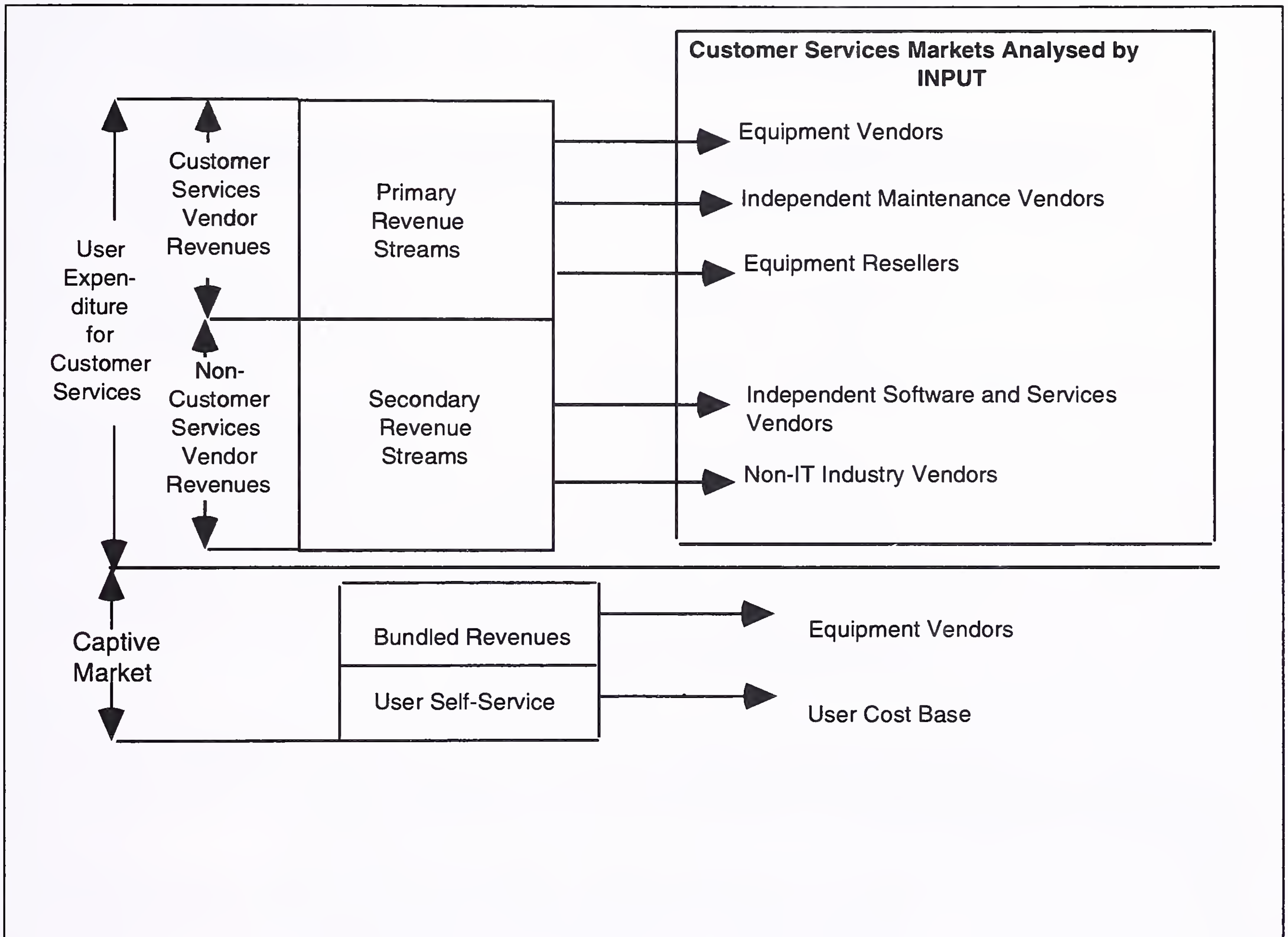
- **Equipment vendors** are defined as companies which manufacture computer hardware/equipment and may service equipment manufactured by themselves or other equipment manufacturers
- **Independent maintenance organisations (IMOs)** are defined as companies which service computer equipment and are independent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

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.

Exhibit A-3

Customer Services Revenues Streams



Source: INPUT

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

- **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 provide all or part of their own customer services through 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.

B

Market Forecast Reconciliation

INPUT's forecast for the customer services market in Europe focuses on user expenditure with:

- Customer services vendors, defined as:
  - Equipment vendors
  - Independent Maintenance Organisations (IMOs)
  - Dealers and distributors.
- Other vendors and organisations providing the services defined within the customer services sectors included in INPUT's forecasts. These other vendors comprise:
  - Independent software and services vendors
  - Non-industry vendors, principally from the construction and building services sectors.

There are no changes to definitions for the 1995 Customer Services Europe Programme.

The effect of last year's changes on the market sector reconciliations are shown in Exhibit B-1.

Exhibit B-1

Customer Services Market Forecast Reconciliation by Service Sector

	1994 Market				1999 Market					
Delivery Mode	1994 Report (Fcst)	1995 Report (Act)	Variance (Amt)	Variance (%)	1994 Report (Fcst)	1995 Report (Fcst)	Variance (Amt)	Variance (%)	1994 Report CAGR (Fcst)	1995 Report CAGR (Fcst)
Equipment Maintenance	12,100	13,246	1146	9	9,700	10,712	1012	10	-4	-4
Environmental Services	7,110	7,796	686	10	9,350	10,747	1397	15	6	7
Systems Software Support	1,580	1,727	147	9	1,960	2,195	235	12	4	5
Education & Training	2,420	2,749	329	14	2,990	3,789	799	27	4	7
Business Continuity Services	420	571	151	36	880	1,159	279	32	16	15
Other Professional Services	1,025	1,125	100	10	1,790	2,130	340	19	12	14
Total Customer Services	24,700	27,214	2514	10	26,700	30,732	4032	15	2	3

Source: INPUT

C

Exchange Rates and Inflation Assumptions

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

Exhibit C-2 shows the changes in country inflation assumptions that will be incorporated into any new forecasts. All growth forecasts in this report include the inflation figures shown this exhibit.

Exhibit C-1

US Dollar and ECU Exchange Rates: 1995

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

Source: Financial Times January 1995

Exhibit C-2

Inflation Assumptions 1994 and 1995

Country	Assumption 1994-1999	Assumption 1995-2000	Change
France	1.9	1.9	0.0
Germany	2.9	2.4	-0.5
United Kingdom	3.0	2.9	-0.1
Italy	3.2	3.2	0.0
Sweden	2.0	2.4	0.4
Denmark	2.6	2.8	0.2
Norway	1.5	2.3	0.8
Finland	2.0	3.2	1.2
Netherlands	2.0	2.3	0.3
Belgium	2.2	2.4	0.2
Switzerland	1.7	2.1	0.4
Austria	2.8	3.1	0.3
Spain	3.4	2.6	-0.8
Portugal	4.8	3.8	-1.0
Greece	11.2	5.3	-5.9
Ireland	3.3	2.8	-0.5
Eastern Europe	-	-	-
European Average	2.8	2.6	-0.2

Source: OECD December 1994

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