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STRATEGIC MARKET PERSPECTIVE

European SAP Services Provision

Software Product Support Programme – Europe

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European SAP Services Provision

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Abstract

SAP continues to enjoy success with its enterprise-wide business applications products. In 1996, its European revenues grew to $1.16 billion, growing 27% from the previous year.

However, the provision of services that enable users to successfully implement and enjoy the full benefits of their SAP investment is key to the continued success of SAP.

In order to deliver an extensive array of services to all of its customers, SAP has chosen to establish a partner programme.

This report analyses the market for SAP services in Europe and describes:

- The environments in which SAP's R/3 typically runs and the implementation of R/3
- User requirements from SAP and its partners
- The dynamics affecting the SAP services market and its likely development.

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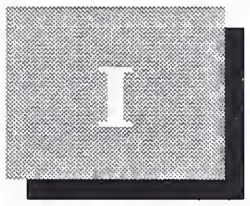

Introduction

A
Objectives And Scope

SAP experienced phenomenal success with its enterprise-wide business applications products in the mid-1990's.

The company's European revenues grew by 27% between 1995 and 1996 reaching $1.16 billion.

The growing popularity of SAP's R/3 combined with SAP's willingness to work with partners to provide services centred around its products has led to a services opportunity that will be worth around $5 billion in 2001 in Europe.

This study will:

- Help vendors to understand the dynamics affecting SAP-related markets
- Help users to understand the environments in which SAP products are typically deployed
- Equip SAP services vendors with information relating to user attitudes towards SAP's products and the services centred around those products.

B
Research Methodology

INPUT interviewed 89 R/3 users across the United Kingdom, France and Italy. Additionally, INPUT conducted a survey of 420 SAP users in Germany.

The majority of the charts in this report reflect perceptions of users in the United Kingdom, France and Italy. However, where German responses differ significantly, commentary is provided.

C
Report Structure

The remaining chapters of this report are as follows:

- Chapter II is an executive summary which provides a summary of the key findings of the study
- Chapter III analyses existing R/3 implementations including hardware platforms, database platforms, and implementation costs and timescales
- Chapter IV analyses user attitudes to SAP's R/3 product and services centred around it
- Chapter V analyses the development of the SAP services market. It examines the use of external services vendors by enterprises, the selection criteria used to select a services vendor and the type of contract preferred by users
- Appendix A contains the questionnaire used for this study in the UK, Germany, France and Italy. Note that a slight variation of this questionnaire was used to accommodate for regional variations.

D
Related INPUT Reports

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

Evaluation of SAP Service Providers in Germany

Evaluation of SAP Service Providers in the United Kingdom

Evaluation of SAP Service Providers in the France

European Business Integration Market, 1996-2001

Enterprise-Wide Database Services, European User Perspectives

Software Product Support Market Analysis and Trends, Europe 1996 - 2001

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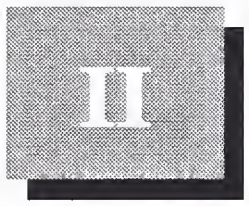


Executive Summary

A
SAP Services Market Set To Reach $4.8 Billion In 2001

SAP continues to enjoy success with its enterprise-wide business applications products. In 1996, its European revenues grew to $1.16 billion, an increase of 27% over the previous year.

However, the provision of services that enable users to successfully implement and enjoy the full benefits of their SAP investment is key to the continued success of SAP.

In order to deliver an extensive array of services to all of its customers, SAP has chosen to establish a partner programme. Typically, its services partners are organisations with proven services expertise which have IT hardware, management consultancy, or professional services backgrounds. Ninety per cent of R/3 users source their SAP-related services from external vendors.

Indeed, the SAP services market in Europe is currently worth approximately $2.5 billion and will grow into a $4.8 billion market in 2001.

Against this background, INPUT research reveals that in order to enjoy success in the SAP services market, vendors must:

- Reduce implementation times for SAP products and offer fixed price contracts
- Boost on-going support and training capabilities

- Acquire expertise in IT products that interoperate with SAP products with emphasis on growth areas such as Windows NT and Microsoft's SQL Server.

Interestingly, the survey findings showed few significant variations between Germany, the United Kingdom, France and Italy. R/3 is commonly implemented by multinationals across all the territories in which they operate. Thus, the implementation process is often very similar in each country. Often, the same services vendor is used in each country.

B

Users Require Faster Implementation Times And Fixed Price Contracts

SAP has received negative publicity regarding implementation times, much of which is not fully justified.

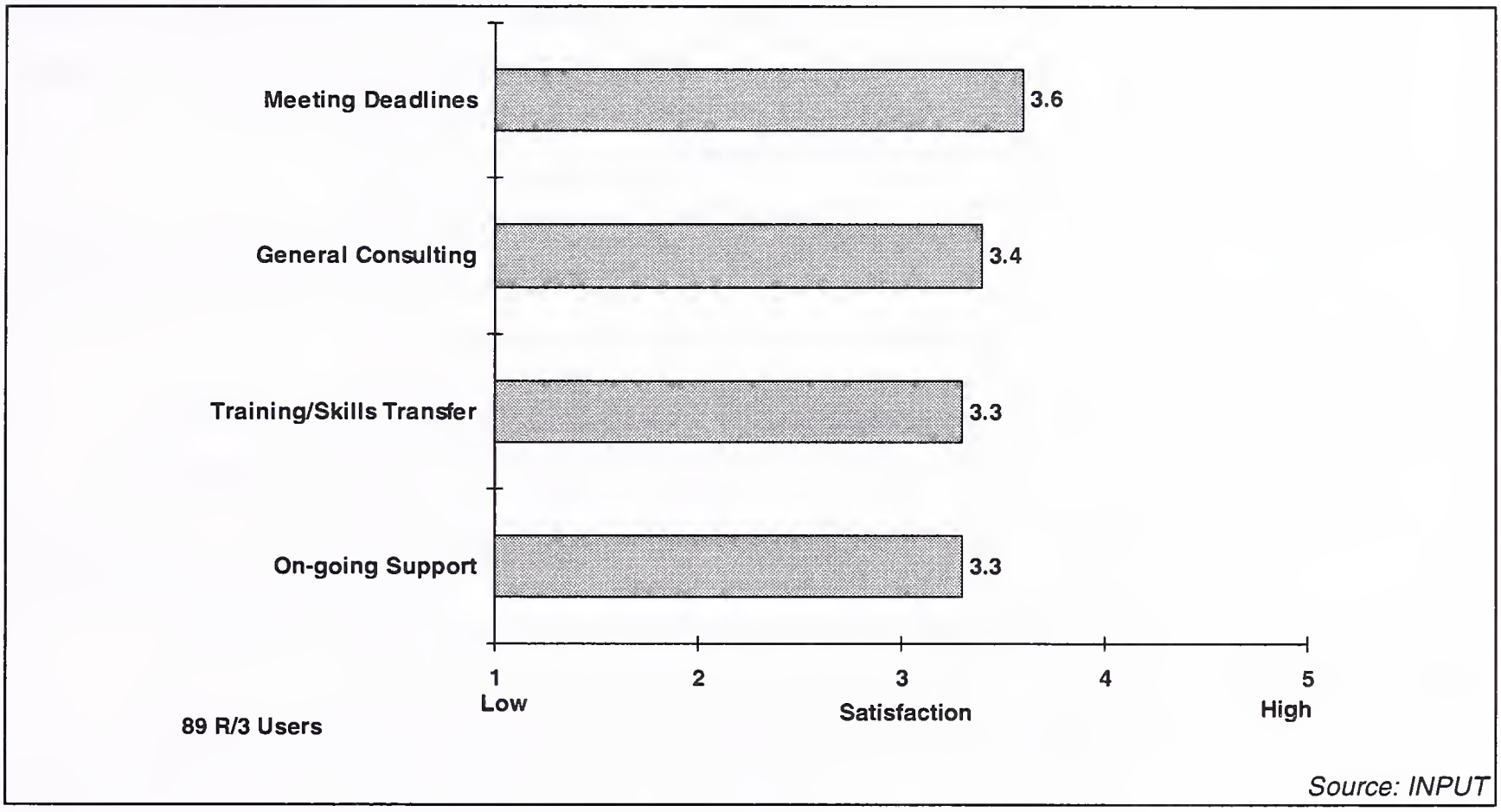
Although approximately a third of SAP implementations in Europe required in excess of one year, INPUT research illustrates that speed of implementation is an area in which many users express relatively high levels of satisfaction. However, there is still scope for improvement. Some users, particularly smaller organisations, express concern with the length of time required to implement SAP products.

Users were asked to describe the elements of their SAP projects with which they were particularly satisfied. Speed of implementation was mentioned in response to this question more often than any other issue. Of course, some users stated that speed of implementation was the element of their project with which they were least satisfied but they were outnumbered by users who were happy with this issue by 2:1.

This finding is supported by another major finding from INPUT's survey. R/3 users expressed relatively high levels of satisfaction with the ability of their services vendors to meet project deadlines (see Exhibit II-1).

Exhibit II-1

R/3 User Satisfaction With Services Delivered By External Vendors



Source: INPUT

The key point regarding SAP implementation times is that it is difficult to compare implementation times in different environments. Implementation times are affected by a multitude of variables which differ greatly across different organisations.

No enterprise is identical, so the task of implementation will not be identical for any two organisations. Typically, SAP products are customised to carry out business processes. For some business processes, this may be a relatively simple task, for others it may be extremely complex.

The complexity of SAP's products lend them rich functionality. Until recently, enterprise customers have been keen to leverage much of this functionality. However, smaller organisations have less of a requirement for it and more often than not are unable to afford long implementation times.

Partners must respond by working closely with SAP to ensure that the implementation process can be customised to suit the needs of smaller organisations more closely.

SAP is addressing this problem in three major ways

- Its Business Engineering Workbench (BEW), now known as Business Engineer automates some of the implementation process. In effect, it acts as a 'Wizard' for some elements of the implementation process

- The porting of pre-defined templates to user installations. Partners are increasingly creating templates that mask much of the product's complexity

- Encouraging hardware partners to pre-install R/3 on their platforms; H-P now sells its hardware with R/3 pre-installed.

Nearly 40% of SAP sites are engaged in time and materials contracts with services vendors. However, this situation is changing as users increasingly demand to know the price of their implementations in advance.

Indeed, users who are planning to undertake large-scale systems development or integration projects over the next year would prefer to pay a fixed price to a services vendor. Thus, SAP services vendors that do not charge fixed prices will soon find themselves at a competitive disadvantage. Furthermore, the inclusion of penalties in contracts for overrunning deadlines will offer services vendors a competitive edge.

The move away from time and materials contracts towards fixed price contracts will reduce SAP implementation costs. Additionally, the steps taken by SAP and its partners to reduce implementation times will reduce the average cost of an R/3 implementation well below the current average of around $3 million in Europe.

The average cost of R/3 implementation of around $3 million should not however be taken at face value, given that it does not reflect the wide diversity of implementation costs. The ratio of product revenues to sales revenues offers a more useful tool for estimating implementation costs. This ratio can be expected to fall from the present 3:1 in favour of services to 2.5:1 by 2001 as implementation costs fall.

C
On-Going Support & Training Exhibit Shortcomings

Demand for skills centred around SAP products continues to outstrip supply, though the gap is narrowing. Consequently, the salaries commanded by those with SAP skills are high (some consultants with under 2 years experience reportedly receive salaries of over $150,000 per year).

Furthermore, SAP consultants are highly mobile given the demand for their skills. This has created a high turnover of project personnel, thus making the ability of vendors to deliver services that satisfy users difficult.

This shortage has affected user perceptions of on-going support and training centred around SAP products.

High levels of demand for end-user support could be reduced by increased investment in training for end users. INPUT research revealed that nearly 50% of SAP users believe that further investment in end user training will improve usage of SAP systems

The rapid growth of SAP sites has perhaps inevitably not been matched by the growth of support facilities. SAP and its partners must consider creating alliances with services vendors who provide on-going support on a large-scale in order to extend their support capabilities.

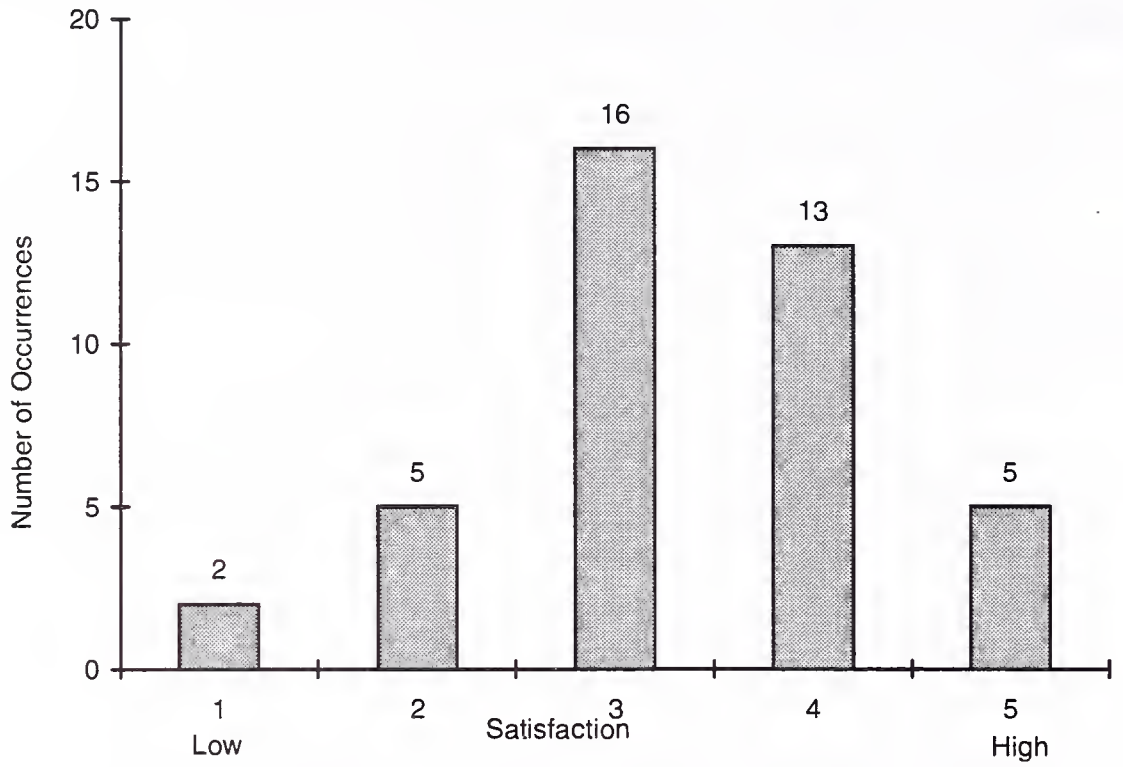
SAP's support model is unusual. All SAP users receive support from SAP alone if the product does not work properly. In other words, SAP basically offers bug fixes if any faults occur with its products and upgrades for new versions. Additionally, SAP provides users with access to its Online Service System (OSS) which offers self-help facilities which enable users to correct problems alone, and information to prevent problems from occurring.

However, other forms of software support that are not specifically related to the integrity of the product are typically sourced from SAP's partners. For example usage advice and 'how to do' type problem resolution is typically provided by SAP's partners.

Overall, less than 50% of users expressed high levels of satisfaction with on-going support (see Exhibit II-2) and only a quarter expressed high levels of satisfaction with training/skills transfer (see Exhibit II-3).

Exhibit II-2

User Satisfaction With On-Going Support Provided By External Vendors

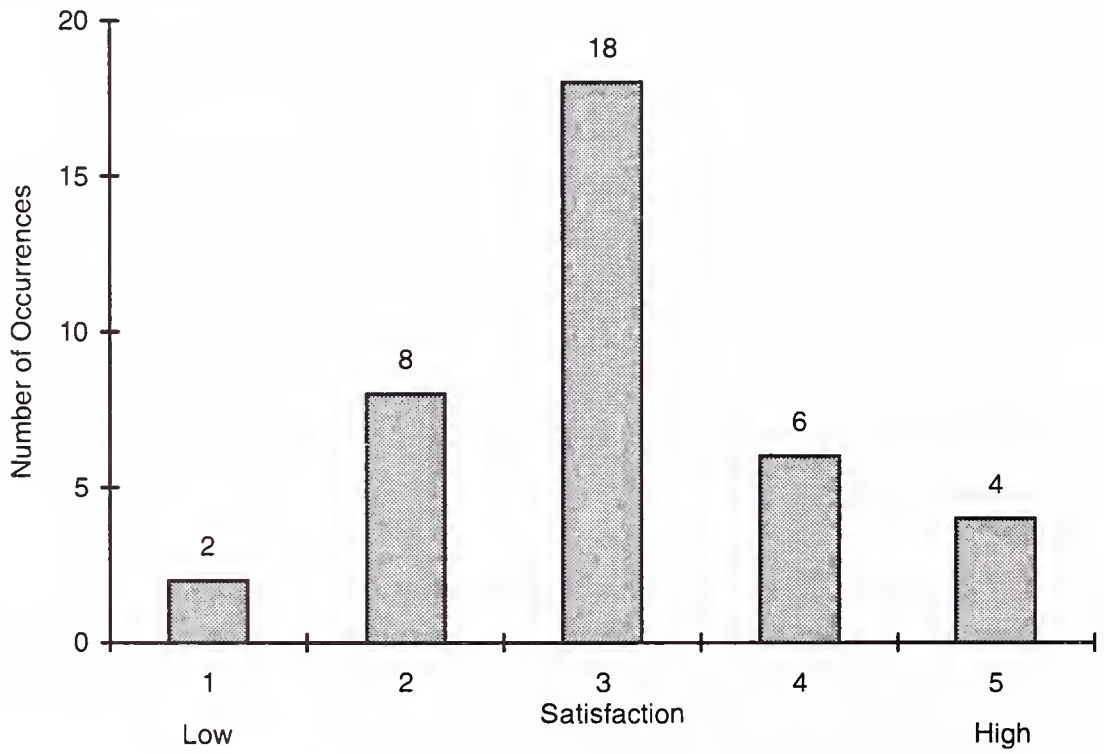


Sample: 41

Source: INPUT

Exhibit II-3

User Satisfaction With Training/Skills Transfer Provided By External Vendors



Sample: 38

Source: INPUT

Relatively poor satisfaction ratings for training/skills transfer and on-going support are largely due to insufficient available skills in the marketplace and the high cost of those skills.

