INPUT

RESEARCH REPORT

Evaluation of Enterprise Application Solutions, U.K.

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Abstract

The enterprise application solutions market has grown rapidly in recent years and strong growth is expected to continue in this market up to the Year 2000. However, the expectations from enterprise application implementation is changing and a new wave of solutions is replacing many of the established vendors in the U.K.

The objectives of this study are to:

- Analyse current usage of enterprise application solutions and the platforms on which they are based
- Identify future buying patterns of solutions and platforms
- Identify the cost structure of enterprise application solution implementations
- Analyse levels of satisfaction with current enterprise application solutions
- Analyse awareness and perceived suitability of enterprise application solutions

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I

Introduction

A
Scope and Objectives

The enterprise application solutions market has grown rapidly in recent years and strong growth is expected to continue in this market up to the Year 2000. However, expectations from enterprise application implementations are changing and a new wave of vendors is replacing many of the established vendors in the U.K.

The objectives of this study are to:

- Analyse current usage of enterprise application solutions and the platforms on which they are based
- Identify future buying patterns of solutions and platforms
- Identify the cost structure of enterprise application solution implementations
- Analyse levels of satisfaction with current enterprise application solutions
- Analyse awareness and perceived suitability of enterprise application solutions

B
Methodology

INPUT interviewed representatives of 173 organisations in the U.K. One hundred and seven of these organisations planned to implement enterprise application solutions within the next two years. The remaining sixty six organisations currently use enterprise application solutions but have no immediate replacement plans.

The breakdown of the overall sample by industry is shown in Exhibit I-1.

Exhibit I-1

Sample Breakdown by Industry Sector

Industry Sector	Proportion of Sample (%)
Discrete Manufacturing	17
Process Manufacturing	16
Distribution	19
Banking	14
Insurance	13
Other	21

Source: INPUT

The breakdown of the overall sample by organisation turnover is shown in Exhibit I-2.

Exhibit I-2

Sample Breakdown by Company Size

Turnover	Proportion of Sample (%)
<£100m	18
£101m-£200m	23
£201m-£500m	16
£501m-£1000m	18
£1001m+	25

Source: INPUT

C
Report Structure

Chapter II consists of the Executive Summary, which is a summary of the key conclusions and recommendations of the research, and identifies the main issues for buyers of enterprise application solutions.

Chapter III analyses existing enterprise application solution usage including current and planned usage of solutions, equipment platforms, operating systems and databases. It also evaluates implementation approaches, timescales and costs.

Chapter IV analyses satisfaction with enterprise application solutions including the achievement of benefits sought. It also analyses satisfaction with enterprise application solution implementation.

Chapter V evaluates the purchasing process for both solutions and services.

D
Related Reports

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

Evaluation of SAP Service Providers in the U.K.

Professional Services Market Forecast, Europe 1997-2002

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II

Executive Summary

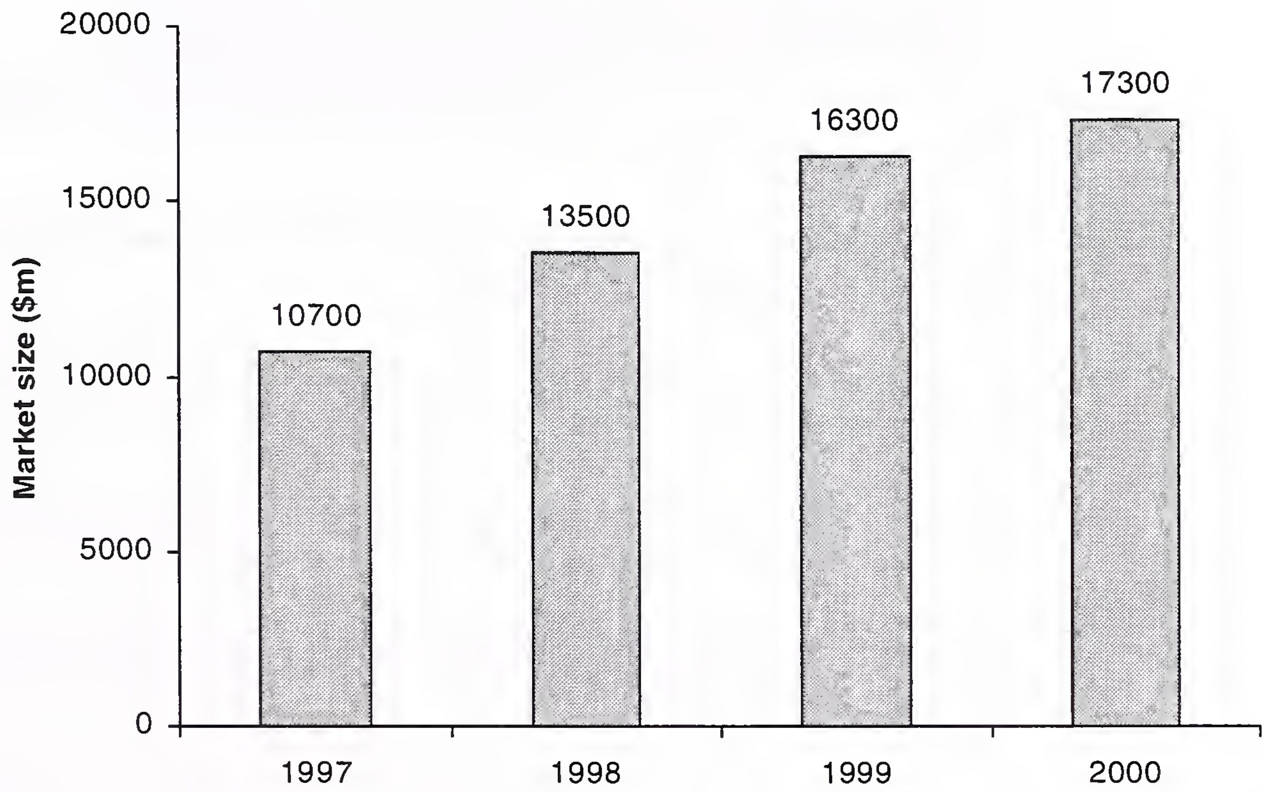
A

Rapid Growth in EAS Services Market

Exhibit II-1 shows the growth in the enterprise application solutions professional services market in Europe up to the year 2000.

