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Desktop Services Outsourcing Europe, 1994

Outsourcing Programme—Europe

JUNE 1994

Desktop Services Outsourcing

Europe, 1994

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Abstract

Many organisations have already outsourced their mainframe operations. These organisations, and others, are now evaluating how best to manage their emerging client/server and desktop IT infrastructures. Many options are open to these organisations since desktop services consists of a large range of service elements, any combination of which could potentially be outsourced.

This report endeavours to identify the combinations of services that organisations are likely to outsource. In particular, it analyses current satisfaction with desktop service components, attitudes towards outsourcing, the nature of the buying process and attitudes towards potential vendors.

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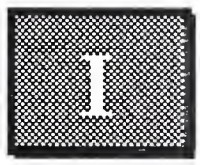

Introduction

A
Scope and Objectives

Outsourcing of mainframe datacentres is now well-established in Europe and many organisations are turning their attention to their desktop IT infrastructures. However, desktop services outsourcing covers a range of service options, each of which can be outsourced either individually or in combination with others. The possible service options include:

- Equipment maintenance
- LAN installation
- Ongoing LAN management
- First- and second-level help-desk services
- Version control and update management
- Asset management

The objectives of this report are as follows to identify:

- Users' level of satisfaction with their current desktop support
- The combinations of services that organisations are likely to purchase
- Users' and IT managers' attitudes to desktop services outsourcing
- The nature of the purchasing process and attitudes towards individual vendors

B
Methodology

The research is primarily based on interviews with 90 respondents: 51 IT managers and 39 users. Twenty respondents were interviewed in each of France, Germany, and the UK.

In addition, eight vendors who are particularly active in the desktop services outsourcing market were interviewed.

C
Report Structure

Chapter II consists of the Executive Overview which is a summary of the key conclusions of the study.

Chapter III analyses satisfaction with the current delivery of desktop services. In particular, it identifies the challenges organisations face in supporting the desktop IT infrastructure, and their relative levels of satisfaction with the various service components.

Chapter IV analyses users and IT managers attitudes towards outsourcing their desktop services, including identifying the areas they perceive to be most appropriate for outsourcing, and the principal benefits they would expect from outsourcing these aspects of their IT infrastructure.

Chapter V analyses the relative importance of senior executives, departmental managers and IT managers in the purchasing process and identifies the perceived suitability of named vendors in each of France, Germany, and the UK.

Chapter VI provides profiles of the desktop services capabilities of a number of leading vendors.

D
Related Reports

Outsourcing Opportunities in Government—Europe, 1993-1998

Information Systems Outsourcing Market—Europe, 1993-1998

Client Satisfaction with IT Outsourcing Services—Europe, 1993

Business Operations Outsourcing, Europe—1993

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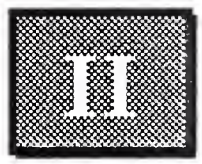


Executive Overview

A
Users Believe Outsourcing Desktop Services Improves Service Responsiveness

Users are much more convinced than their colleagues in IT management that outsourcing their desktop services would generate significant benefits. In particular, approximately 60% of users strongly believe that outsourcing desktop services would improve the focus of their in-house IT department, while 40% of users strongly believe that outsourcing would lead to improved responsiveness, improved cost-effectiveness, and improved user productivity. However, IT managers are less favourably impressed by the concept of outsourcing, and remain more resistant to outsourcing their organisation's desktop services.

This is unfortunate for vendors since IT managers remain the major influence in the control of external expenditure on desktop services. Some of the keys to overcoming their resistance lie in vendors:

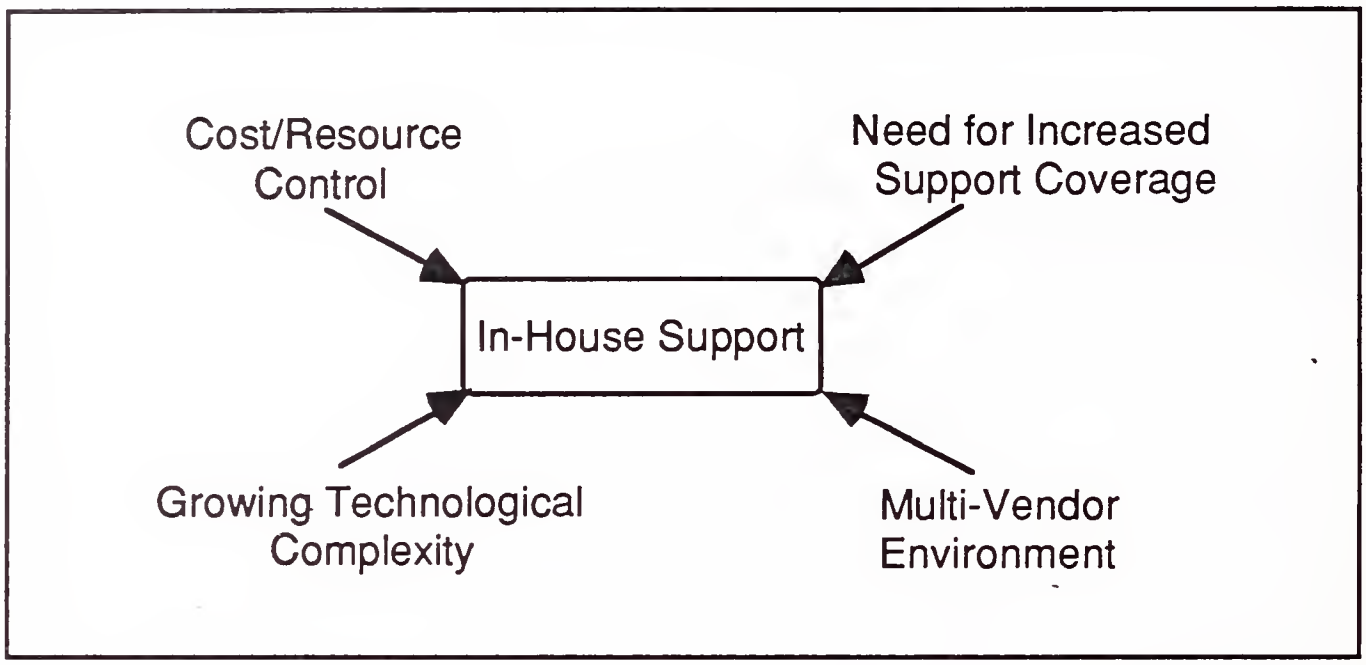
- Offering breadth of support
- Assisting organisations in spreading the cost of technology refreshment
- Demonstrating their ability to provide pro-active help-desk services
- Increasing awareness of their specific desktop services outsourcing capability

B
Organisations Need Breadth of Support

Exhibit II-1 indicates the major support challenges facing organisations trying to deliver desktop services in-house.

Exhibit II-1

Desktop Support Challenges



Source: INPUT

Many IT departments are facing severe headcount and/or budget constraints which limit their capability to meet the growing demand for desktop services. These constraints hinder the IT department from recruiting personnel with the necessary skills to support the changing nature of user support. In addition, they may prevent the in-house IT department from retraining personnel as rapidly and as thoroughly as is required.

At the same time, the support role is increasing in technological complexity. Technological complexity is being increased both by the transition from stand-alone systems to interlinked client/server architectures, and also by the range of architectures and systems software that is being connected into this framework. It may be necessary for service providers to support a range of equipment and operating systems for many years to come.

Accordingly, organisations expect desktop services vendors to offer a complete portfolio of desktop services and to have a depth of capability within each service element. It is difficult for many in-house organisations to be able to afford to support this depth and

breadth of capability. Indeed as LANs become increasingly connected as part of an enterprise-wide, multi-vendor IT infrastructure, so there is a growing need for vendors to combine WAN management with their desktop services to provide total operational management of the emerging client/server IT infrastructure.

The other major challenge for in-house service providers is developing adequate geographic coverage. Users perceive that they require a more comprehensive support service than they currently receive. In many organisations, the number of desktop users, and LAN's to which they are connected, is still growing rapidly. All of these users need to receive a comparable standard of support. Organisations expect their desktop service provider to be able to achieve this by matching their own geographic coverage. In some instances, this means global or European coverage, but, more typically, it translates into national coverage with an element of on-site support expected regardless of location. This can be one of the most difficult challenges for an in-house support organisation.

Users are also seeking more knowledgeable support. In addition to the rapid growth in the user population with access to desktop services, users are becoming more sophisticated and placing greater demands on the service provider. For example, the need to link applications and share data across both platforms and the user base is becoming paramount.

C
Spreading the Cost of Technological Refreshment

In order for users to be able to freely share information, there must be a compatible desktop architecture throughout the organisation. This compatibility is easily destroyed if the numerous departments or business units within the organisation each have differing upgrade policies, resulting in incompatible software products, or versions, throughout the organisation.

This potential problem is compounded by the the rapid rate of change in desktop technology. Two common complaints from users are:

- Inadequate hardware performance as their equipment becomes obsolete approximately every three years
- Frequent changes in the versions of operating systems and application software products.

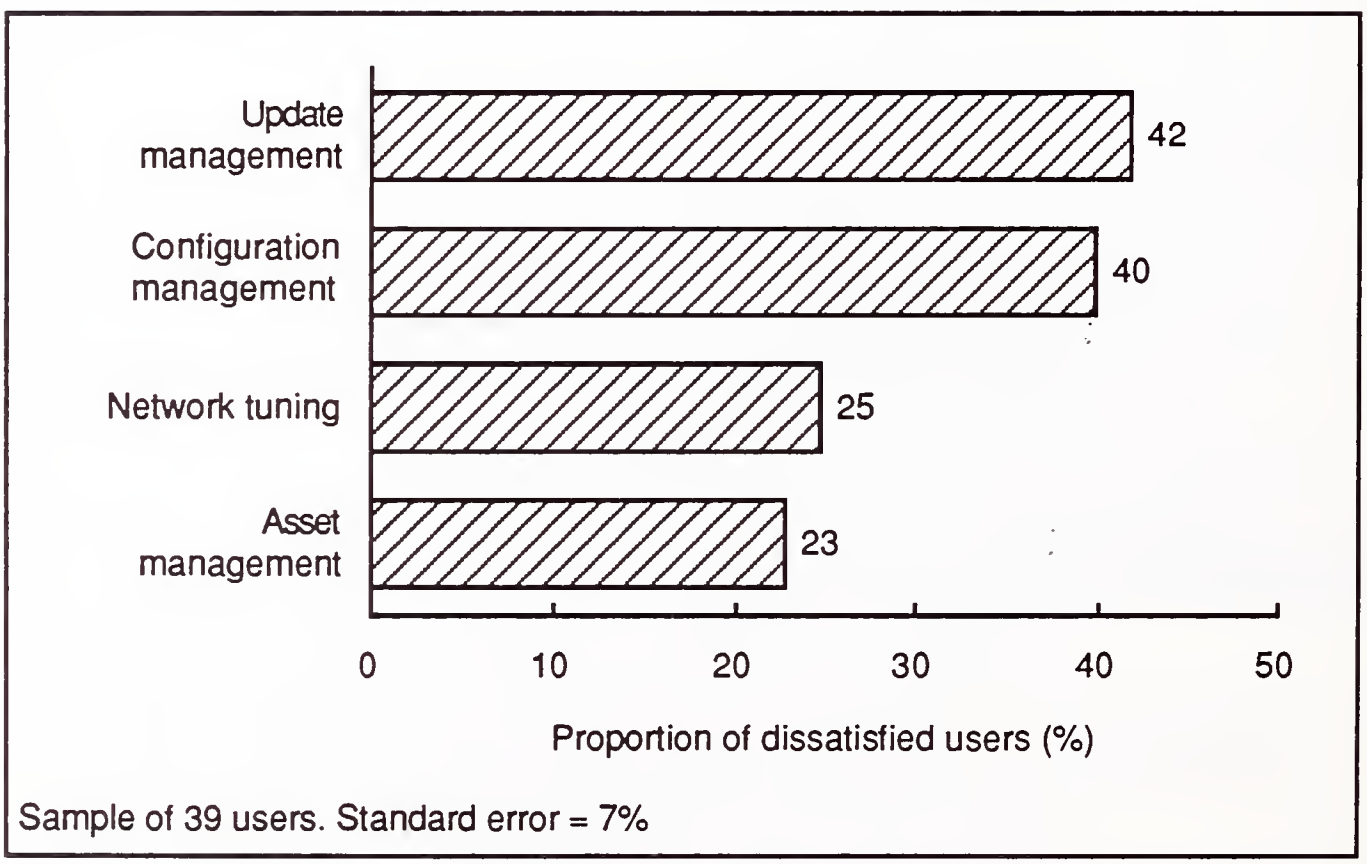
Many users are finding that their hardware is inadequate to run the latest software or data sharing becomes difficult as new versions of software products are introduced.

This situation creates a demand for two important components of desktop services namely update/version management and providing product financing/leasing services.

Users' current levels of satisfaction with update and asset management are shown in Exhibit II-2.

Exhibit II-2

Areas of Low Satisfaction: User Perspective



Sample of 39 users. Standard error = 7%

Source: INPUT

IT managers tend to be more concerned with access to implementation skills and technical support. On the other hand, users are more concerned with the operational management of their desktop systems. There is a danger that IT managers currently under-estimate the value of these operational practices. In practice, update management is typically inadequately

performed by in-house support functions much to the frustration of desktop users.

However the difficulties of achieving a satisfactory standard of update management, and certainly consistent versions of operating systems and application products across the entire organisation, are frequently compounded by the high level of autonomy user departments have in determining the timing and extent of purchasing on standard equipment and software products.

It is virtually impossible for an in-house IT department to combine products and service into a fee-based service. However, this approach may be the only way of satisfactorily spreading the high cost of technology refreshment every two to three years. Periodic high investment can be a major barrier to maintaining consistency of desktop applications and tools throughout an organisation. The provision of financing/leasing services may be the only way for some organisations to overcome their lack of willingness to make the continuing investments necessary to maintain a consistent, up-to-date desktop environment.

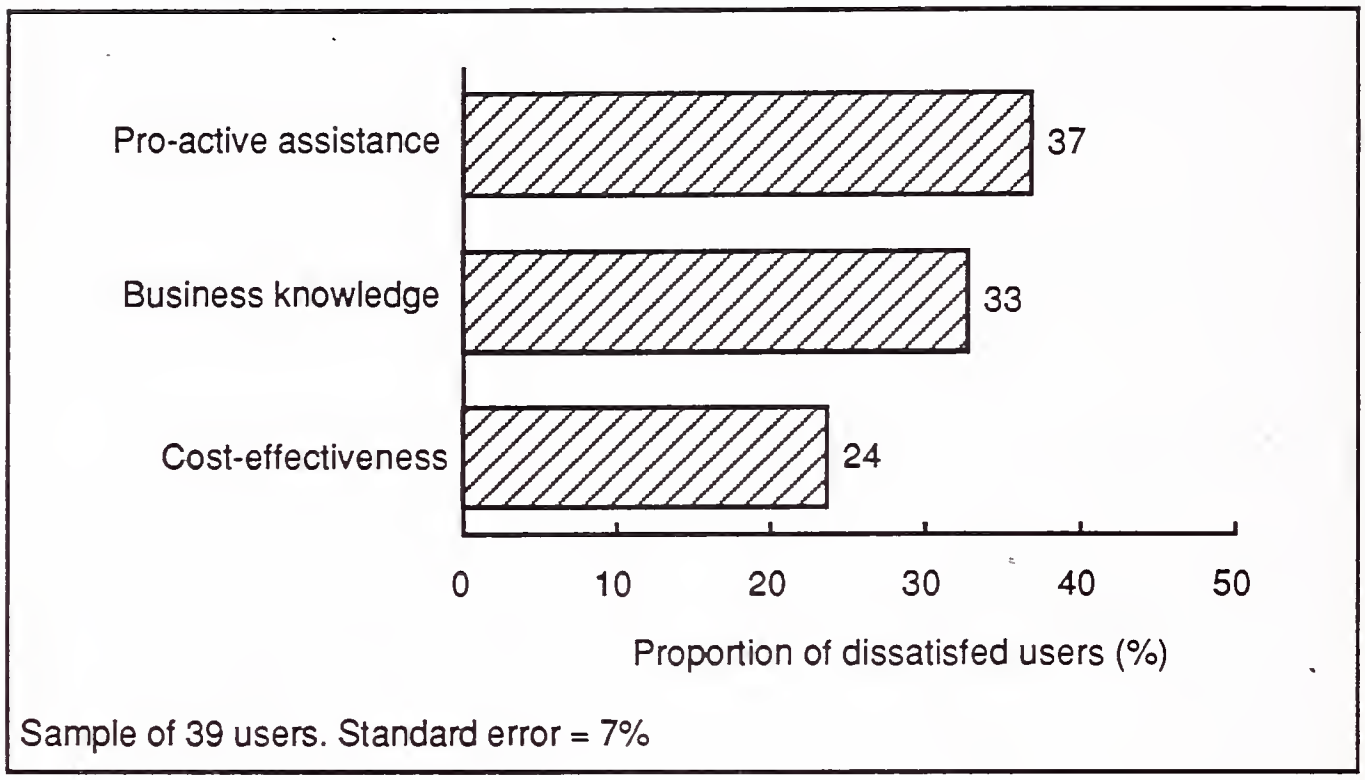
However, there are also signs that update management and asset management are given comparatively low levels of priority by the in-house service provider. IT departments appear to focus their attention on areas such as LAN implementation and technical support, with asset and update management sometimes remaining the responsibility of the user department. Inadequate version control can generate considerable day-to-day difficulties for users.

D
Establishing the Importance of Pro-Active Help-Desk Services

Users are currently receiving a basic, reactive technical support service that addresses their immediate technical queries reasonably satisfactorily. However, users do not perceive this service to be particularly cost-effective nor to be sufficiently pro-active. Exhibit II-3 identifies some of the areas where users perceive there to be scope for improvement.

Exhibit II-3

Scope for Service Improvement: User Perspective



Sample of 39 users. Standard error = 7%

Source: INPUT

One reason often given for not outsourcing is the in-house service provider's detailed knowledge of the organisation's business environment and practices. In practice, this argument does not appear to be valid for desktop services, since approximately a third of users are dissatisfied with the business knowledge exhibited, and level of pro-active support provided, by the in-house support organisation.

Ideally users require a support service that is forward looking and assists them in achieving greater productivity and fully utilising the potential of their desktop IT infrastructure. The help-desk service should enable the vendor to identify emerging problem areas and address them pro-actively. For example, the vendor needs to ensure that data sharing is facilitated between workgroups and departments and that incompatibility problems do not arise due to poor choice of software product or lack of version control. In addition, vendors should build into their desktop service offerings a consultancy element that assists users in identifying their future requirements so that these can be addressed.

Outsourcing of the first-line help-desk is an important component of desktop services outsourcing but potentially an area of considerable resistance to outsourcing. IT managers typically wish to maintain control of the direct interface to user personnel,

though they are enthusiastic about subcontracting second-line technical support. In addition, users perceive that the first-line help-desk is one of the areas where external vendors can make least contribution. The major reason for this view is the extensive use of bespoke applications on proprietary equipment that are still being accessed from the desktop. Both users and IT managers perceive that outsourcing vendors are ill-equipped to support these applications, which have often been written or tailored in-house.

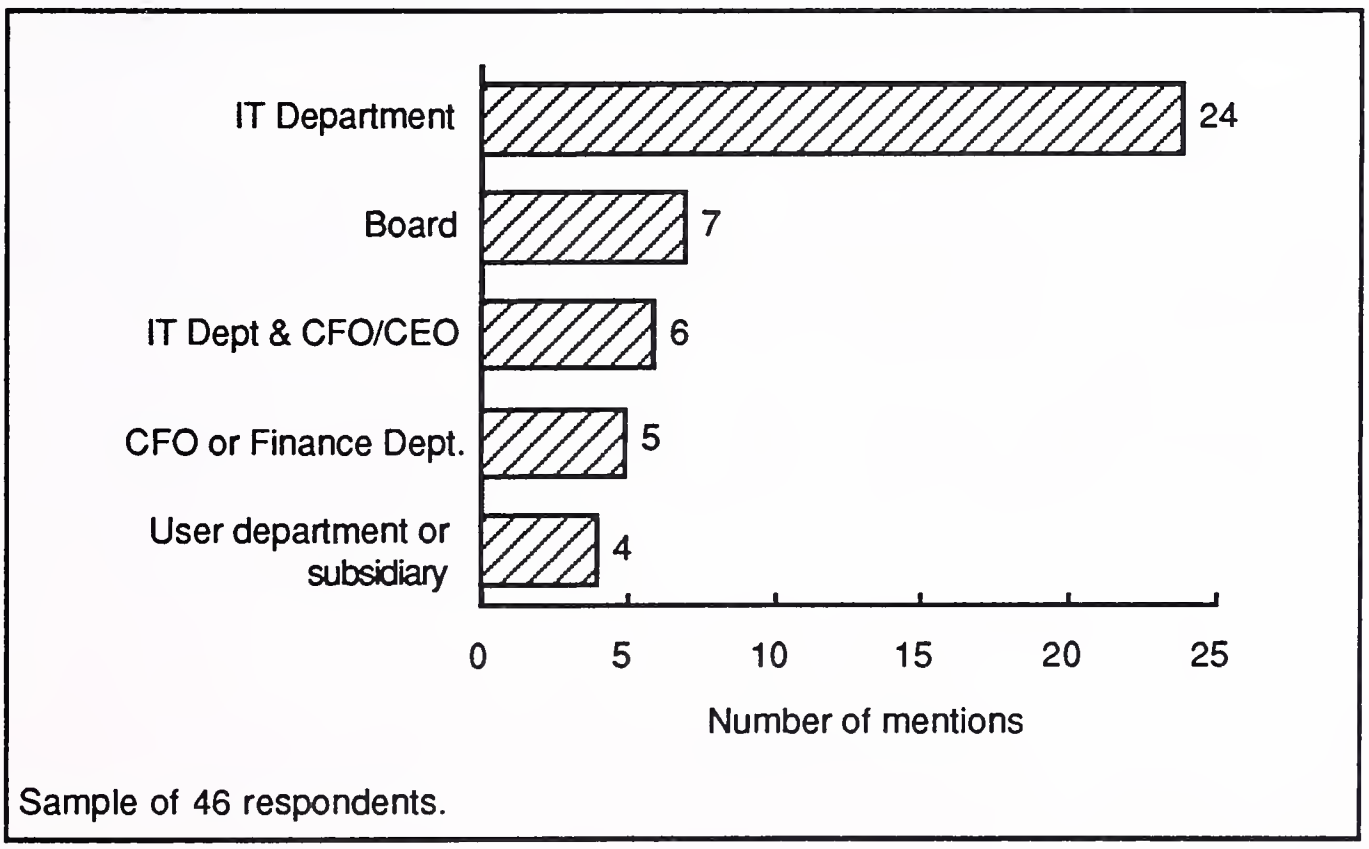
However, this is a potential opportunity for vendors to consider offering application maintenance management as part of their desktop services portfolio. This could overcome one of the biggest obstacles to selling a more complete range of desktop outsourcing services to organisations which have retained a major element of their legacy systems.

E
Increasing Awareness of Vendors' Capabilities

Exhibit II-4 shows respondents' views on the major influence on desktop services expenditure.

Exhibit II-4

Purchasing Control: Desktop Services



Sample of 46 respondents.

Source: INPUT

The in-house IT department is still seen to be the major influence in authorising external expenditure on desktop services, and most vendors active in this market state that their leads are primarily originating from in-house IT departments. However the company board, CEO, or CFO are likely to be important decision-makers in deciding whether or not to adopt a high level of desktop service outsourcing.

User departments still have only low levels of direct influence, though their dissatisfaction with current services may prompt either senior executives or the IT manager to investigate outsourcing. There were no instances in this survey in which end users were considered to be in control of purchasing decisions for arguably the most important element of operational management namely LAN management.

Overall, there is low awareness of vendors' desktop outsourcing capabilities and hence an opportunity for vendors to establish high profiles as desktop services outsourcing specialists.

Respondents tended to rate vendors' desktop services outsourcing capabilities in line the vendor's standing in the overall outsourcing market. As a result, EDS and IBM are regarded as having comparatively high levels of desktop services capability while Digital and Hewlett-Packard are regarded as having relatively low levels of capability.

Users and IT managers differ in their views on the perceived benefits of desktop services outsourcing. These differences are summarised in Exhibit II-5.

Exhibit II-5

Perceived Benefits of Desktop Services Outsourcing Users and IT Managers

Benefit	Level of Importance IT Manager	Users
Cost reduction	Very high	High
Improved/additional technical skills	Medium	High
Increased emphasis on commercial objectives	Low	Medium-High
Protection against equipment obsolescence	Low	Medium
Consistency of support	Medium	Low

Source: INPUT

While cost reduction is important to both IT managers and users, it is of particular importance to IT managers who strongly emphasise this facet of outsourcing. In addition, IT managers expect outsourcers to provide consistency of support in terms of wide geographic coverage and additional technical skills to those available in-house. This perspective is reflected in IT managers' vendor selection criteria where cost and breadth of desktop technical skills receive the highest number of mentions.

On the other hand, users place more emphasis on the contribution the vendor can make in assisting them to meet their business objectives and the need for operational management services. Selection criteria that are important to users include the vendor's level of understanding of their business and a capability to provide them with higher service levels than they have historically received. Some users also stress the importance of flexible contracts that do not lock them in to a particular vendor or to particular products.

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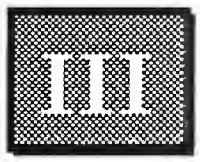


Users Require Assistance in Utilising the Potential of the Desktop

A Third-Parties Used for LAN Installation

The outsourcing of desktop services can arise via two routes namely by:

- Transferring complete responsibility for all desktop service functions and support to a third-party
- Incrementally subcontracting desktop support functions to a third-party until these have built up sufficient mass to be considered outsourcing.

The number of organisations that have transferred complete responsibility for their desktop IT infrastructure to third-parties in Europe is currently very small. Much of the desktop outsourcing installed base is presently accounted for by organisations that have decided to outsource the management and operation of their entire IT infrastructure to a third-party. Examples of this type include BhS and British Aerospace.

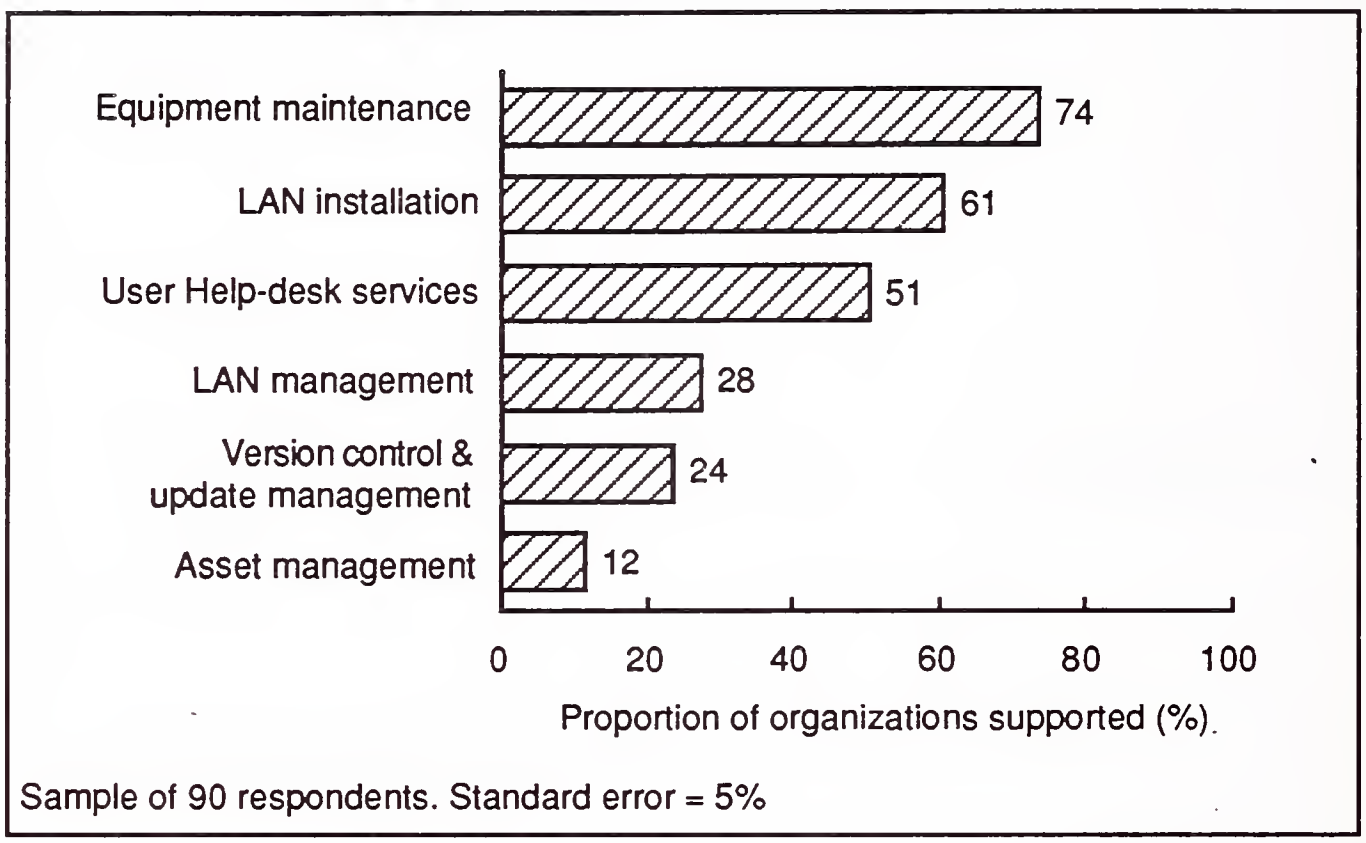
Other organisations such as TSB, Unilever, and ICI have separately outsourced their entire desktop services to a third-party.

However many organisations are going to approach desktop services outsourcing by seeking selective assistance in designing, running, and supporting their desktop IT infrastructures. Accordingly, it is appropriate to identify organisations' current usage of desktop support services, and to identify their current satisfaction with the services they receive.

Exhibit III-1 shows the extent to which organisations currently use third-parties to support key elements of their desktop IT infrastructure.

Exhibit III-1

Third-Party Service Delivery: Europe



Sample of 90 respondents. Standard error = 5%

Source: INPUT

One observation sometimes made about IT managers is that they view desktop outsourcing largely in terms of equipment maintenance. There may be some truth in this observation since the majority of organisations do use third-parties for maintenance of desktop equipment. However, there are signs that use of maintenance for personal computers on the desktop may decline over the next few years. Overall, respondents to this survey were impressed by the high level of reliability of current desktop equipment and by the warranty terms available. Accordingly some organisations are beginning to perceive that equipment maintenance contracts may be an unnecessary luxury.