SAP's model is also called into question. Many users wish to source the full gamut of services from SAP. Currently, users will contact SAP for problems relating to R/3's integrity, but if they require more general support relating to usage in a specific business setting, they are likely to be directed to the services provider that implemented their SAP solution.

The SAP skills shortage is narrowing. According to SAP, the number of SAP accredited consultants in the UK alone has grown rapidly from about 1200 at the end of 1995 to around 1700 at the end of 1996..

However, some concerns exist regarding the nature of the services received from SAP consultants. Several users revealed that their consultants offer services that were too module-specific. They argued that the ability of consultants to integrate SAP modules is limited.

Services vendors must ensure that their consultants do offer both module-specific expertise and integration expertise. INPUT expects this issue to become less significant as existing SAP consultants become more experienced.

D

Services Vendors Must Offer Expertise In Products That Interoperate With SAP Products

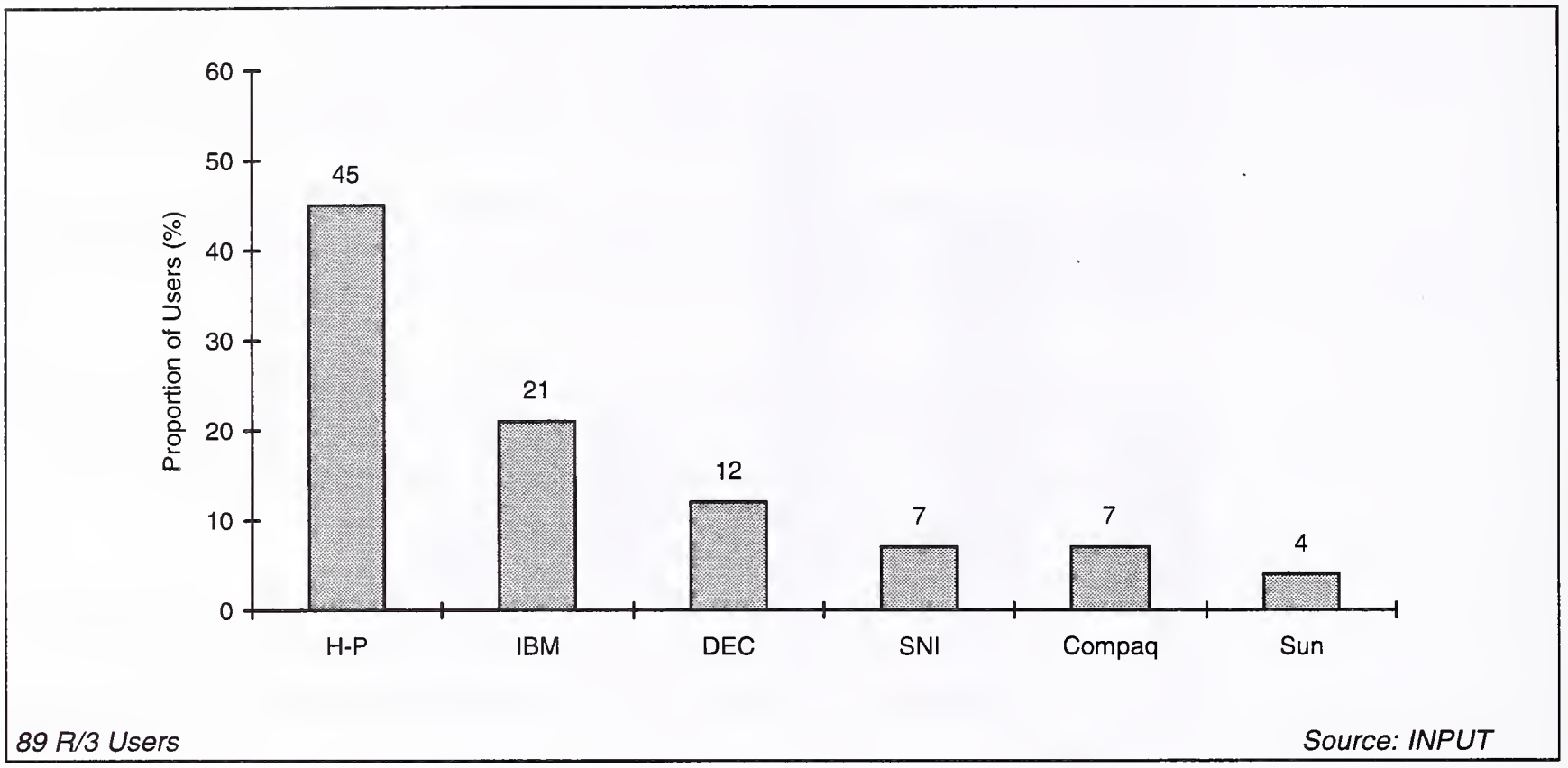
The complexity of SAP implementations increasingly requires SAP services providers to offer expertise relating to IT products that interoperate with SAP products.

Expertise in the hardware platforms on which SAP products run is critical. Hardware vendors who are also SAP services providers have an innate advantage. H-P, the leading vendor of hardware on which SAP products run, is reaping benefits from its position.

In Europe, nearly 50% of R/3 implementations run on H-P hardware (see Exhibit II-4). H-P now has a closer relationship with SAP than any other hardware vendor and is enjoying considerable success in the SAP services market. Indeed, it now sells R/3 pre-installed on both its NT-based NetServers and its HP-UX HP9000 servers.

Exhibit II-4

Hardware Platforms Underlying R/3



89 R/3 Users

Source: INPUT

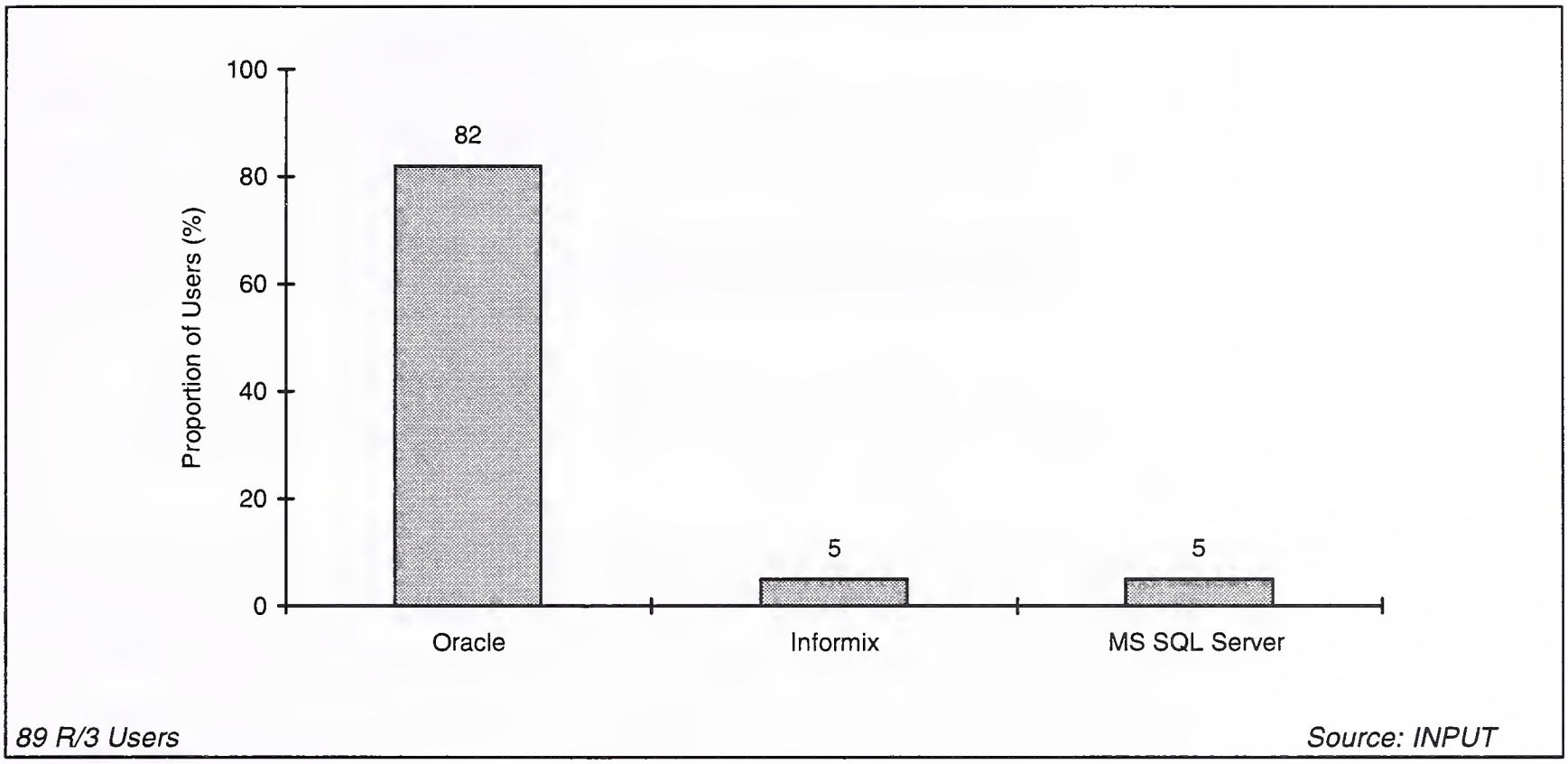
IBM accounts for just over a fifth of the R/3-related hardware market. Its professional services arm ISSC has enjoyed success in the services market surrounding SAP products. If it can leverage its SAP strengths and aim to generate benefits of synergy in this area, its success in SAP-related markets will continue.

DEC, SNI, Compaq and Sun are the other hardware players with significant SAP installed bases in Europe at present.

Database expertise is key to the success of many services vendors as SAP projects increasingly require the integration of SAP products with databases.

Oracle reigns supreme as the database of choice for SAP users in Europe. Over 80% of R/3 installations run on an Oracle database (see Exhibit II-5).

Exhibit II-5



Oracle is the largest database vendor in enterprise-wide client/server environments. SAP is the largest business applications vendor in client/server environments. Both vendors benefit greatly by working closely together.

Indeed, Oracle recently launched a campaign to deliver services to customers of both Oracle and SAP. It now offers a service that helps users to link R/3 with Oracle's data warehousing software which includes the Oracle 7 database and Oracle Express OLAP products. From Oracle's perspective, this service is critical to success in the data warehousing market.

The implementation of data warehousing technology together with SAP R/3 offers opportunities to SAP's services partners.

Strategically, it is unwise for any business applications vendor to become too intertwined with one database vendor — especially when that database vendor is also a competitor.

Interestingly, Baan has responded to the threat posed by over reliance on Oracle technology by favouring Informix. It is ceasing to deploy its proprietary database, Tribase, and is embedding Informix technology into its product. Customers are thus more likely to choose Informix as their

database vendor. Baan does however, offer upgrade paths to both Informix and Oracle database technologies.

SAP has responded to Oracle's dominance by developing close relationships with both Microsoft and Informix. The installed base of NT Servers continues to grow at approximately 100% per annum in Europe, and Microsoft's SQL Server is the dominant database on that platform. SAP has launched a version of R/3 for NT, so SQL Server can be expected to emerge as a major database platform for R/3 over the next few years.

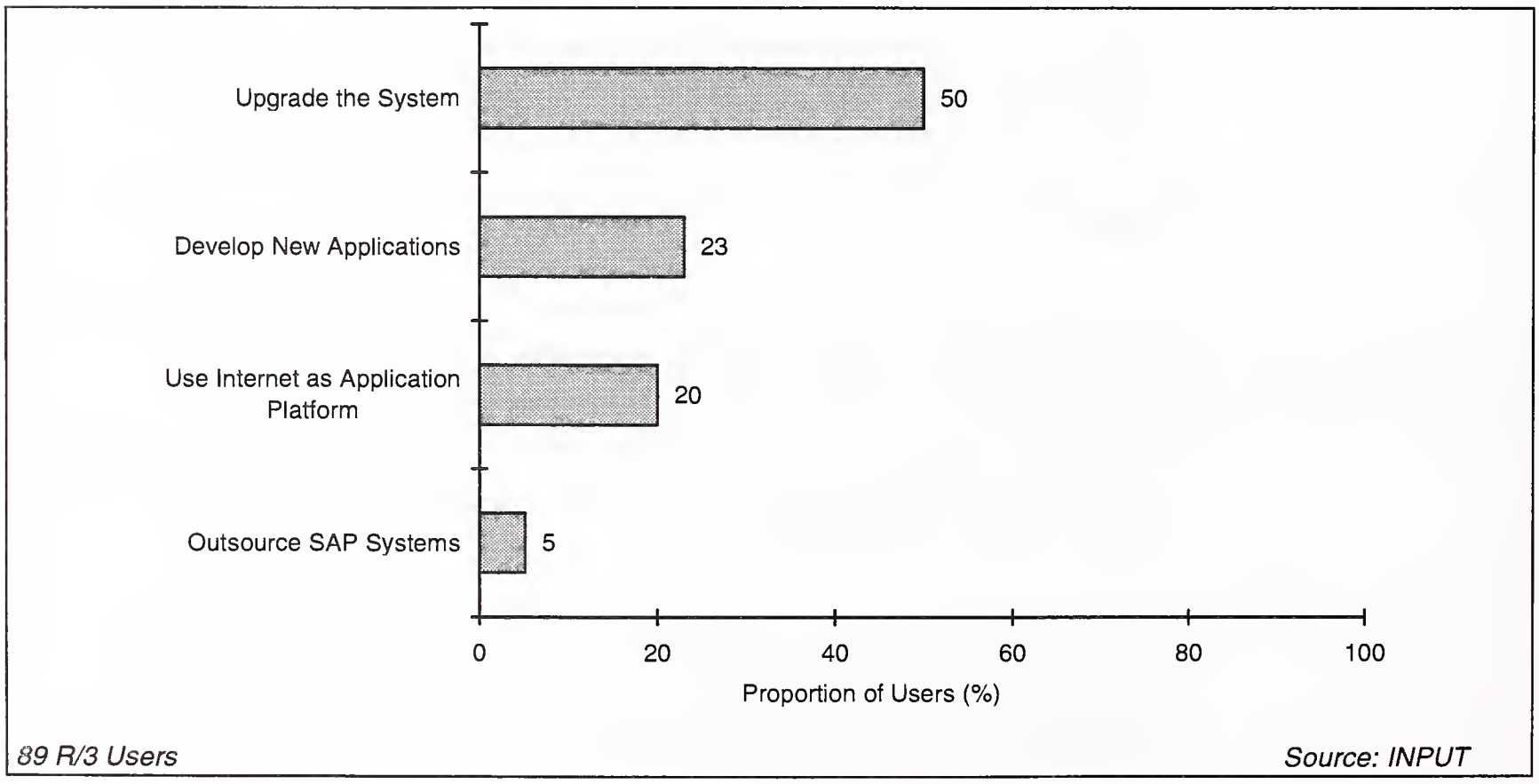
NT Server and SQL Server will become commonplace in the SAP environment. Services vendors must ensure that they have skills in Microsoft BackOffice products.

Furthermore, SAP worked closely with Microsoft to launch an Internet-enabled version of R/3. The new R/3 design enables R/3 to be accessed from most Internet browsers. It will be accompanied by a graphical interface written using Java. Such developments indicate that services vendors must offer Intranet integration and extranet skills in order to work on projects in which R/3 becomes core to the electronic enterprise.

Indeed, around a fifth of R/3 users will use an Internet enabled version of R/3 within the next two years (see Exhibit II-6).

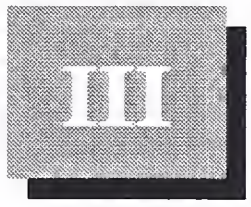
Exhibit II-6

Future Plans (Next 2 Years) With R/3



89 R/3 Users

Source: INPUT



R/3 Implementation

This chapter analyses existing R/3 implementations including analysis of hardware and database platforms used, implementation costs and timescales.

A
Hardware Platforms

H-P has established itself as the dominant R/3 hardware platform in Europe (see Exhibit III-1), underlying nearly half of all R/3 implementations. Indeed, H-P is the leading SAP hardware platform supplier in each of the four largest European economies. Its shares are particularly large in the UK and Germany, 55% and 60% respectively. However, in France the company has only attained a relatively low 30% market share.