Exhibit II-1

European Enterprise Application Professional Services Market, 1997-2000



Source: INPUT

The EAS related professional services market will continue to grow at rates in excess of 20% per annum for the next two years, though rates may subsequently decline. The majority of organisations surveyed by INPUT in the U.K. are either replacing, or planning to replace, their enterprise application solution over the next two years.

There are a number of major reasons why this is taking place.

- Firstly, the market is being fuelled by the need of organisations to address Y2K and Euro issues.

- Secondly, organisations are now beginning to address the need to adapt existing enterprise application solutions for electronic business via Internet/Intranet technology.

- Thirdly, the major enterprise application solution vendors are now moving into new industry sectors where their products have traditionally shown low levels of adoption.

In addition to these effects which are taking place in their traditional market segments, the enterprise application solution vendors are beginning to address the opportunities for their offerings in the SME sector, and are exploring new ways of offering their products to this market, such as via managed services.

However, the use of enterprise application solutions is changing and buyers need to recognise:

- The increased level of business change that now accompanies enterprise application solution implementation

- The need to budget for significant business process reengineering expenditure

- The need to integrate the principal enterprise application solution with other complementary applications

- The changing technology platforms underlying enterprise application solution implementations.

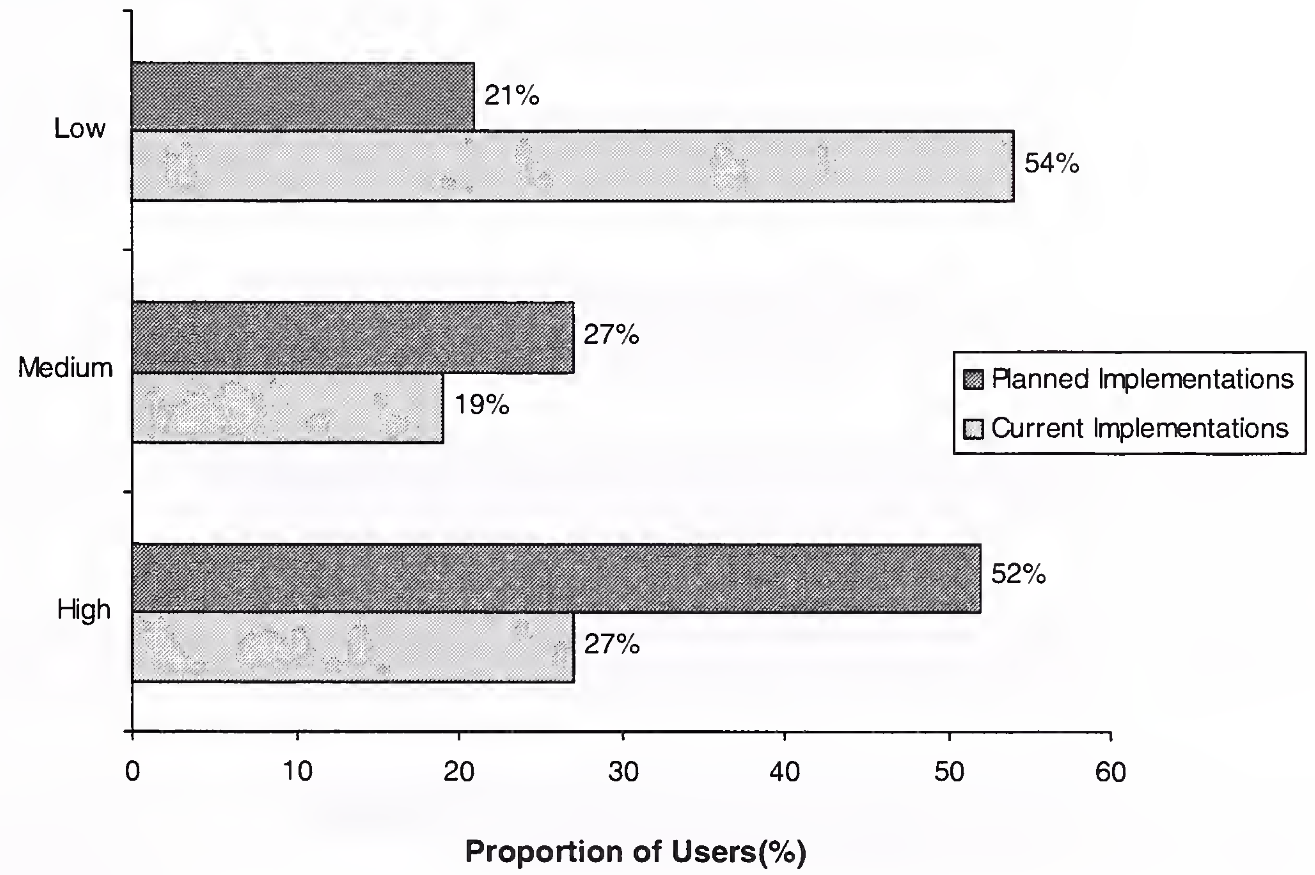
B

Level of Underlying Business Change Increases

Exhibit II-2 compares the level of business process change undertaken during the implementation of current enterprise application solutions with the level of business process change anticipated for implementations beginning in the next two years.

Exhibit II-2

Level of Business Change



Sample of 132 IT Directors. *Source: INPUT*

The level of business process change accompanying implementations is increasing considerably and buyers need to recognise the implications of this for implementation style and expenditure.