The majority of organisations still appear to need assistance in installing and implementing LANs. However most organisations at present appear to believe that implementation assistance is sufficient. Only a minor proportion of the organisation's that seek assistance in implementing LANs continue to use a third-party for ongoing support in the forms of:

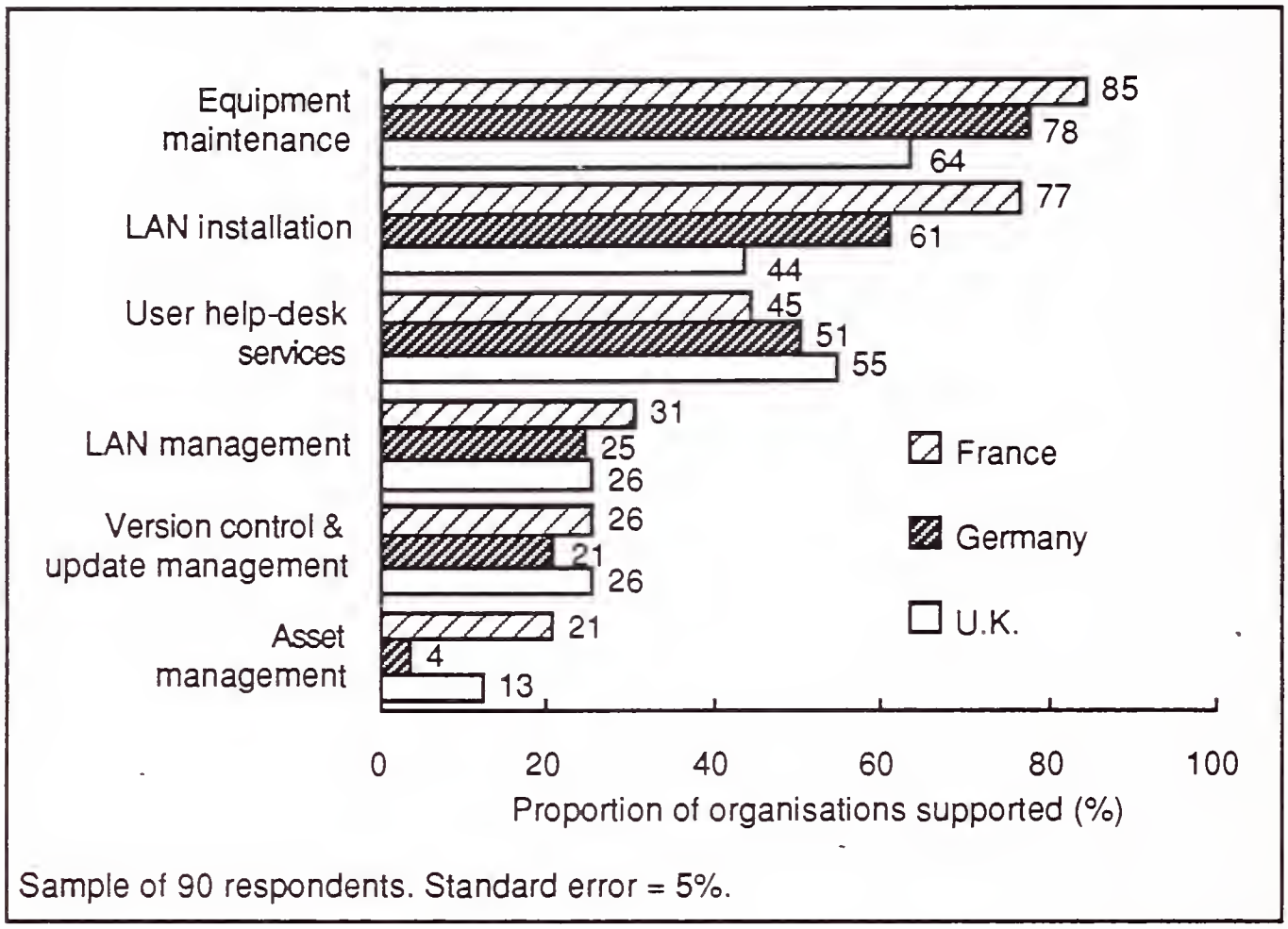
- LAN management
- Version control and update management
- Asset management

Indeed the proportions shown for third-party usage of LAN management and user help-desk services in Exhibit III-1 may be overestimated. IT managers would estimate significantly lower figures for use of LAN management, and it is probable that some users are confusing LAN management with help-desk services. Similarly, the level of user help-desk support shown in Exhibit III-1 should not be taken to imply the provision of a co-ordinated help-desk service by a third-party. Instead it tends to represent user access to general purpose hotlines such as those provided by most producers of personal computer application software products.

A breakdown of third-party usage by country is provided in Exhibit III-2.

Exhibit III-2

Third-Party Service Delivery France, Germany, and U.K.



Sample of 90 respondents. Standard error = 5%.

Source: INPUT

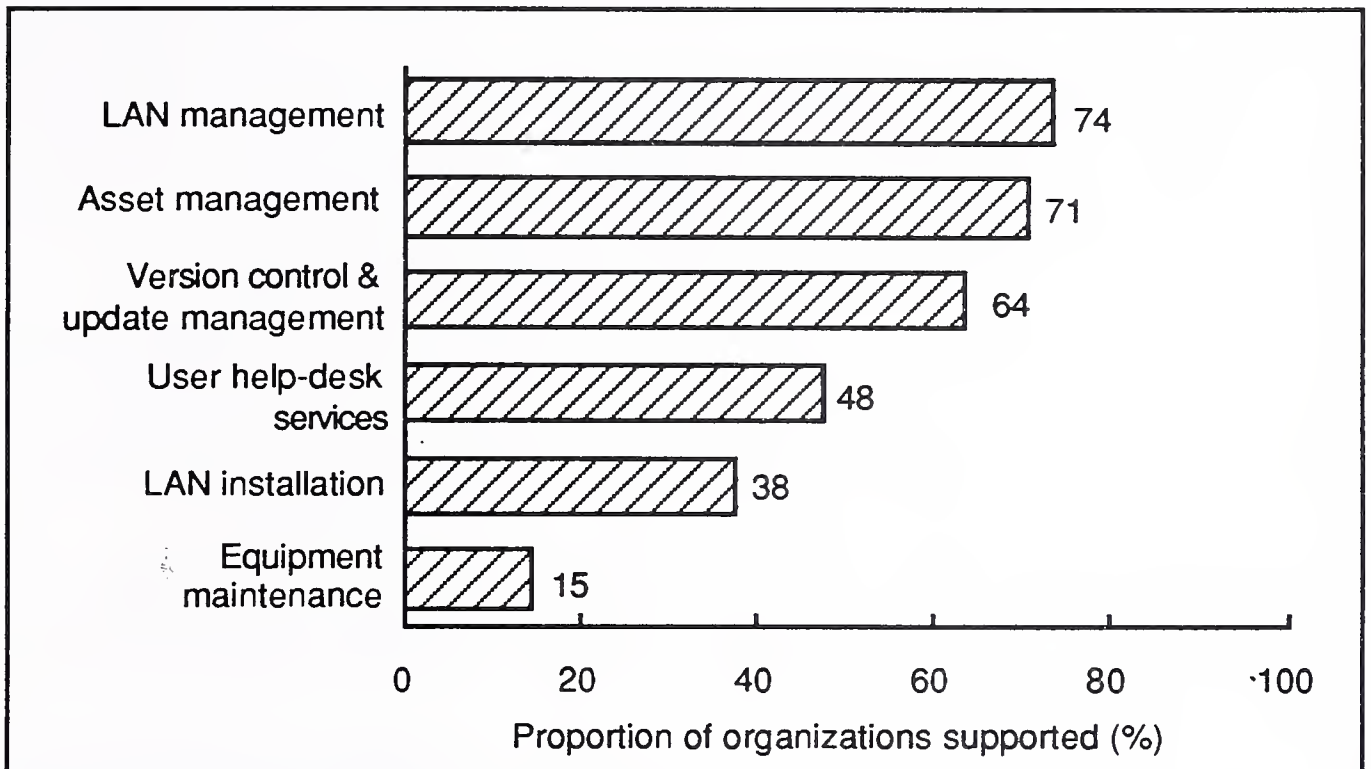
Overall, there is a reasonable level of consistency between the three countries. The main differences are:

- The declining use of equipment maintenance in the U.K.
- The large variation in use of third-parties for LAN installation between the three countries with organisations in France apparently showing a much higher propensity to subcontract installation than those in the U.K.
- The variation in use of third-parties for asset management between France and Germany with comparatively high usage of third-parties in France and low usage in Germany

Exhibit III-3 shows the extent to which organisations use their in-house IT departments for each of these desktop service elements.

Exhibit III-3

IT Department Service Delivery: Europe



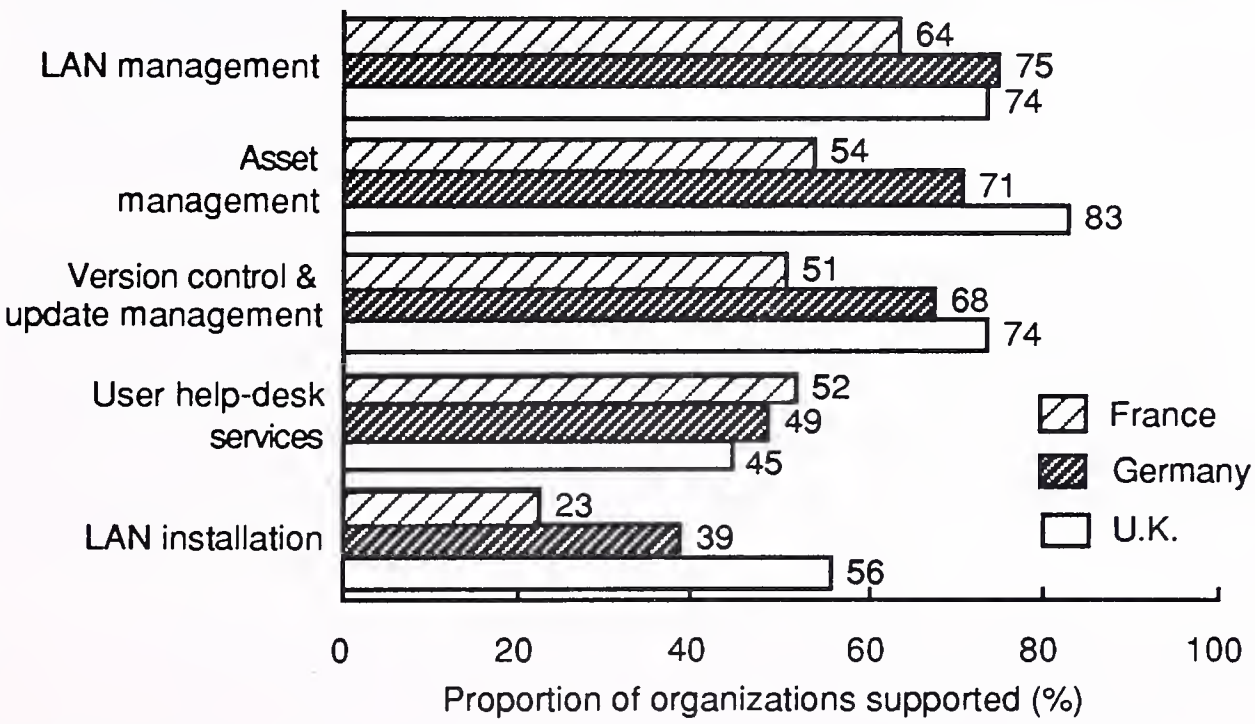
Sample of 90 respondents. Standard error = 5%.

Source: INPUT

Similarly, Exhibit III-4 provides a breakdown of IT department usage by country.

Exhibit III-4

IT Department Service Delivery by Country



Sample of 90 respondents. Standard error = 5%.

Source: INPUT

Organisations' IT departments are typically responsible for the delivery of LAN management, asset management, version control and update management. However, asset management, version control and update management appear to be often viewed as peripheral activities by the IT department. Consequently users were often reported to be responsible for these activities. Overall, users were reported to be responsible for:

- Asset management within 18% of organisations
- Version control and update management within 13% of organisations

Users in organisations in France and Germany were more likely to be responsible for these functions than their counterparts in the U.K..

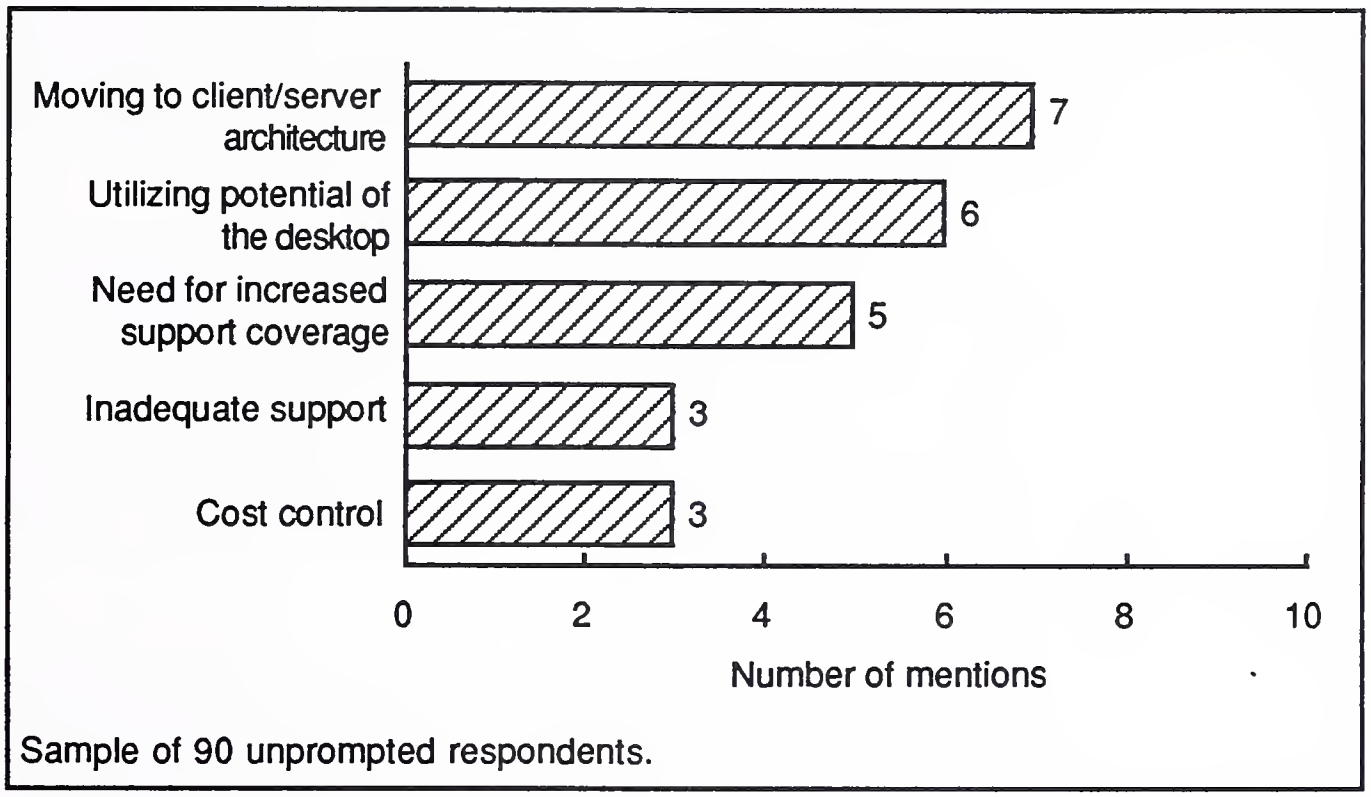
In conclusion, organisations show a high propensity to use third-parties for LAN implementation and installation, but are much less-inclined to subsequently transfer the ongoing management of the desktop infrastructure to a third-party.

B
Users Need Improved Access to Information

Exhibit III-5 identifies the principal challenges organisations face in supporting their desktop IT infrastructures.

Exhibit III-5

Principal Challenges: Support of Desktop Infrastructure



Sample of 90 unprompted respondents.

Source: INPUT

Many organisations, particularly in France, face a considerable challenge in implementing a client/server architecture within their organisations. The key need is to create an infrastructure that gives users access to all the information they require regardless of whether the information is located locally or remotely. At present, much of the data that users require is located on proprietary systems, and these systems need to be made more accessible to desktop users. Organisations are also finding that the number of LANs is expanding and that existing networks may need to be restructured or re-implemented.

Providing users with personal computers is just the first step. Users need considerable assistance if they are to utilise the full potential of their desktop equipment. Many users perceive that they have been given products but need assistance in establishing the connectivity they require and in ensuring the compatibility of applications across the organisation.

The increasing desktop user base is also putting pressure on desktop support organisations. IT departments are finding that the requirements placed upon them are growing. They are now expected to provide comprehensive support to an increasing number of interlinked users covering a wide geographic area. It is no longer acceptable not to support minor departments or those

based in comparatively inaccessible locations. Increasingly, all users expect to have access to the corporate network and to the information and tools they require. At the same time, users are growing in sophistication and are becoming more demanding clients.

In the face of these demands, some organisations are finding that their own in-house support is inadequate. Many in-house support organisations are having difficulty in refocusing their personnel away from proprietary systems to support client/server architectures. In particular, it is difficult to assemble the tools to manage this environment and to keep staff up-to-date with rapidly changing technologies.

A further complicating factor is the pressure being placed on IT departments to control their costs even though the demands being placed on them are increasing. One respondent commented that the IT department had been forced to reduce its costs to ensure that it was cost competitive compared to outsourcing vendors. Consequently, the service levels to users had declined significantly in this case.

These cost pressures are particularly evident in the U.K. and France, and may be less significant in Germany at present.

Exhibit III-6 shows respondents' ratings of the overall quality of their current desktop support.

Exhibit III-6

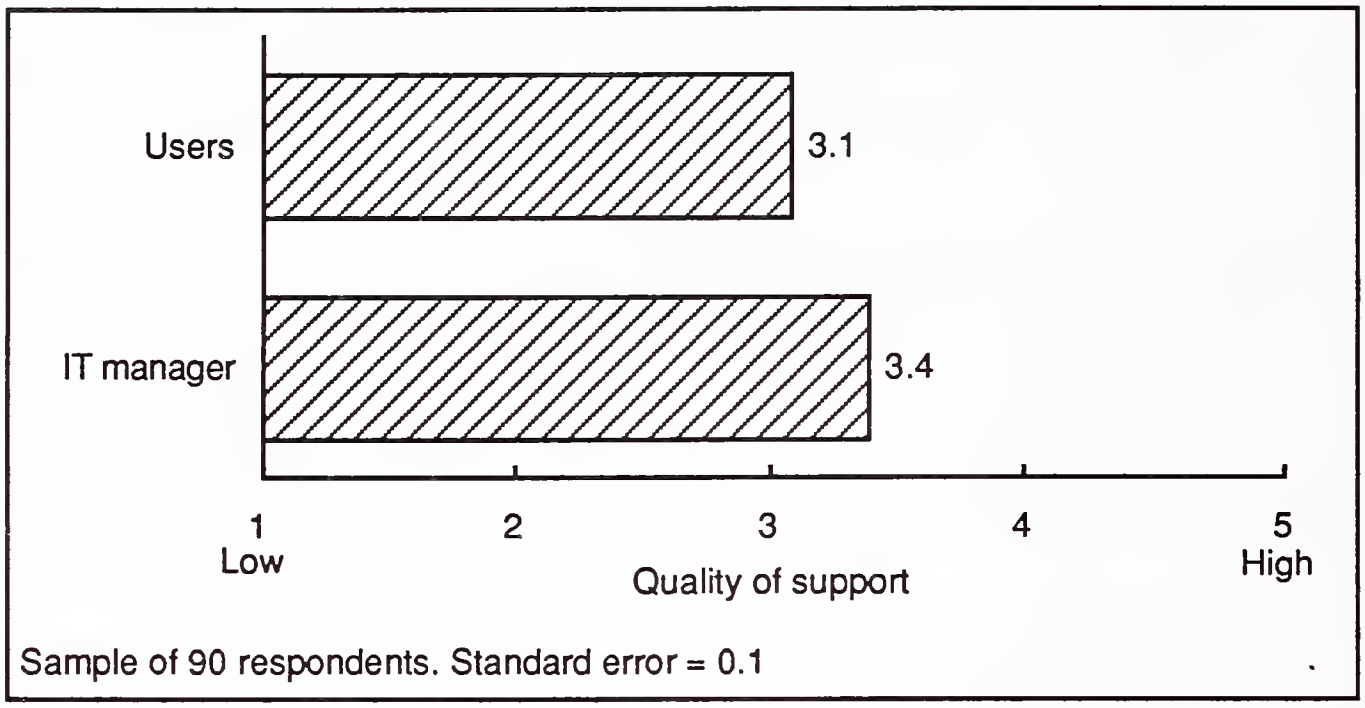
Source: INPUT

The overall ratings of service quality are very similar across each of France, Germany, and the U.K.. These ratings are lower than is desirable. A satisfactory level would be a score of approximately 3.8.

Not surprisingly, IT managers exhibited a higher level of satisfaction with current service quality than did users. The difference between these two groups is shown in Exhibit III-7.

Exhibit III-7

Overall Service Quality User vs. IT Manager Perspective



Source: INPUT

However the gap between the satisfaction levels of these two groups is less than might be expected. If scores of 4 or 5 are taken as indicating a high level of satisfaction, while scores of 1 or 2 are taken as indicating dissatisfaction, then:

- 31% of users and 43% of IT managers are highly satisfied with the current service quality
- 21% of users and 12% of IT managers are dissatisfied with the current service quality

It is worth noting that not a single user gave the current service a top rating of five.

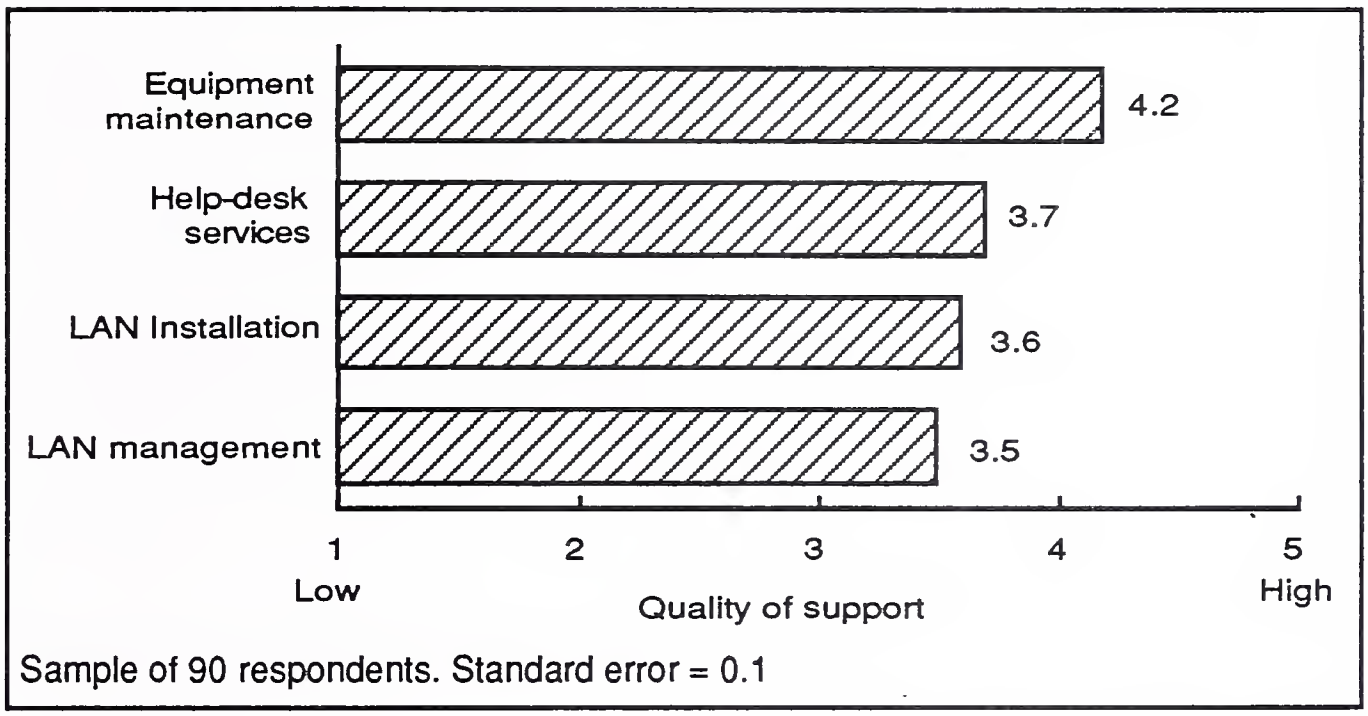
C
Update Management and Asset Management are Inadequately Performed

The quality of support attributed to each of the principal service functions within the scope of desktop services varies widely, however. In addition, there is a high level of agreement across countries and across respondent types on which desktop functions are supported well and which are inadequately supported.

Exhibit III-8 lists those desktop functions that received the highest ratings from respondents.

Exhibit III-8

Best Supported Functions: Desktop Services–Europe



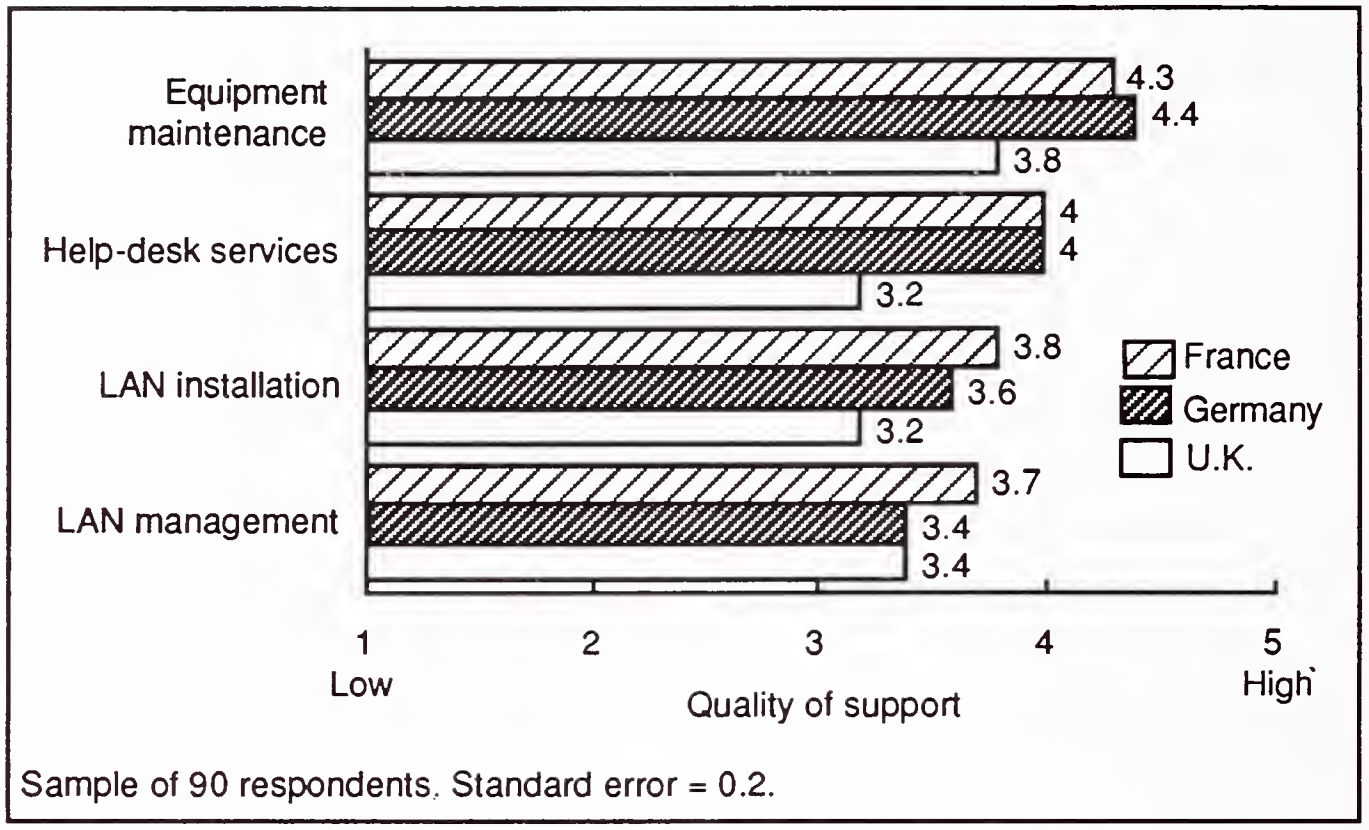
Sample of 90 respondents. Standard error = 0.1

Source: INPUT

Exhibit III-9 provides a breakdown of these ratings by country. The scores achieved in France and Germany show a high level of similarity. However, those for the U.K. are significantly lower, particularly in the areas of help-desk services and LAN installation.

Exhibit III-9

Ratings of Best Supported Functions by Country



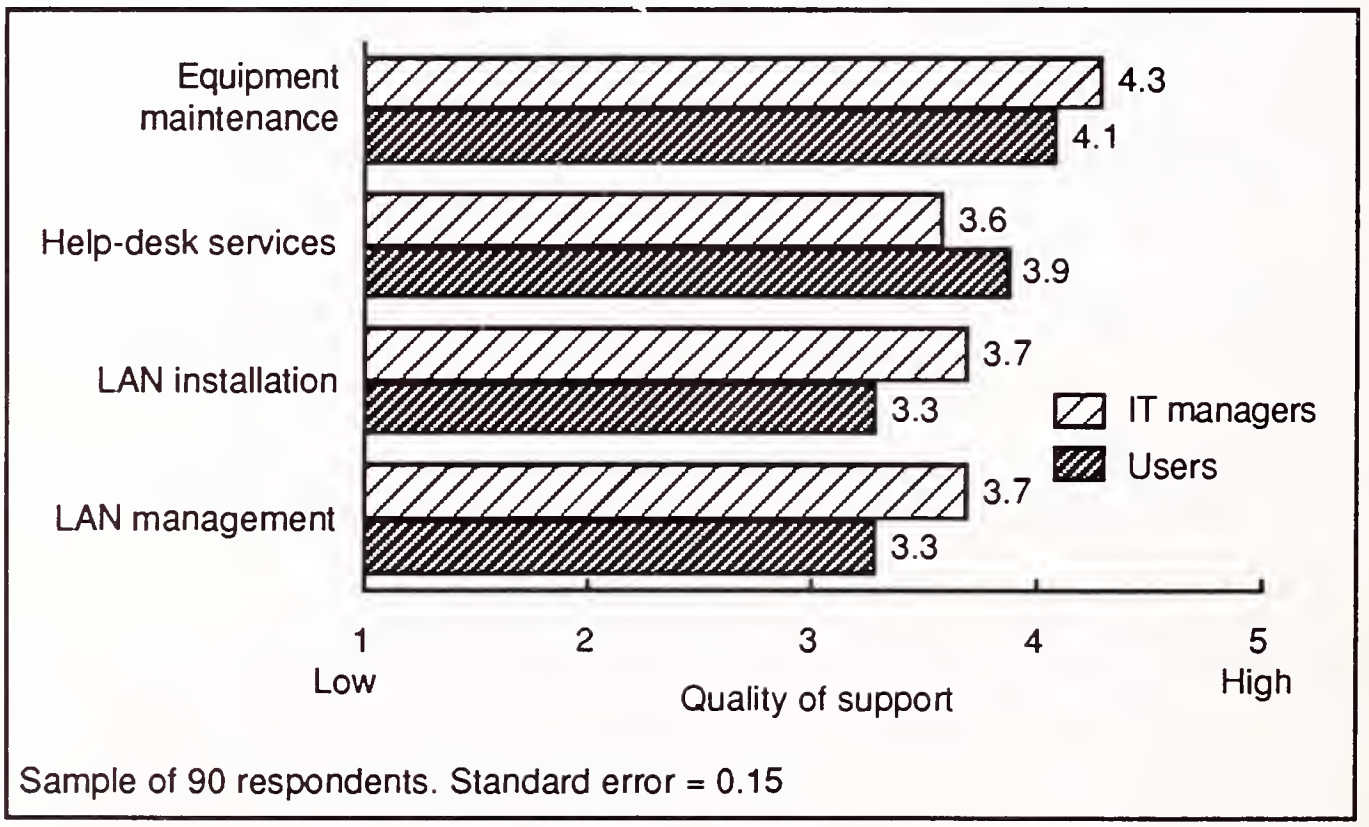
Sample of 90 respondents. Standard error = 0.2.