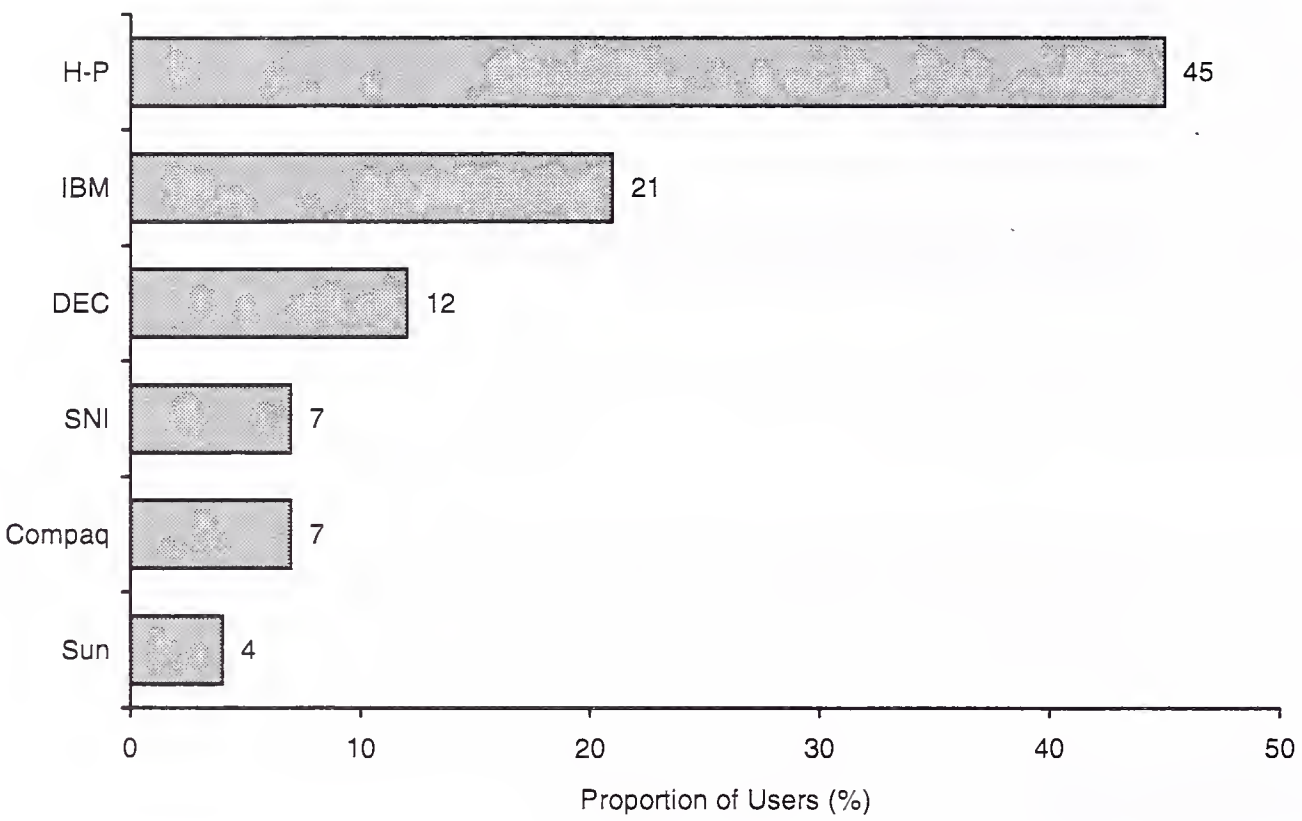
H-P has worked closely in Germany and elsewhere to create a strong relationship with SAP, investing heavily in SAP Competency Centres and using the strength of their professional services business to bid jointly for projects with SAP or refer their existing customers towards SAP.

Indeed, H-P now sells SAP R/3 preinstalled on both its NT-based NetServers and HP-UX HP9000 servers. In effect, H-P offers customers turnkey R/3 systems.

H-P's firm commitment to partnering has clearly paid handsome dividends.

Exhibit III-1

Hardware Platforms Underlying SAP Products



89 R/3 Users

Source: INPUT

HP's closest rival in the R/3 hardware platform marketplace is IBM which provides around 20% of the R/3 base infrastructure. IBM has also, in a similar fashion to HP, attempted to work collaboratively with SAP.

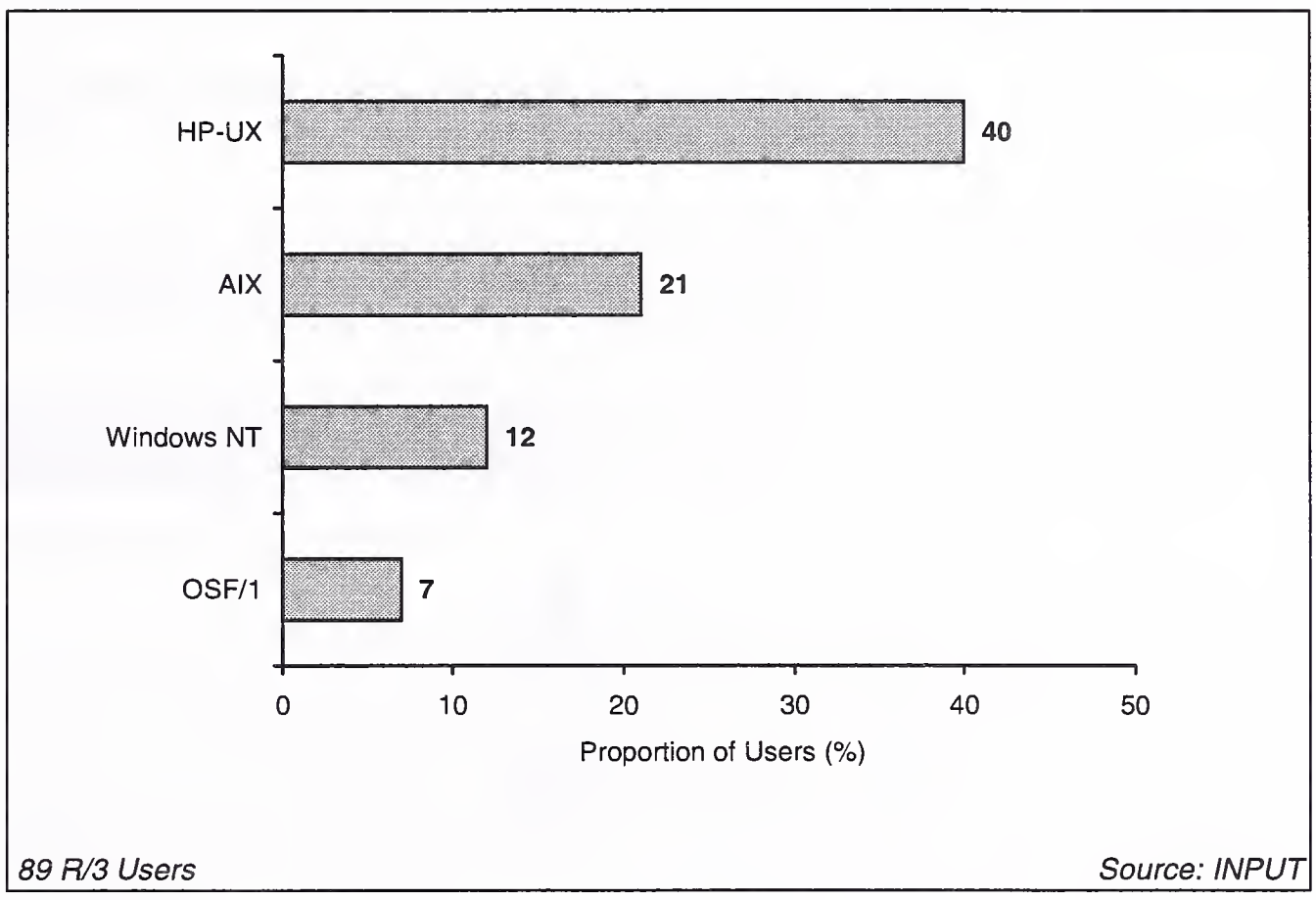
From a purely professional services perspective, ISSC (IBM's professional services branding) has been extremely successful in the SAP third party professional services market, establishing a position as one of the leading world-wide players. IBM has had to demonstrate its "open" credentials though and in many assignments works on non-IBM equipment.

Compaq can be expected to considerably increase its share of the SAP hardware platform market as it leverages its NT credentials to cash in on the growing popularity of NT-based R/3 solutions.

H-P can be expected to retain its dominance as the preferred SAP hardware platform vendor for the next couple of years.

As might be expected, most users choose HP-UX and AIX as their operating systems (see Exhibit III-2).

Exhibit III-2



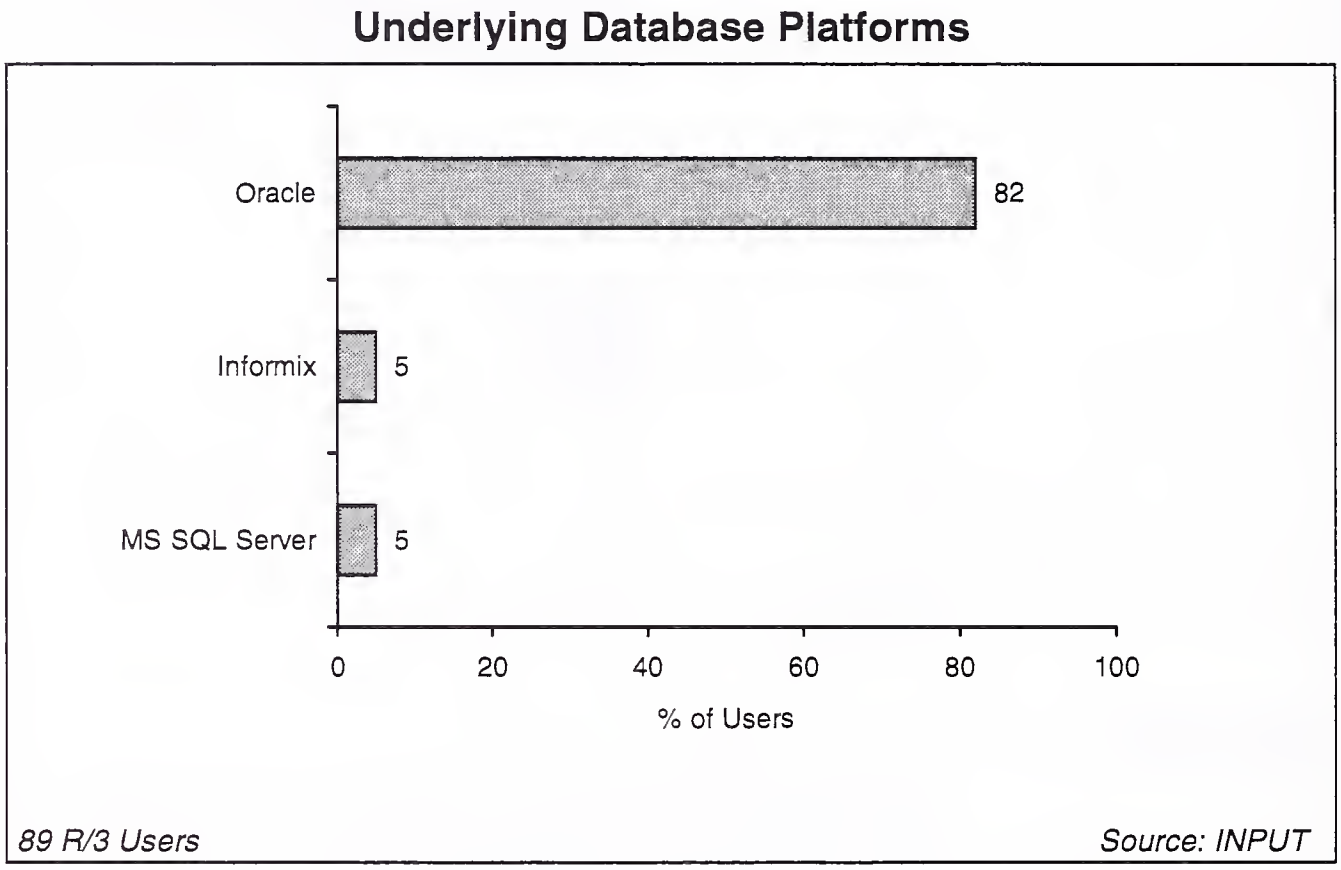
However, Windows NT is beginning to establish a significant share of the SAP-related operating system market. NT can be expected to increase its share significantly over the next few years for the following reasons:

- The installed base of NT Server is growing at 100% per annum in Europe
- H-P is now shipping SAP pre-installed on its NT-based NetServers
- SAP is working closely with Microsoft with regard to standards and an the Internet-enabled version of R/3
- Microsoft's SQL Server, which only runs on NT, is becoming increasingly popular.

B
Database Platforms

The overwhelming majority of R/3 users choose Oracle as their database platform (see Exhibit III-3).

Exhibit III-3



Oracle has a similar share of the market for databases underlying R/3 in all of the major European economies.

Clearly the SAP/Oracle relationship is at the moment symbiotic; Oracle's strategy will however become an increasing threat as it further penetrates the business applications market.

Oracle is aggressively pursuing a strategy of adding functionality to its own enterprise application product, Oracle Applications in an attempt to compete more fully with R/3. Indeed, Oracle recently acquired Datalogix, a company that develops client/server software for process manufacturing.

Understandably, SAP has recently formed close relationships with both Informix and Microsoft in order to avoid becoming too intertwined with a competitor. This offers Informix and Microsoft opportunities in SAP-related markets.

Windows is the dominant front end for SAP R/3 users with over 70% of enterprises using Microsoft technology as their GUI.

C
R/3 Implementation

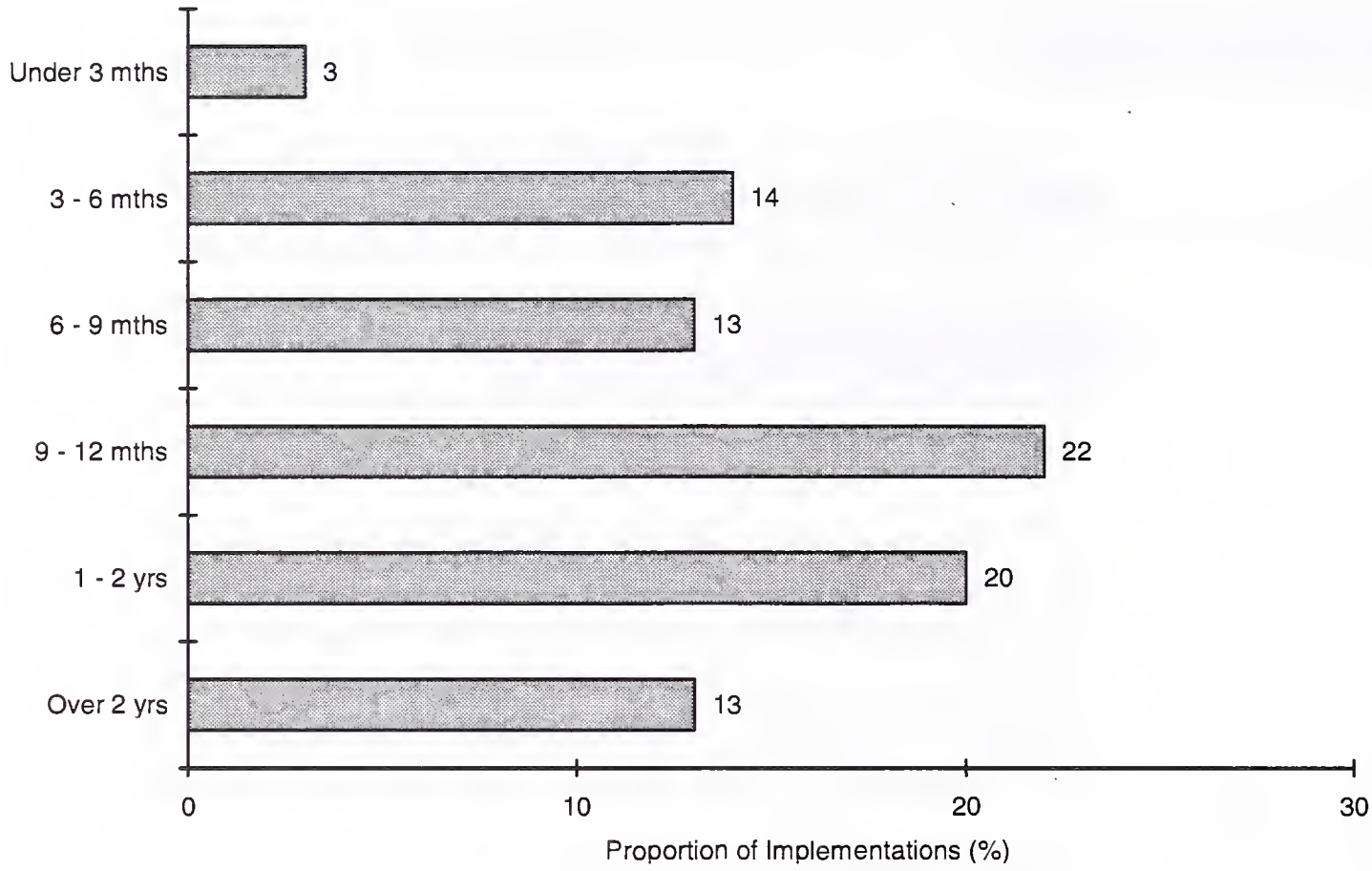
The average cost of R/3 implementation is around $3 million in Europe. However, this figure should not be taken at face value, given that it does not reflect the wide diversity of implementation costs. The ratio of product revenues to sales revenues offers a more useful tool for estimating implementation costs. Across Europe this ratio is now approximately 3:1 in favour of services. This ratio can be expected to fall to 2.5:1 by 2001 as implementation costs fall.