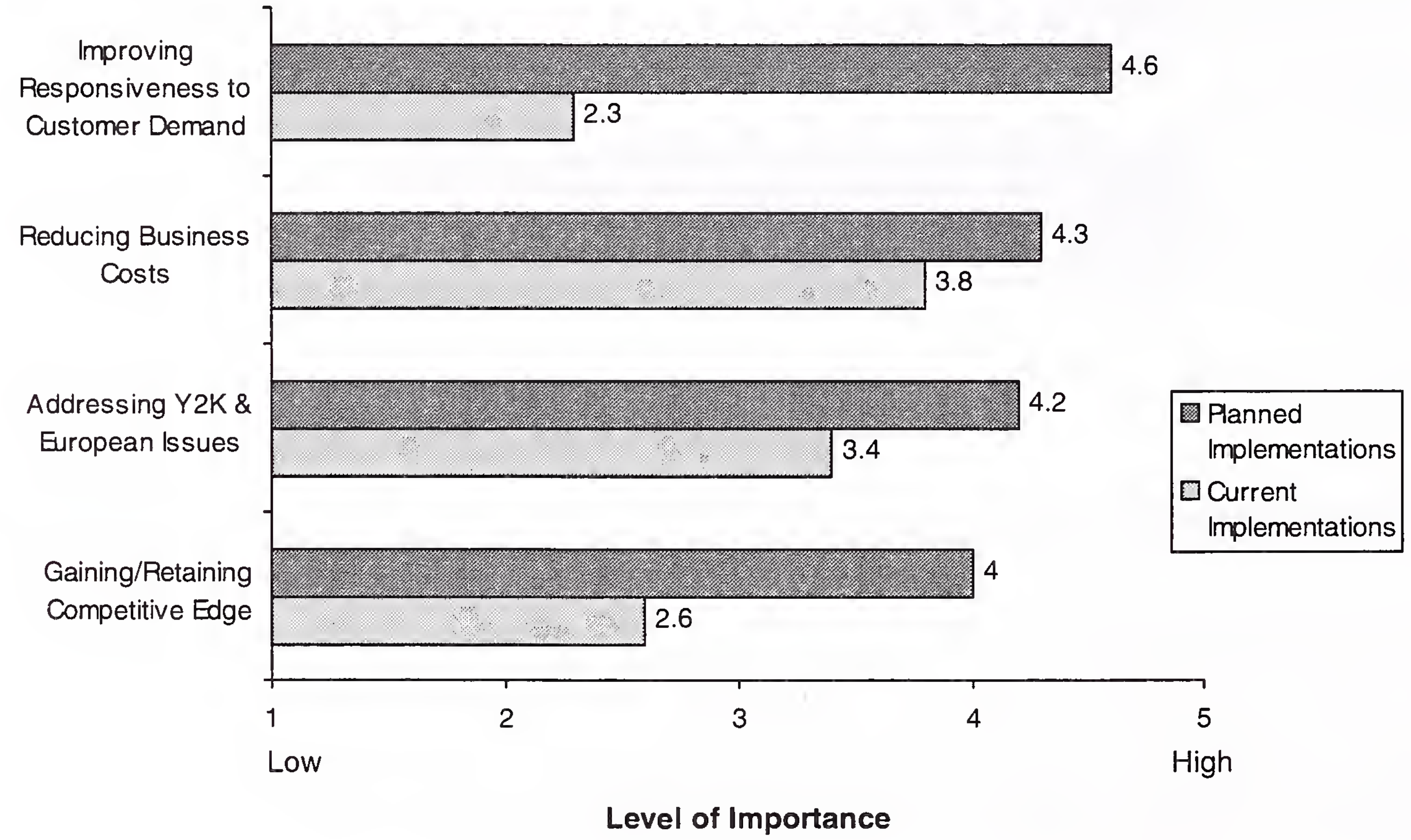
Overall, buyers no longer expect to adapt enterprise application solutions to existing ways of doing business. In many cases, the anticipated enterprise application solution implementation is part of a major organisational review with a major process reengineering emphasis. In other cases, organisations recognise that considerable business process change is necessary to benefit from the change in solution and technology.

This change in emphasis has major implications for the benefits sought by buyers from enterprise application solutions.

Exhibit II-3 shows how the importance that buyers attach to a number of potential benefits is changing.

Exhibit II-3

Benefits Sought from EAS Implementation



Sample of 170 IT Directors *Source: INPUT*

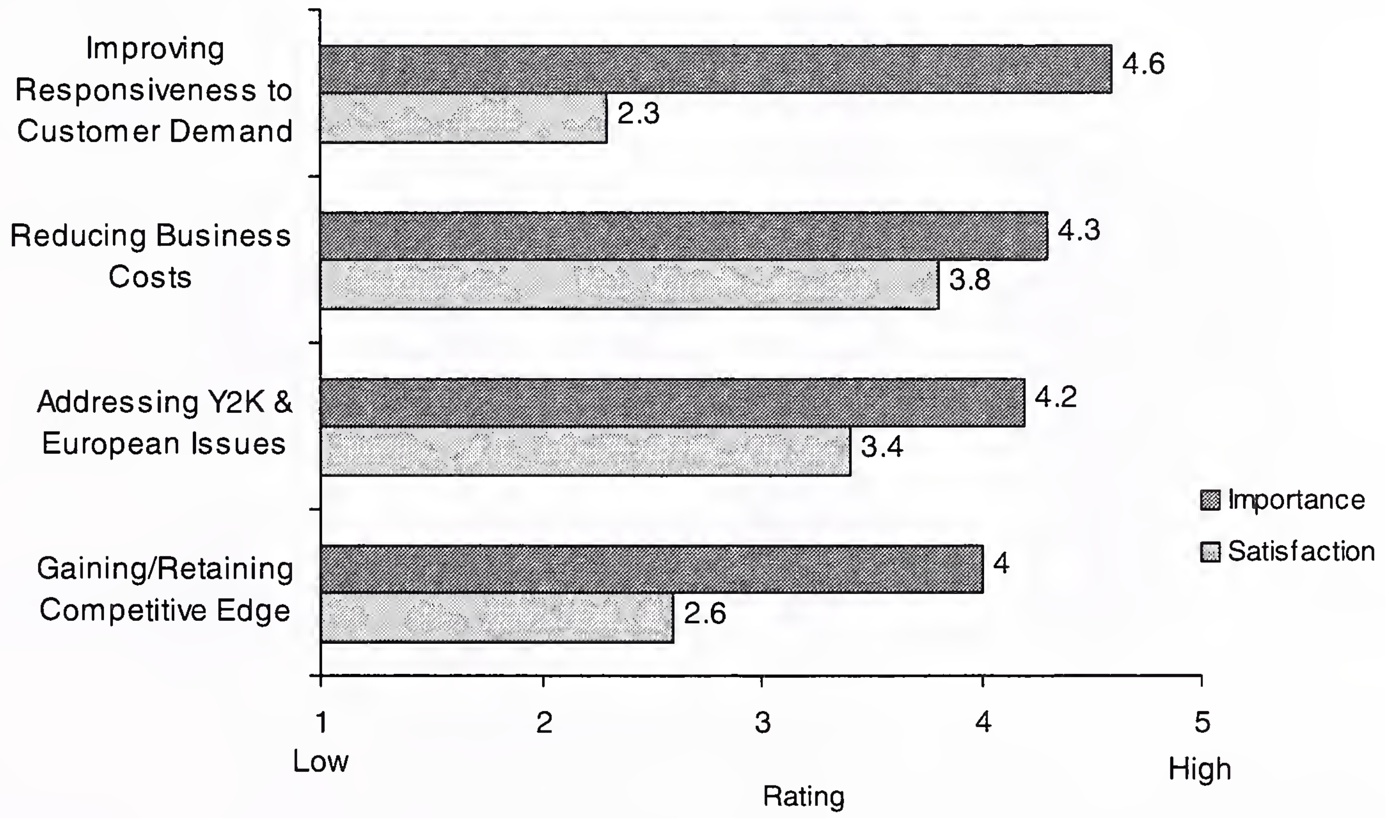
The emphasis on enterprise application solution implementation is now much more outward looking than previously. While past implementations tended to emphasise the reduction of business process costs, a much greater importance than in the past is now attached to improving customer service.