Source: INPUT

Exhibit III-10 provides a breakdown by respondent type.

Exhibit III-10

Best Supported Functions:
User vs. IT Manager Perspective



Sample of 90 respondents. Standard error = 0.15

Source: INPUT

Overall the majority of IT managers show an adequate level of satisfaction with the current quality of support for these four

functions. Consequently they are unlikely to be predisposed towards outsourcing them, if they have the decision-making authority.

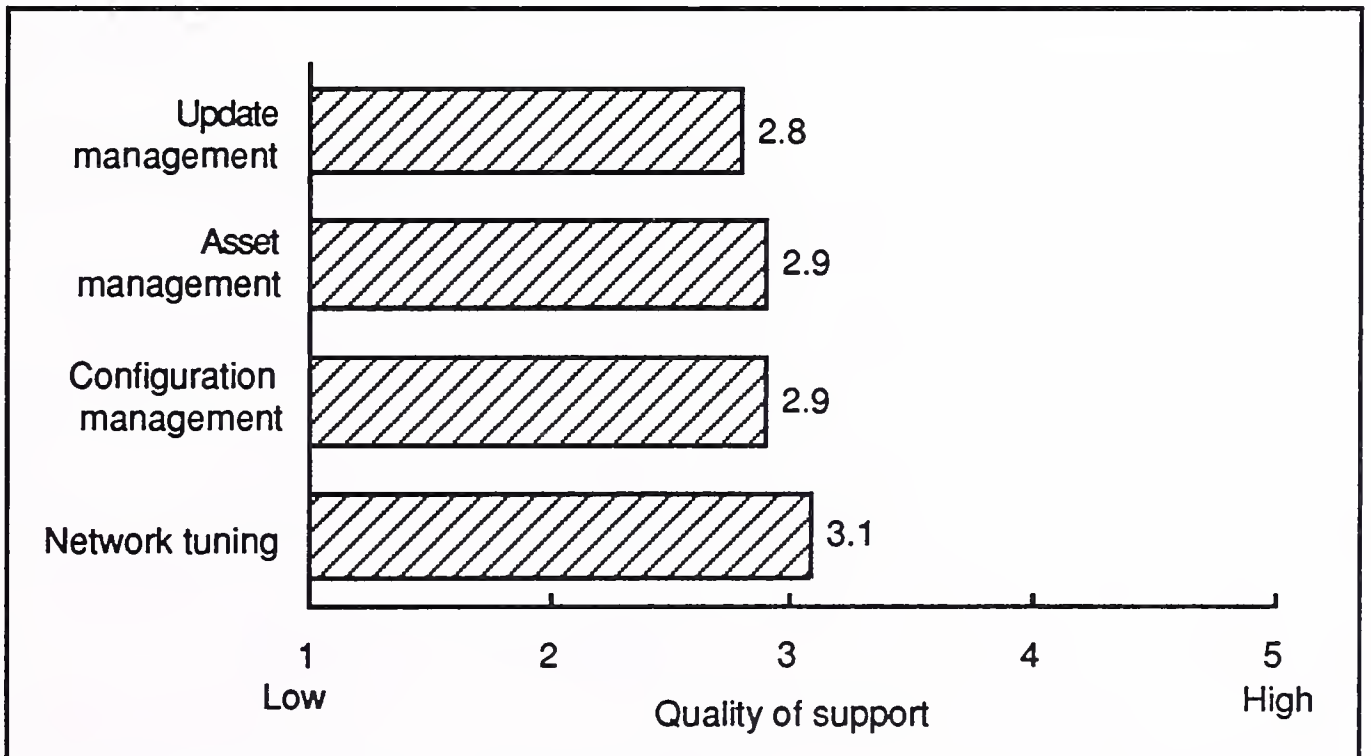
The critical function amongst these, if desktop services outsourcing is to become widely adopted, is LAN management. In this area, only 6% of IT managers showed signs of dissatisfaction with the current service quality. On the other hand, 21% of users indicated a degree of dissatisfaction.

Surprisingly, users rated the quality of help-desk service more highly than did IT managers. However, it is probable that a number of the IT managers were rating the second-line support they receive from vendors rather than their own provision of first-line support. Approximately 13% of users expressed dissatisfaction with their current help-desk support.

Exhibit III-11 lists the worst supported desktop functions.

Exhibit III-11

Worst Supported Functions: Desktop Services—Europe



Sample of 90 respondents. Standard error = 0.1

Source: INPUT

At present, organisations appear to be neglecting configuration management, asset management, and update and version control. These functions may appear initially to be of secondary importance, but are actually critical to successful desktop support.

Firstly users' equipment must be suitable for running the latest versions of personal computer application software products. These products are placing growing demands on the hardware and many users are finding that their current equipment is obsolete and incapable of performing adequately with the latest software.

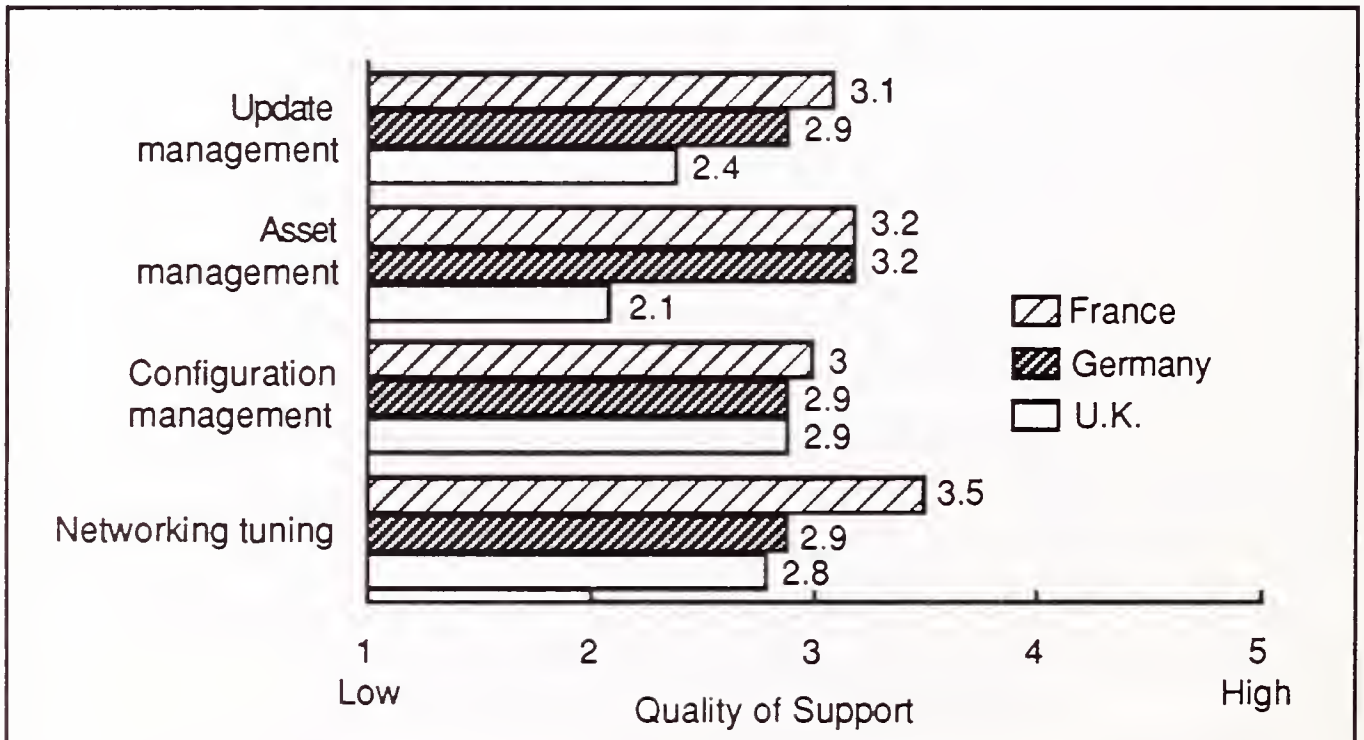
Secondly if users wish to share documents and data across a corporate network, then version control can be critical in ensuring that this is possible.

In practice, all of these functions need to centrally co-ordinated, rather than carried out at the whim of each individual department. However, these areas can be difficult for an in-house IT department to control if spending is totally under the control of individual departments.

Exhibit III-12 lists the ratings for the worst supported functions by country.

Exhibit III-12

Ratings of Worst Supported Desktop Functions
France, Germany, and U.K.



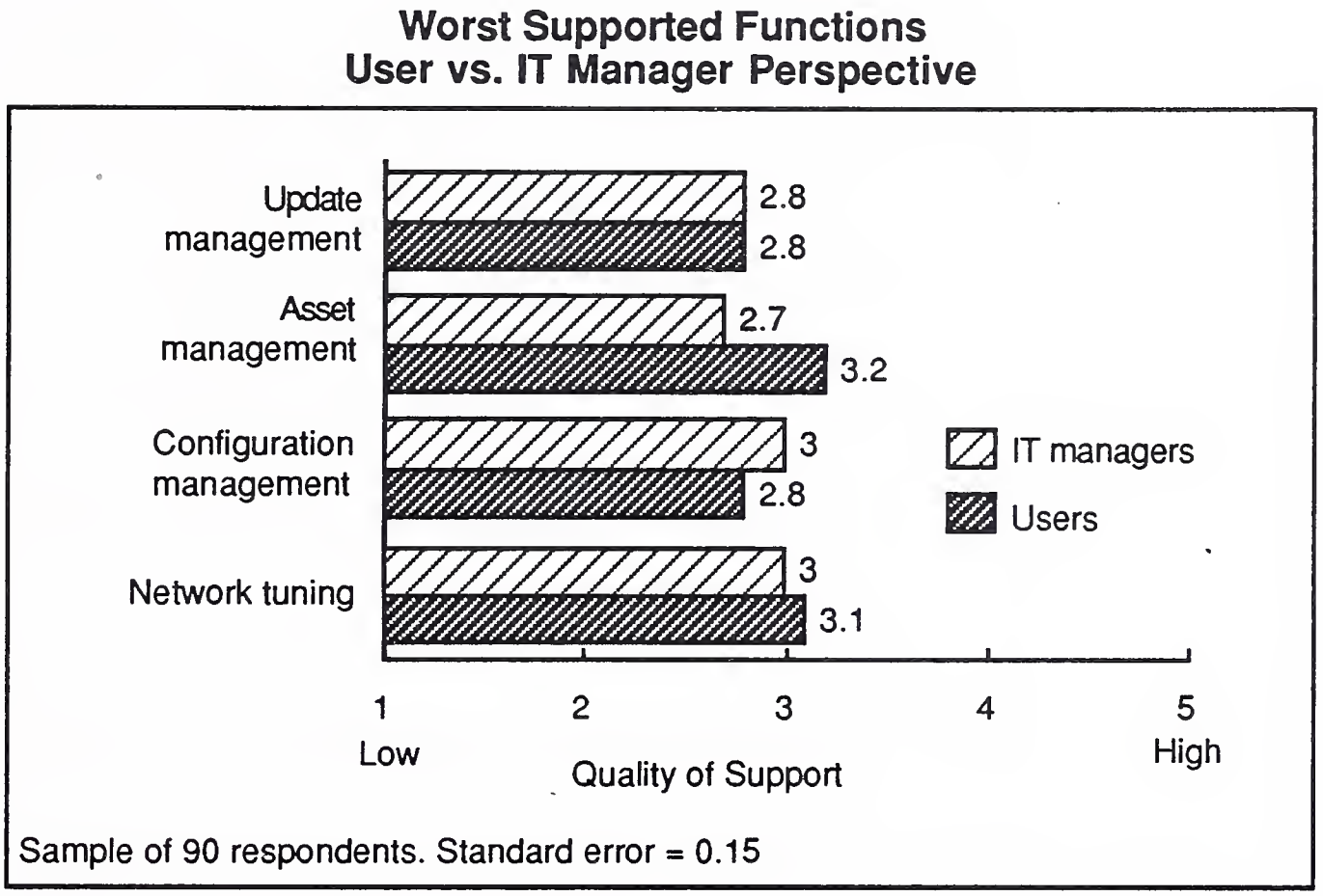
Sample of 90 respondents. Standard error = 0.2

Source: INPUT

The ratings from organisations in France and Germany show a high level of similarity with update management and asset management receiving particularly low ratings in the U.K..

Exhibit III-13 provides a breakdown of the ratings given to the worst supported desktop functions by respondent type.

Exhibit III-13



Source: INPUT

Surprisingly, there is considerable similarity between the views of users and IT managers. The main divergence is in the area of asset management where IT managers rate the quality of asset management even lower than users do. Overall 46% of IT managers are dissatisfied with the present quality of asset management compared to 23% of users.

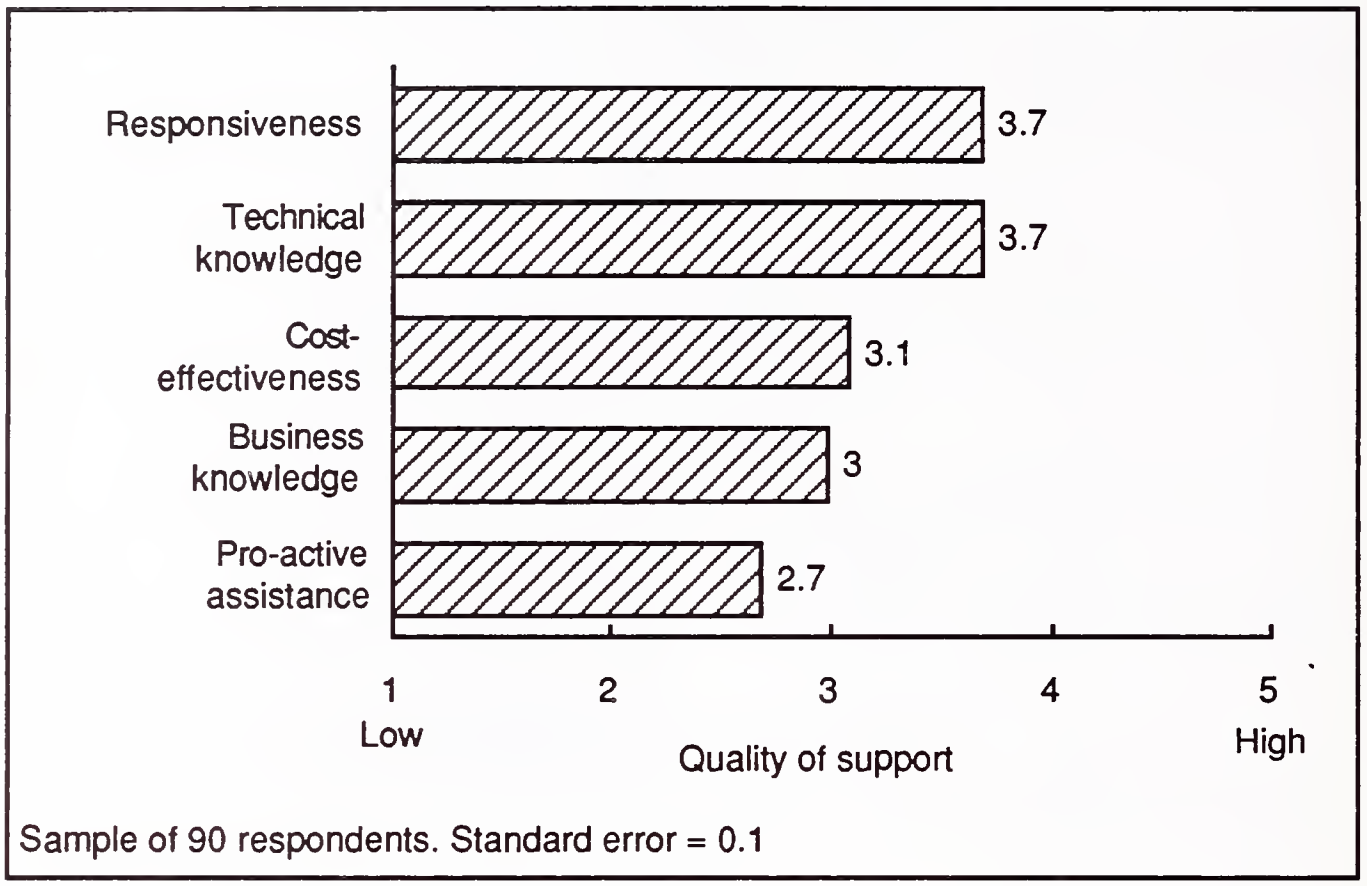
This may be because IT managers recognise the importance of asset management in supporting the desktop environment, and, in many cases, feel frustrated because it is outside their control. On the other hand, over 70% of respondents reported that asset management was the responsibility of the IT department. Another possibility is that responsibility for asset management is unclear in many instances with responsibility falling between users and IT management.

D
Services Need to be More Pro-Active and Cost-Effective

Exhibit III-14 indicates respondents' ratings of their current desktop support in terms of a number of attributes.

Exhibit III-14

Service Attribute Ratings: Europe



Sample of 90 respondents. Standard error = 0.1

Source: INPUT

Overall desktop services provision appears to reach a satisfactory level in terms of responsiveness and technical knowledge. The emphasis of current services is obviously on providing a technically based, reactive service that can address technical queries once these have been identified.

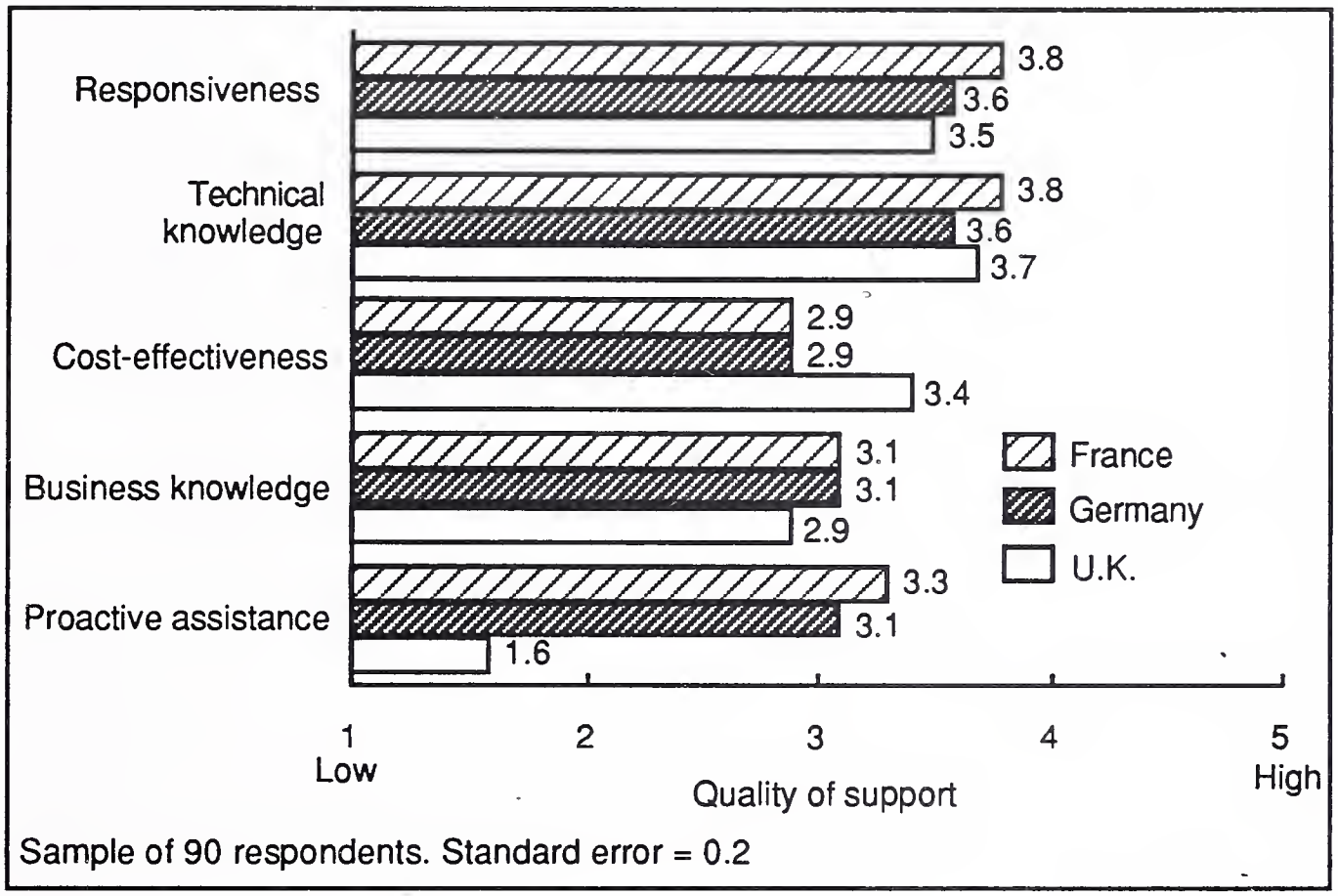
However, current desktop service provision lacks adequate levels of business knowledge. Accordingly the current services probably have difficulty in assisting users in applying technology to their business requirement. Current services also appear to be insufficiently pro-active, both to assist users in applying technology and also in identifying possible problem areas before they occur.

In addition, respondents question the cost-effectiveness of the services provided.

Exhibit III-15 provides a breakdown of these service attribute ratings by country.

Exhibit III-15

Service Attribute Ratings: France, Germany, and U.K.



Sample of 90 respondents. Standard error = 0.2

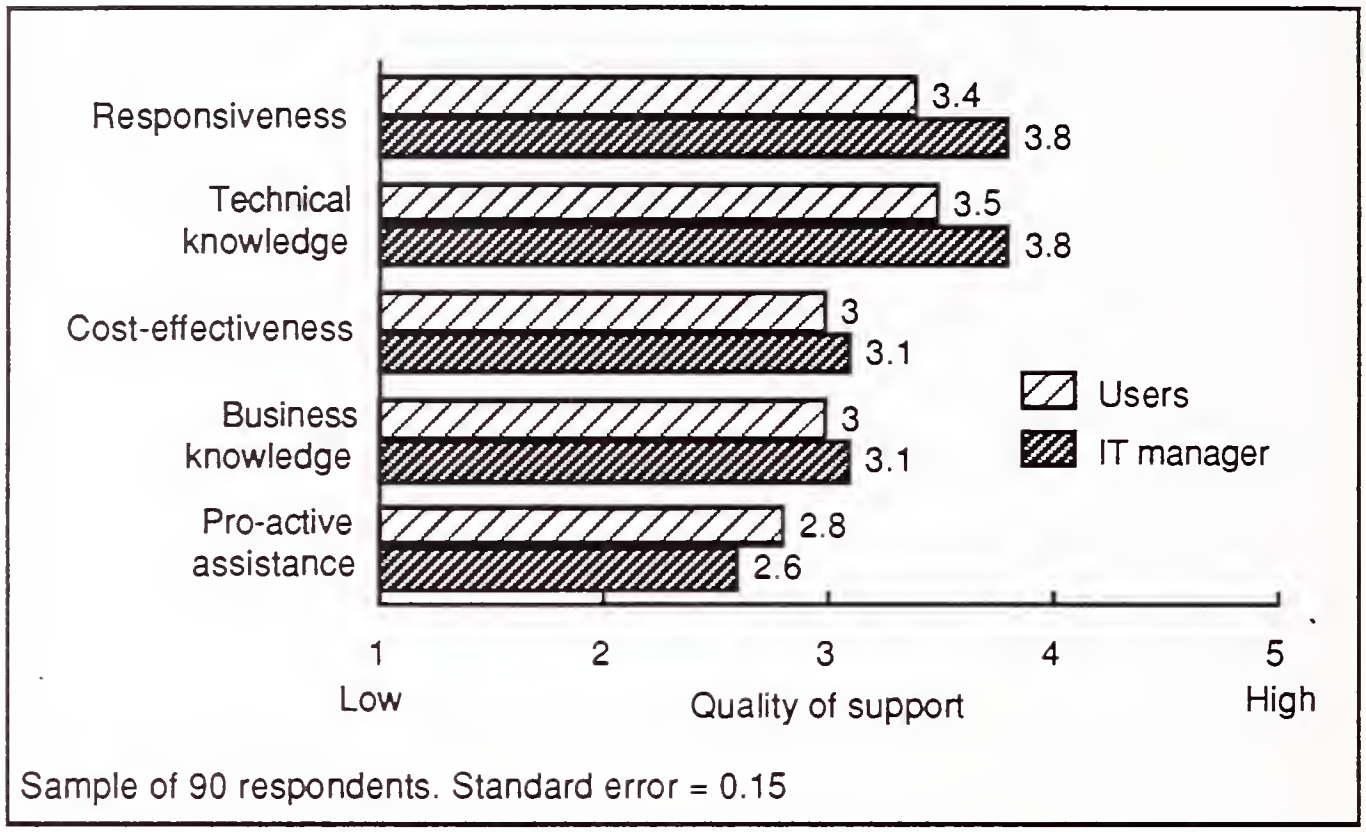
Source: INPUT

Once again, there is a high level of similarity between countries. The principal exception is the U.K., which seems to have gained a relative increase in cost-effectiveness at the expense of a decrease in the level of pro-active assistance provided to users. This is certainly consistent with reports of in-house support organisations reducing costs in order to protect their continued existence while reducing service levels to their clients.

Exhibit III-16 provides a breakdown of the service attribute ratings by respondent type.

Exhibit III-16

Service Attribute Ratings
User vs. IT Manager Perspective



Sample of 90 respondents. Standard error = 0.15

Source: INPUT

Both users and IT managers give current desktop services low ratings in terms of cost-effectiveness, business knowledge, and pro-active assistance. However, while IT managers seem to be largely satisfied with current service provision in terms of its responsiveness and depth of technical knowledge, users seem to largely unconvinced of the presence of these virtues also. Overall:

- 16% of users are dissatisfied with the responsiveness of current services
- 13% of users are dissatisfied with the level of technical knowledge exhibited by the service providers

The overall result is a high level of dissatisfaction with existing services provision which must create significant opportunities for outsourcing vendors.

IV

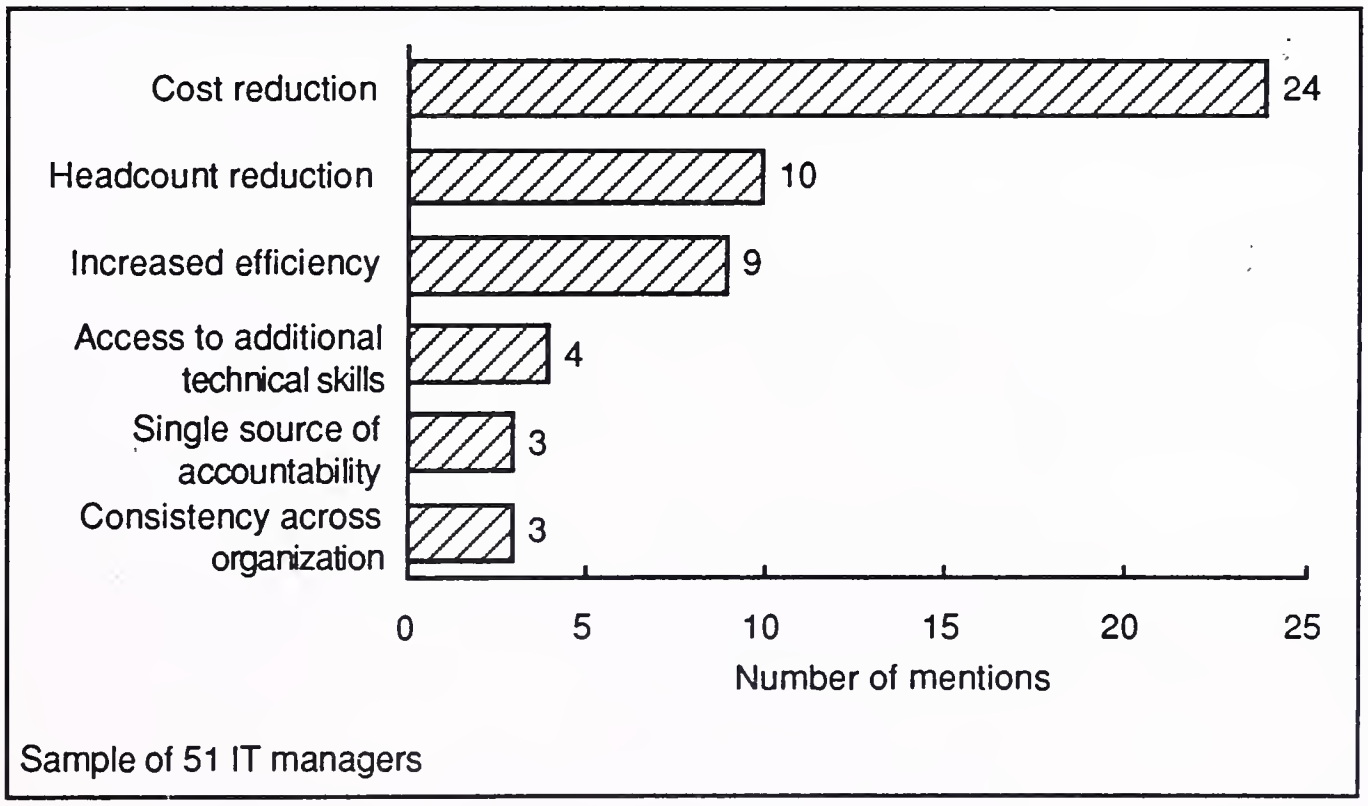
IT Managers Remain Reluctant to Outsource Operational Management

A
Cost Reduction Remains A Key Benefit

Exhibit IV-1 lists the principal benefits mentioned by IT managers questioned about the benefits that they would expect to achieve by outsourcing their organisation's desktop services.

Exhibit IV-1

Principal Benefits from Desktop Services Outsourcing
IT Manager Perspective



Source: INPUT

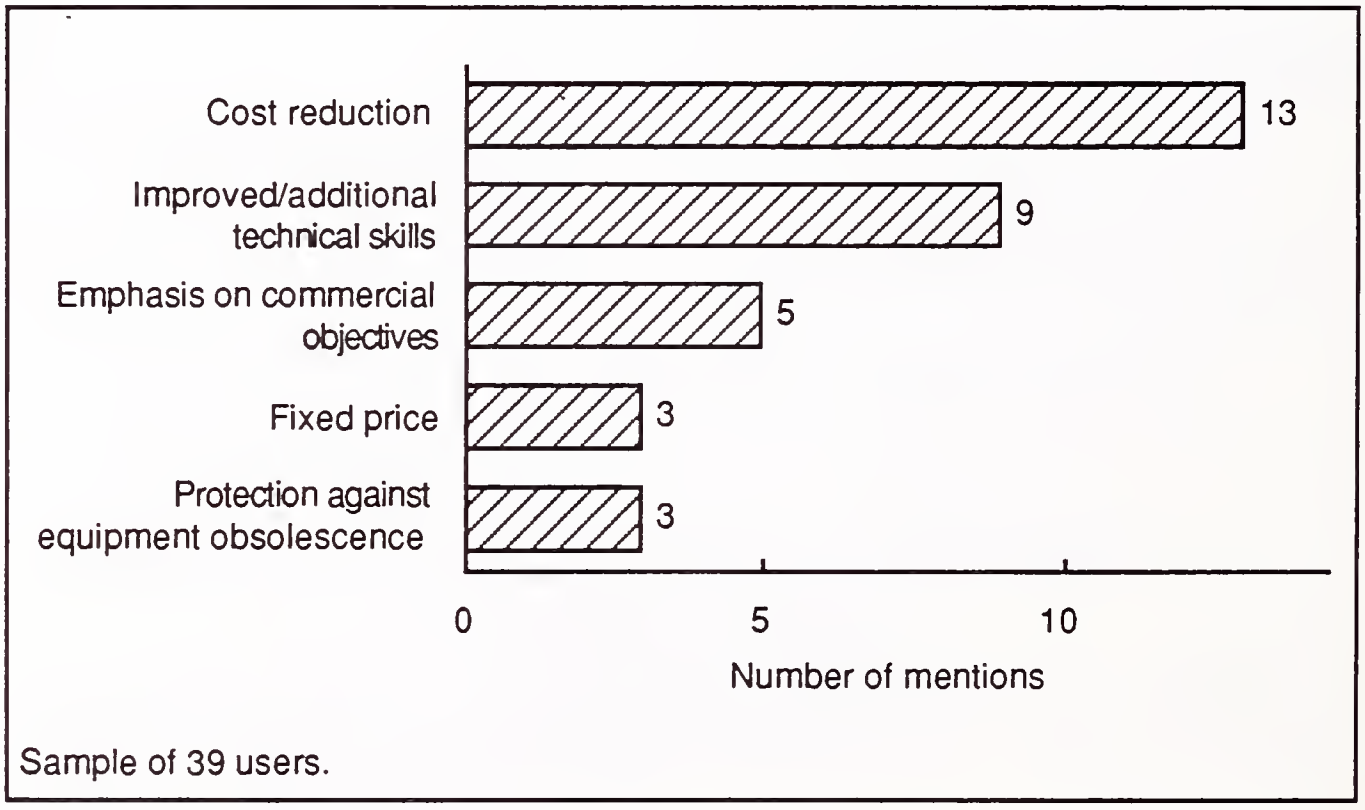
IT managers still view outsourcing predominantly in terms of cost reduction and improved efficiency. This attitude is prevalent throughout Europe, but is strongly emphasised in the U.K., where cost reduction, personnel reductions, and increased efficiency dominate the responses from IT managers. Organisations in the U.K. appear to be uniquely concerned with reducing their number of in-house IT support staff, in a bid to reduce overall support costs.