Over the past year, SAP has received negative publicity regarding the length of product implementation times. However it is becoming increasingly difficult to compare implementation times given the multitude of variables that affect each R/3 implementation. Implementations are often strongly influenced by qualitative issues such as the customer's commitment to the SAP project and project management.

Exhibit III-4 provides a profile of R/3 implementation times. However, it must be noted that implementation times do vary by country. In the UK and Germany, the average implementation time is around 8.5 months. In France and Italy, it is approximately 13 months.

Exhibit III-4

R/3 Implementation Times



89 R/3 Users *Source: INPUT*

Contrary to the much publicised concern regarding SAP implementation times, meeting deadlines was the area that SAP users mentioned most frequently when asked to indicate implementation characteristics with which they were most satisfied.

However, it was also mentioned as something that dissatisfied users.

Smaller companies more often have concerns regarding implementation times. SAP has responded by:

- Introducing its Business Engineering Workbench (BEW), now known as Business Engineer automates some of the implementation process. In effect, it acts as a 'Wizard' for some elements of the implementation process

- Enabling the porting of pre-defined templates to user installations. Partners are increasingly creating templates that mask much of the product's complexity.

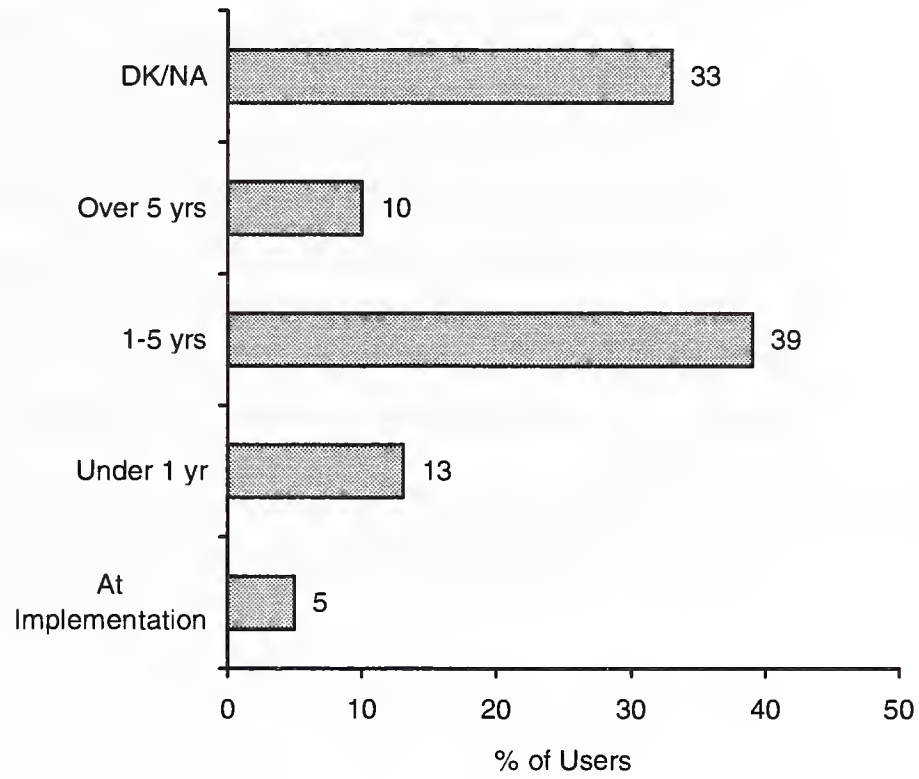
- Encouraging hardware partners to pre-install R/3 on their platforms; H-P now sells its kit with R/3 pre-installed.

As Exhibit III-4 reveals, R/3 implementation times vary widely. This reinforces the fact that implementation times are increasingly dependent on many factors including customer attitudes to the products, project management, and specific customer business requirements, and are less reliant on product-specific features.

Expected payback times also vary widely, though most users expect to have paid for their R/3 investments within 5 years (see Exhibit III-5).

Exhibit III-5

Expected Payback Periods For R/3



89 R/3 Users *Source: INPUT*

D
Use Of Modules

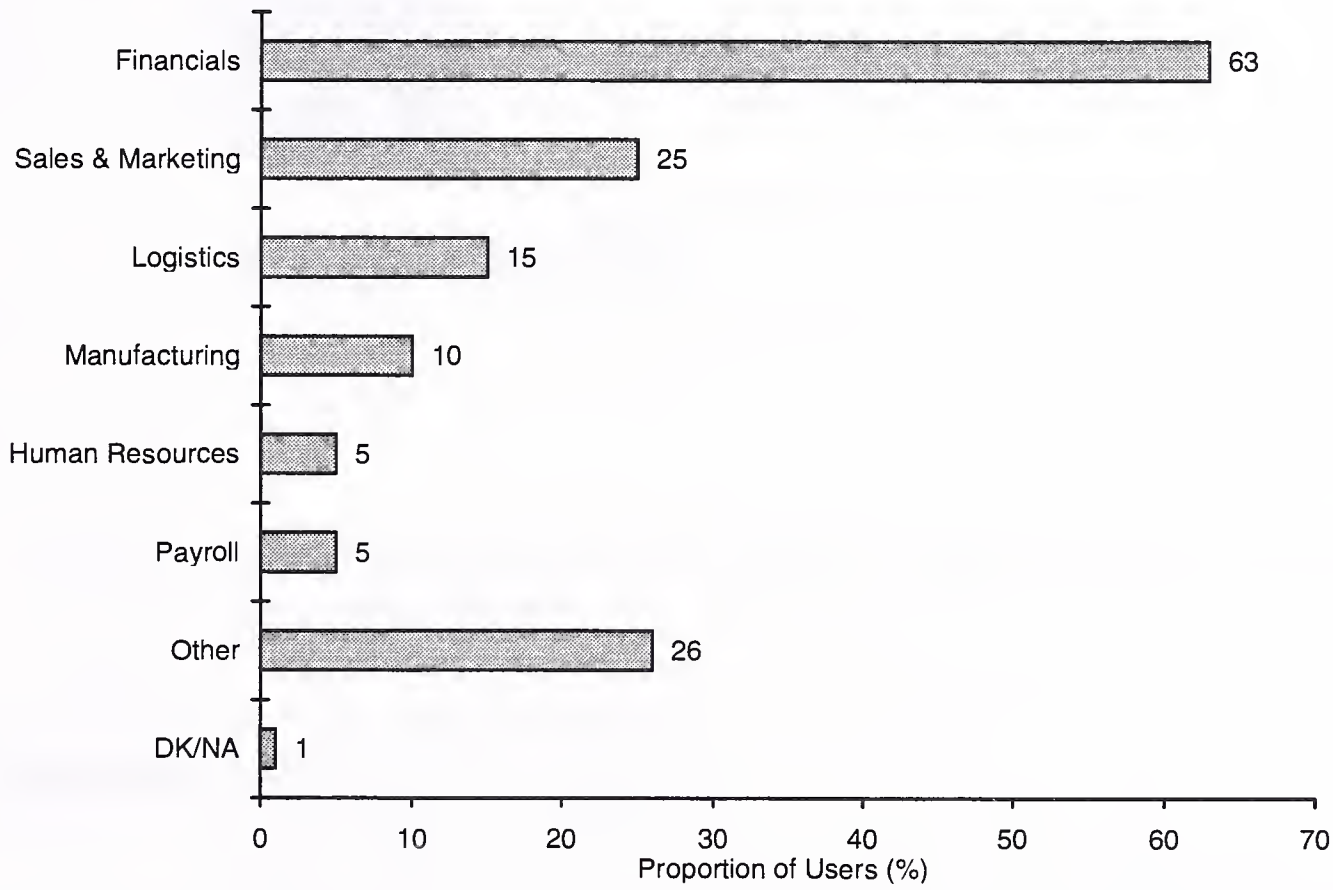
One of the undoubted factors in SAP's success has been the modular nature of its software products. R/3 offers application modules that provide coverage over a wide sweep of an organisation's value chain, including financials, logistics, payroll and human resources, manufacturing and sales and marketing.

This characteristic has allowed users to select only the appropriate functionality required, to develop applications in a phased, iterative way, and to integrate SAP product into an existing infrastructure. These qualities are shared by both SAP's mainframe and client/server product, but R/3's modularity in particular, due to its distributed nature, has been recognised by users as key.

Fifteen per cent of R/3 users have implemented the total product or all SAP modules. Amongst those organisations surveyed, the most broadly used module is the financial module (see Exhibit III-6); over 60% of all companies had implemented the complete financial module. Although this module is in itself modular, in that there are sub-components such as general ledger, accounts receivable etc., 50% of organisations have chosen to implement a complete financials package rather than construct a piece-meal version.

Exhibit III-6

Implementation Of R/3 Modules



89 R/3 Users

Source: INPUT

The 'other' category in Exhibit III-6 largely consists of users who had implemented the 'materials management' module.

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IV

User Needs

This chapter analyses user attitudes to SAP's R/3 product and services centred around it.

A
User Satisfaction With SAP Products

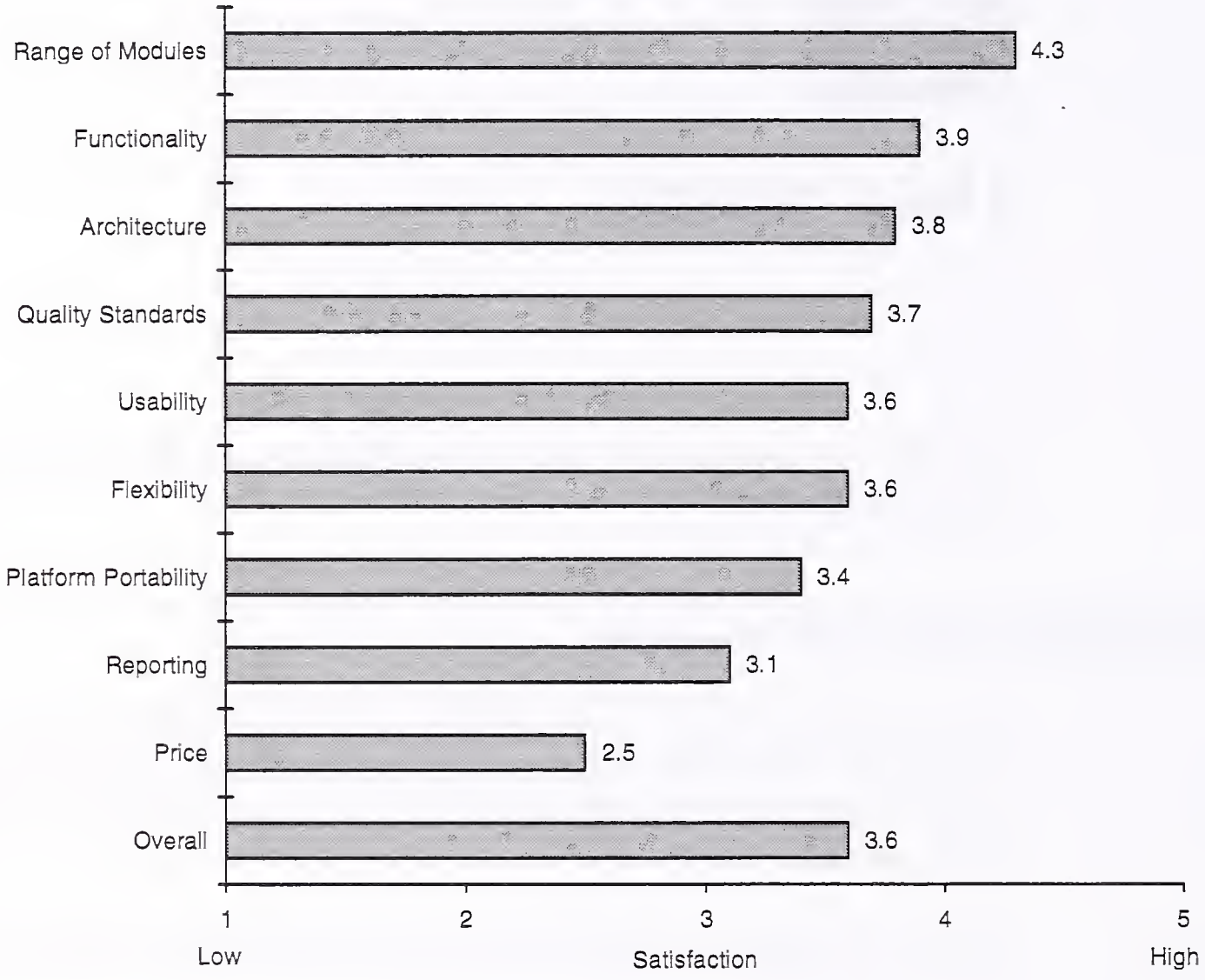
R/3 is widely believed to improve efficiency and reduce costs within enterprises. Thus, increasing emphasis has been placed on functionality and the range of business processes that can be integrated into an R/3 based system.

Users were asked to indicate their levels of satisfaction with several elements of R/3.

Exhibit IV-1 reveals the satisfaction levels of R/3 users overall with the product and with discrete elements of the product.

Exhibit IV-1

User Satisfaction With R/3



89 R/3 Users *Source: INPUT*

It is noticeable that satisfaction with reporting is particularly low among R/3 users which suggests that the packaged nature of R/3 may result in reporting facilities that do not match specific business needs.

There is an uncanny similarity across the four major European economies in terms of which aspects of R/3 users are most satisfied with and those with which they are least satisfied. However, overall and for each element, UK satisfaction ratings were slightly lower whereas French and, to a greater extent, Italian satisfaction ratings were higher.

User satisfaction with prices is low. This is a serious threat to SAP. SAP and its partners are now targeting smaller organisations as well as large enterprises. Smaller organisations are much more price sensitive and low cost SAP alternatives will make inroads at this level. SAP will increasingly

find that their competitors enjoy success on the basis of price as business applications become more commoditised.

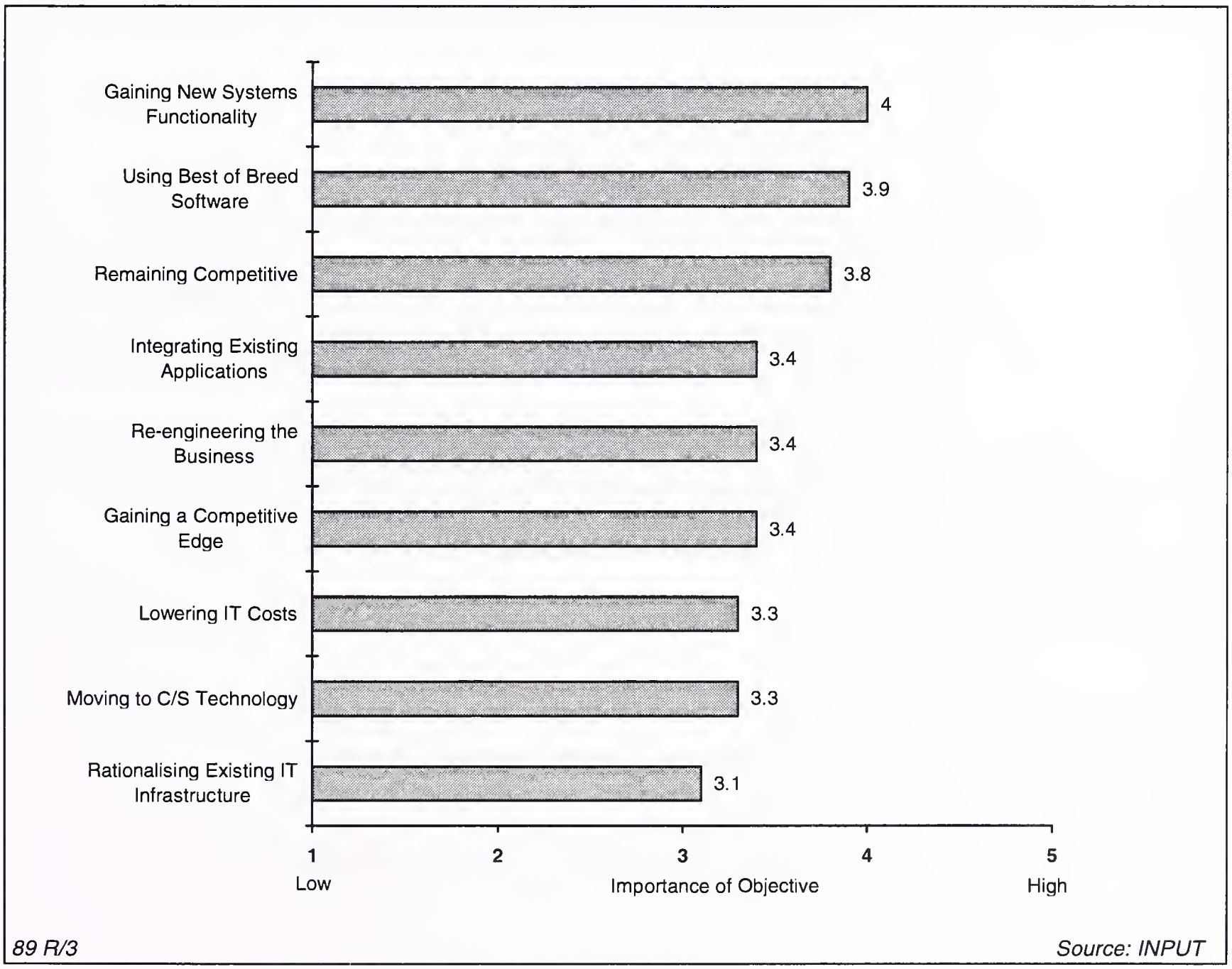
B

Objectives Behind SAP Implementation

Exhibit IV-2 illustrates user objectives behind the implementation of SAP's R/3.