This change in emphasis requires buyers to seek new competencies from both solutions vendors and implementation services partners. The vendors need to be more outward facing than previously and address sales and marketing and distribution related functionality, rather than relying on materials and supplier management.

Exhibit II-4 shows the extent to which the most important benefits now sought from the implementation of enterprise application solutions were achieved in past implementations.

Exhibit II-4

Level of Benefit Achievement



Sample of 170 respondents *Source: INPUT*

Traditionally, enterprise application solution implementations have been perceived as successful in addressing the Y2K issue. However, they have been perceived to be less successful in delivering business benefit.

Buyers need to clarify the business objectives that they seek from future enterprise application solution implementations and ensure that they select and manage vendors with a view to realising these benefits.

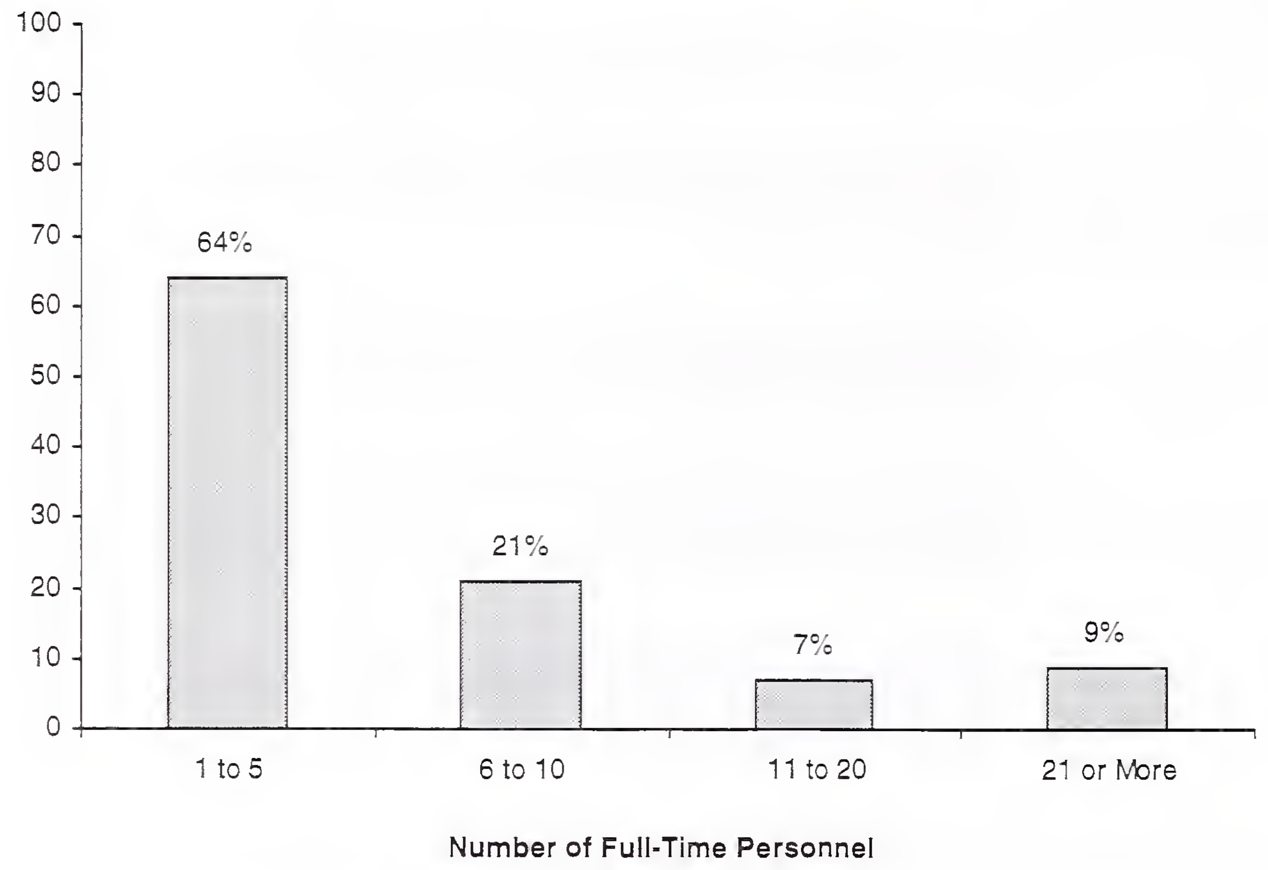
C

Buyers Must Budget for BPR Expenditure

Exhibit II-5 shows the profile of number of full-time implementation personnel involved in prior enterprise application solution implementations.