Elsewhere in Europe, IT managers are more likely to view outsourcing in terms other than cost reduction, such as the ability of outsourcing to deliver improved consistency of support and a single source of accountability.

Exhibit IV-2 shows the profile of benefits that users would expect to derive from outsourcing their desktop services.

Exhibit IV-2

Principal Benefits from Desktop Services Outsourcing
User Perspective



Source: INPUT

Again, cost reduction was the major potential benefit cited by users. It was the leading benefit mentioned by users in each of the three countries. It was again accompanied by mention of manpower reductions in the U.K., but not in France and Germany.

Users expect vendors to exhibit greater depth of technical expertise than their in-house support units. Many organisations are having difficulty in retraining in-house personnel to support their emerging client/server architectures. At the same time, vendors are believed to have the scale of operation required to support a greater breadth of technical capabilities.

The emphases of IT managers are primarily on achieving greater efficiency and access to technical skills. While users expect outsourcing to assist them in achieving these same benefits, they also expect vendors to assist them in achieving commercial benefits.

Users expect outsourcing vendors to assist them by helping them to understand how technology can be applied to their business processes. One reason often given for not outsourcing is the level of understanding of the client's business possessed by in-house support groups. However, in practice, in-house support groups are reported to have low levels of business process knowledge. Users have significantly higher expectations that outsourcing vendors will have relevant knowledge of their industry sector. In addition, users expect to be able to focus on their core business, since the outsourcing vendor will relieve them of the burden of managing their current technology.

Another perceived benefit of desktop services outsourcing is that it will enable users to spread the cost of their desktop investment. At present, users believe that they will be faced with a major financial outlay every two to three years to maintain their desktop environment. Users that are reluctant to make this investment, or are faced with lengthy approval processes, can find that their personal computers are no longer capable of running up-to-date versions of the leading application software products. Outsourcing is viewed as one mechanism by which an organisation can incorporate technology refreshment into its budgets while avoiding periodic, large capital outlays. It is difficult for an in-house service provider to deliver this type of service.

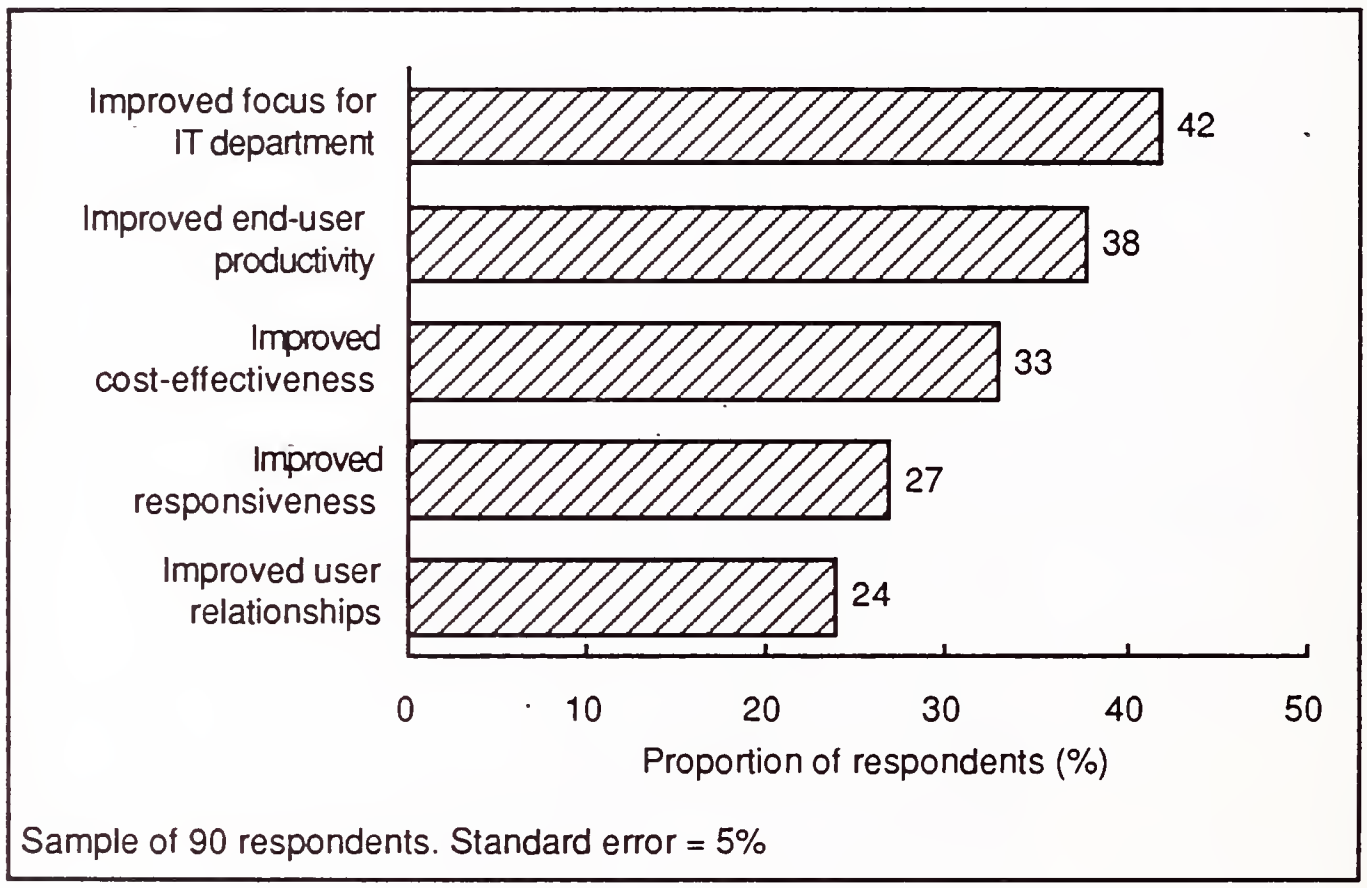
B

Users Believe Outsourcing will Improve the Focus of the IT Department

Respondents were also asked to rate the extent to which they believed outsourcing their desktop services would deliver each of a number of potential benefits. The proportion of respondents that could be considered enthusiastic about each of the benefits - based on a rating of 4 or 5 - is shown in Exhibit IV-3.

Exhibit IV-3

Enthusiasm for Potential Outsourcing Benefits: Europe



Sample of 90 respondents. Standard error = 5%

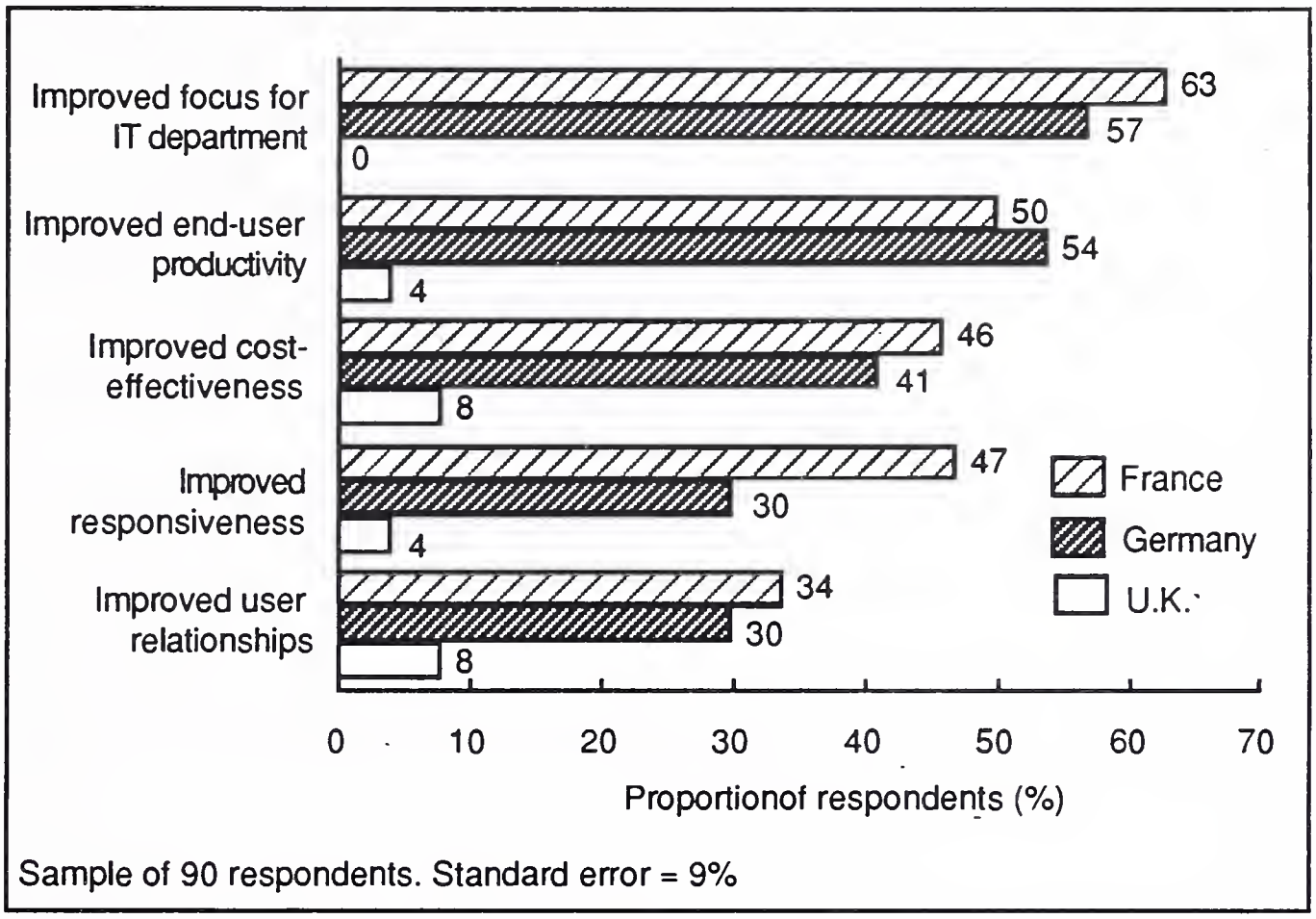
Source: INPUT

Previous studies have indicated an often poor quality of relationship between in-house IT service providers and their clients. Surprisingly only a minority of respondents expected outsourcing to improve the quality of relationship between service provider and user.

Exhibit IV-4 shows the same ratings analysed by country.

Exhibit IV-4

Enthusiasm for Potential Outsourcing Benefits: France, Germany, and U.K.



Sample of 90 respondents. Standard error = 9%

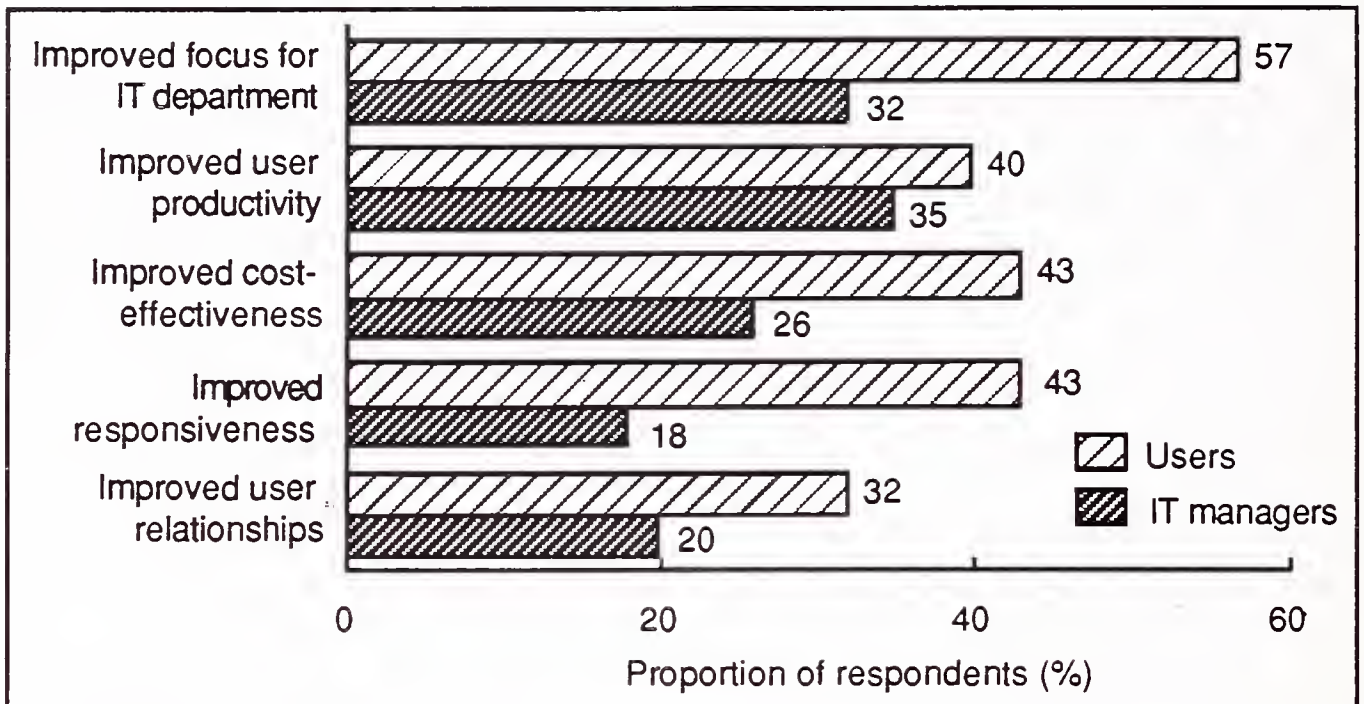
Source: INPUT

The most noticeable feature of this chart is the very low expectations of outsourcing recorded by respondents in the U.K.. To a certain extent, this feature can be explained in terms of the relative bias of the U.K. sample in terms of IT managers. However, this only serves to explain approximately half of the variance between the U.K. and France and Germany. It appears as though U.K. organisations do have lower expectations of desktop services outsourcing than their counterparts in France and Germany. Possibly IT managers in the U.K. feel more threatened by outsourcing than those elsewhere in Europe, and view outsourcing being imposed on their organisations solely to achieve short-term cost reductions regardless of whether service quality improvements can be achieved or not.

Exhibit IV-5 shows the proportion of respondents that could be considered enthusiastic about each of the potential benefits by respondent type.

Exhibit IV-5

Enthusiasm for Potential Outsourcing Benefits
User vs. IT Manager Perspective



Sample of 90 respondents. Standard error = 7%

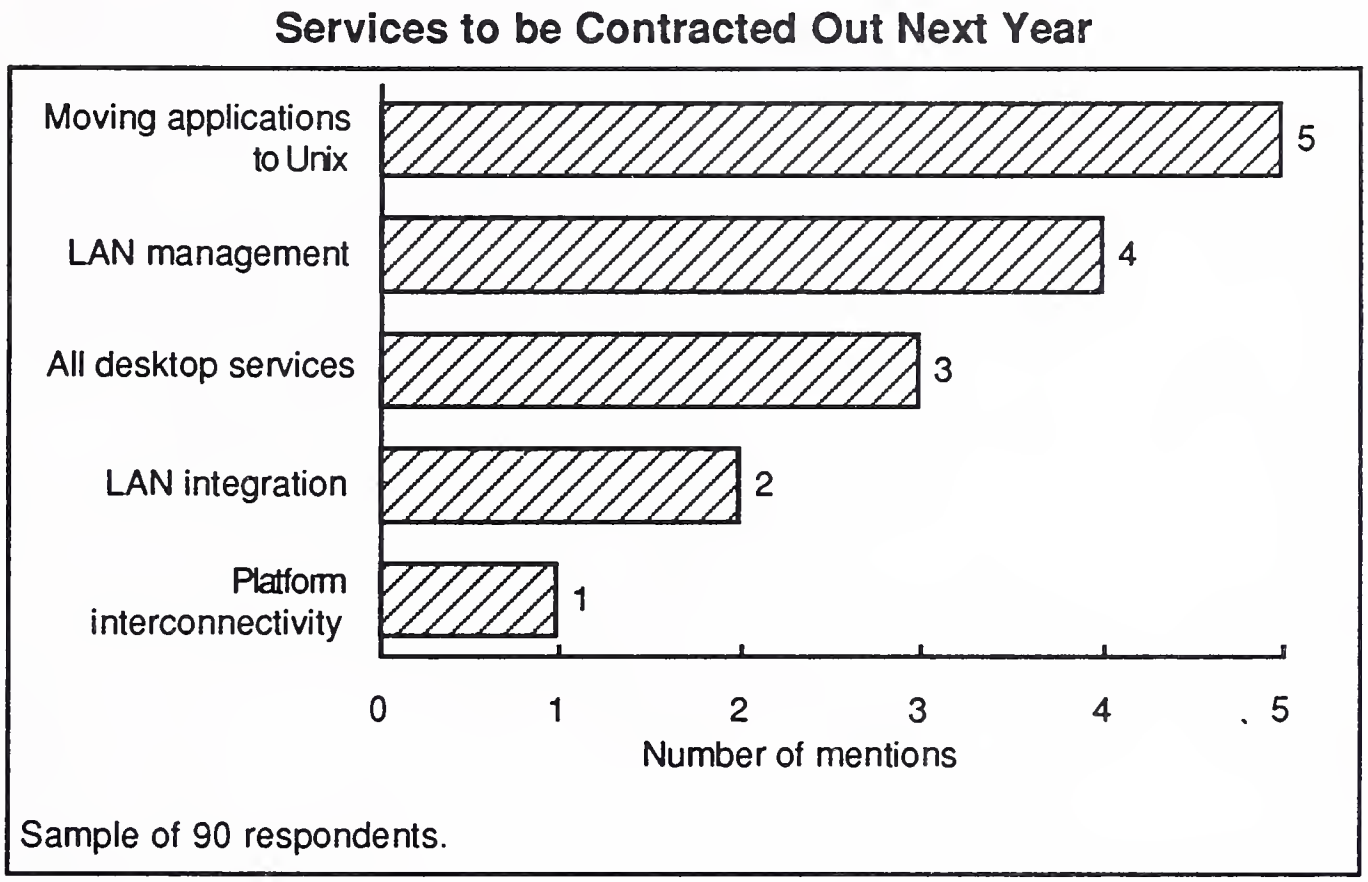
Source: INPUT

Overall, users show a much more pronounced enthusiasm than IT managers for the potential benefits of desktop services outsourcing. On average, over 40% of users are enthusiastic about each of the potential benefits listed above, compared to roughly 25% of IT managers. The largest differences in opinion between users and IT managers relate to *improved focus for the IT department* and *improved responsiveness*.

Many users believe that the in-house IT department should not be involved in labour-intensive tasks such as management of the desktop infrastructure, but should concentrate on more strategic issues such as assisting users in addressing their business problems. Secondly IT managers are much less prepared than users to admit that outsourcing would improve the responsiveness of the service.

Exhibit IV-6 lists the services that respondents expect to contract out during the next year.

Exhibit IV-6



Source: INPUT

Overall, three per cent of respondents expect their organisations to outsource their entire desktop services within twelve months. In addition, four per cent of respondents expect to outsource LAN management. If these levels of activity materialise then it will lead to substantial growth in the desktop services outsourcing market.

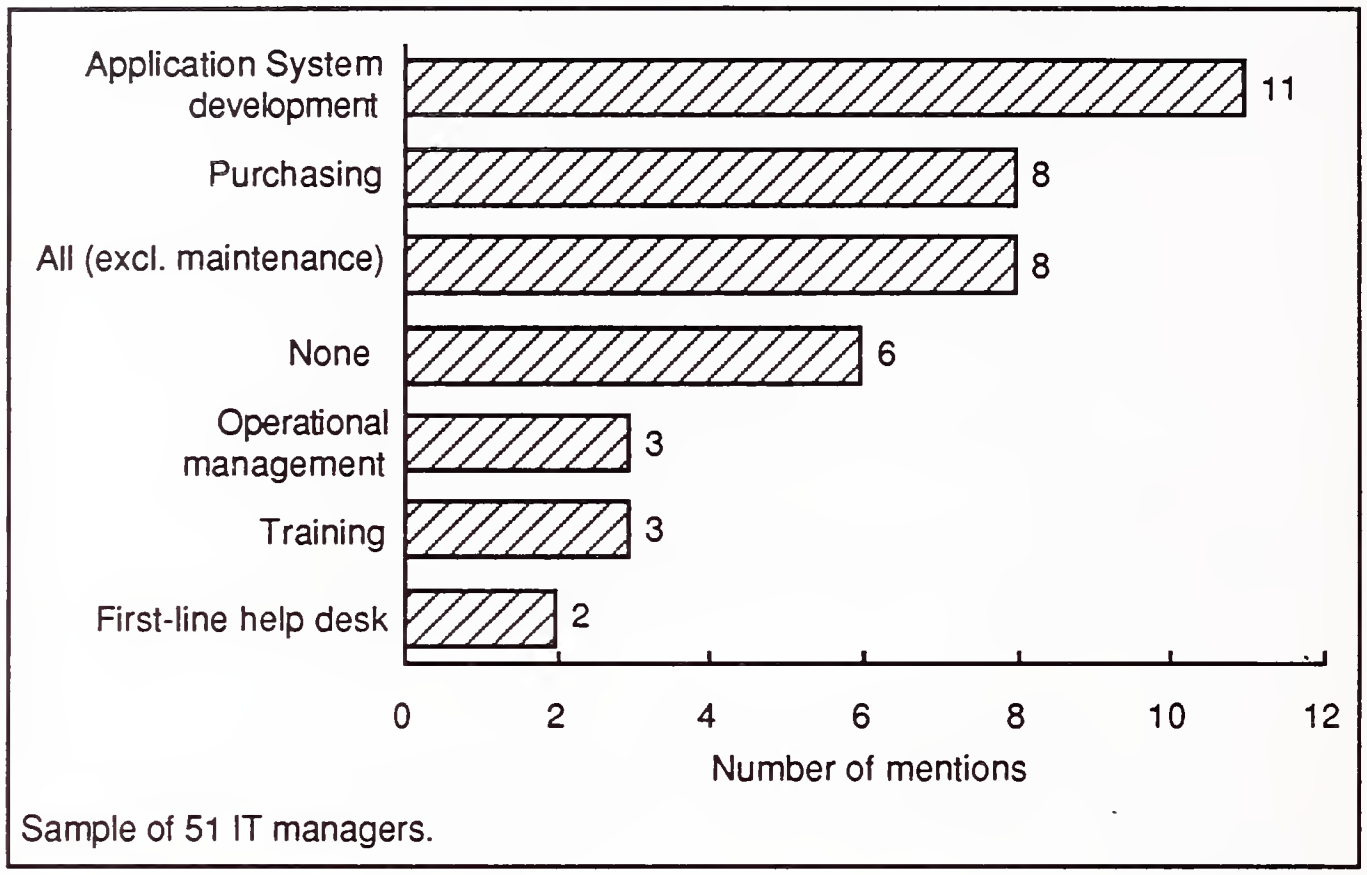
However, there is also a high level of activity in the project services market centred on the desktop, with many organisations seeking assistance in moving to an open systems environment and implementing a client/server based infrastructure.

One way of analysing areas of client resistance to desktop services is to identify those functions that IT managers and users perceive to be best performed in-house. In practice, there is a significant variation between the views of IT managers and those of users.

Exhibit IV-7 shows the profile of services that IT managers regard as best-performed in-house.

Exhibit IV-7

Services Best Performed In-house: IT Manager Perspective



Sample of 51 IT managers.

Source: INPUT

Many IT managers perceive that all desktop services, with the exceptions of equipment maintenance and standard application software support, should be performed in-house. However, some of these managers are frustrated at the apparent unwillingness of senior executives within their organisations to permit them the funding and number of personnel that they perceive to be necessary to provide a high-quality desktop support service.

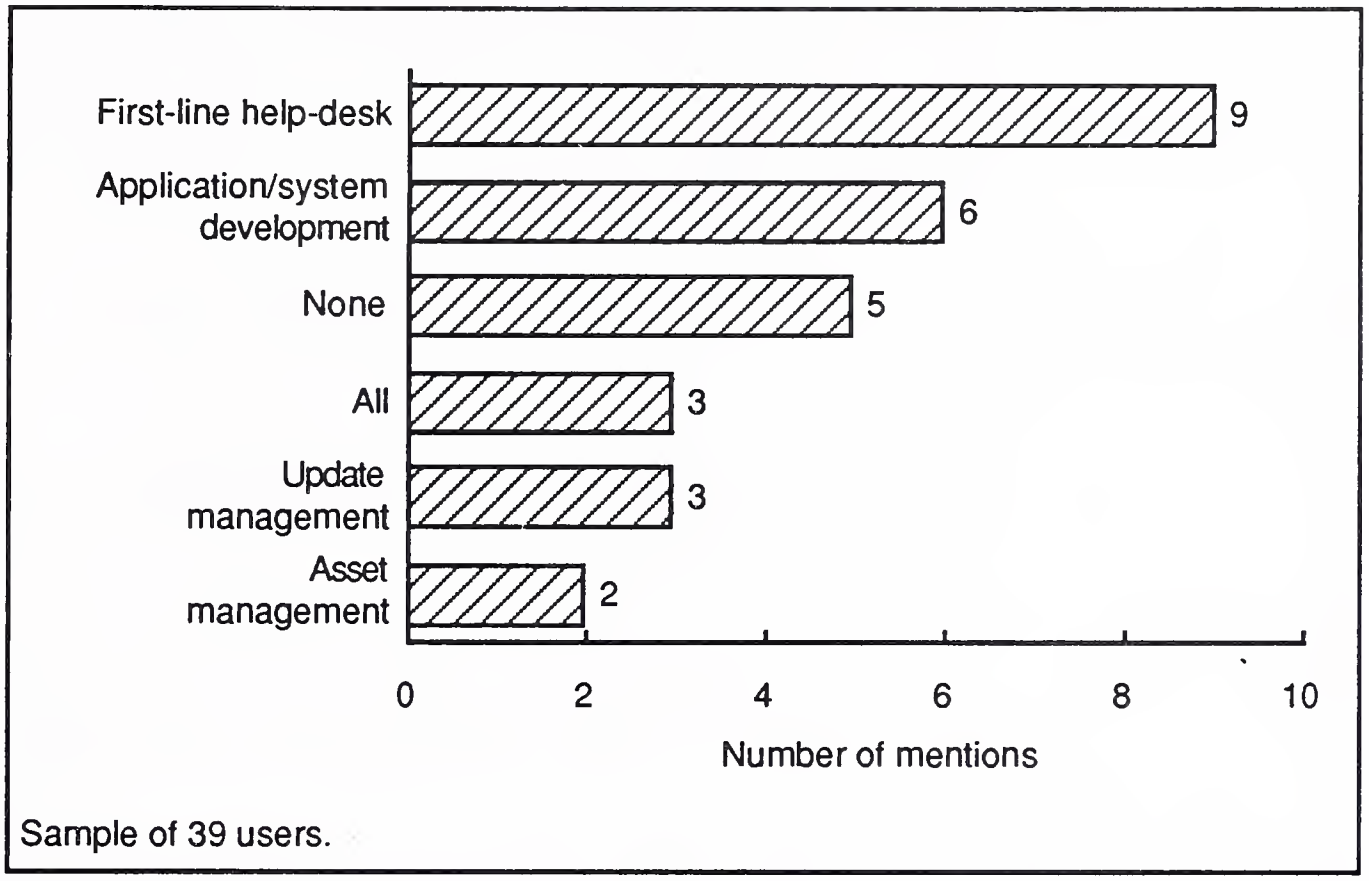
More encouragingly for outsourcing vendors, over 25% of IT managers perceive that it is inappropriate for them to provide desktop services, and favour using an outside vendor. The majority of this group, however, favour retaining control of purchasing in-house. This may extend to control of equipment and software product purchasing as well as services.

In terms of individual services, many IT managers favour retaining system development in-house at the expense of operational management services. However, there remains some resistance to outsourcing operational management and first-line help-desks.

Exhibit IV-8 indicates the profile of services that users believe should be retained in-house.

Exhibit IV-8

Services Best Performed In-house: User Perspective



Sample of 39 users.

Source: INPUT

Perhaps surprisingly, a considerable body of users strongly believe that first-line help-desk support should be performed in-house. The principal reason for this is that the desktop is one element in a larger client/server IT infrastructure. Within this overall architecture, many organisations still possess key applications that were written in-house and which still reside on mainframe or proprietary equipment. Many users perceive that desktop services vendors would be unable to support these applications.

This is potentially a major impediment to growth in the desktop services outsourcing market, since first-line help-desk services are a key component in desktop outsourcing.

One possible solution to this problem would be for vendors to offer application maintenance management services alongside their desktop services outsourcing service portfolios. Vendors would then be in a position to offer a complete help-desk service including support for all applications accessed by users regardless of whether they are standard personal computer based applications or applications written in-house.