Exhibit IV-2

Major Objectives Behind R/3 Implementation



89 R/3 *Source: INPUT*

It is worth noting that Italian users attributed relatively high importance levels to each named objective and UK users attributed relatively low importance levels to the objectives. Furthermore, UK and German users place much greater importance on integrating existing applications than do French and Italian users. French and Italian users, on the other hand, place significantly more importance on using 'best of breed' software than do UK and German users.

As illustrated in Exhibit IV-2, the three major objectives behind the implementation of SAP's R/3 are:

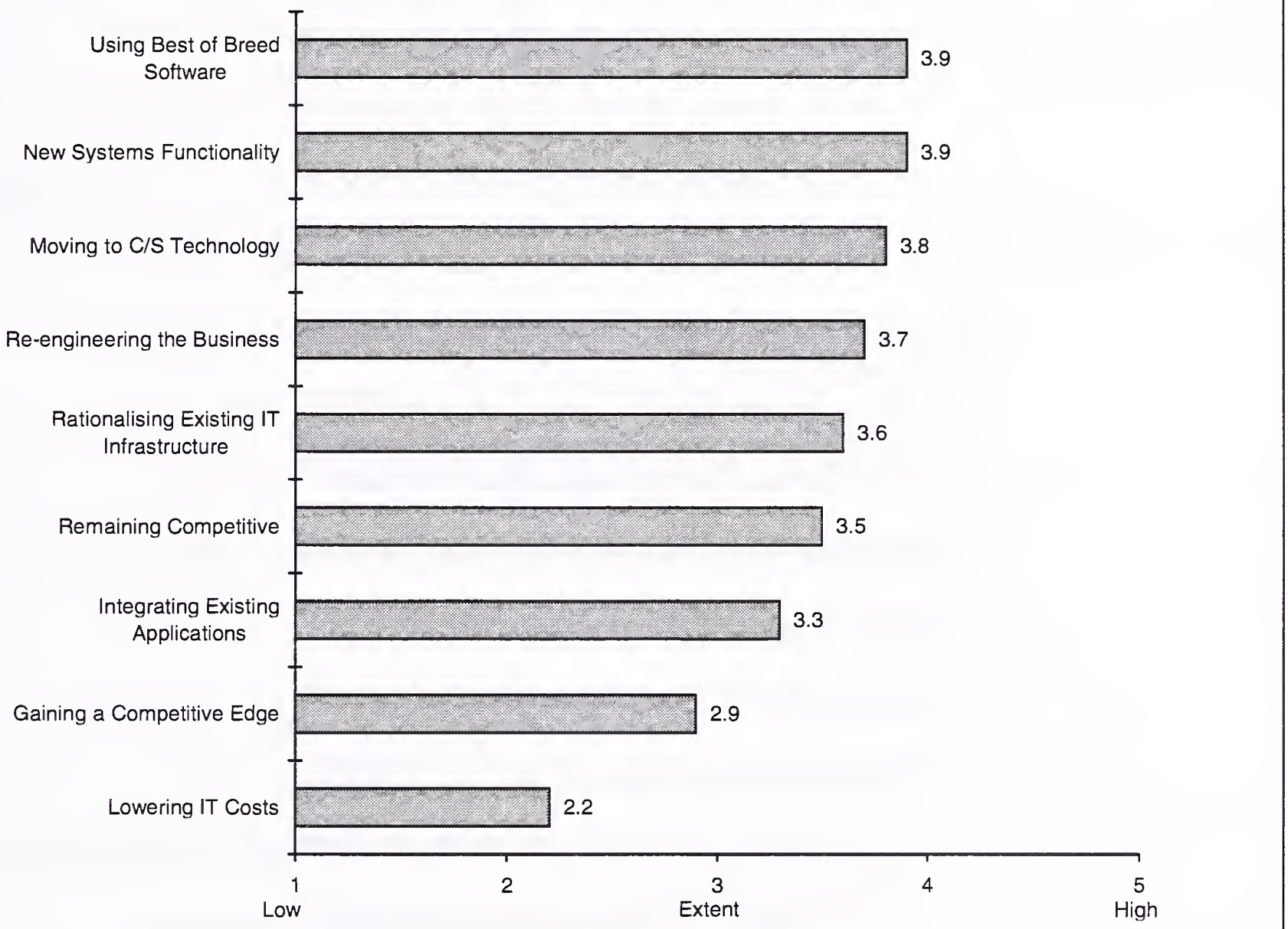
- Gaining new systems functionality
- Remaining competitive
- Using best of breed software.

Lowering IT costs is not a major objective in the SAP marketplace. Systems integration (SI) projects involving the implementation of business applications are increasingly becoming perceived as increased IT expenditures. However, this additional expenditure is expected to lead to sizeable cost savings within other areas of the business.

Having established the major objectives behind SI projects involving the implementation of SAP products, INPUT asked users to indicate the extent to which these objectives had been met as a result of the implementation of R/3 (see Exhibit IV-3).

Exhibit IV-3

Meeting Objectives With R/3 Implementation



89 R/3 Users *Source: INPUT*

Many users purchase SAP products in order to gain a competitive advantage. However, most R/3 users do not believe that this objective is met to any significant degree. Instead, they have found that many of their competitors have also implemented R/3 or a similar product and that R/3 has been necessary just in order to remain competitive in their marketplaces.

One of the major user objectives is to gain new systems functionality from an SAP implementation. This objective has been satisfied for most SAP users.

After indicating objectives behind R/3 implementation, users were asked to reveal the major reasons why they chose SAP products.

INPUT research reveals that users chose R/3 because it is perceived to offer:

- A more fully integrated solution than competing products
- Wider coverage of application areas than competing products
- Greater functionality than competing products
- Greater stability/robustness than competing products
- A global solution in terms of the multilingual, multicurrency capabilities.

Users indicate that the aforementioned reasons for choosing SAP products are also the five major strengths of the products.

The five major weaknesses of SAP products are perceived by users to be:

- Poor on-going support
- The cost of implementation
- The complexity of implementation
- Poor usability; the front ends are not considered to be user friendly by many customers
- The lack of SAP skills in the marketplace.

Interestingly, most of these perceived weaknesses do not relate specifically to SAP products. In fact, most of these weaknesses could be overcome by the actions of services vendors.

Services vendors would be well advised to focus on their abilities to deal with these perceived weaknesses when promoting their offerings in each European country.

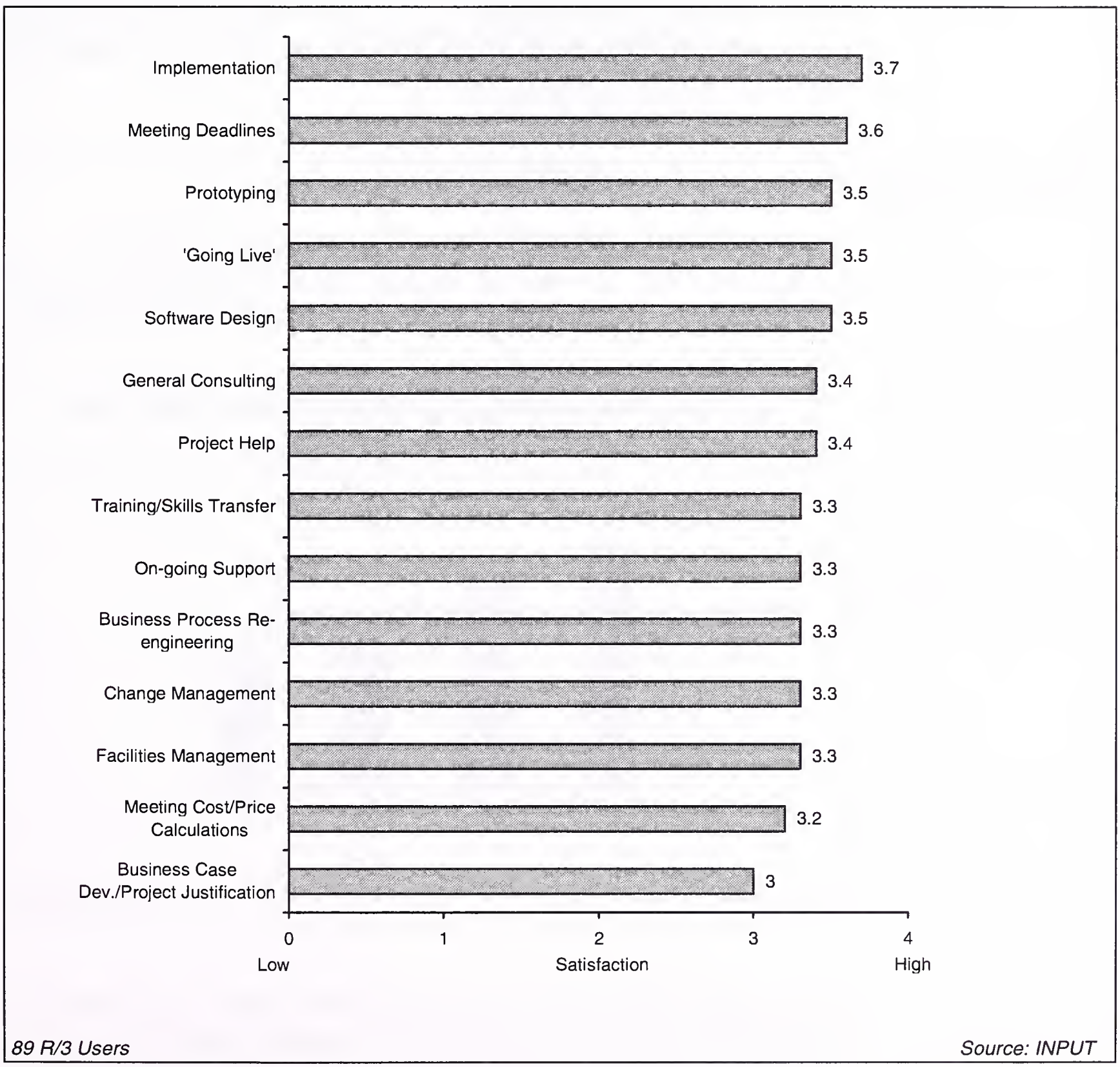
C

User Satisfaction With SAP Services Delivered By External Vendors

INPUT asked R/3 users to express their levels of satisfaction with various aspects of services centred around R/3 and delivered by external services vendors (see Exhibit IV-4).

Exhibit IV-4

R/3 User Satisfaction With Services Delivered By External Vendors



89 R/3 Users *Source: INPUT*

User satisfaction levels with the services delivered by external vendors in the United Kingdom are slightly lower than the average across Europe. French levels of satisfaction are broadly compatible with the European average whereas Italian and German ratings are slightly higher.

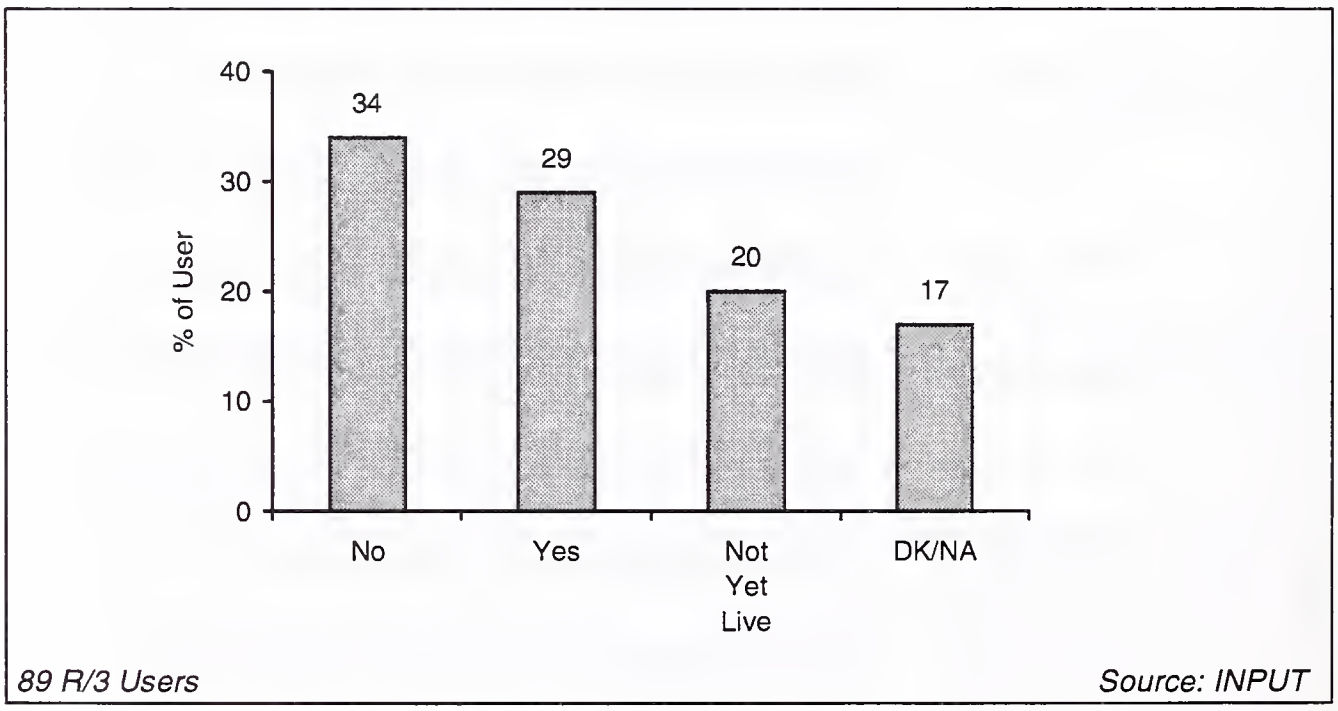
Overall, satisfaction levels with the ability of external services vendors to meet deadlines and implement R/3 are relatively high. However, there is scope for improvement in many areas, notably in on-going support, business-related services, and facilities management. On-going support is an area of particular importance, given that users mention it frequently as a weakness of SAP products. For R/3 in particular, the average satisfaction level with on-going support is low.

D
Areas For Improvement

Nearly 30% of R/3 users revealed that they encountered significant problems with their systems (see Exhibit IV-5). This figure did not vary by more than 5% between Germany, France, the United Kingdom and Italy.

Exhibit IV-5

Are Users Encountering Significant Problems With Their Systems?

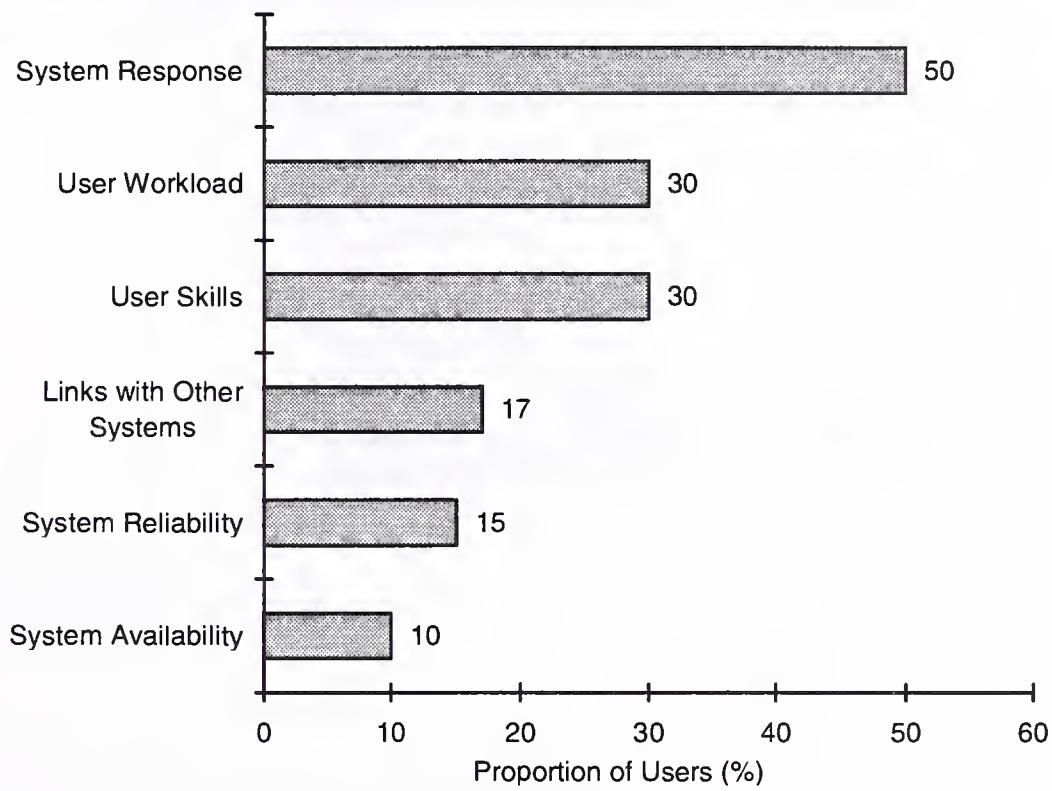


Of those users indicating that they experienced significant problems with their R/3 implementation, nearly 50% indicated that the problems related to systems response (see Exhibit IV-6). In addition, in many organisations, users encountered difficulties in using R/3 following its implementation.