Exhibit II-5

Profile of Implementation Personnel Required



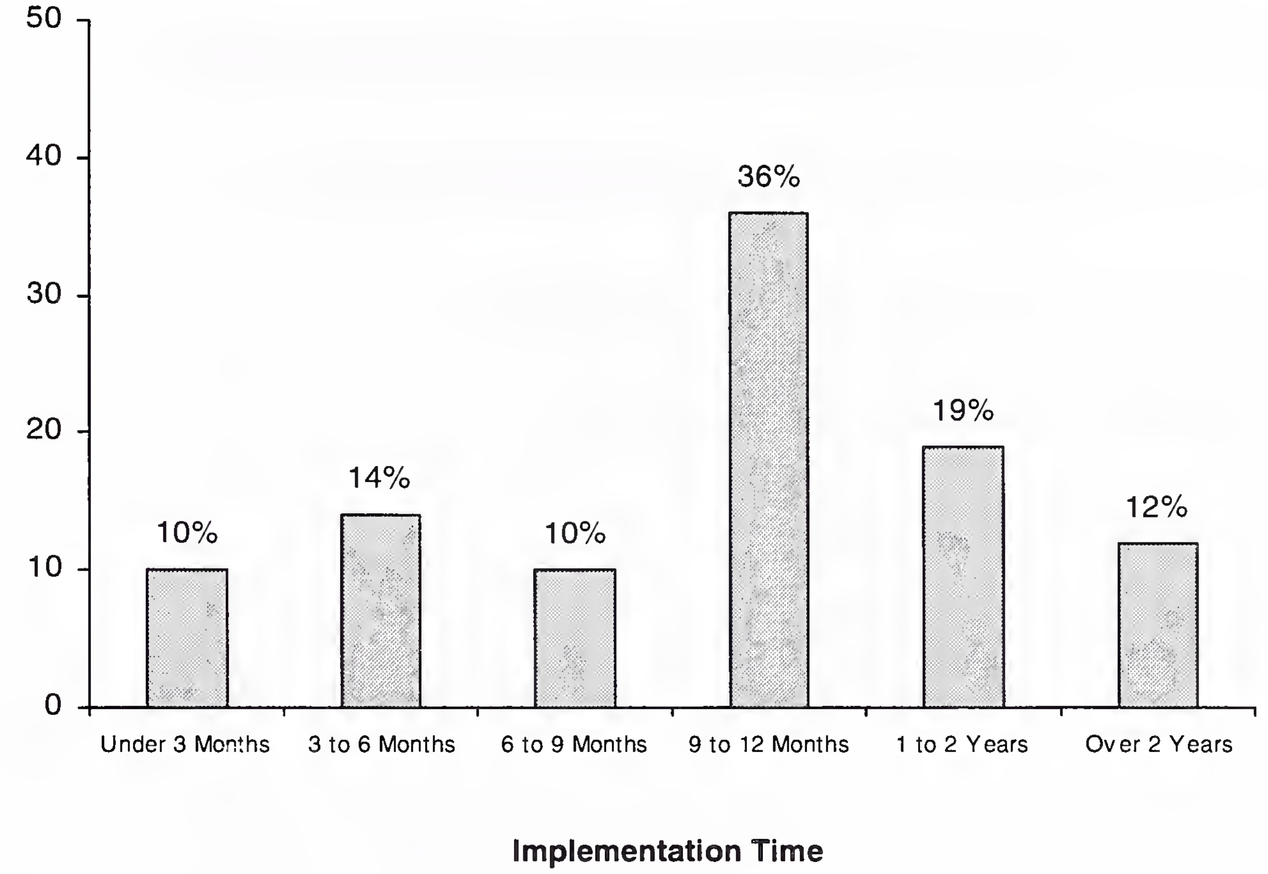
Sample of 58 IT Directors *Source: INPUT*

On average, organisations used five full-time personnel in implementing existing enterprise application solutions.

Exhibit II-6 shows the range of timescales taken to implement enterprise application solutions across an organisation.

Exhibit II-6

Profile of Implementation Timescales



Sample of 42 IT Directors *Source: INPUT*

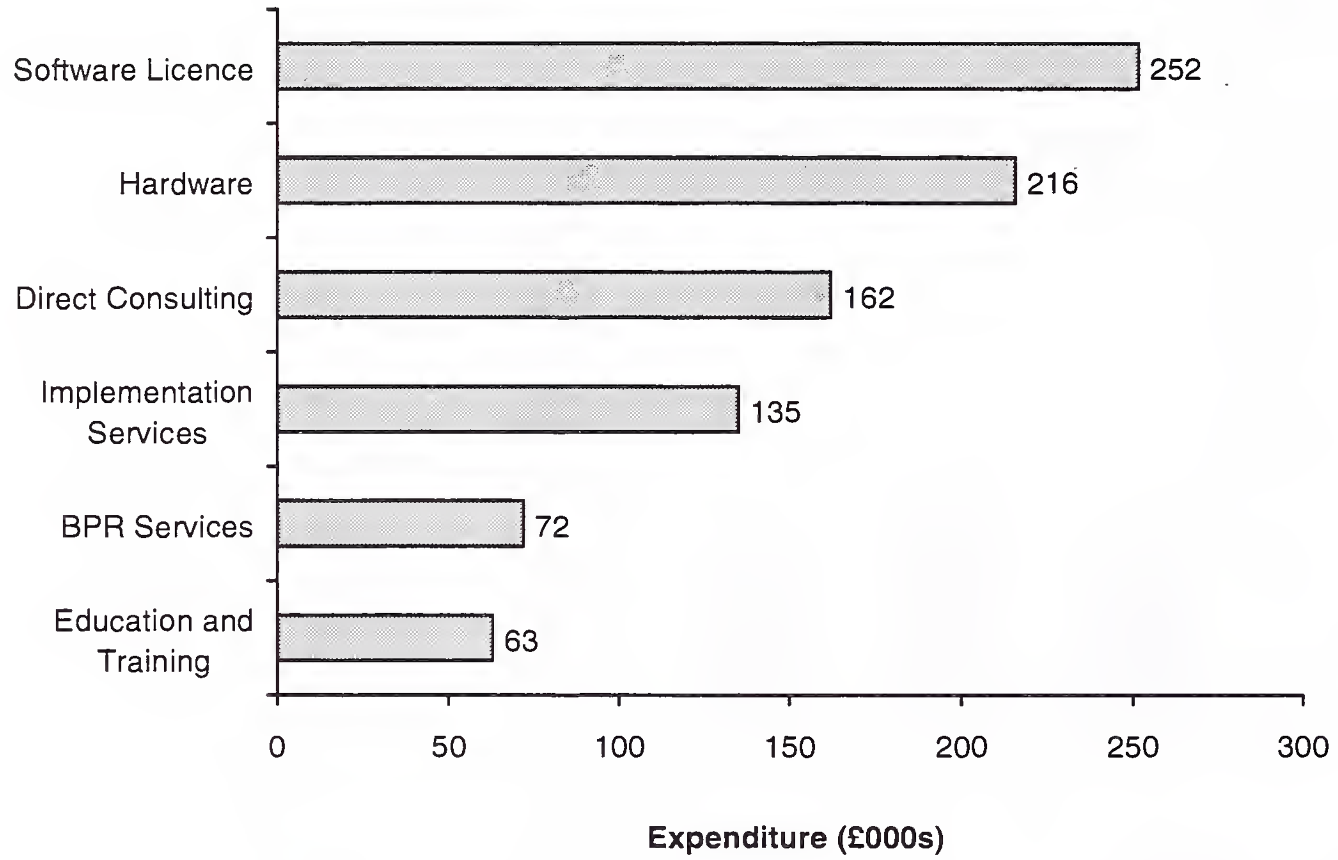
The average implementation time for a company-wide enterprise application solution is currently twelve months. Given the speed with which commercial environments currently change, there is much discussion of the need to reduce current implementation times and costs. In response, enterprise application solution vendors and their services partners have introduced a wide range of industry templates and methodologies which seek to lower implementation times. However, industry templates do not yet appear to be fully effective and potential buyers do not expect implementation times to be reduced.