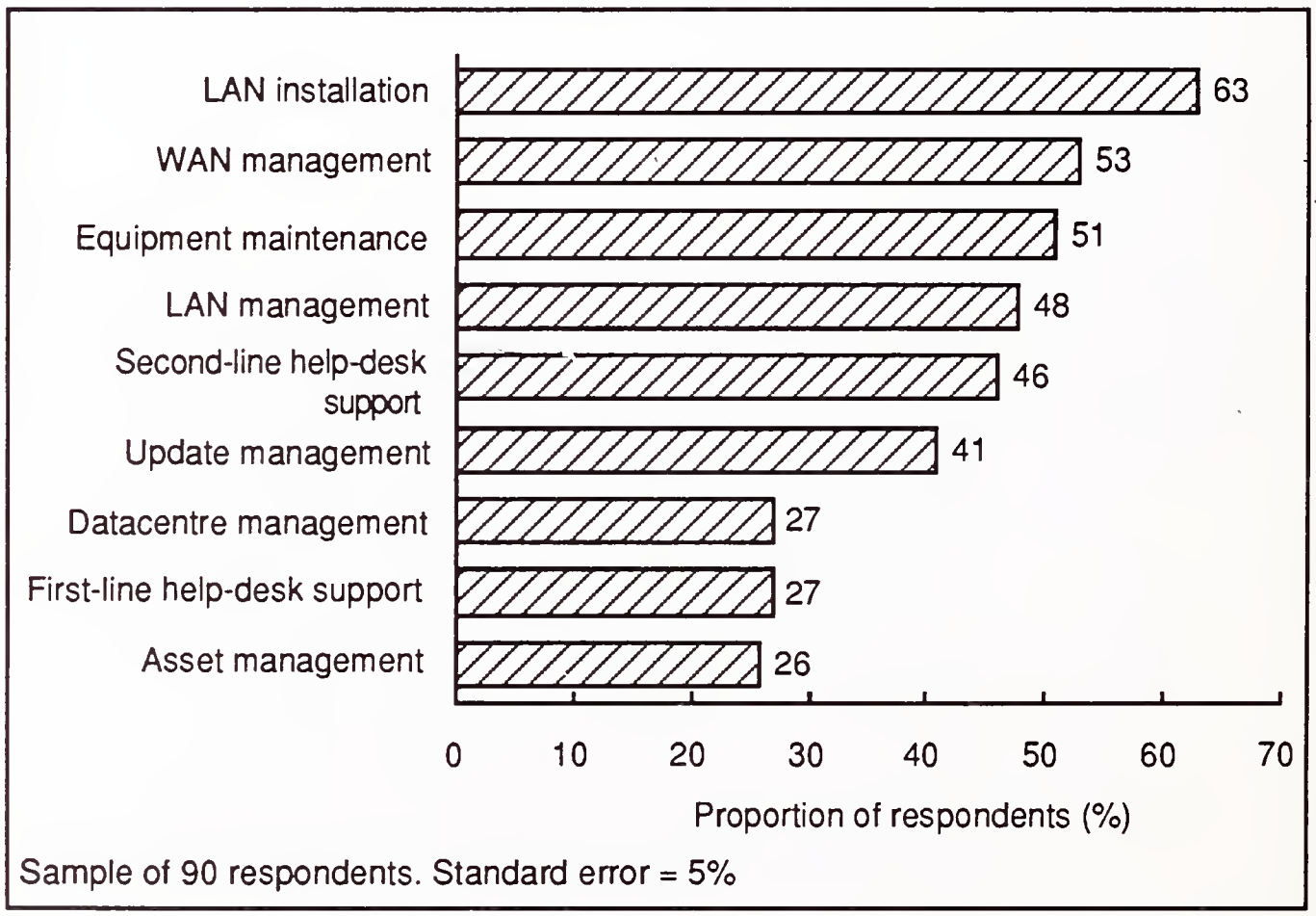
Many users also favour new system development remaining in-house, and believe that administrative tasks such as update management and asset management can be per formed in-house. This view probably underestimates both the importance of these administrative functions and their strong interrelationship with other desktop support functions.

C
IT Managers Want Second-Line Technical Support

Exhibit IV-9 shows the proportion of respondents that strongly believe outsourcing would improve the quality of service for each of the service elements listed.

Exhibit IV-9

Perceived Contribution of Outsourcing to Improving Quality of Service



Sample of 90 respondents. Standard error = 5%

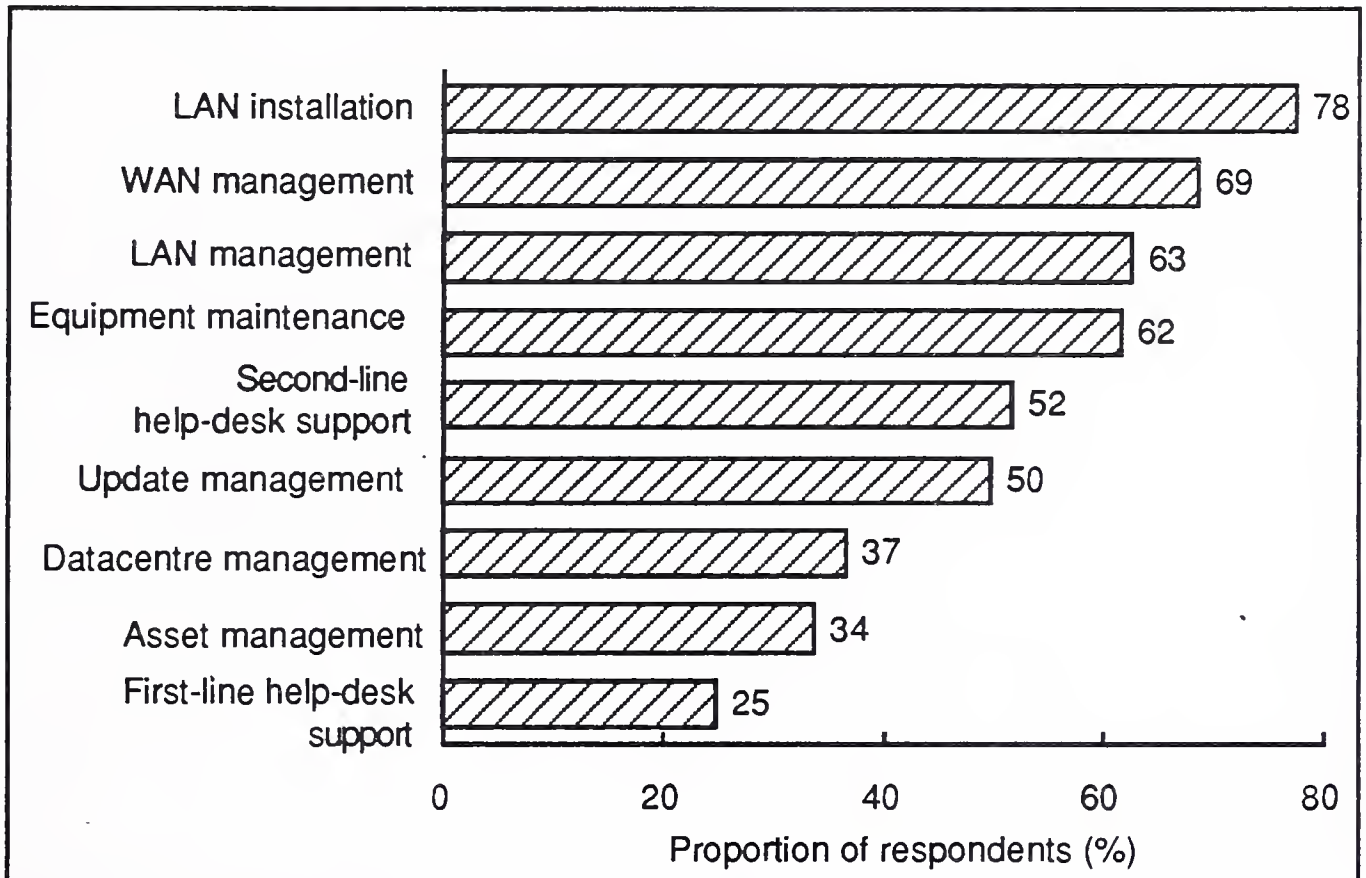
Source: INPUT

However, these figures are an European average, and it may be more useful to evaluate this chart analysed by country and by type of respondent.

Exhibits IV-10, IV-11, and IV-12 provide breakdowns for each of France, Germany, and the U.K..

Exhibit IV-10

Perceived Contribution of Outsourcing to Improving Quality of Service: France

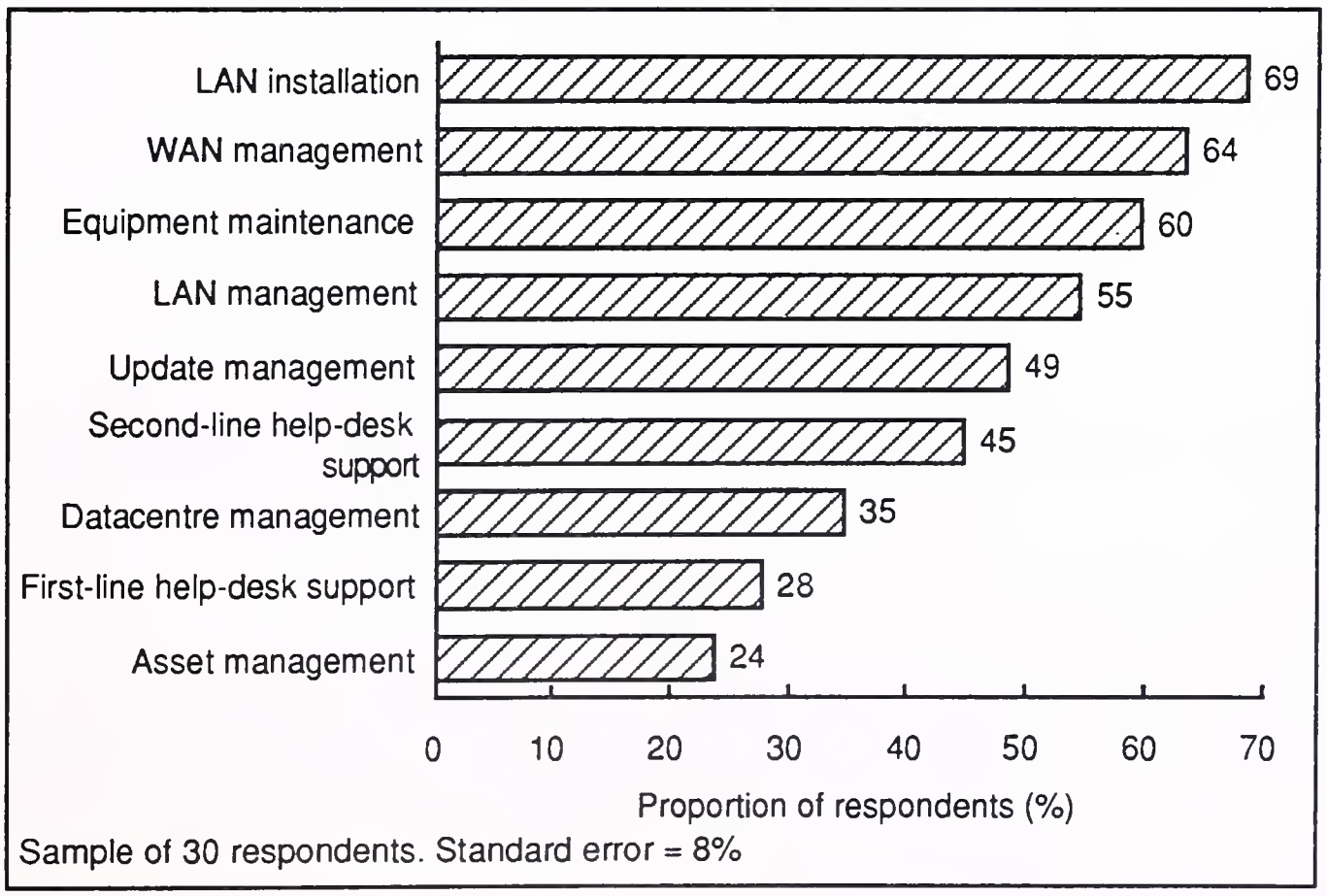


Sample of 30 respondents. Standard error = 8%

Source: INPUT

Exhibit IV-11

Perceived Contribution of Outsourcing to Improving Quality of Service: Germany

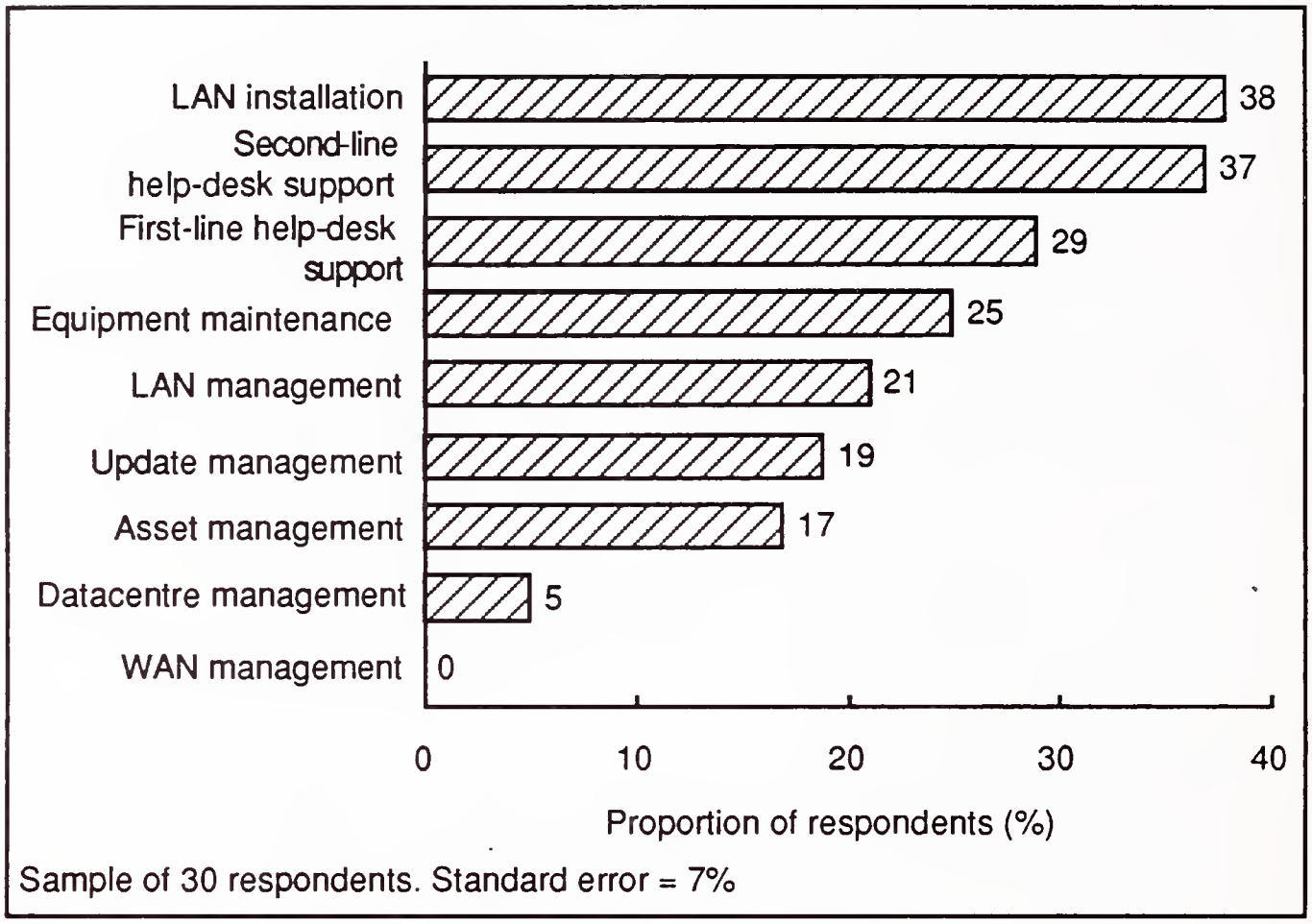


Sample of 30 respondents. Standard error = 8%

Source: INPUT

Exhibit IV-12

Perceived Contribution of Outsourcing to Improving Quality of Service: U.K.



Sample of 30 respondents. Standard error = 7%

Source: INPUT

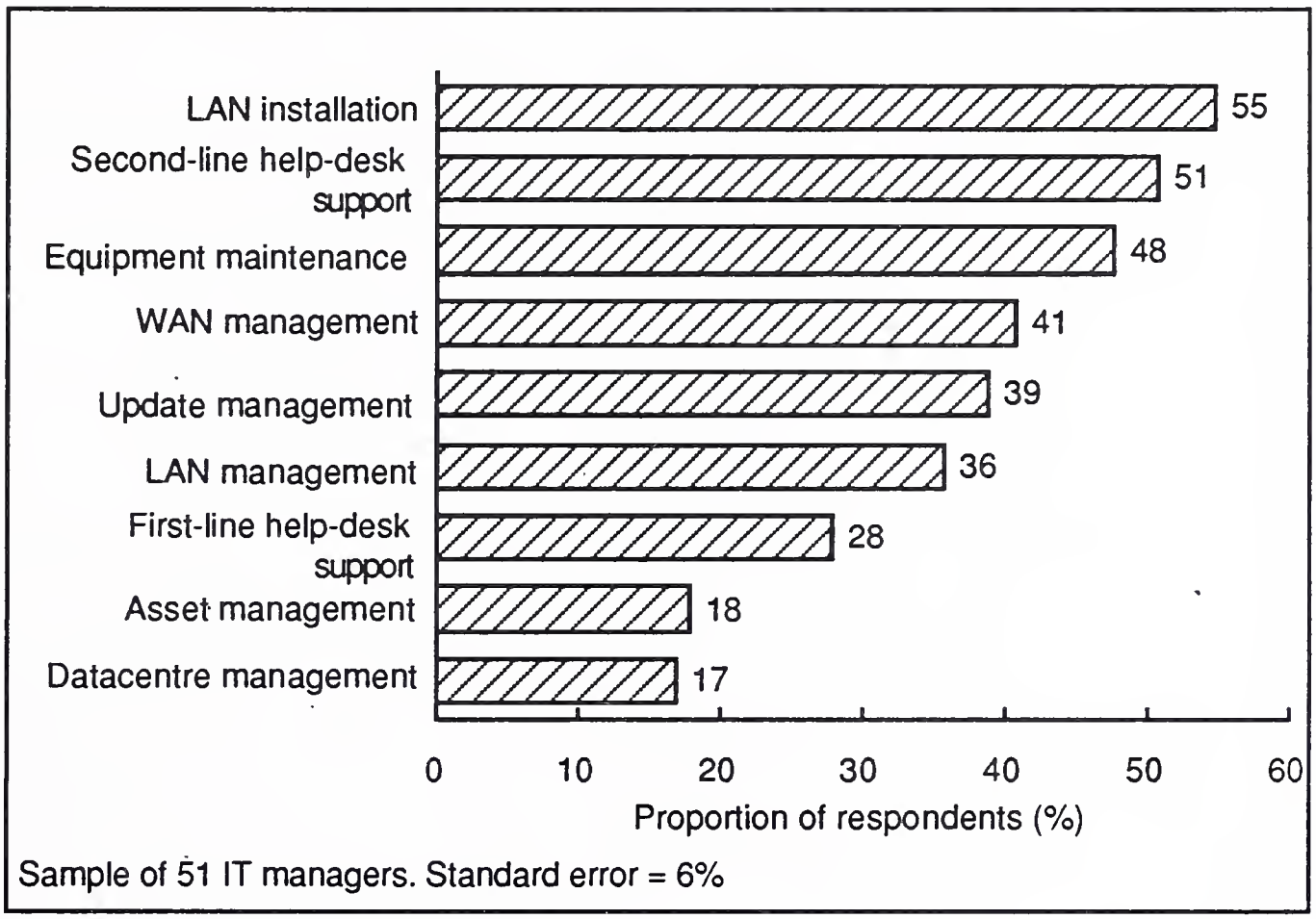
Once again, there is a substantial difference in the proportion of respondents that strongly believe outsourcing could improve the quality of desktop service between France and Germany, and the U.K.. In the U.K., a much smaller proportion of respondents are enthusiastic about the ability of outsourcing to improve the quality of desktop service.

There are also significant differences in the areas where respondents believe outsourcing could contribute. In France and Germany, the majority of respondents perceive that outsourcing would significantly improve the quality of their wide-area network management. No respondents in the U.K. believed this to be applicable.

Exhibit IV-13 shows the proportions of IT managers who strongly believe that outsourcing could improve the quality of service for each of these service elements.

Exhibit IV-13

Perceived Contribution of Outsourcing to Improving Quality of Service: IT Managers



Sample of 51 IT managers. Standard error = 6%

Source: INPUT

One observation sometimes made about IT managers is that they view desktop outsourcing largely in terms of equipment maintenance. However, it appears that the majority of IT managers perceive that outsourcing would only improve the quality of service in two areas :

- LAN installation
- Second-line help-desk support.

INPUT's previous study into desktop services outsourcing in 1992 indicated a similar attitude.

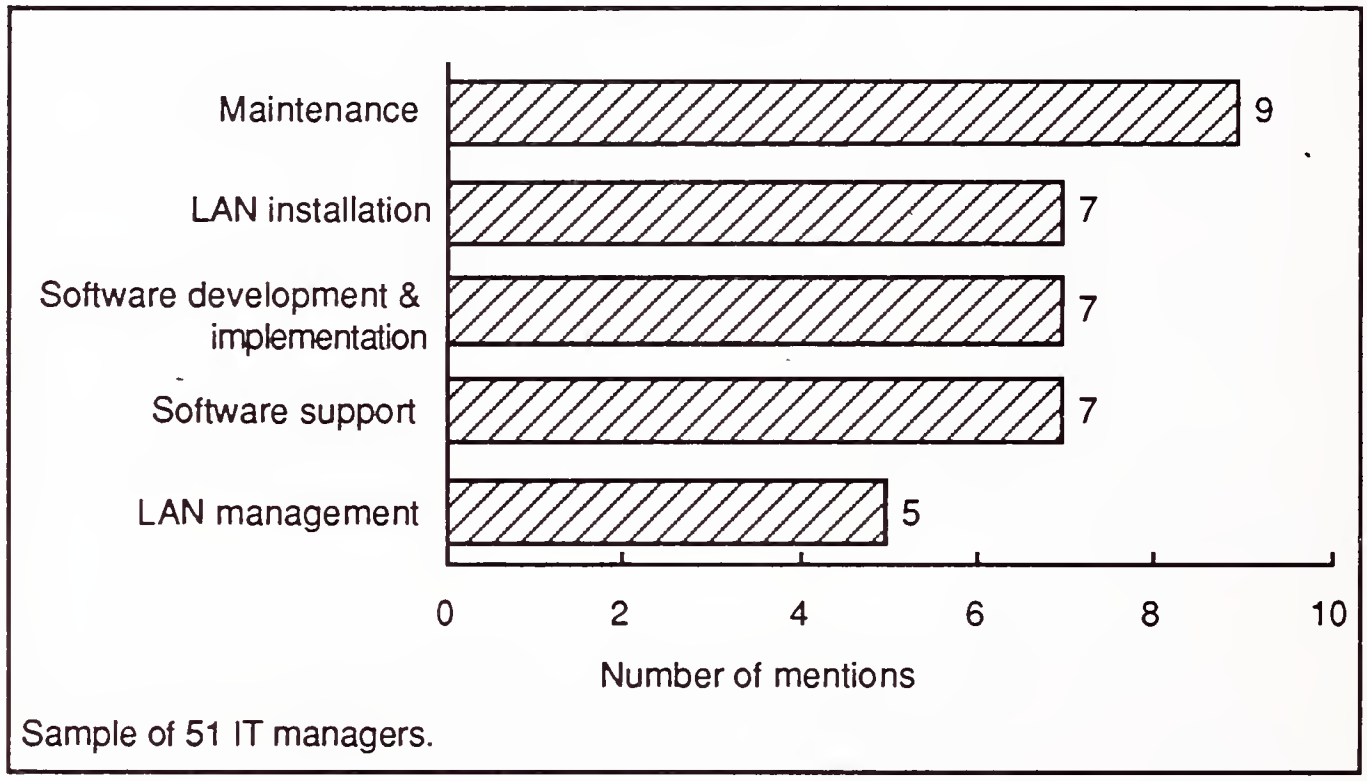
Despite these preferences, there are encouraging signs for outsourcing vendors, particularly outside the U.K., with over a third of European IT managers believing that outsourcing could make a significant contribution to their organisation's network - both WAN and LAN - management.

Surprisingly, despite their criticism of the current calibre of asset management, only a comparatively minor proportion of IT managers perceive that outsourcing this service would improve service quality.

Exhibit IV-14 shows the pattern of services that IT managers would outsource, if they were to incrementally outsource elements of their desktop support services.

Exhibit IV-14

Incremental Desktop Services Outsourcing Pattern
IT Managers



Sample of 51 IT managers.

Source: INPUT

The pattern of service outsourcing shown is consistent with the earlier findings that IT managers exhibit the strongest propensity to outsource LAN installation, second-line software support, and equipment maintenance. In addition, IT managers perceive a need for assistance in software development and implementation, despite their preference for retaining these activities in-house whenever possible.

Finally, there is a significant opportunity for operational service outsourcing, since at least ten per cent of IT managers would be prepared to outsource LAN management.

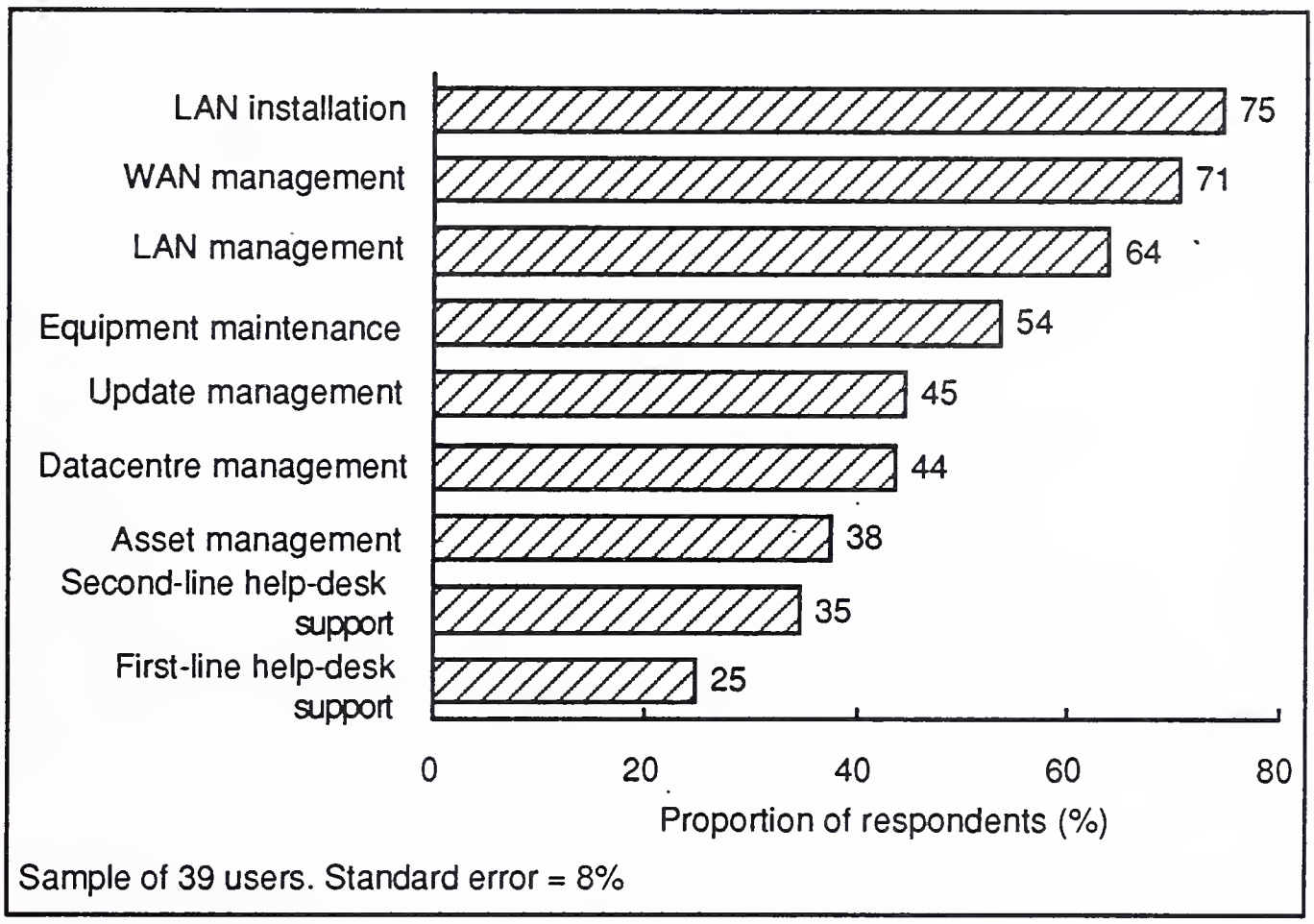
D

Users Are More Prepared to Outsource Operational Management

Exhibit IV-15 shows the proportions of users who strongly believe that outsourcing could improve the quality of service for each of the service elements listed.

Exhibit IV-15

Perceived Contribution of Outsourcing to Improving Quality of Service: Users



Sample of 39 users. Standard error = 8%

Source: INPUT

Overall, users appear to be strongly supportive of desktop services outsourcing. Approximately 50% of users in Europe strongly believe that outsourcing would improve the quality of each of the services shown. Like their counterparts in IT management, users perceive that outsourcing would improve the quality of LAN installation services within their organisation. However, unlike IT managers, the majority of users perceive that outsourcing would strongly improve the quality of operational management services such as LAN and WAN management.

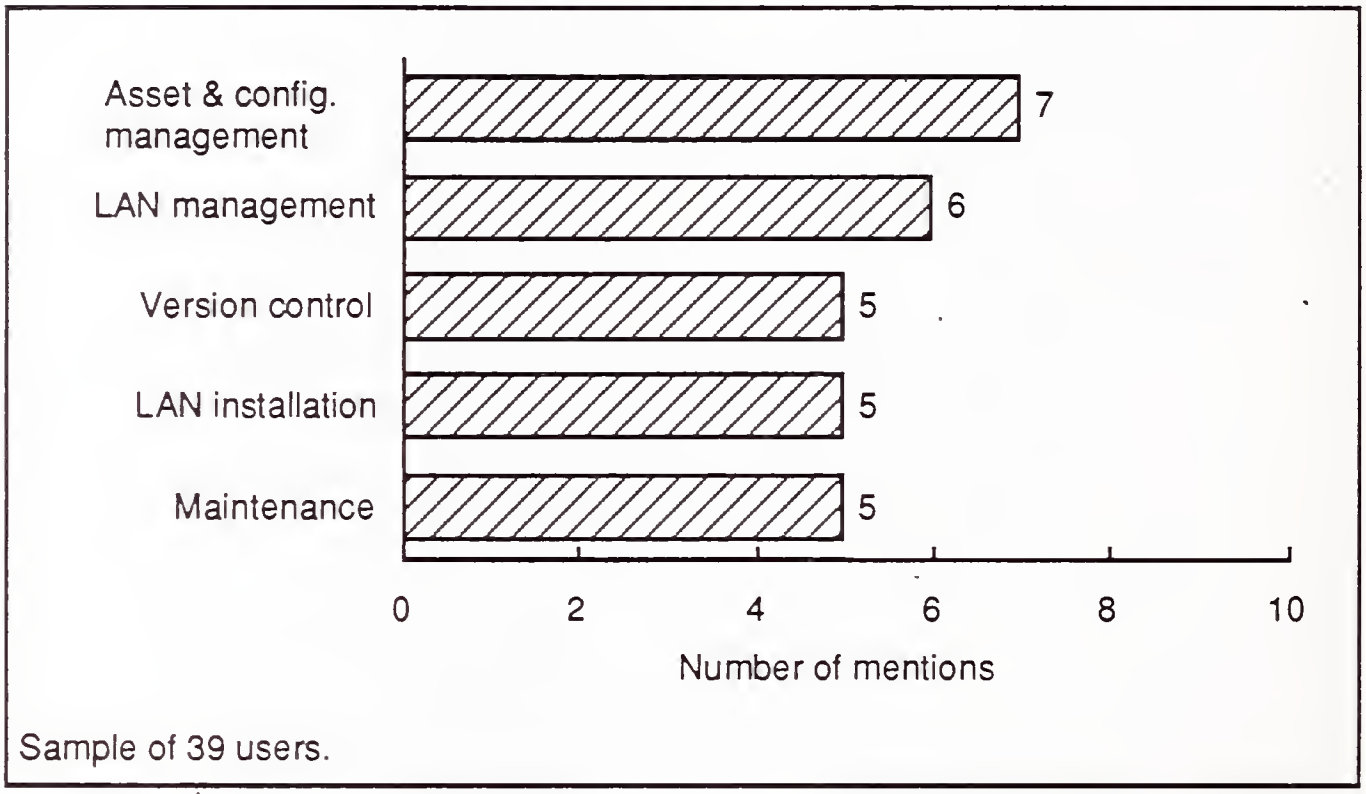
As mentioned earlier, users perceive external vendors as being comparatively ill-equipped to provide help-desk services because of the need to be able to support all of their organisation's existing

applications, many of which have been designed and written in-house.