This suggests that many users find R/3 complex to use and will require extensive training if implementations are to be successful.

Exhibit IV-6

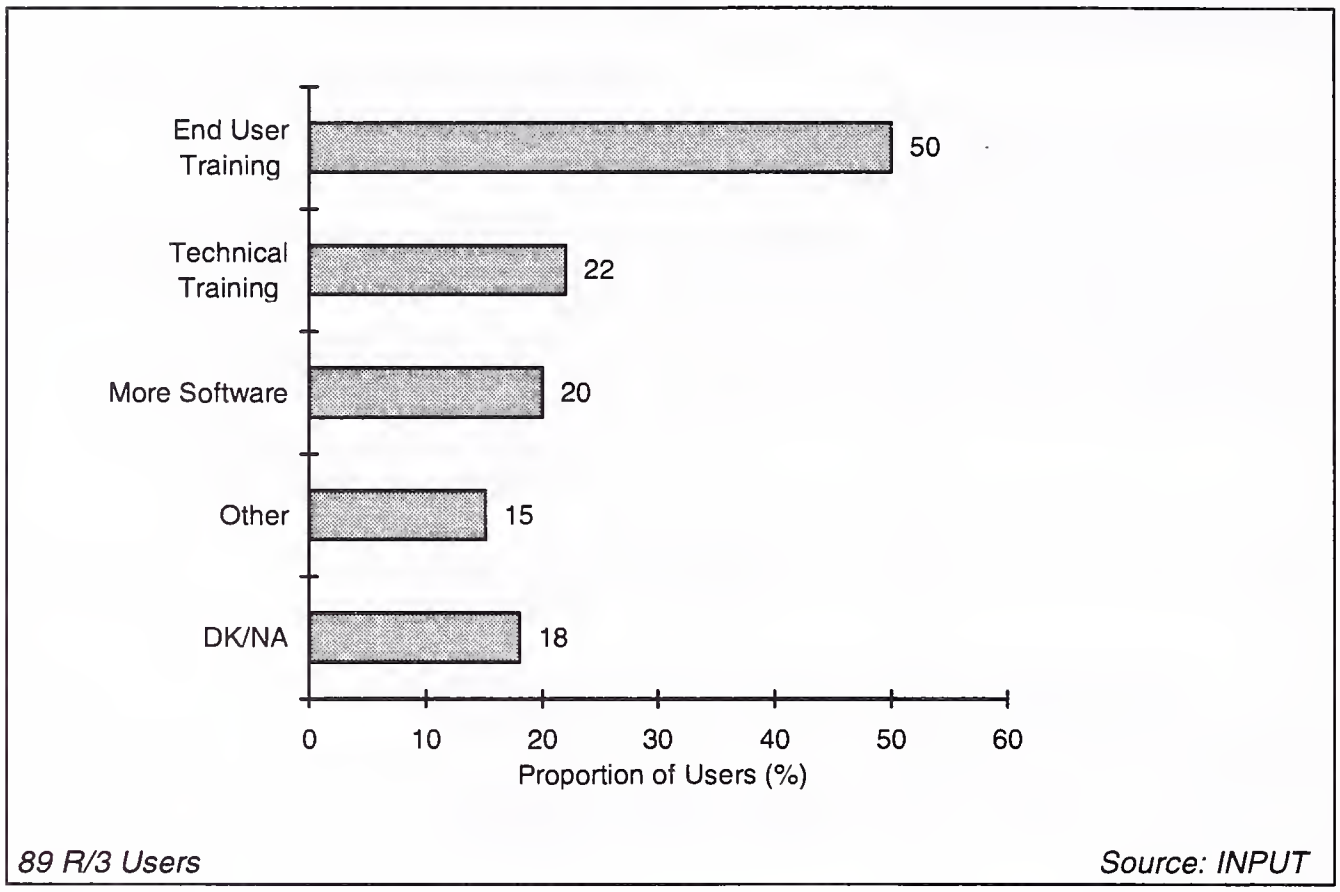
Common Problems With SAP Systems



89 R/3 Users *Source: INPUT*

INPUT asked SAP users to indicate what areas they believed required further investment in order to improve the usage of their SAP systems (see Exhibit IV-7).

Exhibit IV-7

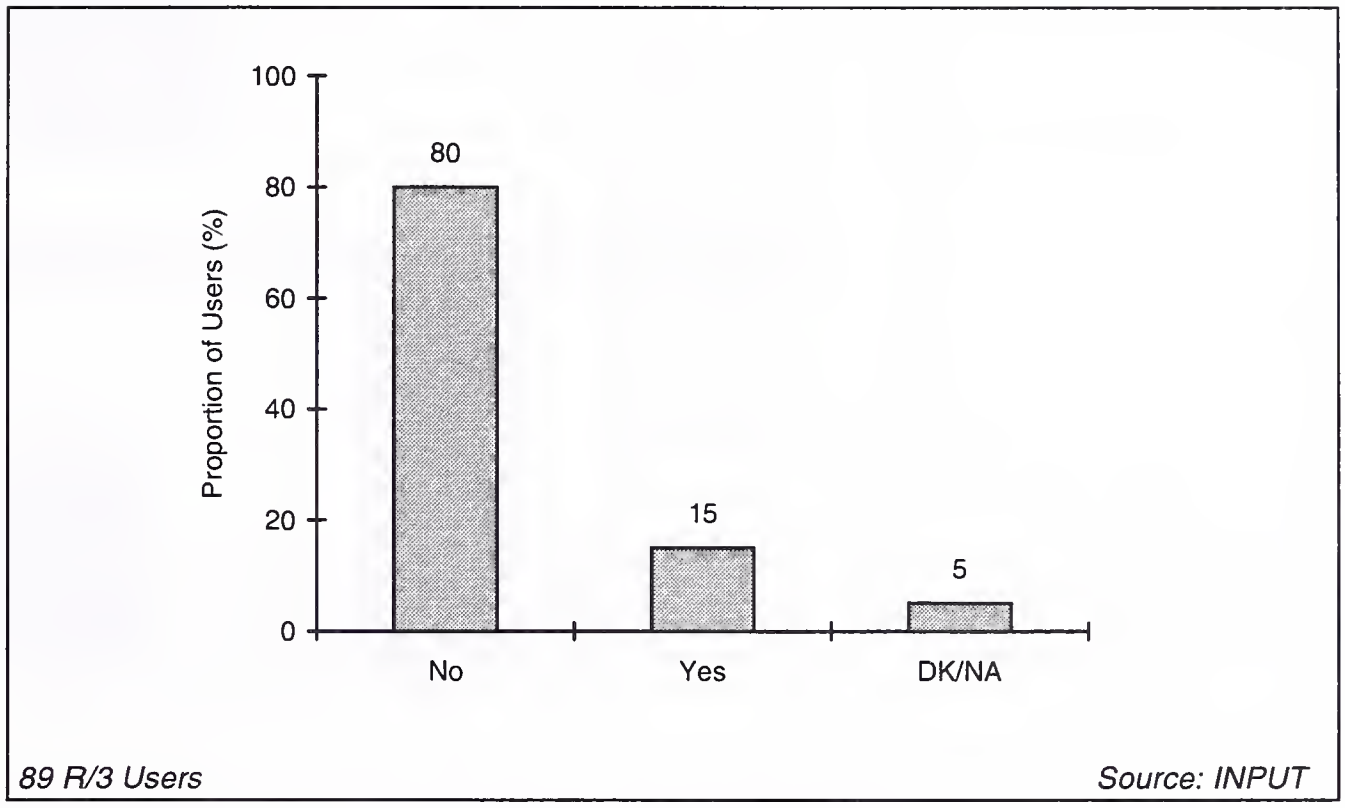


INPUT's survey reveals that once R/3 has been implemented, skilled users are at a premium. Thus, nearly 50% of users believe that further investment is required in the area of end user training. There is also a shortage of technical skills relating to R/3.

Perhaps surprisingly, nearly 80% of all R/3 users believed that there were no unmet requirements from their R/3 implementation processes (see Exhibit IV-8).

Exhibit IV-8

Did Users Have Unmet Requirements From The Implementation Process?



89 R/3 Users *Source: INPUT*

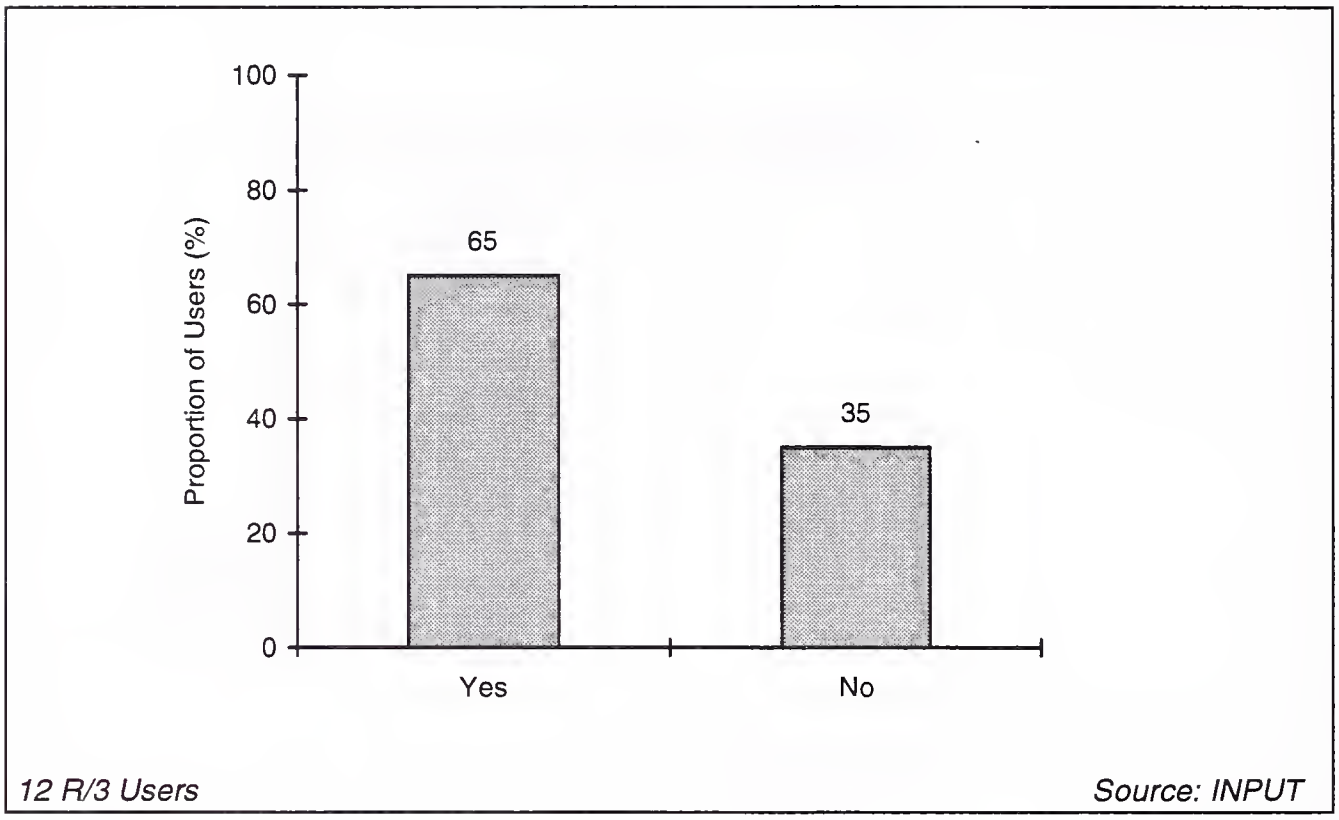
However, of those users that had unmet requirements, the four most commonly mentioned requirements were:

- Having a basis for on-going support
- Continuity of service
- Risk management
- Full integration of the system across the enterprise.

Over half of the users who mentioned that their services provider did not meet all of their requirements related to implementation believe that other SAP services providers offer the unmet services (see Exhibit IV-9).

Exhibit IV-9

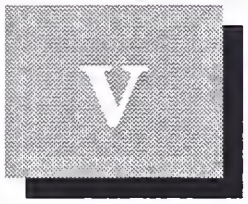
Do Users Believe That Alternative Services Providers Can Meet Their Unfulfilled Requirements?



12 R/3 Users

Source: INPUT

The SAP services market is maturing rapidly. Vendors who do not offer a comprehensive suite of services that answer user concerns will increasingly lose business to their competitors.



Market Development

This chapter analyses the development of the SAP services market in Europe. It examines the use of external services vendors by enterprises, the selection criteria used to select a services vendor and the type of contract preferred by users.

A
Market Growth

SAP experienced phenomenal success with its enterprise-wide business applications products in the mid-1990's. The company's European revenues grew by 27% between 1995 and 1996 to $1.16 billion. Although still a very healthy growth rate, this represents a slowdown from 1995. The slowdown in growth can be expected to continue for three major reasons:

- SAP had a relatively small installed base in most of Europe (outside Germany) prior to 1995
- Its products have traditionally been targeted at large enterprises (typically with annual revenues in excess of $500 million) — there are a limited number of such organisations
- Increased competition.

SAP can still expect to experience growth in Europe from:

- The remaining large enterprises that have not implemented enterprise-wide business applications

- Smaller organisations that are increasingly demanding the rich functionality, the scalability, the range of applications modules, and the integrated attributes associated with SAP's products

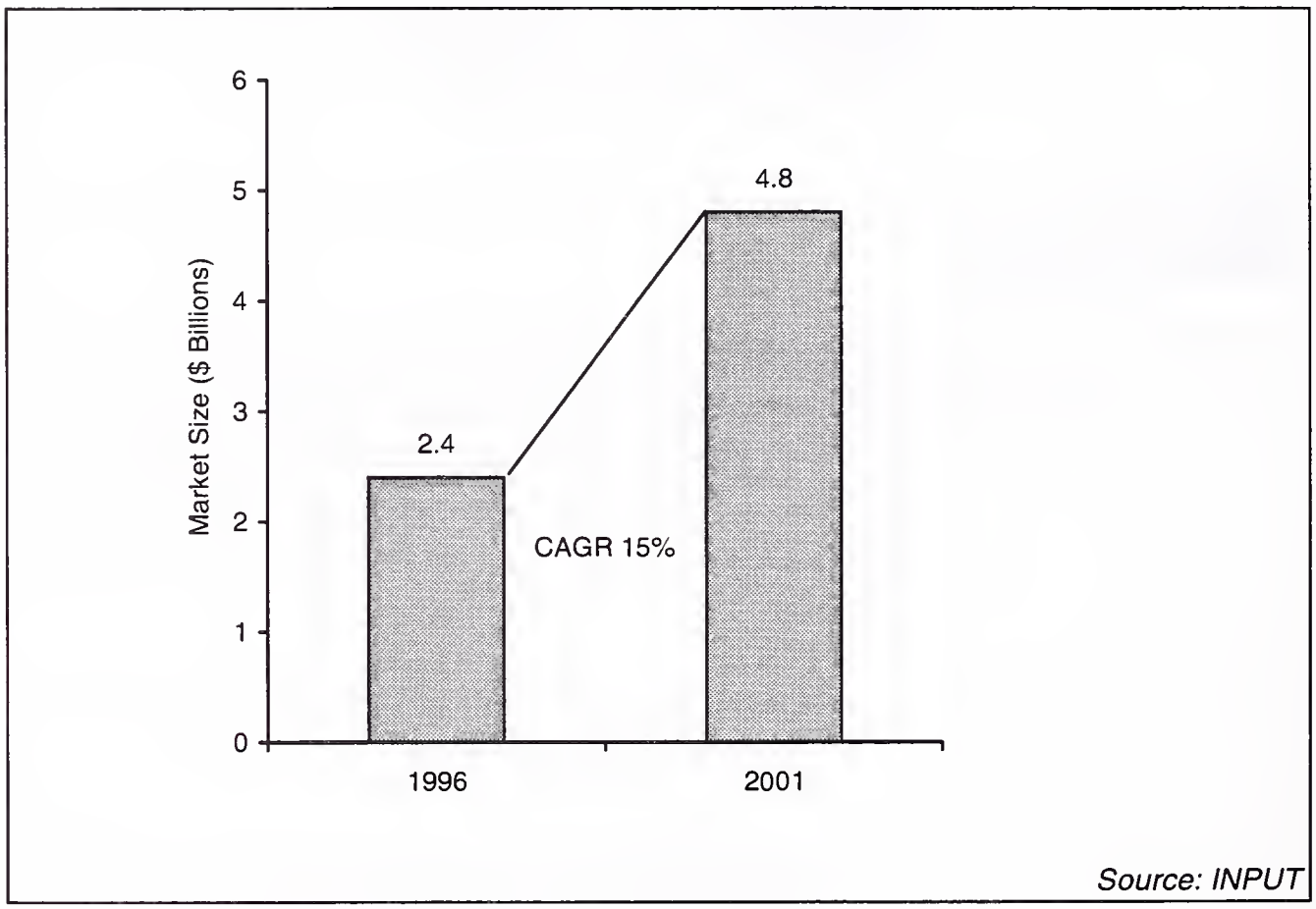
- Demand from both its existing customers and potential customers for the Internet-enabled version of R/3.