The current expectation of buyers is that enterprise application solution implementation will take on average 14 months. This slight lengthening of lead times is not statistically significant and may arise from the changing requirements from enterprise application solution implementation, such as the greater emphasis on accompanying business process redesign and the greater scope of implementation both geographically and functionally.

Exhibit II-7 shows the breakdown of expenditure incurred in the implementation of enterprise application solutions.

Exhibit II-7

Breakdown of Implementation Expenditure



Source: INPUT

Cost performance on enterprise application solution implementation has been relatively good in the past. Seventy-two per cent of implementations were achieved within budget or within 10% of budget. Only 10%of implementations exceeded plan by more than 25%.

Approximately half of external implementation costs in the past have been incurred on equipment and software licence costs, the remainder being incurred on external services.

Historically, 8% of expenditure has been incurred on average on business process reengineering. However, BPR was less important in the past, and buyers should typically budget more than this in future to allow for the growing importance of process change during implementation.

D

Integration With Complementary Products Remains Important

Existing users of enterprise application solutions were asked about their plans over the next two years. The major themes to emerge were:

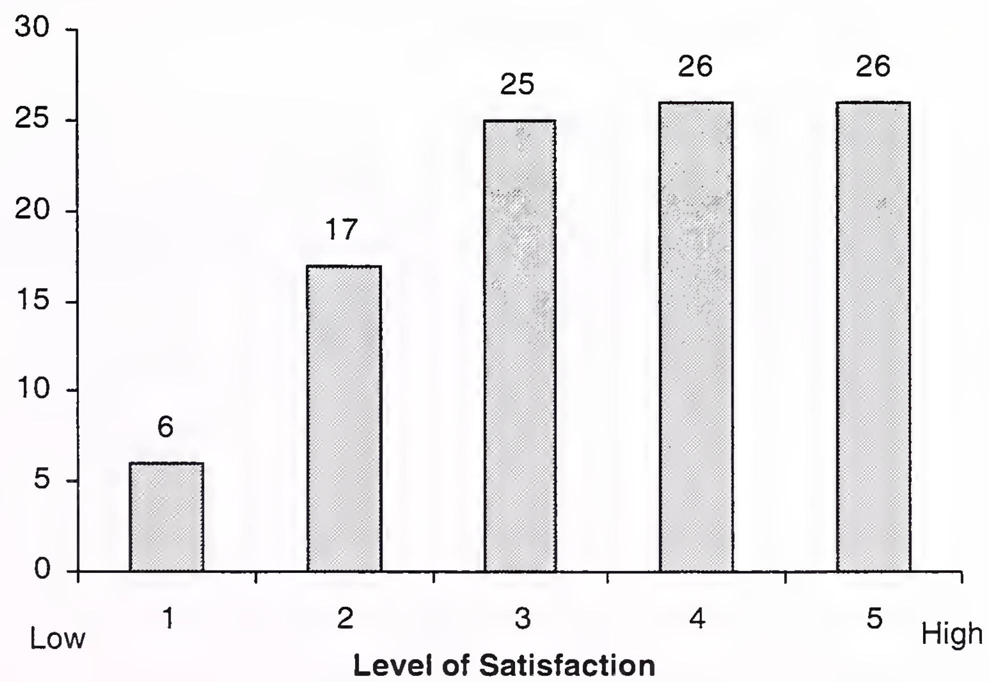
- The extension of current enterprise application solutions to additional functional areas
- The extension of functionality through use of additional “best of breed” applications.

At present, 85% of organisations use multiple best of breed products rather than a single enterprise application solution to meet their needs. Sixty five per cent of buyers intending to implement enterprise application solutions within the next two years also intend to use multiple products. So the ability to integrate multiple applications will remain important to buyers over the next few years. However, there is scope for solutions vendors to improve the capabilities of their products in this respect. Accordingly, buyers should take this factor into account when selecting an enterprise application solution.

Exhibit II-8 shows the profile of buyer satisfaction with buyer ability to integrate principal enterprise application solutions with complementary solutions.

Exhibit II-8

Satisfaction with Ease of Integration with Other Products



Sample of 50 IT Directors *Source: INPUT*

Approximately a quarter of buyers are dissatisfied and another quarter only moderately satisfied.

Exhibit II-9 compares the level of awareness of a number of enterprise application solutions in the U.K. with the satisfaction of current users of these solutions.

Exhibit II-9

Product Positioning: EAS Solutions

	High Satisfaction	Medium Satisfaction	Low Satisfaction
High Awareness	SAP Computer Associates	Oracle	SunAccounts QSP
Medium Awareness	JD Edwards	PeopleSoft JBA	Walker

Source: INPUT

Key strengths reported for SAP included:

- The high level of integration and similarity between modules
- Its ease of use
- Its ability to cope with change.

Weaknesses reported included:

- Its high resource usage
- Difficulty of implementation
- Its reporting capabilities.

JBA solutions were praised for their business orientation and completeness but criticised for their age, reliance on batch processing, cost of upgrades and poor documentation.