Exhibit IV-16 shows the pattern of services that users would outsource, if they were in a position to incrementally outsource elements of their desktop support services.

Exhibit IV-16

Incremental Desktop Services Outsourcing Pattern: Users



Sample of 39 users.

Source: INPUT

Again there is a much stronger emphasis from users on outsourcing operational management services than is the case with IT managers. In addition to LAN management, users show a comparatively strong inclination to outsource asset and configuration management and version control.

While IT managers tend to be most concerned with access to implementation skills and technical support, users are more concerned with the operational management of their desktop systems. Asset and configuration management are often badly performed in-house much to the frustration of desktop users. Similarly, inadequate version control can generate considerable day-to-day difficulties for users. Currently, there is a danger that IT managers under-estimate the value of these operational practices.

Indeed as LANs become increasingly connected as part of an enterprise-wide, multi-vendor IT infrastructure, so users indicate the growing need for vendors to combine WAN management with their desktop services to provide total operational management of the emerging client/server IT infrastructure. Both users and IT managers believe that outsourcing could make a major contribution to improving the quality of their organisation's WAN services.

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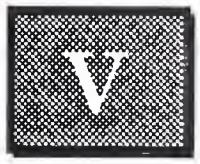


Vendors Need to Market Services at Board-Level

A IT Managers Are Major Influence on Desktop Services Expenditure

Exhibit V-1 shows respondents' views of the major influence on desktop services expenditure by service type.

Exhibit V-1

Control of External Expenditure: Desktop Services

Service	Number of mentions					
	IT Department	IT Department & CFO/CEO	Board	Finance	User Dept/ Subsidiary	Total
Equipment maintenance	38	3	2	2	5	50
LAN installation	40	4	1	2	-	47
LAN management	40	4	3	2	-	49
User help-desk services	35	4	1	4	8	52
Version control & update management	41	3	1	2	11	58
Asset management	26	5	3	9	10	53
Overall	24	6	7	5	4	46

Source: INPUT

As indicated in earlier INPUT studies, control of IT infrastructure policy and expenditure tends to remain centralised

within the organisation. Similarly, control of expenditure on desktop services tends to be dominated by the IT department. Respondents estimated that, overall, IT managers controlled over 70% of purchasing decisions related to individual desktop services.

On the other hand, managers in charge of individual departments or subsidiaries are perceived to have a comparatively low level of influence over the purchase of desktop services. These users are estimated to control roughly 10% of individual desktop service purchase decisions.

Indeed, users level of influence was seen to be negligible in the case of the key service - LAN management. This suggests that individual user departments do not currently have a mandate to authorise widespread outsourcing of their desktop services.

This leaves vendors with the options of targeting either IT managers, who are often comparatively reluctant to outsource significant elements of their desktop services, or board level personnel such as the CFO or CEO. In the majority of outsourcing contracts, the major purchasing influence is the CFO. It appears that the desktop services outsourcing market will share this characteristic with the broader outsourcing market.

Board personnel, such as the CFO and CEO, are estimated to be influential in the purchase of individual desktop services in approximately 18% of organisations. When purchasing decisions are being taken for outsourcing a wide combination of desktop services, then the CFO and CEO become more influential, and are estimated to be among the key decision-makers in 40% of organisations.

However, the IT department retains an advisory role alongside board-level personnel in many of these purchase decisions, and will remain a significant influence on the vendor selection criteria used.

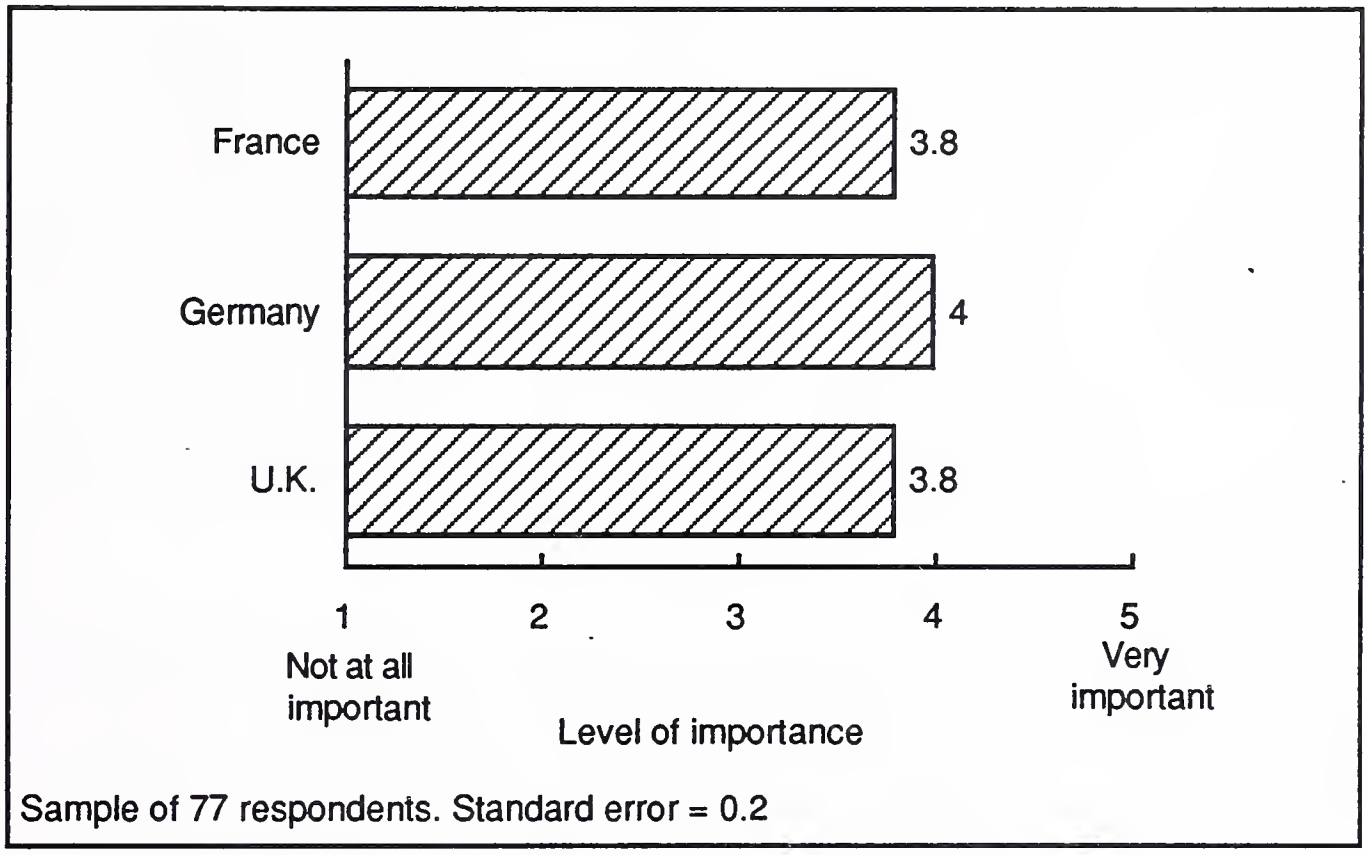
Organisations' desire to reduce the number of external vendors is one factor in favour of outsourcing vendors. Even where organisations are contracting out a number of minor service elements, rather than adopting full desktop services outsourcing, there is a high level of enthusiasm for consolidating the number

of service providers. This trend will assist vendors in developing their clients towards a complete outsourcing service.

Exhibit V-2 shows the importance respondents attached to reducing the number of external desktop service suppliers by country.

Exhibit V-2

Importance of Reducing Number of External Vendors
France, Germany, and U.K.



Sample of 77 respondents. Standard error = 0.2

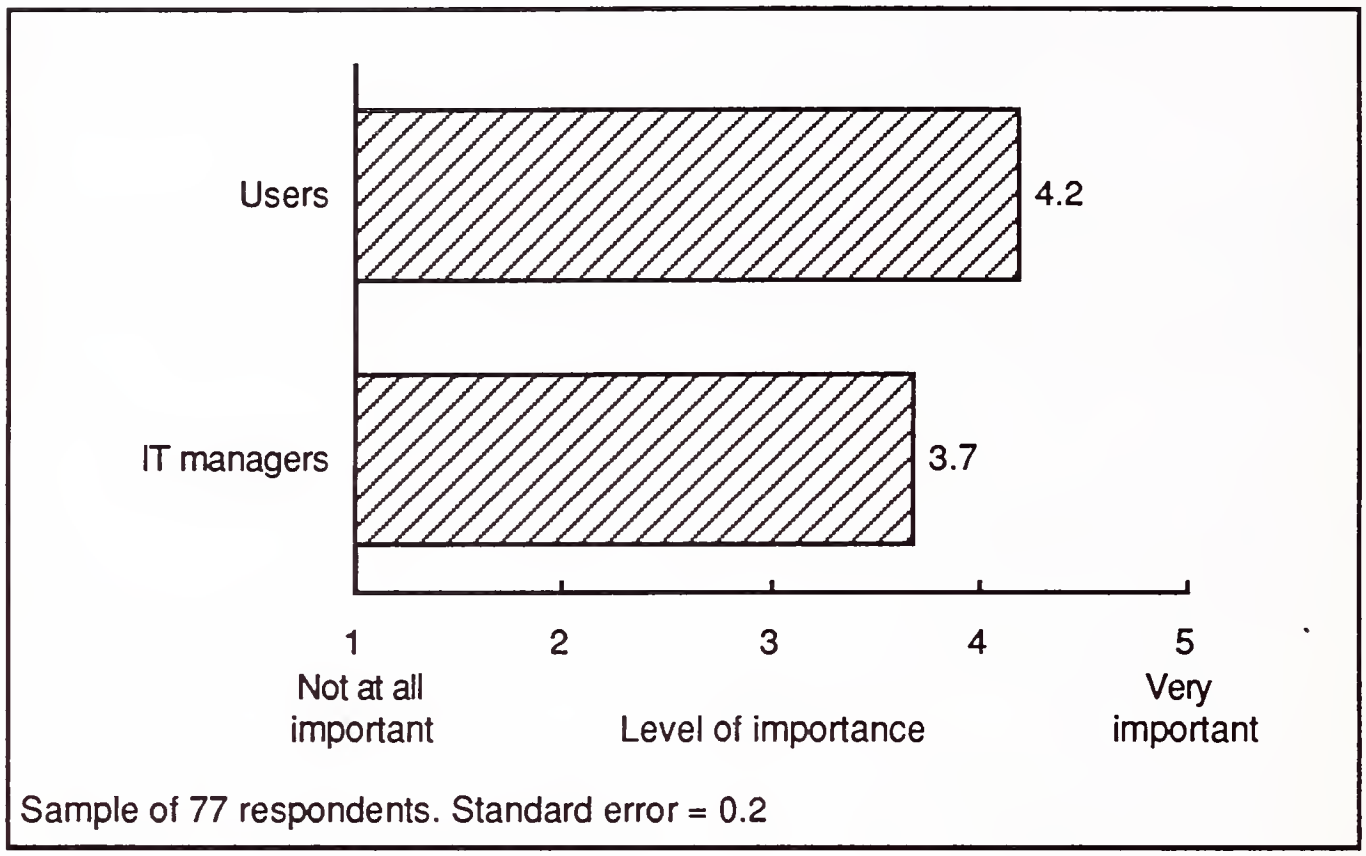
Source: INPUT

For once, there is a very high level of similarity between attitudes in each of France, Germany and the U.K., with broad agreement on the need to reduce the number of vendors.

Exhibit V-3 shows the importance respondents attach to this issue by respondent type.

Exhibit V-3

Importance of Reducing Number of External Vendors
User vs. IT Manager Perspective



Sample of 77 respondents. Standard error = 0.2

Source: INPUT

Even though users appear to exhibit slightly more enthusiasm for this concept than IT managers, there is broad agreement by the majority of users and IT managers that reducing the number of external service providers is desirable. Indeed, this is an encouraging sign for outsourcing vendors since it suggests that key decision-makers such as the CFO and CEO are likely to favour using a single vendor to supply all of the desktop services required, rather than subcontract these to a range of vendors in an endeavour to optimise delivery of individual service components.

B

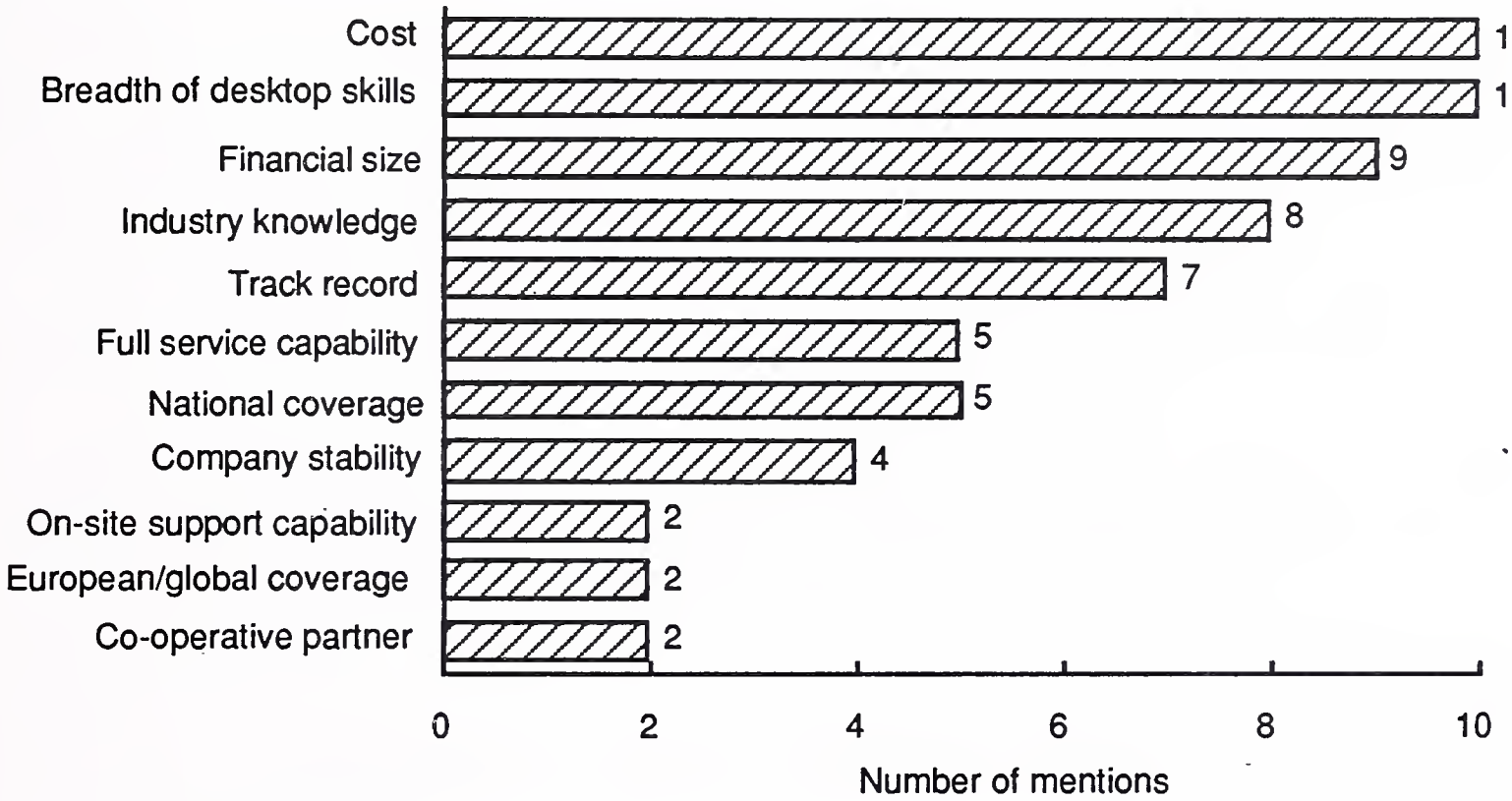
Cost and Breadth of Technical Skills are Key Selection Criteria

Users and IT managers tend to identify significantly different selection criteria in choosing a supplier of desktop services. Since the selection criteria used in any individual purchase of desktop outsourcing services will tend to be influenced by both the CFO and the IT manager, it is important that vendors take both sets of selection criteria into account when marketing their services.

Exhibit V-4 identifies the key selection criteria nominated by IT managers.

Exhibit V-4

Key Vendor Selection Criteria: IT Managers



Sample of 51 IT Managers

Source: INPUT

The selection criteria favoured by IT managers for purchasing desktop services can be broadly classified into four groups:

- Cost
- Technical skills
- Vendor stability
- Geographic coverage.

The cost-competitiveness of the vendor received the highest number of mentions from IT managers. IT managers perceive that desktop services outsourcing is primarily concerned with cost reduction, in a similar way to other forms of outsourcing. While organisations often seek improved user productivity as a key benefit of desktop services outsourcing, they remain unlikely to raise their support costs to attain this goal.

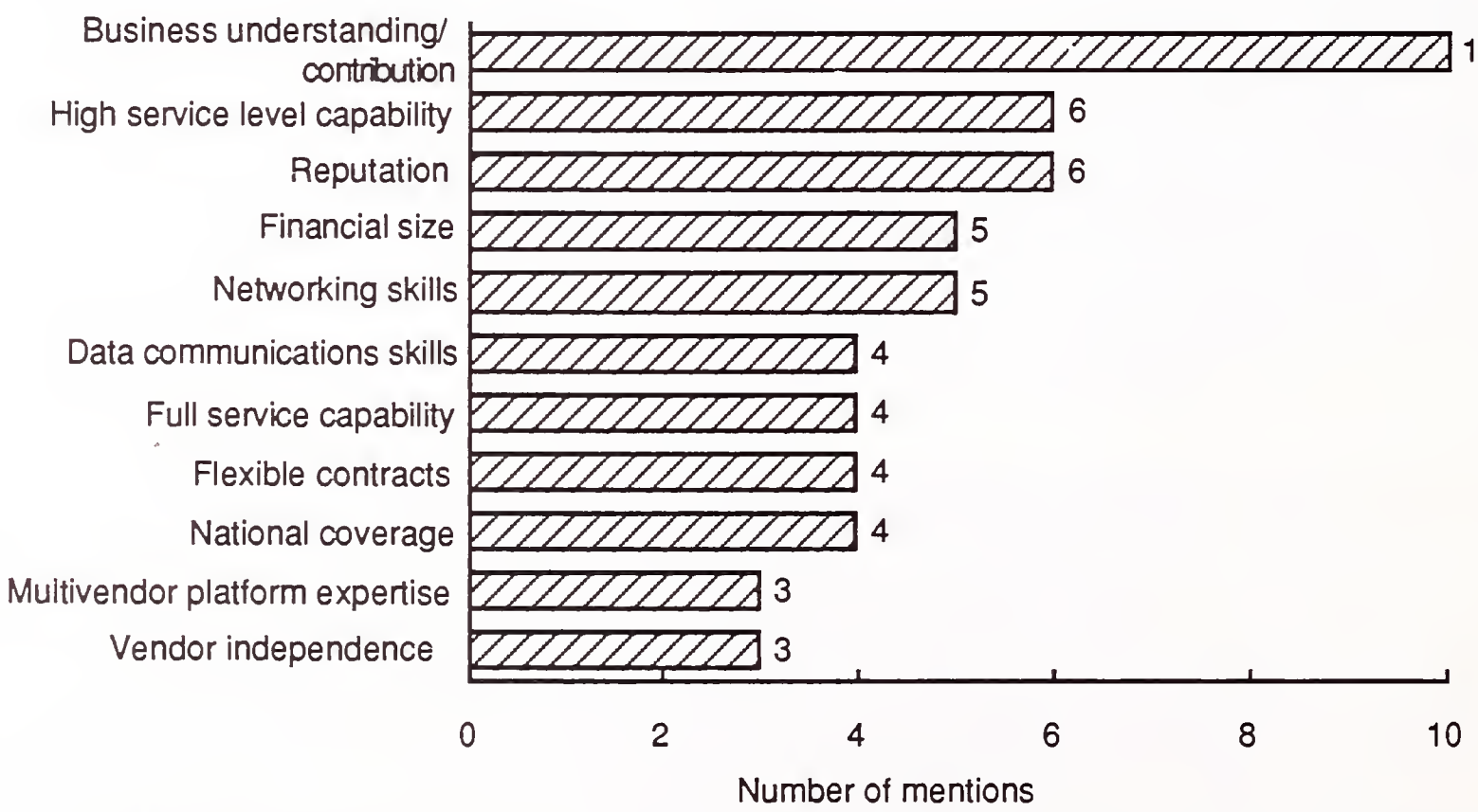
The vendor's comparative level of technical skills is another critical criterion for IT managers. Ideally, IT managers are seeking a vendor with an extensive desktop services portfolio, together with an extensive range of technical skills within each of these service areas.

The vendor's geographic coverage is also an important factor in choice of vendor for desktop services, since clients often require an on-site element of support. IT managers are seeking vendors that can at least match the existing, and projected, geographic spread of their own organisations. In many cases, this implies extensive national coverage by the vendor. However, in other instances, vendors are beginning to seek vendors that can offer European, or even global, support coverage.

While users seek many of the same characteristics in vendors, they also differ significantly in the emphasis placed on a number of criteria. Exhibit V-5 lists the key vendor selection criteria adopted by users.

Exhibit V-5

Key Vendor Selection Criteria: Users



Sample of 39 users.

Source: INPUT

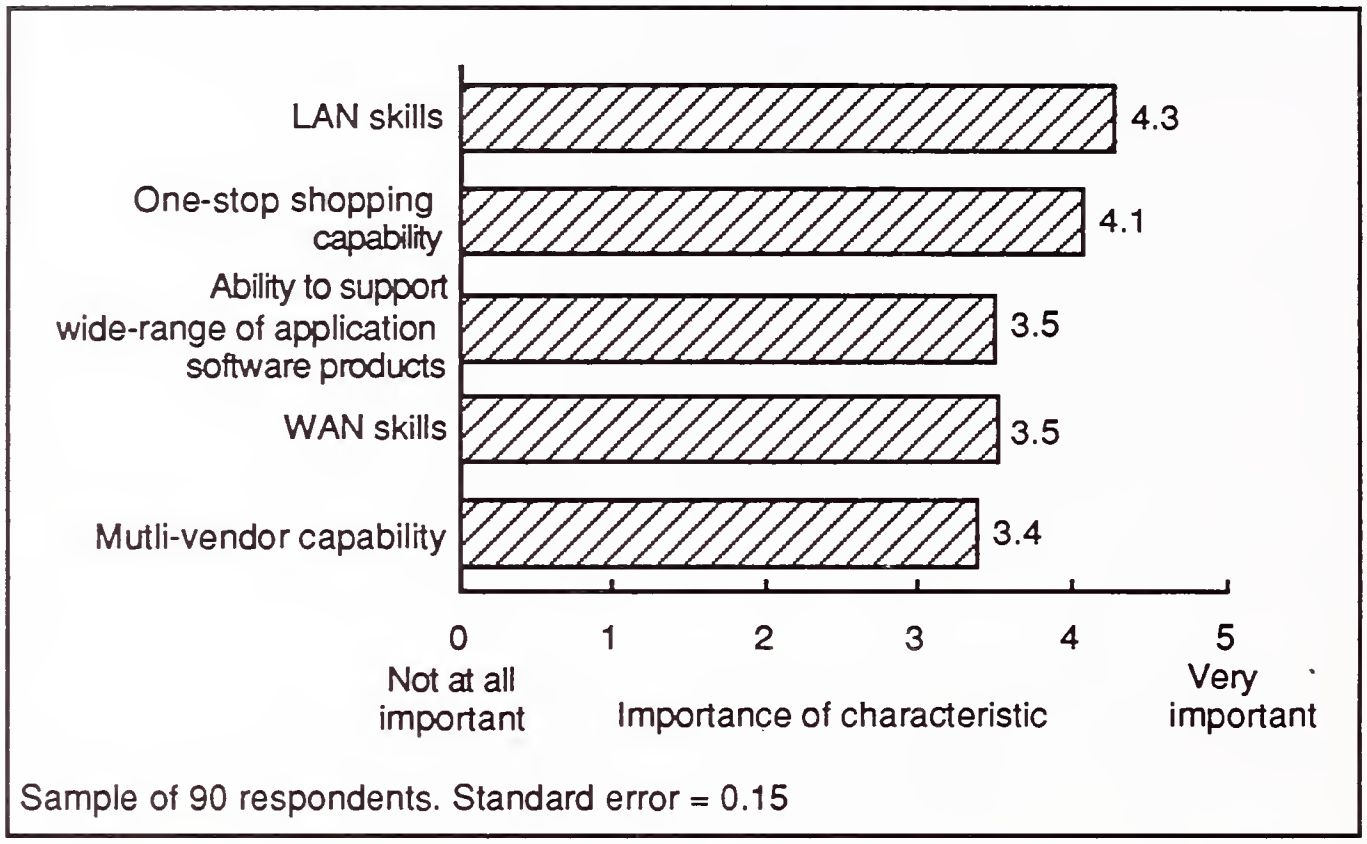
The key differences between the selection criteria adopted by IT managers and those adopted by users are as follows:

- Users appear to place much less emphasis on cost.
- Users place considerable emphasis on business understanding and the contribution that the vendor can make to meeting the organisation's business objectives. IT managers tend to be more concerned with technical competence.
- Many users require a vendor that can offer higher service levels than those they have been accustomed to receive in the past.
- Users place an emphasis on multi-vendor platform expertise, and sometimes stress independence from an individual equipment vendor.
- Users sometimes stress the importance of flexible contracts. By *flexible*, users mean short-term contracts which do not lock them in to a particular vendor or equipment base.

In addition to the criteria identified by the respondents themselves, which were discussed above, respondents were also asked to rate the importance of a number of potential vendor selection criteria. The characteristics that were rated most highly are listed in Exhibit V-6.

Exhibit V-6

Key Vendor Characteristics: Europe



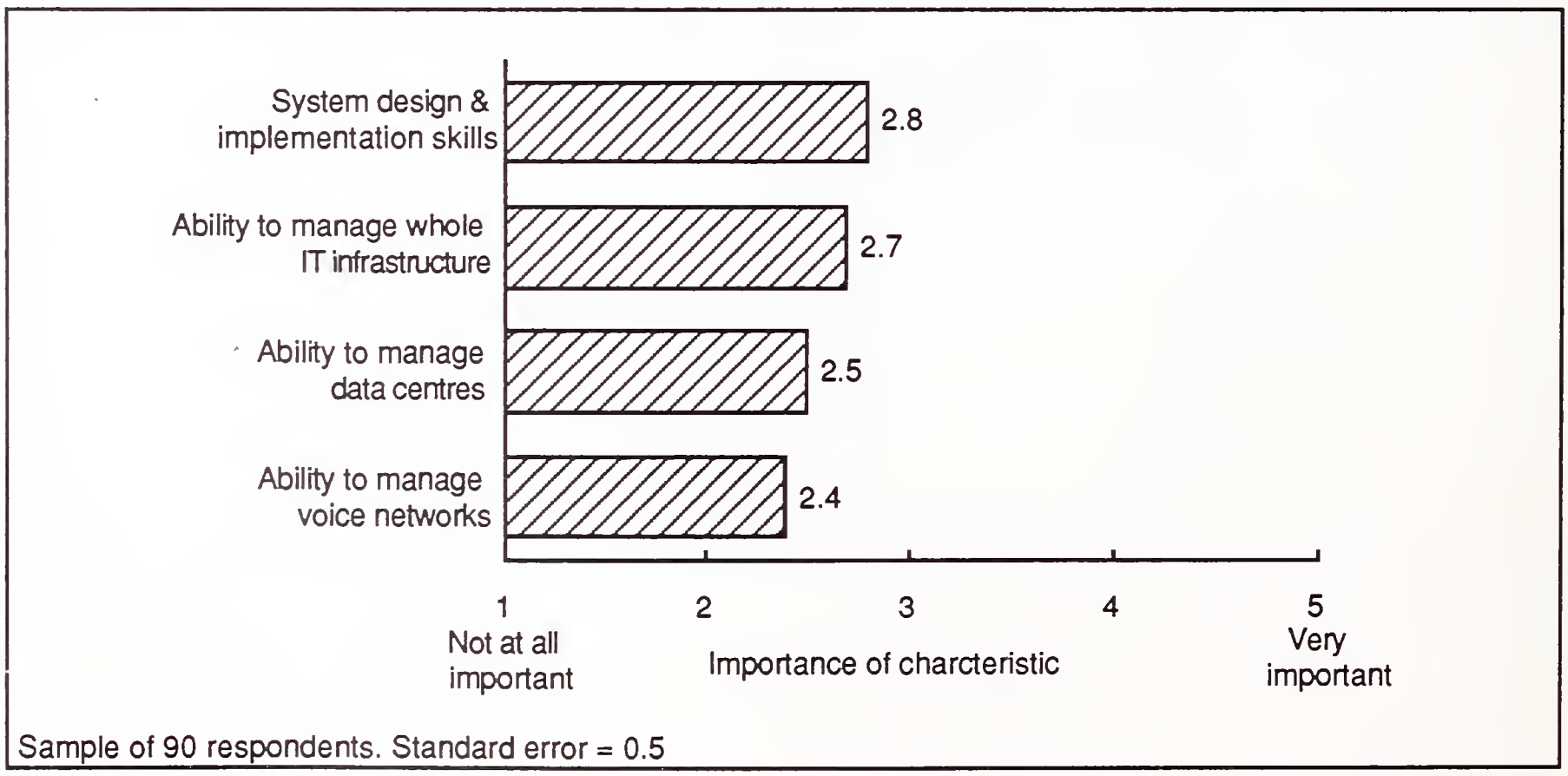
Sample of 90 respondents. Standard error = 0.15

Source: INPUT

Those characteristics that were rated as relatively unimportant overall are listed in Exhibit V-7.