As a result of SAP's success, SAP services providers have also enjoyed success over the last few years and will continue to do so.

The market for SAP related services in Europe reached $2.4 billion in 1996 (see Exhibit V-1). INPUT estimates that it will reach $4.8 billion in 2001.

Exhibit V-1

European Market For SAP-Related Services, 1996 - 2001



Source: INPUT

Services revenues are estimated to be three times the size of SAP's product revenues at present. However, this ratio is likely to fall to about 2.5:1 as the end of the century approaches. This is reflected in the modest (by SAP standards) CAGR for SAP-related services of 15% in Europe.

Influences on the SAP services market include:

- Emphasis on reducing implementation times

- Efforts to reduce the complexity of R/3 for smaller organisations
- Moves away from time and materials contracts and towards fixed price contracts
- Pre-loading R/3 onto hardware; H-P now offer hardware with R/3 pre-installed
- Greater competition in the marketplace
- An increase in SAP-related skills.

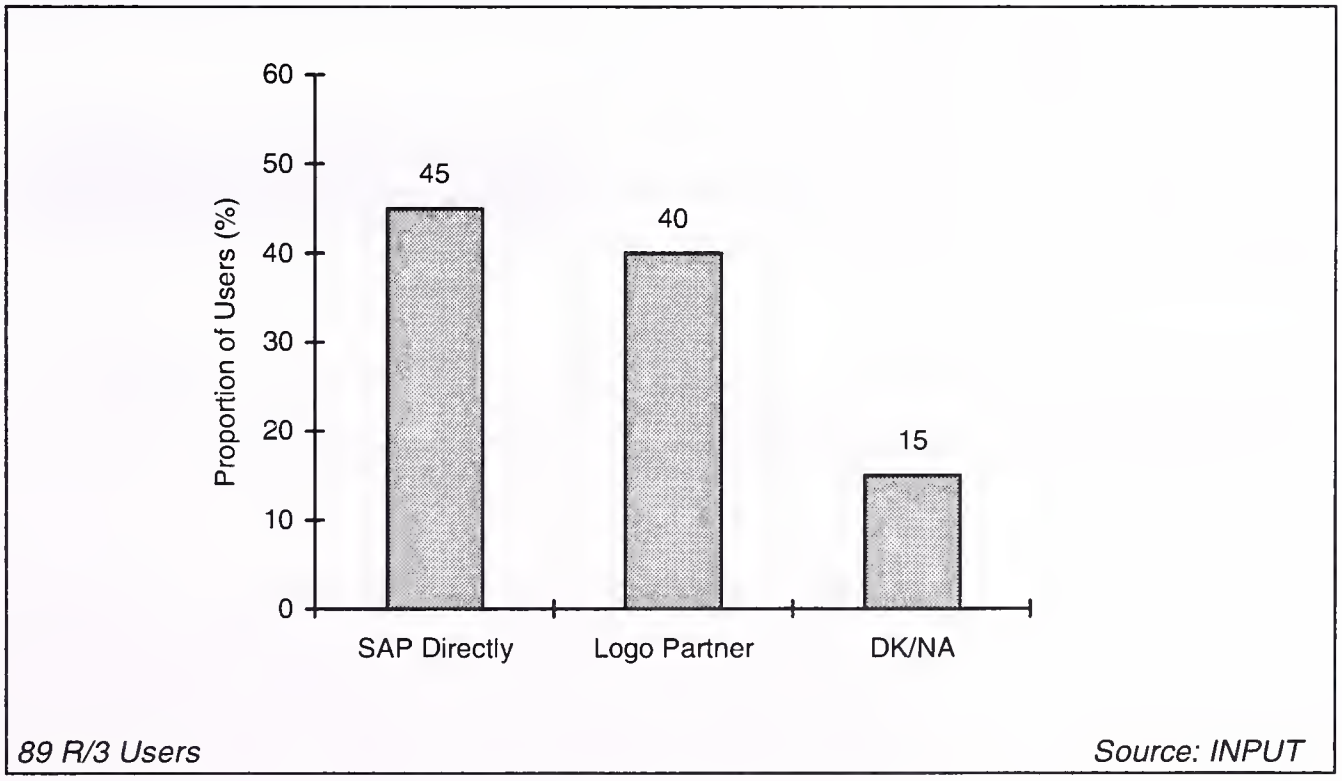
Although SAP's phenomenal growth and the resulting growth of the market for SAP-related services can be expected to stabilise, the prospects for steady healthy growth are good.

B
Use Of External Vendors

Much of SAP's recent success can be attributed to its extensive use of partners for the provision of services centred around its products. However, most users in Europe approached SAP directly in order to purchase SAP products (see Exhibit V-2).

Exhibit V-2

Who Did Users Approach To Purchase SAP Products?



89 R/3 Users *Source: INPUT*

A much larger proportion of UK users, around 60%, approached SAP directly, while a much lower proportion of Italian users, around 20%, approached SAP directly.

These findings suggest that the capabilities of SAP's services partners and SAP's services strategy must be publicised more widely as small and medium-sized firms increasingly demand integrated business applications such as SAP's R/3.

When users of external SAP services in each major European economy, were asked why they had made that choice, their responses related to technical issues. The complexity of SAP's products has resulted in a shortage of technical skills centred around the products. Users are therefore keen to involve external vendors with technical implementation skills, functional application skills and programming skills (see Exhibit V-3).

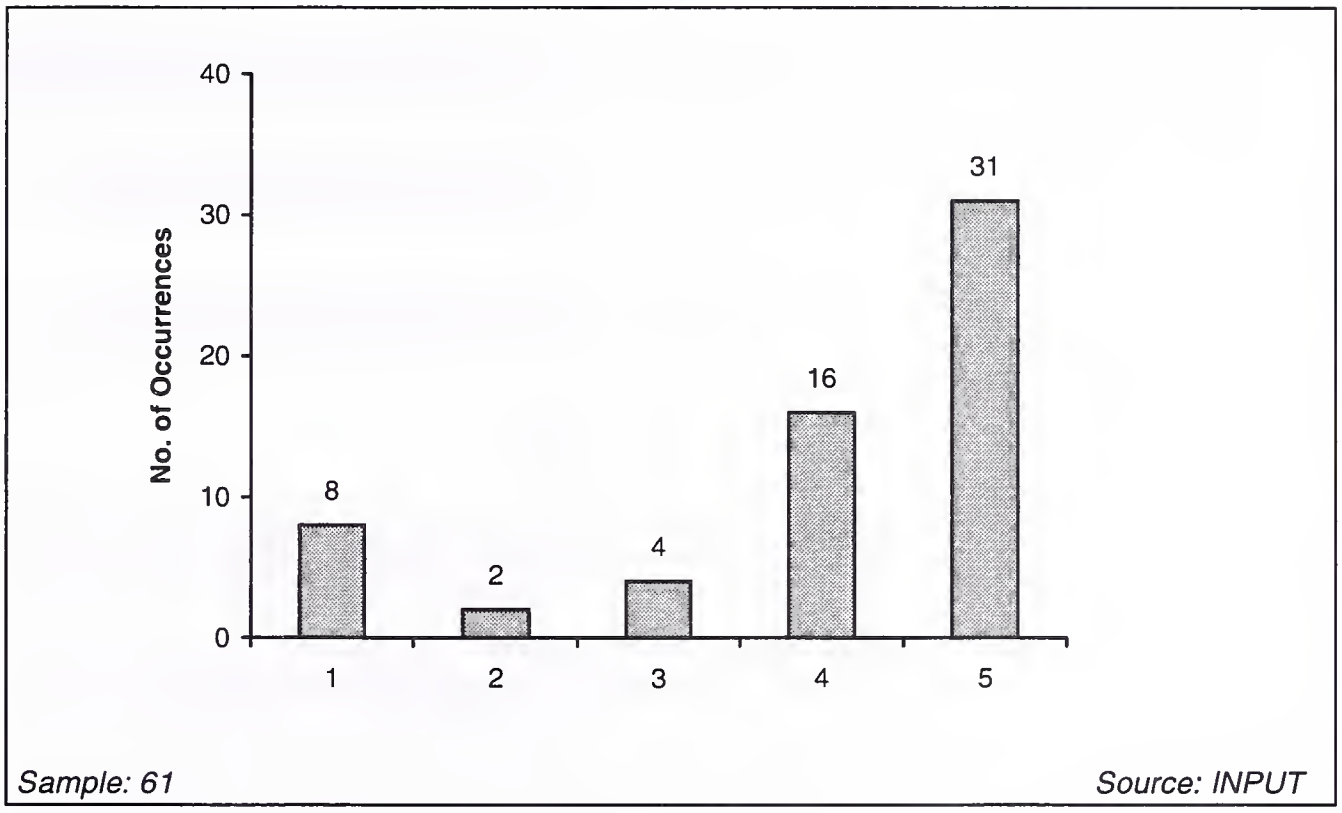
Exhibit V-3

Major Reasons For Choosing External Assistance

Logo Partner accreditation is important for external vendors who wish to be successful in the SAP services market. Logo Partner accreditation was very important to approximately three-quarters of enterprises when selecting their SAP services vendor (see Exhibit V-4).

Exhibit V-4

Importance Of Logo Partner Accreditation In Services Vendor Selection



Sample: 61

Source: INPUT

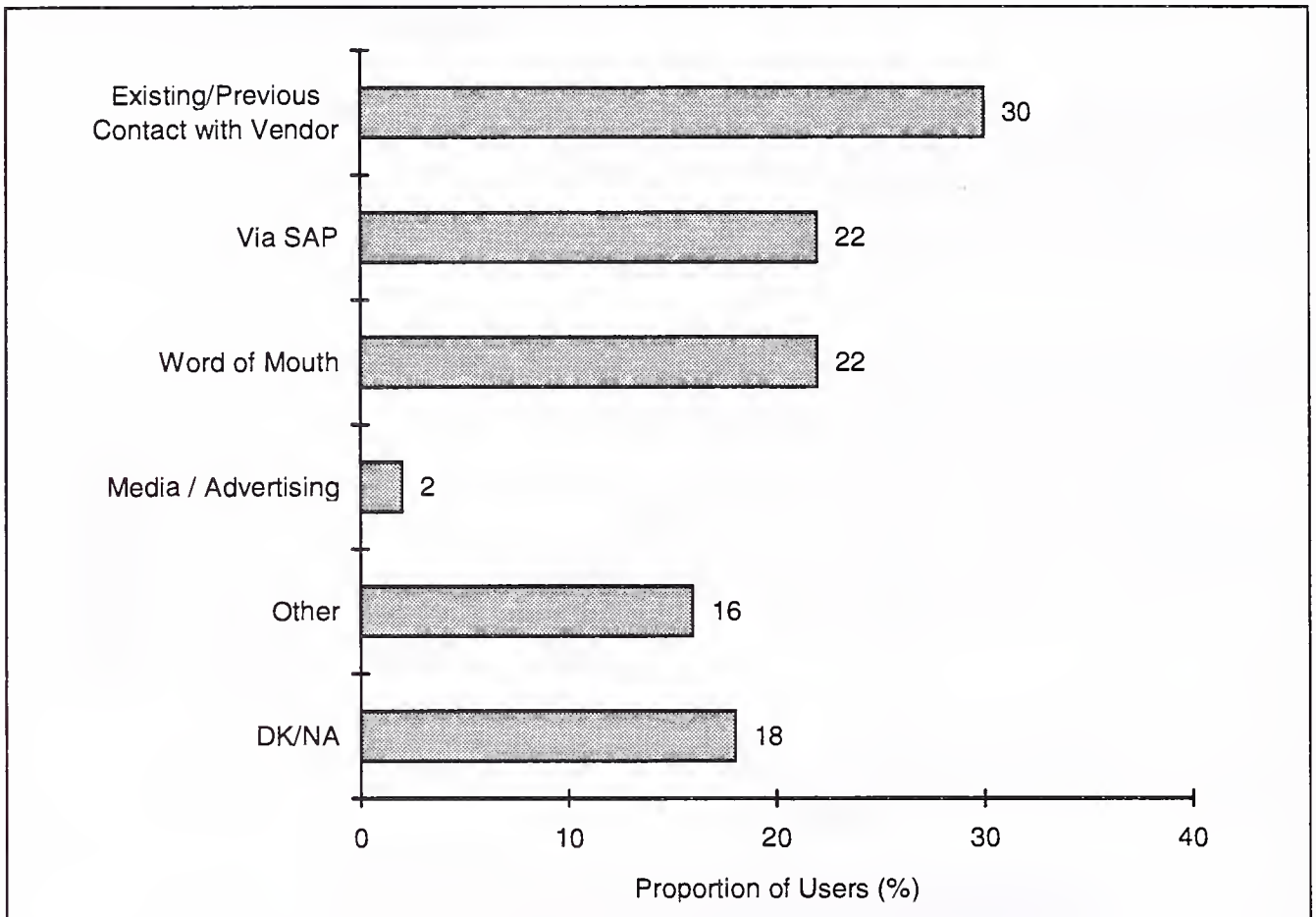
Nearly a quarter of users found out about their services partners via SAP (see Exhibit V-5). Nearly 30% had worked with their services vendor previously. Only 2% of SAP services customers found out about their services vendor from the media.

Italian and French users are much more likely to be aware of their services vendors from existing/previous contact with the vendor than via SAP. However, UK users are more likely to become aware of their services vendor via SAP. German users are as likely to become aware of their services vendor via SAP as from existing/previous contact with the services vendor.

Services vendors have an opportunity to gain a competitive edge by using carefully targeted media vehicles to promote their SAP-related activities.

Exhibit V-5

Awareness Of Services Vendors



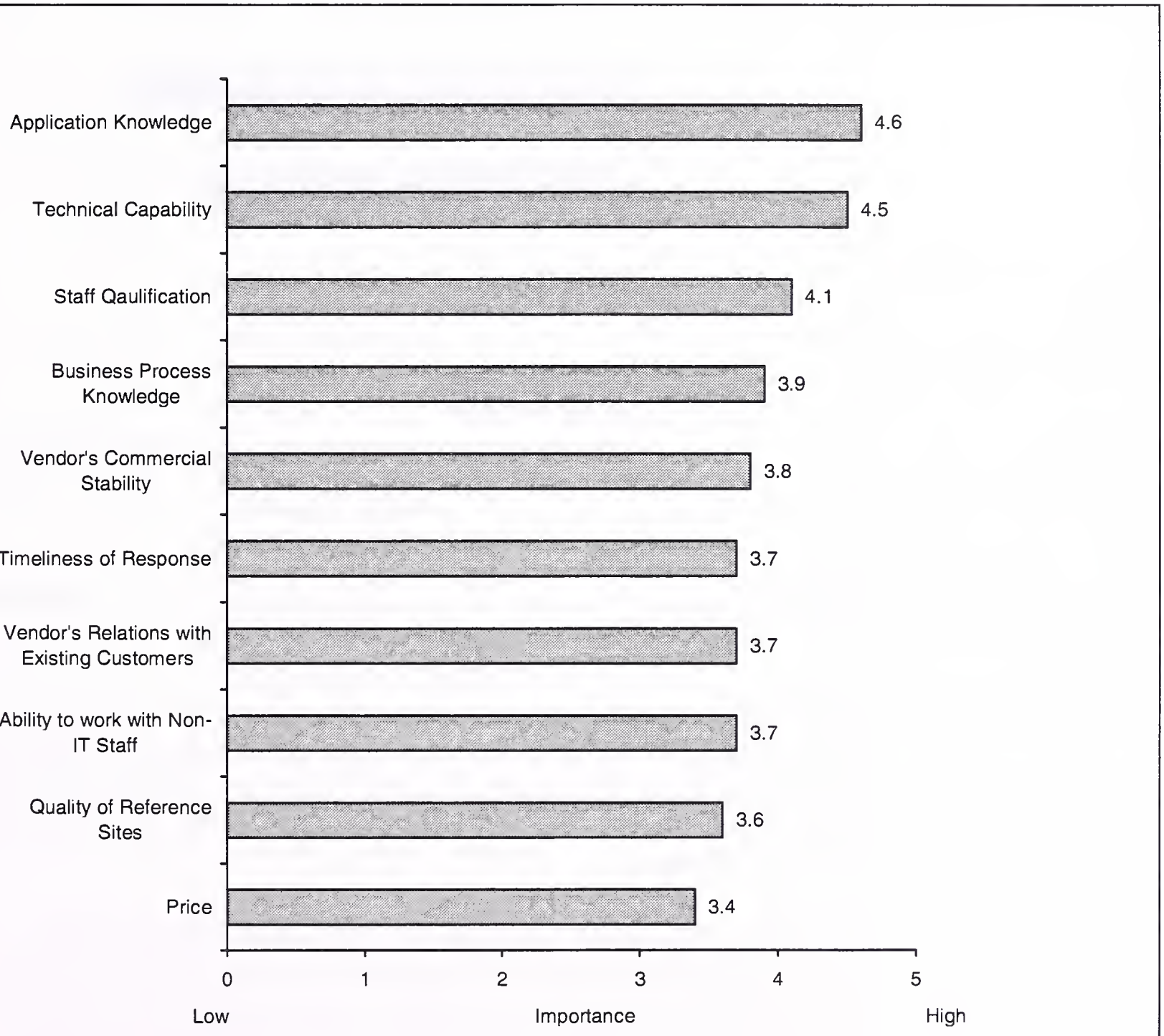
44 R/3 Users *Source: INPUT*

C
Vendor Selection/Decision Criteria

When asked to reveal the most important selection criteria in their choice of services partner, R/3 users in each major European economy believe that the application knowledge and technical capability of their services partner are key (see Exhibit V-6).