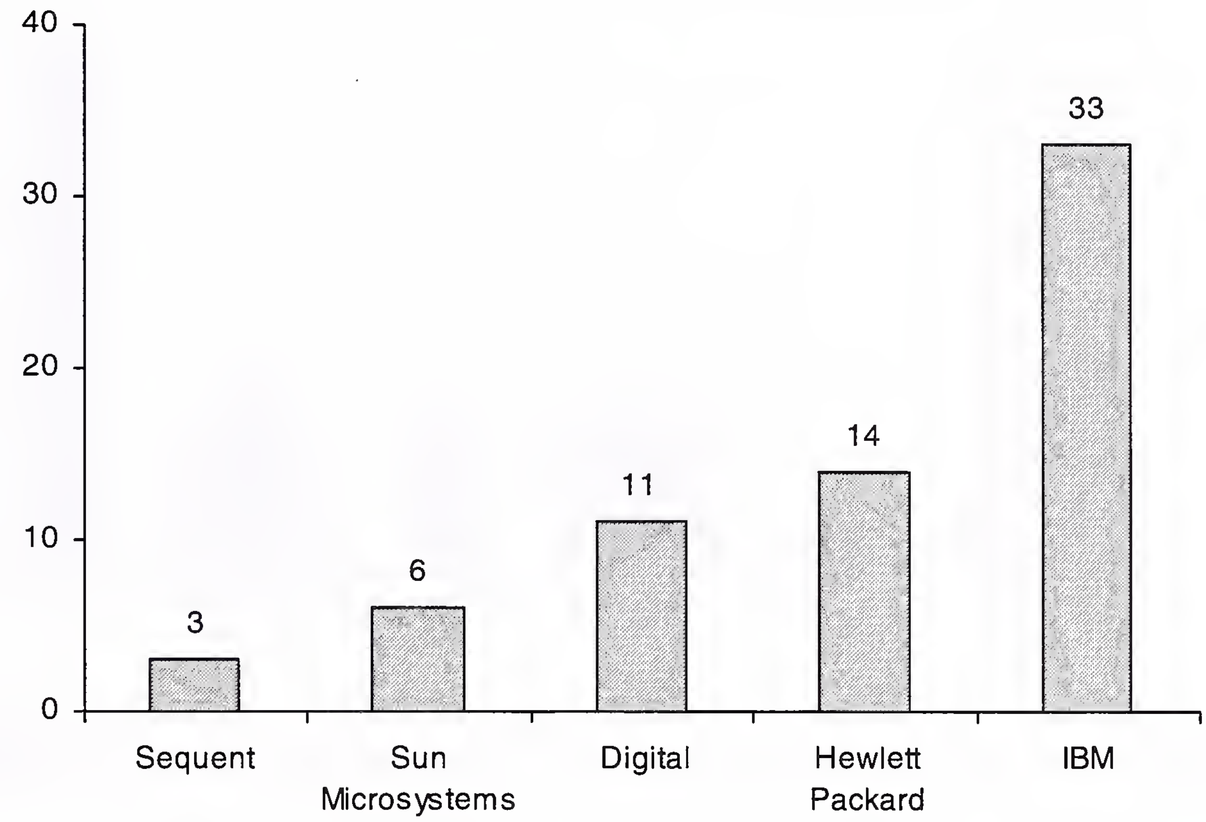
E

Oracle's Dominance Challenged by SQL Server

Exhibit II-10 shows the profile of equipment platforms currently underlying enterprise application solutions in the U.K.

Exhibit II-10

Current Equipment Platform Usage



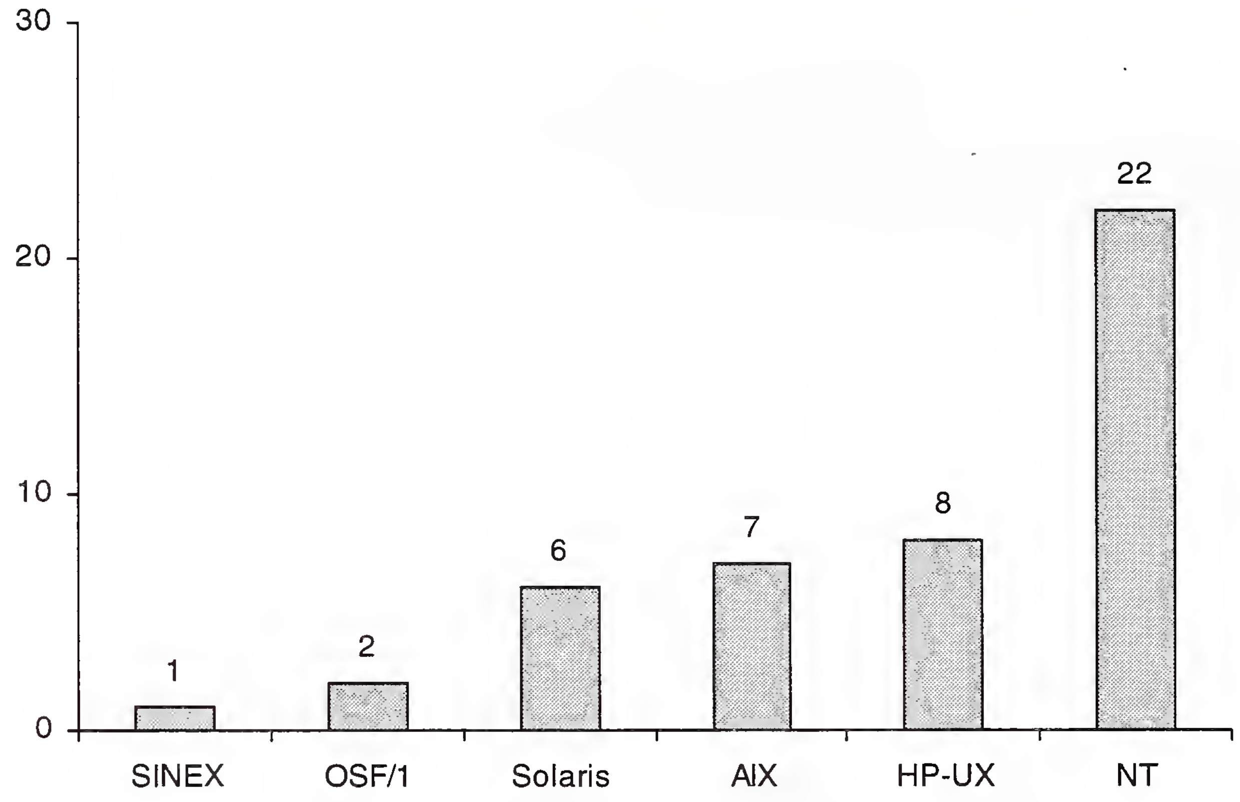
Sample of 70 IT Directors *Source: INPUT*

In addition to those vendors listed, ICL and Compaq have a strong presence in the U.K. enterprise application solutions platform market. On the basis of current buyer intentions, IBM is expected to maintain its leadership in this market over the next two years. However, the company will be increasingly challenged by Sun Microsystems, Hewlett-Packard and Digital whose platforms will increase in importance in this marketplace.

Exhibit II-11 shows the profile of operating systems currently underlying enterprise application solutions in the U.K.