Exhibit V-7

Secondary Vendor Characteristics: Europe



Sample of 90 respondents. Standard error = 0.5

Source: INPUT

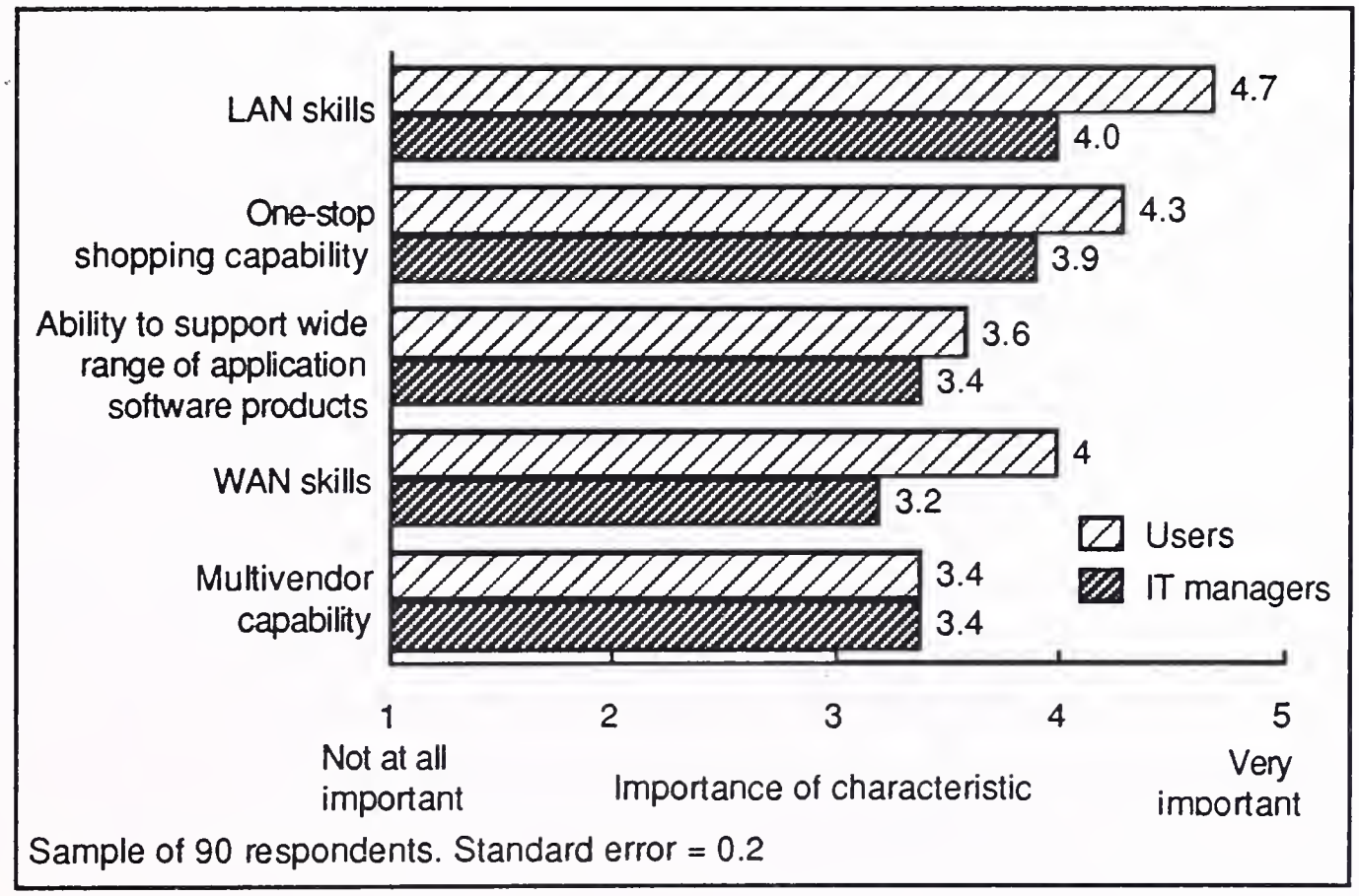
Overall respondents are seeking a vendor that has impressive LAN skills and can provide an extensive distributed systems management service including wide area network data communications skills. However, respondents do not typically appear to be seeking a single vendor who can manage their entire IT infrastructure including mainframe data centres and voice networks. In addition, systems design and development skills also appear to be a low priority for the majority of respondents.

Surprisingly perhaps, users and IT managers are in broad agreement on which vendor characteristics are important and which are relatively unimportant. However, they differ appreciably on the ratings given to individual characteristics.

The attitudes of IT managers and users towards the relatively important vendor characteristics are shown in Exhibit V-8 and their ratings of the less important characteristics are listed in Exhibit V-9.

Exhibit V-8

Key Vendor Characteristics
User vs. IT Manager Perspective

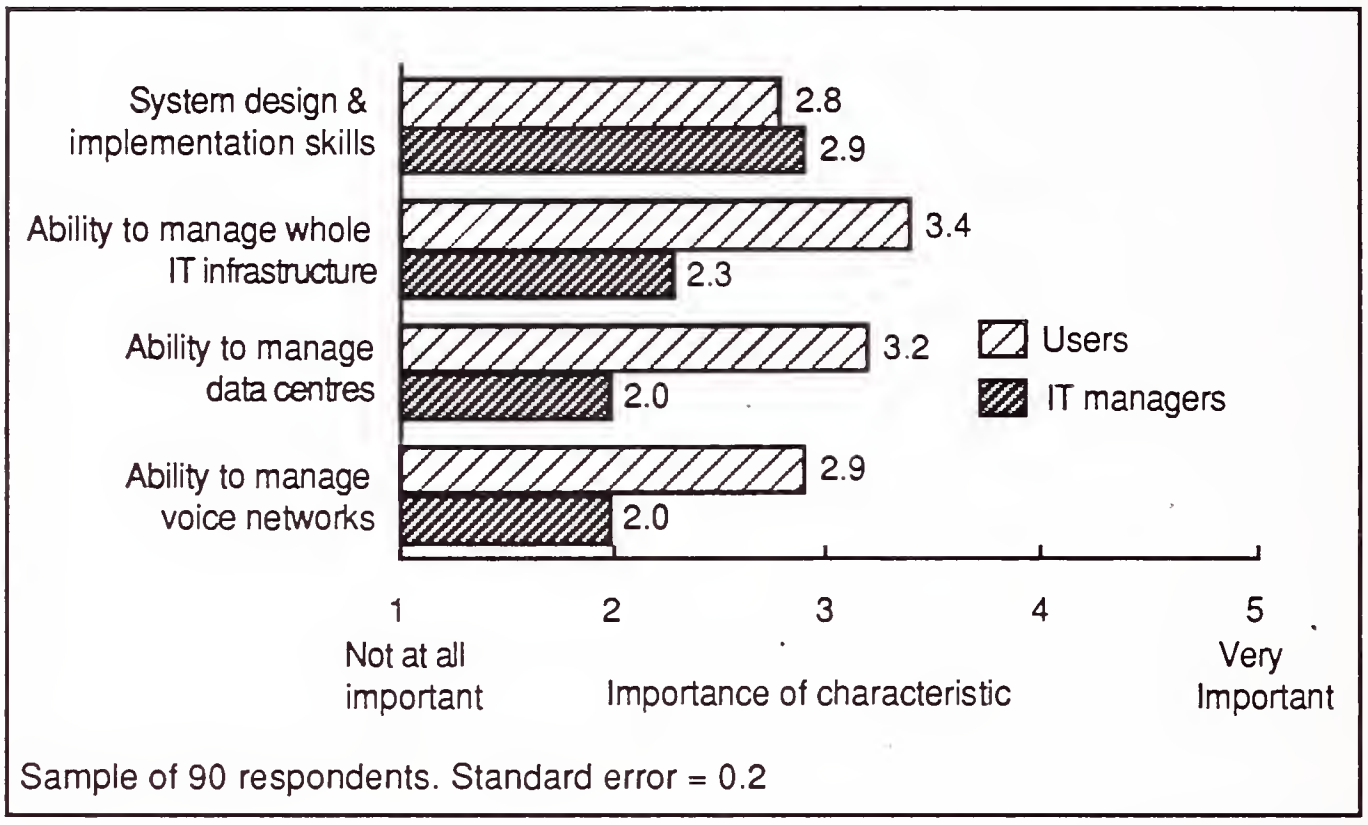


Sample of 90 respondents. Standard error = 0.2

Source: INPUT

Exhibit V-9

Secondary Vendor Characteristics
User vs. IT Manager Perspective



Sample of 90 respondents. Standard error = 0.2

Source: INPUT

IT managers are essentially seeking a single vendor who can manage the whole of the organisation's desktop infrastructure. They typically lack enthusiasm for finding a vendor with the capability to manage the organisation's complete IT infrastructure, including wide area networks, data centres, and voice networks.

Users, on the other hand, exhibit a significantly higher interest in desktop services vendors ability to manage their complete infrastructure. Approximately 75% of users strongly believe that desktop services vendors should possess wide area network skills, and approximately 50% believe the desktop services vendor should have the capability to manage the organisation's entire IT infrastructure., a view shared by less than 20% of IT managers.

Exhibit V-10 lists the ratings given to each vendor characteristic by country.

Exhibit V-10

Vendor Attributes: Rankings by Country

Characteristic	Importance Ranking		
	France	Germany	U.K.
LAN skills	1*	1*	2=*
One-stop shopping capability	2*	2*	1*
Ability to support wide range of application software products	4	4	2=*
WAN skills	3*	3*	5=
Multi-vendor capability	5	5	4*
System design & implementation skills	7	6	5=
Ability to mange whole IT infrastructure	6	7=	7=
Ability to manage data centres	8	9	7=
Ability to mange voice networks	9	7=	9

*Note: * = Scores of 3.7 or higher* *Source: INPUT*

Sample of 90 respondents.

Overall, there is a high level of consistency between the rankings awarded in each country, particularly between those in France and Germany. Respondents in the U.K. attached less importance to wide area network skills, but exhibited a higher level of interest in a vendor's multi-vendor support capability and ability to support a wide range of application software products. The key criteria in each country are marked with an asterisk.

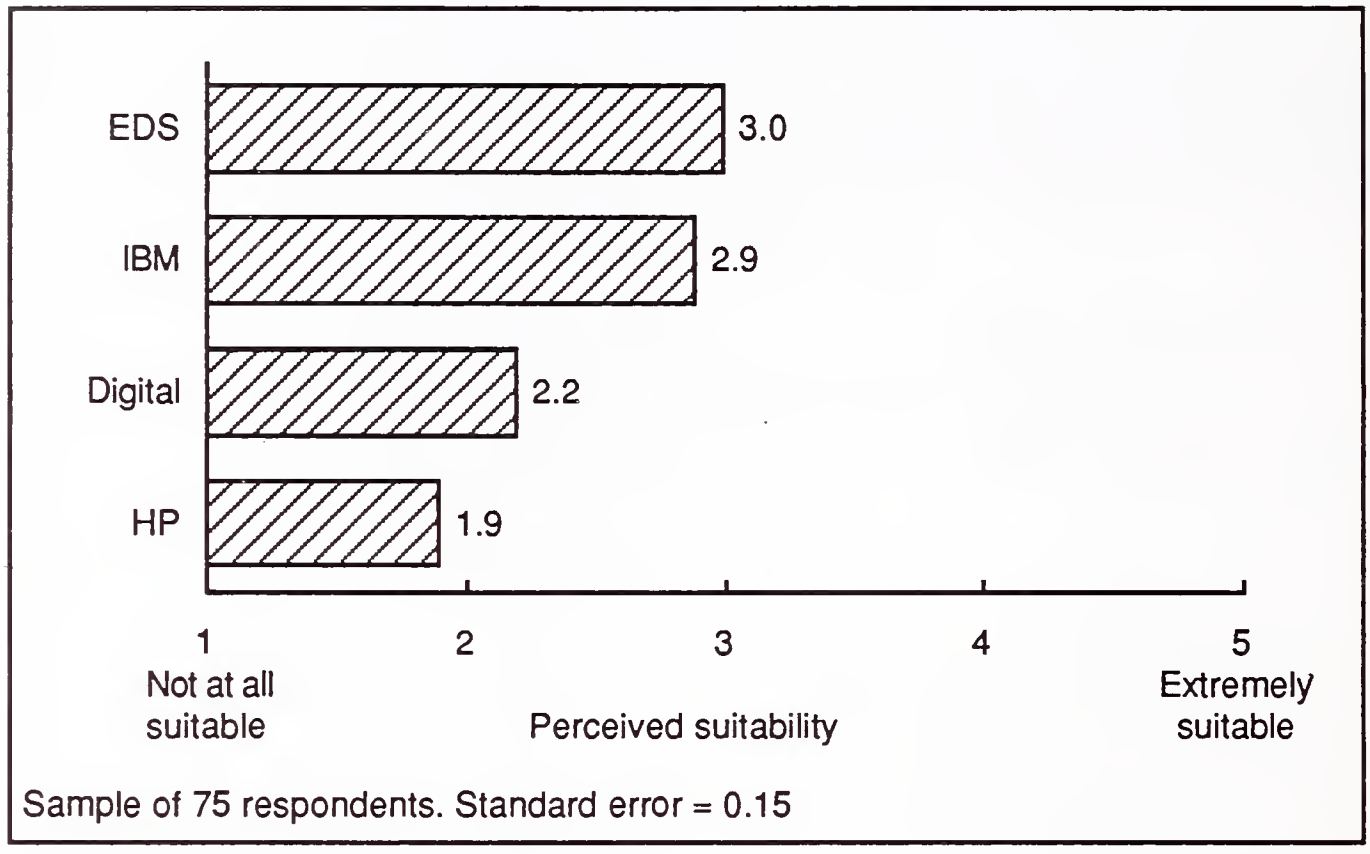
C
EDS Has Comparatively High Profile

In addition to identifying key vendor selection criteria, respondents were asked to rate the suitability of each of a number of named vendors as potential suppliers of desktop services.

Differing lists of vendors were used in country. However four vendors were common to each list. The overall ratings these vendors received from respondents across Europe are listed in Exhibit V-11.

Exhibit V-11

Perceived Vendor Suitability: Europe



Sample of 75 respondents. Standard error = 0.15

Source: INPUT

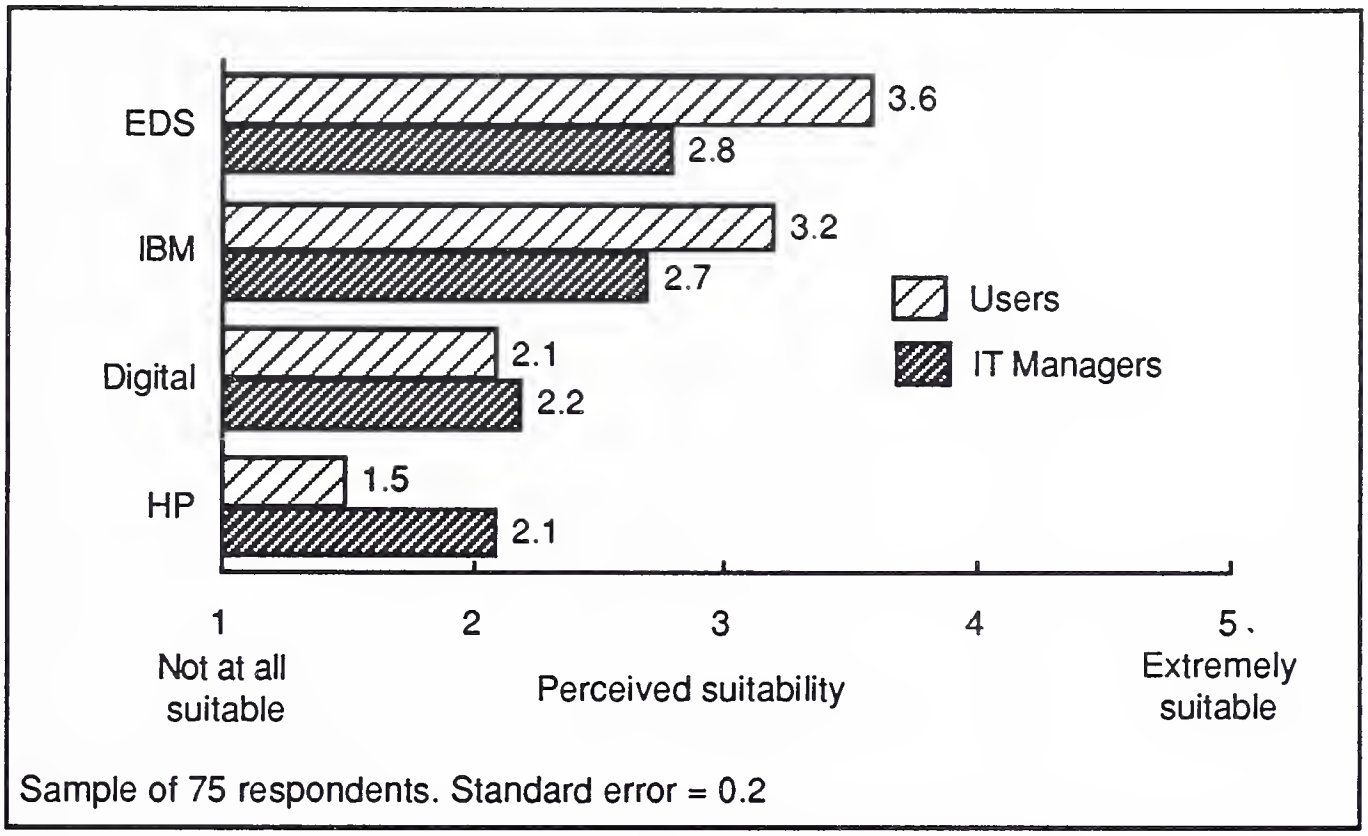
The ratings shown above appear to reflect vendors overall level of awareness in the outsourcing market, rather than being a specific judgement on the vendor's desktop services outsourcing capability. While no individual vendor receives a particularly high rating, vendors with a wider outsourcing capability including data centre management, such as EDS and IBM, currently receive higher ratings than Digital and Hewlett-Packard. Digital and Hewlett-Packard lack mainframe datacentre outsourcing capability and are strongly targeting the management of client/server infrastructures, including a major emphasis on LAN management and desktop services outsourcing.

These scores are a reflection of the immaturity of the desktop services outsourcing market. At present, no vendor is strongly recognised as a desktop services specialist. This creates an opportunity for individual vendors to establish themselves as leading players in this market.

Exhibit V-12 analyses perceived vendor suitability by respondent type.

Exhibit V-12

Perceived Vendor Suitability
User vs. IT Manager Perspective



Sample of 75 respondents. Standard error = 0.2

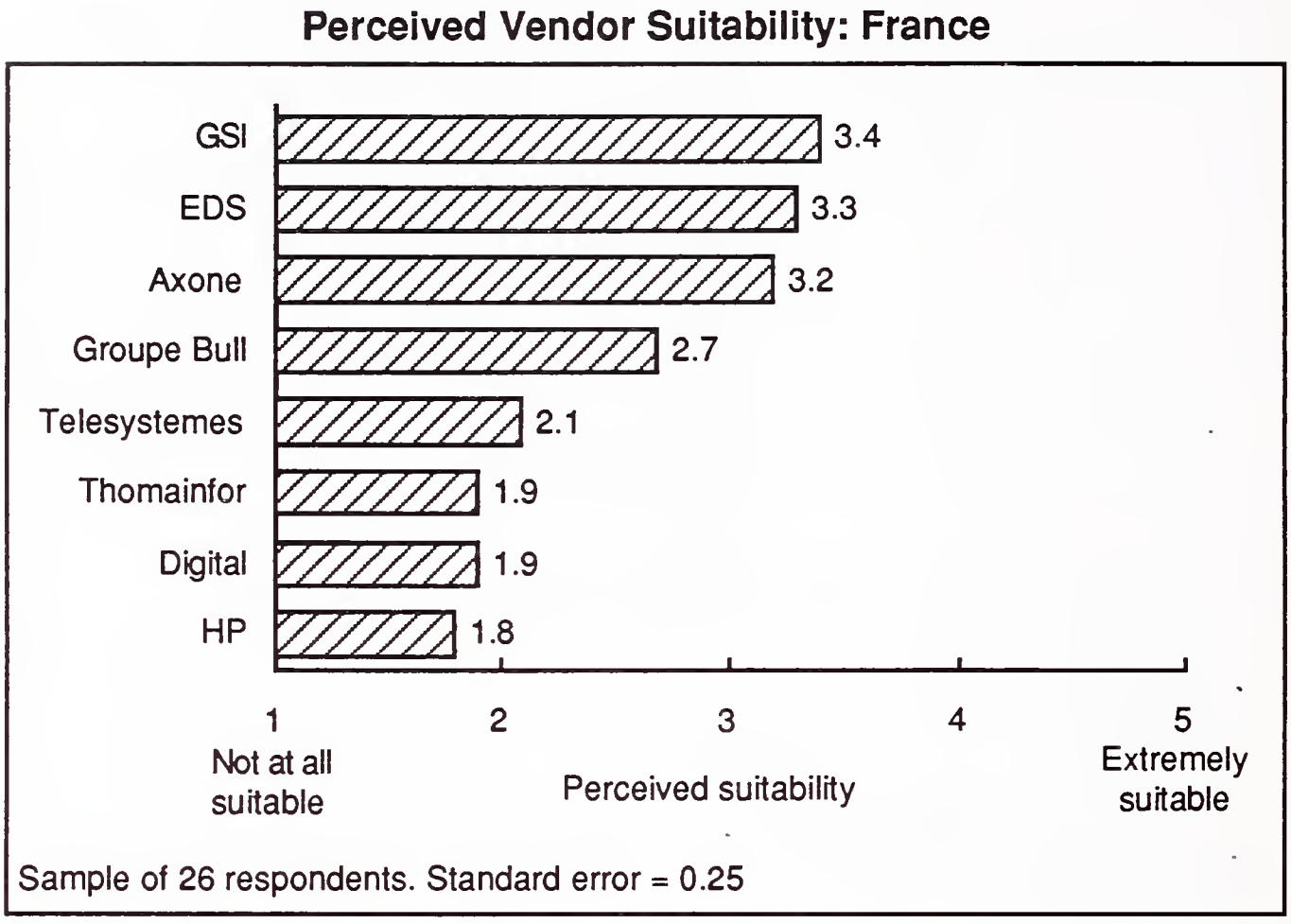
Source: INPUT

Users and IT managers rank these four vendors identically in terms of their suitability as desktop services suppliers. However, there are differences in their ratings, with users showing comparatively higher levels of enthusiasm than IT managers for EDS' and IBM's capabilities. Overall, over 50% of users exhibit strong enthusiasm for EDS' desktop service capabilities compared to 20% of IT managers. The corresponding proportions for IBM are 35% and 25%.

Similarly, IT managers give higher ratings to Digital and Hewlett-Packard than do users, possibly reflecting these vendors more technical image in the IT services marketplace. In particular, there appears to be low awareness of Hewlett-Packard's recent positioning as a supplier of desktop outsourcing services. Only 4% of users and 8% of IT managers regarded HP as a credible supplier of desktop services.

Exhibits V-13, V-14, and V-15 indicate the perceived suitability of each of a number of potential outsourced desktop services vendors for France, Germany, and the U.K..

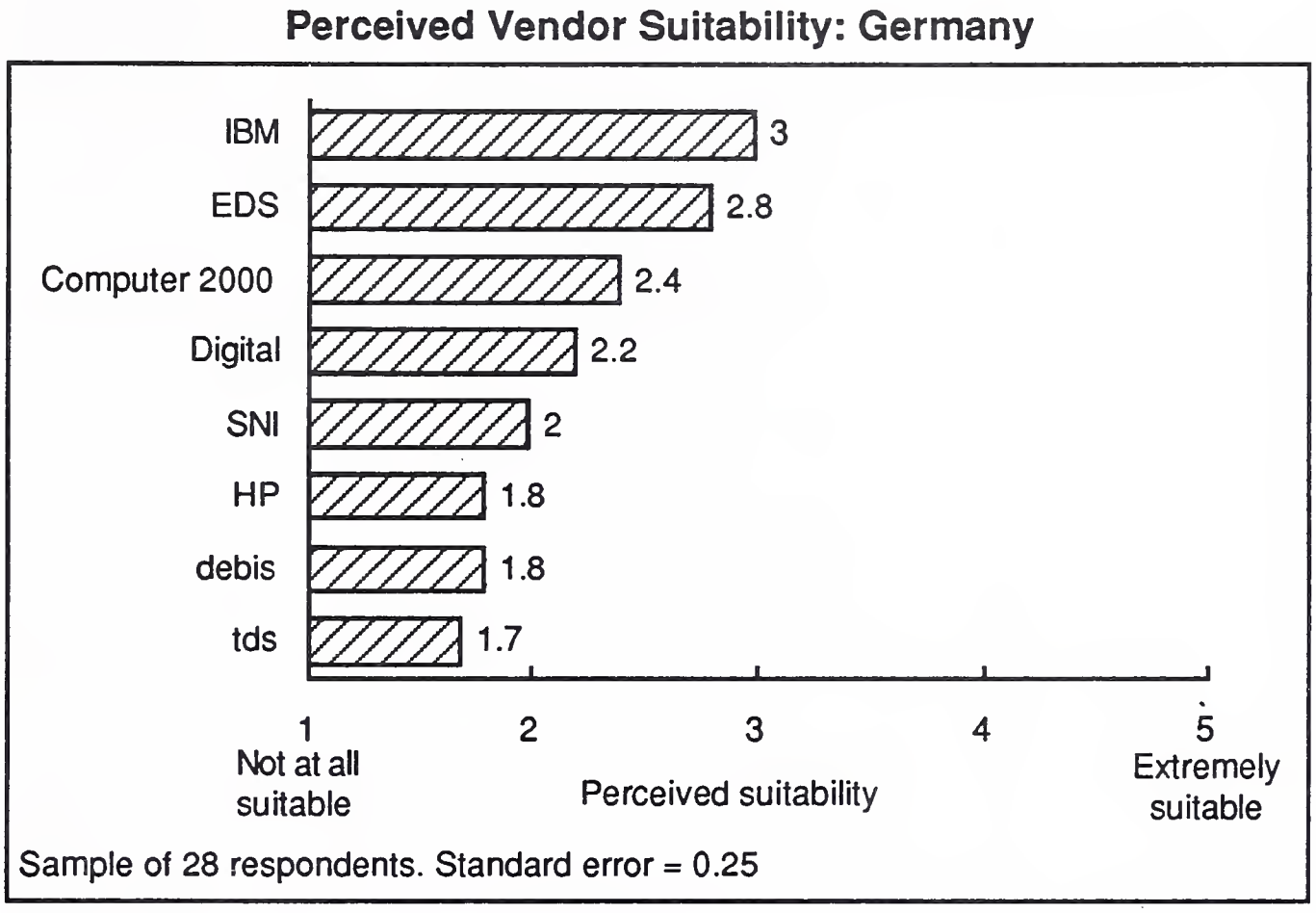
Exhibit V-13



Source: INPUT

In France, the rankings once again appear to reflect the approximate level of activity, and hence awareness, of each vendor in the overall outsourcing market, though GSI, EDS, and Axone all have offerings for the desktop services market. The vendors who specialise in the client/server and LAN management outsourcing markets such as Digital and HP have very low levels of awareness of their capabilities.

Exhibit V-14

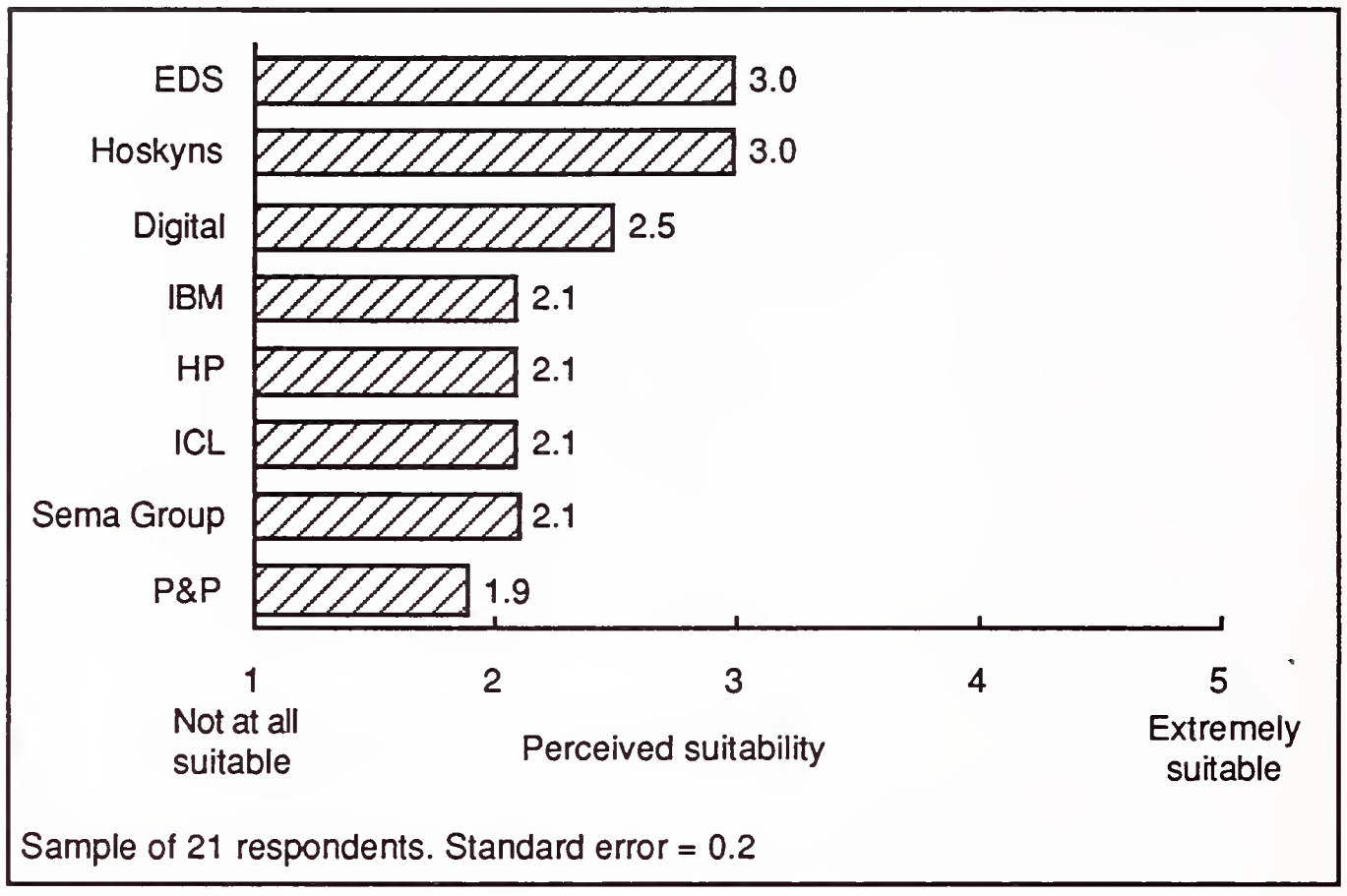


Source: INPUT

In Germany the leading outsourcing vendors - IBM and EDS - exhibit the highest levels of awareness of their capabilities. Surprisingly, debis Systemhaus, an organisation that was one of the early market leaders in the German outsourcing market is regarded as having a very low level of desktop services outsourcing capability.

Overall, the services capability of the leading personal computer dealers tends to be regarded with suspicion in Europe. However, Computer 2000, while not receiving a high rating from respondents was ranked third in Germany behind IBM and EDS, and ahead of vendors such as Digital and HP. At present, Digital is maintaining a consistent lead in awareness over HP across each of France, Germany, and the U.K..

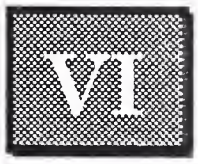
Exhibit V-15



Source: INPUT

In the U.K., the two vendors perceived to be most suitable are EDS and Hoskyns. Both of these organisations currently have very high profiles in the outsourcing market in the U.K., and have announced desktop services offerings in the last year. IBM and Sema Group appear to have much lower levels of awareness of their capabilities.

The lowest rating in the U.K. was awarded to P&P. P&P was one of the early leaders in the desktop services market in the U.K. and has, in the past, won a number of major desktop services contracts, such as those with ICI and Unilever. However, while the major personal computer dealers have won many of the desktop services outsourcing contracts awarded in the U.K., they continue to be regarded with suspicion by IT managers who view them primarily suppliers of products rather than suppliers of services.



Vendors Announce Desktop Services Offerings

A Hewlett-Packard introduces Selective Outsourcing

In 1986, Hewlett-Packard(HP) created Customer Network Centres in Atlanta, Singapore and Bristol, and in the following year, introduced Network Monitoring Services. However, it was not until 1993 that HP formed a division—Operations Services Division—dedicated to outsourcing solutions. This year (1994), HP has formally announced its outsourcing services portfolio in Europe.