Exhibit V-6

Most Important Criteria For R/3 Services Vendor Selection

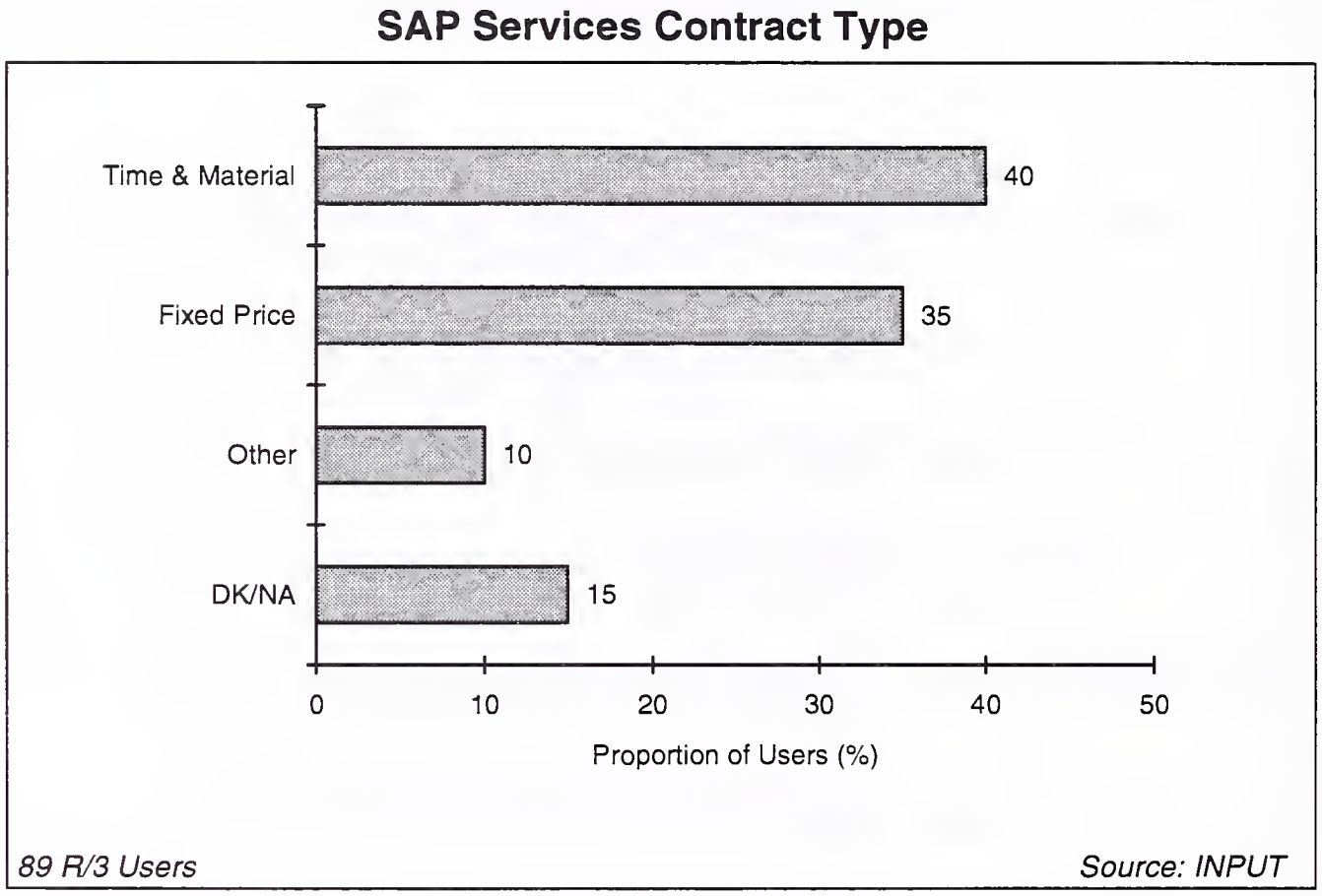


89 R/3 Users *Source: INPUT*

D
Contract Types

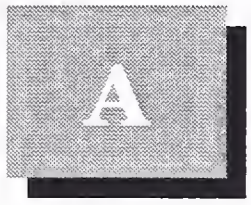
Services vendors are increasingly offering fixed price contracts in order to enjoy success in the SAP services market. However, nearly 40% of existing R/3 users purchased contracts on a time and materials basis (see Exhibit V-7).

Exhibit V-7



Perhaps surprisingly, time and materials contracts are more common in the UK than in the other 3 major European economies, with nearly half of UK users engaged in time and materials contracts. German, French and Italian users are more likely to have fixed price contracts with their SAP services providers.

Currently, many services vendors are reluctant to offer fixed price contracts, particularly for high risk projects. As R/3 implementation becomes better understood and project risks are perceived to lessen, vendors will increasingly be prepared to offer fixed price contracts. Furthermore, in order to achieve success with smaller organisations, vendors will move to offering standard implementations at fixed prices.



SAP User Questionnaire

Section A

Questionnaire Respondent Details

Company Name _____

Respondent Name _____

Job Title _____

Total Annual Turnover _____

Total Number of Staff _____

Total IT Budget _____

Total Number of IT Staff _____

Section B - Questions Regarding the Actual SAP Product

1 What SAP software do you have installed in your organisation and how long has it been operational ?

	Version	Date Installed
R/2		
R/3		
Combination		

2. Can you indicate whether you have implemented a total SAP product or just certain modules ? *(Multiple ticks allowed)* Can you also indicate the number of users typically utilising a particular module ?

	SAP Module Implemented	Number of Users
Total Product		
Financials (all)		
Financials (components)		
General Ledger		
Accounts Receivable		
Accounts Payable		
Financial Controlling		
Investments		
Legal Consolidation		
Asset Management		
Management Accounting		
Logistics		
Payroll		
Human Resources		
Manufacturing		
Sales & Marketing		
Other (Please Detail)		

3. Can you outline the IT infrastructure supporting your SAP products ? *(Multiple ticks allowed)*

R/2

Hardware	IBM	Fujitsu	HDS	Other *(Detail)*
Operating System	VSE/SP	MVS	MVS/XA	MVS/ESA
Data Comms	CICS	IMS/DC		
Database	VSAM	DL1	Adabas	IMS/DB

R/3

Hardware	Bull	Digital	HP	IBM	SNI	Sun	Sequent	Other *(Details)*
Operating System	BOS	OSF/1	HP-UX	AIX	SINEX	Solaris	Other	
Database	Oracle	Informix	Other					
Presentation	OSF/MOTIF	Other						

4. Can you briefly outline your SAP related history; i.e. have you *(Multiple ticks allowed)*

Been and still are, purely a R/2 site ? _____

Migrated from R/2 to R/3 ? _____

Outsourced your R/2 ? _____

Gone straight to R/3 ? _____

Outsourced your R/3 ? _____

Other _____

_____

5. How satisfied are you with the following elements of the actual SAP product you have implemented ? (Please rate on a scale of 1-5 where 1 = extremely dissatisfied and 5 = extremely satisfied) *Answer relevant sections*

	R/2	Version	R/3	Version
Usability				
Flexibility				
Functionality				
Reporting				
Architecture				
Range of Modules				
Quality Standards				
Platform Portability				
Price				
Overall				

6. Can you indicate what the major objectives were behind your SAP implementation and to what extent have these been met ? (Please rate both on a scale of 1 - 5 where 1 = low objective/ objectives not met at all and 5 = high objective/objectives completely met)

	Objective	Objective Met
Rationalising existing IT infrastructure (s)		
Moving to client/server technology		
Using best of breed software		
Integrating existing applications		
Improving product lifecycles		
Gaining new systems functionality		
Gaining competitive edge		
Remaining competitive		
Reengineering the business		
Lowering IT costs		
Other (s)		

7. Why did you choose SAP products ?

_____

_____

8. What other company's products did you consider ? *(Multiple ticks allowed)*

Oracle _____

JBA _____

CODA _____

Computer Associates _____

Dun & Bradstreet _____

Walker _____

IBM _____

Systems Union _____

JD Edwards _____

Hoskyns _____

Peoplesoft _____

SSA _____

Baan _____

Peterborough _____

Interactive Care _____

QSP _____

Other *(Please detail)*

_____

_____

9. Can you detail the total cost of your UK SAP implementation in terms of the following categories?

PLEASE AIM TO OBTAIN HARD NUMBERS - %'S ARE A FALLBACK POSITION

Implementation Categories	Project Cost (£,000 or %)
Software Licence	
Central Hardware	
Desktop Hardware & Networking	
BPR Services	
Systems Configuration Services	
Systems Tailoring/Enhancement Services	
ABAP, Interfaces, etc.	
Education & Training	
Direct Consulting from SAP	
Other (Please Detail)	
Total	

10.Can you indicate how long your SAP implementation period was ?

Under 3 months _____

Between Three and Six Months _____

Between Six and Nine Months _____

Between Nine Months and a Year _____

Between One and Two Years _____

Over Two Years _____

11.How long do you expect the payback period for your implementation to be ?

At implementation _____

After 12 months _____

After 1-5 years _____

After 5 years _____

12.Was your decision to adopt SAP

	Yes	No
An independent decision ?	_____	_____
Discussed with Management Consultants ?	_____	_____
Discussed with your auditors ?	_____	_____

13.If your decision was discussed with Management Consultants were these consultants an SAP Logo Partner ? Can you state who they were ?

Yes _____

No _____

Name of Consultants

_____

_____

14 In purchasing SAP Products did you

Approach SAP directly ? _____

Via an SAP Logo Partner ? _____

15. What do you consider the three main strengths and weaknesses of SAP's products ?

	Strength	Weakness
1		
2		
3		

Section C - Questions Regarding the IT Services Assistance you Received in your SAP Implementation Project

16. What were the main three main reasons you sought external SAP services assistance ? *(Please rank 1, 2, 3, where 1= most important)*

Technical Implementation Skills _____

Project Management Skills _____

Business Consulting Skills _____

Industry Knowledge _____

IT Architecture Knowledge _____

Systems Integration Expertise _____

BPR Skills _____

Functional Applications Skills _____

Programming Skills _____

Prime Contractor Management of the Project _____

Business Process Expertise _____

End User Training _____

Access to a development/implementation methodology _____

Change Management _____

Other (Please detail below)

_____

_____

Did not Utilise External Services _____

IF YES TO THIS LAST PART OF QUESTION 16 - TERMINATE INTERVIEW

17. In your selection process how important was it that the IT services provider was an SAP Logo Partner ? *[Detail Global or National] (Please rate on a scale of 1-5 where 1 = very unimportant and 5 = very important)*

18. Can you rate the importance of the following criteria in your initial selection of the external SAP services vendor ? (Please rate on a scale of 1 - 5 where 1 = unimportant and 5 = very important)

Ability to offer a broad range of services from consulting to maintenance

Size of the supplier _____

Quality of reference sites _____

Quantity of reference sites _____

Industry specialisation _____

Geographical presence _____

Price _____

Flexibility of contractual approach _____

Vendor's commercial stability _____

Vendor's relations with existing customers _____

Your existing relationship with the vendor _____

Vendor's commitment to partnering _____

Culture of the vendor _____

Technical capability _____

Staff qualification _____

Timeliness of response _____

Performance guarantees _____

Application knowledge _____

Process knowledge _____

Independence _____

Staff attrition rate _____

Quality Certification (ISO9000) _____

Process reengineering skills _____

Ability to demonstrate IT's business benefits _____

The management of risk _____

Ability to work with non-IT staff _____

On-going support _____

Other *(Please detail)*

_____

_____

19.How did you find out about your SAP services partner ? *(Multiple ticks allowed)*

Via SAP _____

Word of mouth _____

Media/Advertising _____

Directories _____

World-Wide-Web _____

Other (Please detail)

_____

_____

20. How influential were each of the following in selecting an SAP services providers ? (Please rate on a scale of 1 to 5 where 1 = not influential and 5 = very influential)

Managing Director/Chief Executive Officer _____

Financial Director/Chief Financial Officer _____

IT Director _____

Other Director (please specify)

_____

User Representative _____

External Audit Representative _____

Internal Audit Representative _____

External Consultancy _____

Internal Consultancy _____

Other

_____

_____

21. What contractual approach did you use for your SAP implementation project and how satisfied have you been with this approach ? *(Tick in appropriate Contractual Approach Box and then rate on a scale of 1 - 5 where 1 = extremely dissatisfied and 5 = very satisfied))*

	Contractual Approach	Satisfaction
Systems Integration		
Fixed Price for Services		
Time and Material		
Other *(Please explain)*		

22. Overall, how satisfied are you with your SAP services provider ? Can you name them ? (Please rate on a scale of 1-5 where 1 = extremely dissatisfied and 5 = extremely satisfied)

Name (s)	Satisfaction Rating

23. How satisfied are/were you with your SAP services provider with regards to the following issues ?: (Please rate on a scale of 1-5 where 1 = very dissatisfied and 5 = very satisfied)

Business case development/project justification _____

Business process reengineering _____

General consulting _____

Change management _____

Meeting cost/price calculations _____

Meeting deadlines _____

Software design _____

Prototyping _____

Implementation _____

Training/Skills transfer _____

"Going Live" _____

Facilities Management _____

Maintenance _____

Project Help _____

Desk Top _____

24.Did your external IT services firm utilise any of the following; if they did how satisfied were you with them ? *(Please score satisfaction on a scale of 1 - 5 where 1 = very dissatisfied and 5 = very satisfied)*

	Yes/No	Satisfaction Rating
Formal Implementation Methodology		
Proprietary Implementation Tools		
Business Modelling Tools		
SAP's Business Engineering Workbench (BEW)		

25.What implementation approach did your organisation adopt in your SAP project ?

Big Bang _____

Phased By Modules _____

Pilot/Roll Out _____

Other (Please Detail)

_____

_____

26.(a) Which elements of your SAP project were you particularly satisfied with and why ?

_____

_____

(b) Which elements of your SAP project were you particularly dissatisfied with and why ?

_____

_____

27.(a) In your SAP implementation process were there any requirements which you had which were unmet by the services organisation assisting you ?

Yes _____

No _____

(b) If Yes, what were these ?

_____

_____

(c) Do you believe other SAP services providers offer these services ?

Yes _____

No _____

28.(a) Since going live with SAP have you experienced significant problems with the system ?

Yes _____

No _____

Not yet live _____

(b) If yes, have these been in:

User skills _____

User workload _____

System reliability _____

System availability _____

Links with other systems _____

Systems response _____

Other (Please detail)

_____

(c) To improve the usage of your SAP systems, do you think your best investment would be in:

Technical training _____

More hardware _____

More software _____

End user training _____

Technical support facilities _____

Other (Please detail)

_____

29.(a) How much have you spent in total on external SAP services in the last 12 months ? How much do you intend to spend on SAP services in the next year ?

Last 12 Months _____

Next 12 Months _____

(b) In percentage terms, can you apportion this spend across the following areas ?

	Last 12 Months	Next 12 Months
Technical Implementation Skills		
Project Management Skills		
Business Consulting Skills		
Systems Integration Expertise		
BPR Skills		
Functional Applications Skills		
Programming Skills		
Change Management		
End User Training		
Other (Please detail below)		

30.Do you currently have an agreement in place for development/maintenance of your system ?

Yes _____

No _____

31.Do you feel the that the external IT services vendor you engaged to assist you with your SAP implementation has delivered value for money ? (Please rate on a scale of 1 - 5 where 1 = you strongly believed they have not and 5 = you strongly believe they have)

_____

32 (a) Would you act as a reference site for the SAP services provider ?

Yes _____

No _____

Possibly _____

(b) Would you recommend the company's SAP services offering to other organisations ?

Yes _____

No _____

Possibly _____

33.Over the next two years do you have plans to do any of the following ? *(Multiple ticks allowed)*

Develop new SAP applications _____

Upgrade the system _____

(IF CURRENTLY AN R/2 SITE) Migrate to R/3

Outsource your SAP systems _____

Use the Internet as an SAP application platform _____

Other *(please detail)*

_____

_____

Thank you very much for your time and assistance with this questionnaire

(Blank)