HP calls its approach to outsourcing: *Selective Outsourcing* and defines it as "HP's approach to helping customers balance internal and external resources and expertise to optimise the management of client/server environments."

HP's Operations Services Division is a global business unit that is:

- Focusing on client/server outsourcing
- Targeting Chief Financial Officers (CFOs) and Chief Information Officers (CIOs)
- Supported by services from other divisions within HP.

1. Focusing on Client/Server Computing

Traditionally, the mainframe datacentre environment has dominated the outsourcing market. However, many organisations that have begun to adopt client/server based infrastructure are discovering that in many respects this is a more demanding environment in terms of day-to-day management, because of:

- Multi-vendor equipment, software products and communications devices
- Extensive geographic spread of equipment and users
- Need to facilitate users' IT usage while maintaining high levels of interpretability
- Lack of a coherent set of systems management tools for this environment.

In response to these issues, HP has developed operational support services for:

- HP and multi-vendor open systems environments
- Organisations transitioning to open systems
- HP 3000 MPE systems
- Distributed PC environments

HP is not positioned to target large outsourcing contracts where the primary emphasis is the management of mainframe datacentres. However, HP will work with partners with mainframe outsourcing capability to assist organisations seeking to make the transition from a mainframe environment to a client/server environment.

HP's own *Operations Support Services* portfolio consists of the following components:

- Systems management
- Network management
- Desktop management
- Business Protection Services

HP's systems management services are aimed at the HP installed base and also at multi-vendor UNIX environments. For example, HP has experience in managing UNIX equipment from Sun, IBM and Digital.

HP's desktop management service consists of the following optional service elements:

- Help-desk
- Education services
- Procurement/needs analysis
- Asset management
- LAN and server management
- Change management
- Data protection
- Technical Support.

2. Targeting CIOs and CFOs

One of the major issues for vendors such as HP is that outsourcing is frequently viewed as a hostile activity by CIOs in Europe. Some vendors can afford to risk alienation of CIOs by bypassing them and targeting senior board members.

However, this is not an approach that HP considers it can afford to take. Accordingly HP is endeavouring to persuade CIOs, in conjunction with CFOs where necessary, that they need to selectively balance their use of internal and external resources. This approach enables the client to select a sub-set of outsourcing services that address their immediate concerns without feeling threatened by a take-over bid from the outsourcing vendor.

In practice, many of the existing clients of HP's systems management services appear to have been motivated by a need to reduce operational costs. On the other hand, clients of HP's desktop management services appear to be typically motivated by the desire to ensure consistent user desktop support levels.

Examples of HP's European systems management contracts are listed in Exhibit VI-1.

Exhibit VI-1

Examples of System Management Contracts

Client	Problem	Services Provided
U.K. Insurance Company	IT under cost pressure	Systems management (24 hour x 7 day) some systems moved to HP sites
Petroleum Company	Long-term support for ageing application & infrastructure	Systems management Help desk
European Airline	Cost-effective 24-hour system management for key application	Overnight(only) systems management

Source: HP

In addition, HP has assisted a multinational ceramics company in making the transition from its previous batch systems to SAP R/3. HP assisted in the development and implementation of the new client/server environment, and now provides systems management and network management of the client/server infrastructure.

Examples of HP's desktop management contracts are listed in Exhibit VI-2.

HP's European outsourcing contracts typically average three years in duration, and have an average value of approximately $500K.

The pricing mechanism used by HP varies from contract to contract. At present, the majority of deals are conducted on a cost plus basis, but HP expects value-based pricing to grow in importance.

Exhibit VI-2

Examples of Desktop Management Contracts

Client	Problem	Services Provided
Pharmaceutical Company	Inconsistent desktop service levels. Headcount restraints on IT department	Help-desk services. Service level metrics implemented. On- site installations.
U.K. Investment Bank	Inconsistent desktop service levels in critical user environment	On-site help-desk. Off-site 2nd line support. Service level management
Telecommunications manufacturer	Cash flow and service levels	Desktop management services Application help-desk Finance for LAN environment Equipment procurement Managed service levels

Source: HP

3. Supported by Other HP Divisions

HP's Operations Services Division reports into HP's World-wide Customer Support Operations organisation. However, the Operations Services Division utilises support from elsewhere within HP. The principal organisational units involved in HP's selective outsourcing services are:

- Corporate Network Services
- Information Technology centres
- Operations Services Centres
- World-wide Response Centre Network
- Systems Support Organisation
- Professional Services Organisation
- Finance and Remarketing Organisation

The HP Response Centre and Operations Centre Network employs approximately 2,300 personnel world-wide, across 32 locations. Four of the network's ten hubs are sited in Europe at:

- Ratigen, Germany
- Bracknell, U.K.

- Les Ulis, France
- Milan, Italy

The Information Technology Centres are responsible for the operation and management of HP's internal IT services.

Access to HP's Finance and Remarketing Organisation is important since many organisations want to avoid the purchase of assets. In addition, introducing technology refreshment into the outsourcing contract assists in ensuring version control and in preventing technology obsolescence occurring at the desktop.

World-wide, HP estimates that its financing division is involved in approximately fifty per cent of outsourcing contracts. However this proportion may be lower for the European contract base.

Personnel from the Professional Services Organisation assist in providing technical consultancy skills such as the design of client/server infrastructures and in delivering technical training.

B

ITnet—Targeting Distributed Systems Outsourcing in Local Government

In the recent past, a number of large company IS departments have begun to offer their services externally. Many of these organizations have viewed the outsourcing market as a major new opportunity.

Not all of these organizations have achieved the success they sought. Even though the European outsourcing market is growing rapidly, it remains very competitive.

ITnet, however, has achieved an average annual growth rate of 28% since its formation in 1987. Much of this growth has been derived from the organization's outsourcing activities. ITnet's revenue growth over the last six years is shown in Exhibit VI-3.

Only £1 m of the company's 1993 revenues were derived from the project service sector, the remainder coming from outsourcing services.

Exhibit VI-3

ITnet Revenues, 1988-1993

Year	Revenues (£m)	Growth (%)
1988	13	18
1989	19.5	50
1990	26.6	36
1991	30.3	14
1992	34.3	13
1993	44	28

Source: ITnet

The bulk of ITnet's outsourcing revenues in 1993 were derived from platform operations.

However ITnet is developing its services to target major new growth opportunities including:

- Distributed systems outsourcing
- Managed services in U.K. local government.

In addition, ITnet may develop partnerships with other outsourcing vendors to increase its ability to meet client need for international outsourcing services.

1. Developing Distributed Systems Outsourcing Services

A breakdown of ITnet's outsourcing revenues by service type is provided in Exhibit VI-4, and a breakdown of number of customers by service type in Exhibit VI-5

Exhibit VI-4

ITnet Outsourcing Revenue Breakdown by Service Type, 1993

Service	Revenues £m
Platform Operations	28
Desktop Services	3.5
Application management	9
Business Operations (Managed Services)	2.5
Total	43

Source: ITnet

Exhibit VI-5

Number of Customers by Service Type ITnet, January 1994

Service Type	Numbers of Clients
Datacentre services Applications management	21
Distributed systems services	5
Managed services	17
Total	29

Source: ITnet

The majority of ITnet's outsourcing clients use the company's platform operations and application management services. New platform operations contracts were signed with the following clients in 1993:

- The Cheese Company (formerly Express Foods Ltd)
- Hertfordshire County Council
- Prudential Assurance Co. Ltd
- Premier Brands

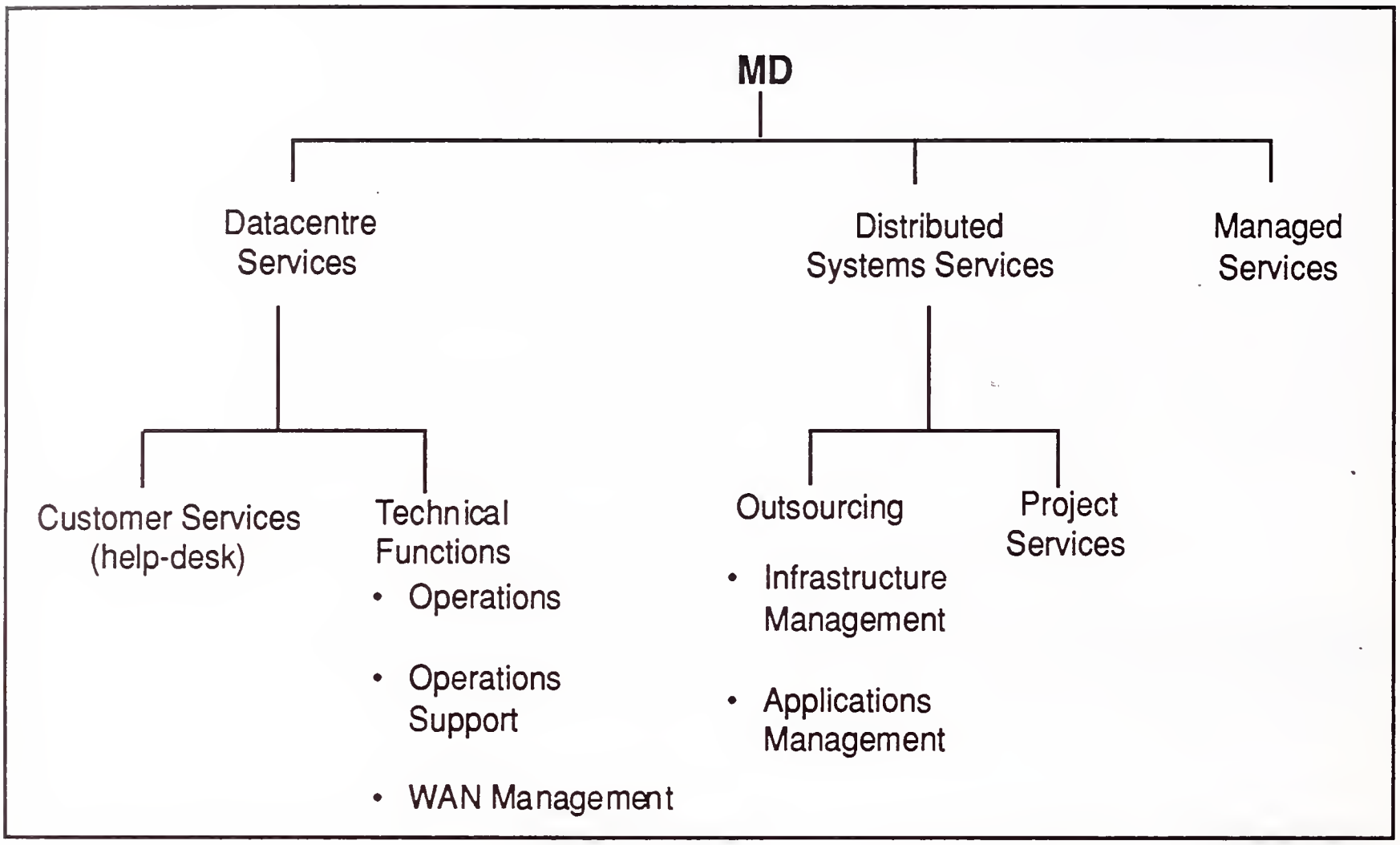
- Sterling Health
- Westminster City Council

ITnet has a well-established application management capability and lies in fifth place in the U.K. application management market behind Hoskyns, FI Group, Sema Group, and Andersen Consulting. Overall ITnet is finding that application management is becoming an increasingly important component of outsourcing contracts, as organizations focus on migrating from their legacy systems to client/server architectures.

ITnet has had an embryonic desktop services capability for a number of years. However, the company is now placing much more emphasis on the need to migrate clients between IT architectures and is strengthening its distributed systems outsourcing capability by creating an organizational structure that places greater emphasis on distributed systems services. The new structure is shown in Exhibit VI-6.

Exhibit VI-6

ITnet Organization Structure, 1994



Source: INPUT

This re-organization will divide ITnet's operational capabilities into three principal areas: datacentre services, distributed systems services, and managed services.

Initially, ITnet may develop separate help-desks for each of datacentre and distributed systems support, though these help-desks are likely to merge in the long-term. ITnet is currently enhancing its ability to remotely manage equipment connected to LANs through its three regional support centres based in Birmingham, Hertfordshire, and Westminster (London).

Examples of clients for whom ITnet manages distributed systems environments include Hertfordshire County Council and Westminster City Council.

2. Targeting Managed Services in Local Government

Exhibit VI-7 provides a breakdown of ITnet's revenues by industry sector. At present, if ITnet's revenues from its parent Cadbury Schweppes are excluded approximately 75% of the company's outsourcing revenues are derived from the public sector.

Exhibit VI-7

ITnet Revenues by Sector, 1993

Sector	Revenues (£m)
Local Government	22.5
Commercial	21.5
• Cadbury Schweppes	(15.0)
• Other	(6.5)
Total	44

Source: INPUT

ITnet does not have a background in sales to central government and so is tending to focus on local government and former local government entities such as schools and colleges that now need to manage their own budgets. ITnet has a number of specialist applications designed for use by these institutions.

Itnet perceives that in order to maintain its market share in local government, the company will need to maintain growth of 25% per annum.

While much of ITnet's growth is expected to come from increased IT outsourcing activity as a result of the implementation of Compulsory Competitive Tendering, ITnet is also developing its capability to provide *managed services* to local government. Managed Services is the term used within U.K. local government for business operations. ITnet already has a number of managed services clients including Hertfordshire County Council, Westminster City Council, and the London Borough of Brent. In addition, ITnet has a number of schools and colleges that utilise its payroll managed service.

At present, ITnet is concentrating on managed financial services covering areas such as payroll, pensions administration,

exchequer services. ITnet has recently introduced revenue collection services.

At present ITnet does not offer business operations services to the commercial sector but may enter this market when once business operations becomes well-established there.

However, ITnet is aiming to increase its revenues in the commercial sector substantially. ITnet doubled its non-Cadbury Schweppes revenues in 1993, and intends to grow its commercial sector revenues significantly in 1994. ITnet will be principally targeting migration services for medium to large organizations i.e., those organizations which will yield contracts worth £1 - 10 million per annum.

While recognizing the importance of price in the decision process, ITnet perceives that its culture will assist it in winning new business.

Cadbury Schweppes has a philanthropic tradition, and ITnet's culture makes it comparatively sensitive to human resources issues. This is a desirable attribute in negotiating contracts with the public sector, but maybe viewed as less important by some organizations in the commercial sector.

In addition, ITnet's customer service organization has achieved BS5750/TickIT certification and, in 1993, the company won Computing magazine's "Best Outsourcing Company Award for Excellence".

3. Developing International Partnerships

ITnet does not have any operations capability outside the U.K.. However, the company is potentially interested in establishing partnerships with culturally compatible outsourcing vendors to facilitate access to multinational outsourcing contracts.

For example in 1993, Comdisco was awarded a world-wide outsourcing contract by Sterling Health. Lacking any U.K. operations capability, Comdisco subcontracted the U.K. operations to ITnet.

As organizations increasingly outsource on a multinational basis, ITnet would like to participate in this market by establishing suitable partnerships.

C

SHL Systemhouse Aims to be Global Leader in Transformational Outsourcing

During the last two years, EDS and CSC have considerably increased their presence in the European outsourcing market. Other North American professional services vendors are now aiming to increase their penetration in the outsourcing market here.

For example, although SHL Systemhouse is an organization with annual revenues exceeding $1 billion, it has a relatively low profile in Europe. SHL Systemhouse now intends to increase its presence in Europe.

The company will aim to grow by:

- Establishing its transformational outsourcing services
- Focusing on certain strategic market sectors.
- Acquisition

1. Establishing Transformational Outsourcing Services

Prior to 1993, SHL Systemhouse's outsourcing contracts were predominantly mainframe-based platform operations contracts. However in recent contracts, there has been increasing emphasis on distributed systems outsourcing. SHL Systemhouse's current focus is to take advantage of this trend and become "the global leader in the transformational outsourcing market".

SHL defines *transformational outsourcing* as assisting clients in migrating their applications to the more flexible and cost-effective client/server architecture. The service encompasses the operation of a client's mainframe applications, migration to a client/server platform and the operation of that distributed environment. To avoid clients becoming locked-in to paying for services on their existing mainframes, SHL offers a guaranteed decline in charges for mainframe use as applications are migrated onto client/server architecture. SHL Systemhouse offers a complete transformation service including:

- Datacentre operations

- Legacy system application support
- Client/server architecture planning
- Systems integration services
- Application development and implementation
- Help desk
- Telecommunications services
- Business recovery services
- Networked systems management

SHL Systemhouse will either provide networked systems management or assist clients in establishing their own network operations centre to provide in-house distributed systems management. SHL Systemhouse currently has seven Computing and Network Services centres. Six of these are based in North America and one in London. The company has assembled its own unique set of systems management tools for the management of distributed systems, based around Hewlett Packard's OpenView.

Within its distributed systems management service, SHL offers six core service components and three optional service components. The core service components are:

- Help desk
- Fault management
- Asset and configuration management
- Accounting management
- Performance management
- Security management.

The optional service components are:

- Software distribution
- Data recovery

- Business recovery.

SHL Systemhouse believes that the help desk should be a single point of contact to all support services covering:

- Call logging
- Remote LAN Management
- Field engineering
- On-site support
- Client-specific help desks.

SHL Systemhouse is targeting organizations with more than 500 personal computers attached to LANs, that are implementing LAN-based mission critical applications.

SHL Systemhouse intends to offer end-to end service delivery. The company provides technology deployment, education and training, systems integration, and consultancy services in addition to its systems management services. A breakdown of the company's European revenues by line of business is provided in Exhibit VI-8.

Exhibit VI-8

Revenue Breakdown by Line of Business, Europe

Line of Business	1993 Revenues $M
Technology Development	100
Training & Education	25
Systems Management	25
Systems Integration & Consultancy	15
Total	165

Source: SHL Systemhouse

The organisation of these service lines in Europe is shown in Exhibit VI-9.

In addition, the company's European operations have access to the global Strategic Technology Units. These units specialize in client technology, server technology, communications, and systems development environments. SHL Systemhouse has developed its own client/server development methodology called SHL Transform. SHL Transform is workstation-based and object-oriented, using hypertext, hypermedia and video. SHL Systemhouse also has expertise in full text searching and imaging technology.

In the future, SHL Systemhouse expects the basis of pricing for its services to change from cost-based pricing to a fee per workstation which includes all aspects of application provision and support services. In other instances, clients will pay not for the cost of system implementation and support, but per business transaction as the system is used.

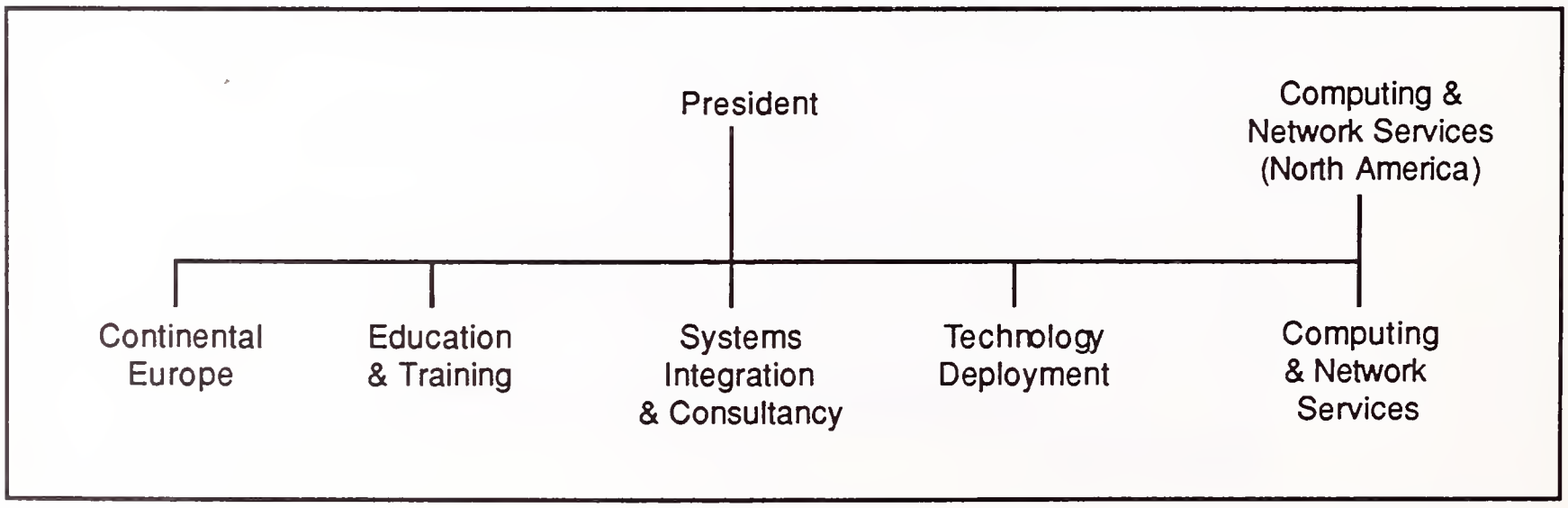
2. Focusing on Postal Authorities and Banking & Finance Sectors

Worldwide, SHL Systemhouse focuses on three key sectors: postal authorities, telecommunications, and oil and gas. The oil and gas sector is particularly important to SHL Systemhouse in Latin America.

In Europe, SHL Systemhouse also emphasises its experience in the postal services sector. The company played a major role in assisting the U.S. postal service to establish and manage its client/server architecture.

Exhibit VI-9

SHL Systemhouse Europe



Source: INPUT

Exhibit VI-10

Examples of Outsourcing Contacts

Client	Scope of Service	Value (£)
Royal Bank of Canada	Platform Operations Applications maintenance & development	15
Westpac Banking Corporation	Platform Operations Technical Support	3.5
RAC	Outsourcing	3
CIBC Mortgages	Platform Operations Technical Support	2
ABN Amro Bank N.V.	Platform Operations Technical Support	1.2
European Postal Organization	Networked Systems Management	

Source: INPUT

SHL Systemhouse already has a major contract with one European postal authority to assist them in managing their distributed environment. This infrastructure consists of approximately 800 Novell servers, 200 UNIX servers, and 3,500 workstations spread over 700 locations.

In the U.K., SHL Systemhouse also has expertise in the banking & finance sector following its acquisition of AST. Examples of SHL Systemhouse's European outsourcing contracts are listed in Exhibit 3.

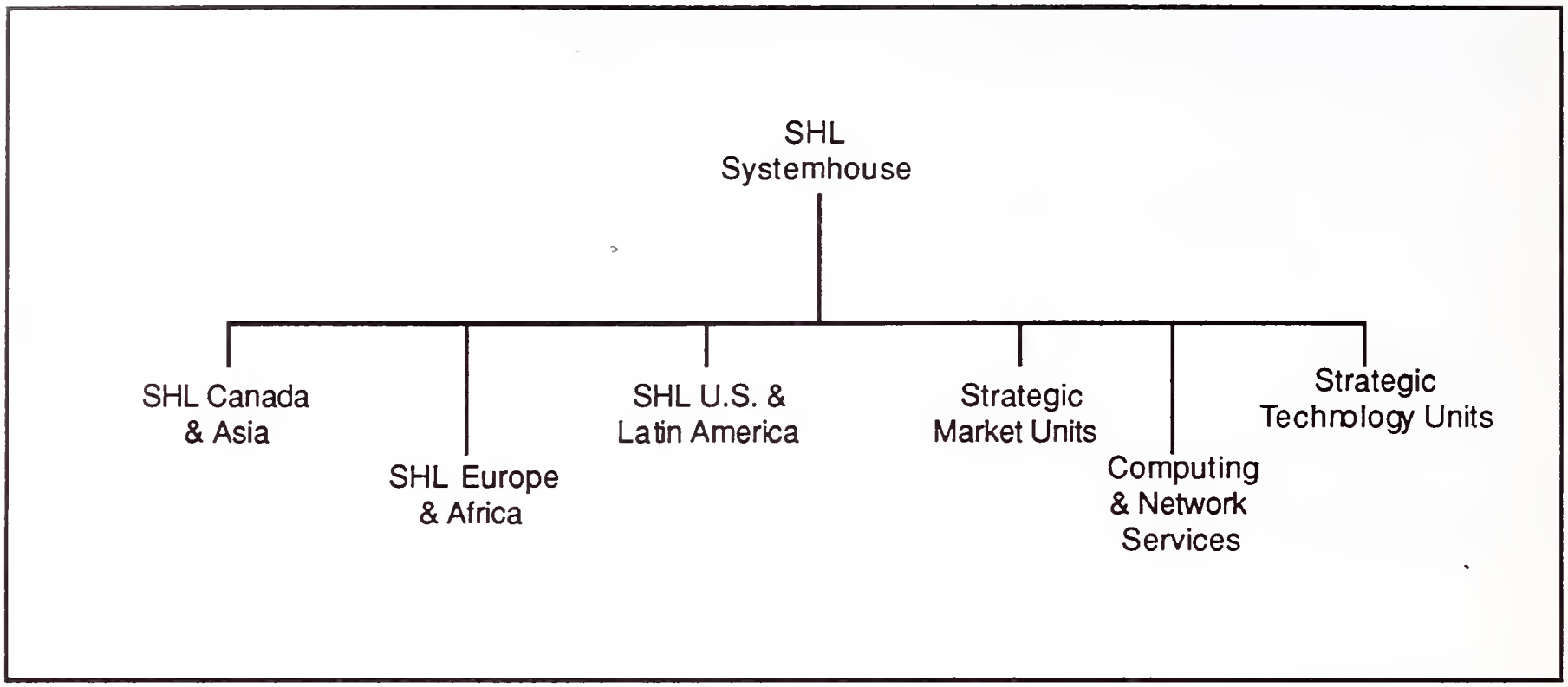
In the U.K., SHL Systemhouse also offers business recovery services to the financial services community. In particular, the company has established two dealing room contingency facilities.

3. Growth by Acquisition

SHL Systemhouse's current organization structure is shown in Exhibit VI-11.

Exhibit VI-11

SHL Systemhouse Organizational Structure



Source: INPUT

The company is organized into three geographic regions and three global entities, through which the company aims to offer a seamless global service. If the company's revenues are apportioned solely on a regional basis, then in 1993, Europe achieved revenues of $165 million, with the other two regions each achieving revenues in excess of $400 million.

In Europe, SHL Systemhouse employs approximately 600 personnel, 500 of whom are employed in the U.K. Systemhouse International U.K. was established in 1989 offering systems integration and consultancy services. Since then the company has made a number of U.K. acquisitions, including:

- Computer Group - in 1989, as a basis for the company's technology deployment services
- Computer Marketing - in 1991, to enhance Systemhouse's network integration capabilities
- AST Trans-Act - in 1993, to add major datacentre capability.

The acquisition of AST Trans-Act enables SHL Systemhouse to deliver a complete range of transformational outsourcing services to its U.K. customer base. AST Trans-Act was formally owned by the Royal Bank of Canada and offered outsourcing services principally for the banking and finance sector. Elsewhere in Europe, SHL Systemhouse's presence is comparatively limited and the company will need to make additional acquisitions to build its business in continental Europe.

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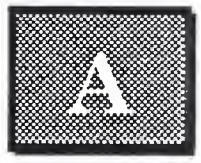

User Questionnaire

A. Current Service Delivery

1. What are the principal challenges in supporting your organization's desktop IT infrastructure?

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2. Who delivers each of the following components of your organization's desktop support at present?

Equipment maintenance _____
LAN installation _____
Ongoing LAN management _____
End-user help-desk services _____
Version control and update management _____
Asset management _____
Other (please specify) _____

Choose from;

- Central IS team
- Local IS team
- End users
- Third parties (who?)

B. Current Satisfaction

3. Which aspects of your organisation's desktop services are you particularly pleased with?

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4. Which aspects of your desktop service delivery do you think could be improved? Why?

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5. How well do you perceive each of the following aspects of the desktop environment to be supported at present? Please rate on a scale of 1-5 where 1 = not at all well, and 5 = extremely well.

Equipment maintenance _____
LAN installation _____
LAN management _____
Help-desk services _____
Update management _____
Asset management _____
Network tuning _____
Configuration management _____
Overall _____

6. Please rate the quality of your current desktop support in terms of each of the following (please rate on a scale of 1-5 where 1 = unsatisfactory and 5 = very satisfactory):

Responsiveness _____
Cost-effectiveness _____
Pro-active assistance _____
Business knowledge _____
Technical knowledge _____
Overall _____

C. Attitudes to Outsourcing

7. Which services do you expect to begin contracting out over the next year?

_____

8. Please rate the level of contribution you feel contracting out could make to improving the quality of each of the following service functions, where 1 = none and 5 = very considerable.

Equipment maintenance _____
LAN installation _____
LAN management _____
Help-desk services _____
- First-line end user support _____
- Second-line support _____

Update management _____
Asset management _____
Wide area network management _____
Datacentre management _____

9. What are the principal benefits you would expect to achieve through outsourcing?

_____

10. To what extent do you think that outsourcing your desktop services would deliver each of the following benefits? Please rate an a scale of 1-5, where 1 = not at all and 5 = very considerably?

Improved responsiveness _____
Improved cost-effectiveness _____
Improved end-user relationships _____
Improved end-user productivity _____
Improved focus for IT department _____

11. If you were to incrementally outsource elements of your desktop support services, which would you outsource?

_____

12. Which aspects of desktop support do you think are best carried out in-house and which externally?

D. Purchasing Process

13. Who currently within your organization controls external expenditure decisions for each of the following areas?

Equipment maintenance _____

LAN installation _____

Ongoing LAN management _____

End-user help desk services _____

Version control and update management _____

Asset management _____

Overall _____

14. What are the key criteria you would look for in a supplier of desktop services?

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15. How desirable are each of the following? Please rate on a scale of 1-5 where 1 = not at all desirable and 5 = very desirable.

One-stop shopping capability _____

Ability to support wide range of application software products _____

Multivendor capability _____

LAN skills _____

WAN skills _____

Ability to manage data centres _____

Ability to manage voice networks _____

System design and implementation skills _____

Ability to manage whole of IT infrastructure _____

E. Vendor Image

16. Who do you think is most appropriate to supply desktop services support?

Why?

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17. How suitable do you perceive each of the following vendors to be as potential suppliers of desktop services? Please rate on a scale of 1-5 where 1 = not at all suitable and 5 = extremely suitable.

U.K.		France		Germany	
IBM	_____	Axone	_____	IBM	_____
Digital	_____	Digital	_____	Digital	_____
HP	_____	HP	_____	HP	_____
ICL	_____	ICL	_____	ICL	_____
P&P	_____	GSI	_____	tds	_____
SemaGroup	_____	Télésystems	_____	debis	_____
Hoskyns	_____	Thomainfor	_____	Computer 2000	_____
EDS	_____	EDS	_____	EDS	_____

18. How important is it for your organisation to reduce/simplify the number of external vendors involved in providing desktop support services? Please rate on a scale of 1-5 where 1 = not at all important and 5 = very important.

F. Cost Reduction

19. For which elements of desktop support do you believe cost savings could be achieved by using an external vendor?

_____

20. How much do you believe it costs your organization to support your desktop environment at present?

Overall _____

Per PC _____

Per User _____

21. How do you feel these costs are broken down by element?

	Proportion (%)
Equipment and software purchase costs	_____
Equipment maintenance	_____
Installation	_____
End-user help desk support	_____
Other (please specify)	_____

G. Background

22. Number of people in enterprise _____

23. Turnover of enterprise _____

24. Number of PCs in enterprise _____

25. Number of LANs in enterprise _____

26. Proportion of PCs connected to LANs _____

27. Industry sector _____

28. Respondent type _____