Exhibit II-11

Current Operating System Usage



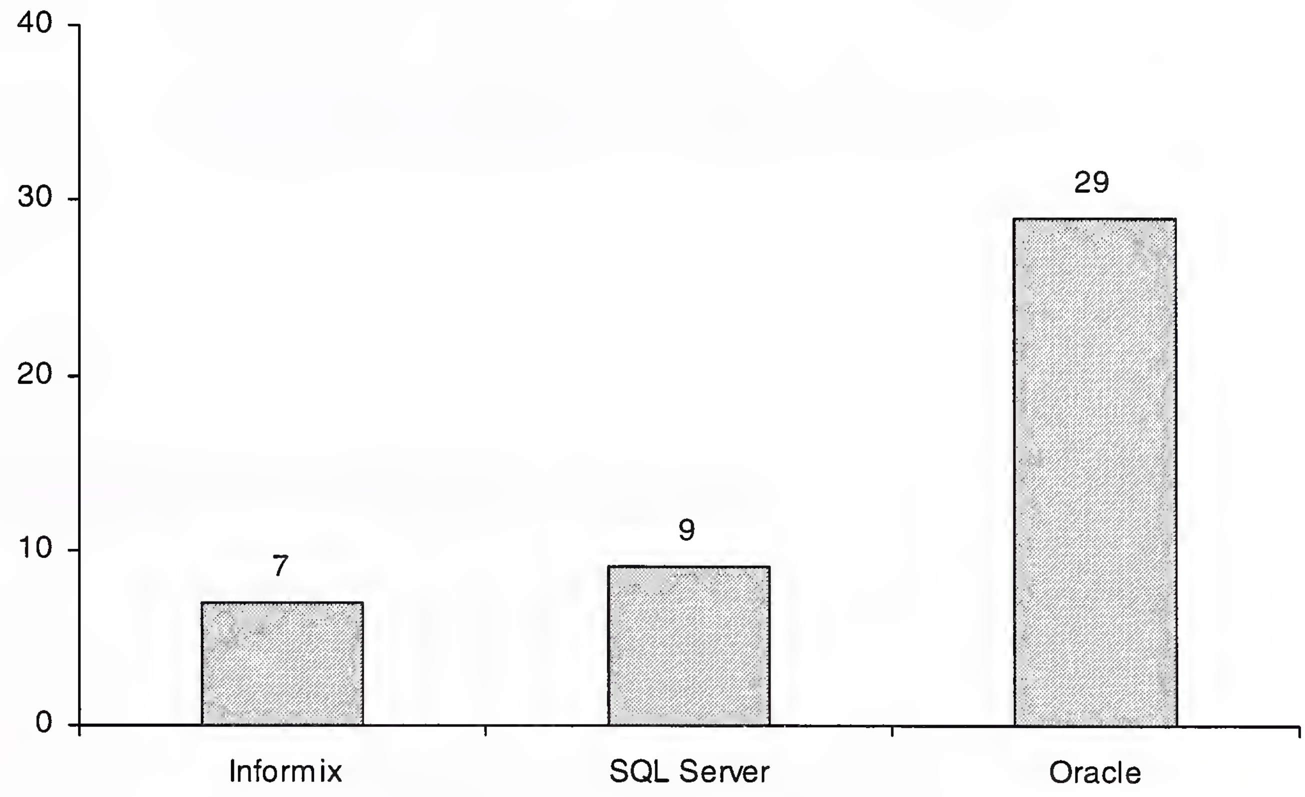
Sample of 70 IT Directors *Source: INPUT*

NT is already widely established within the U.K. as a platform for enterprise application solutions. However, Unix will remain as a strong alternative to NT for the next few years.

Exhibit II-12 shows the profile of database platforms currently underlying enterprise application solutions in the U.K.

Exhibit II-12

Current Database Usage



Sample of 70 IT Directors *Source: INPUT*

Oracle currently dominates the market for database platforms underlying enterprise application solutions. However, over the next two years, it will be increasingly challenged by SQL Server reflecting the increased presence of NT as the leading operating system in this market.

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III

Implementation of Enterprise Application Solutions

A
Usage of Enterprise Application Solutions

Exhibit III-1 shows the relative usage of the leading EAS solutions within major U.K. organisations.

Exhibit III-1

Usage of EAS Software: U.K.

Vendor	Proportion of leading organisations using (%)
JBA	6%
SAP	5%
CA	5%
Walker	4%
QSP	3%
SunAccounts	3%
Oracle	3%
PeopleSoft	3%
Coda	3%
Marcam	2%
JD Edwards	2%

Source: INPUT

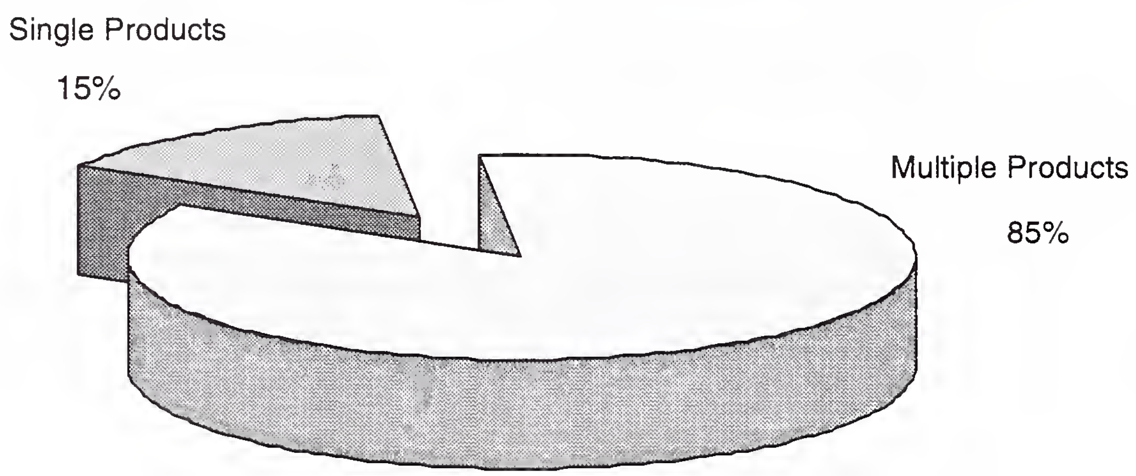
At present, the installed base of enterprise application solutions in the U.K. still strongly reflects the presence of indigenous suppliers such as JBA and QSP.

While SAP is beginning to show a strong presence in the U.K., neither SAP nor Oracle dominate the installed base and Baan has a low presence so far.

Exhibit III-2 shows the proportion of organisations that used a single product from one vendor and the proportion that used multiple integrated products.

Exhibit III-2

Use of Single/Multiple Products



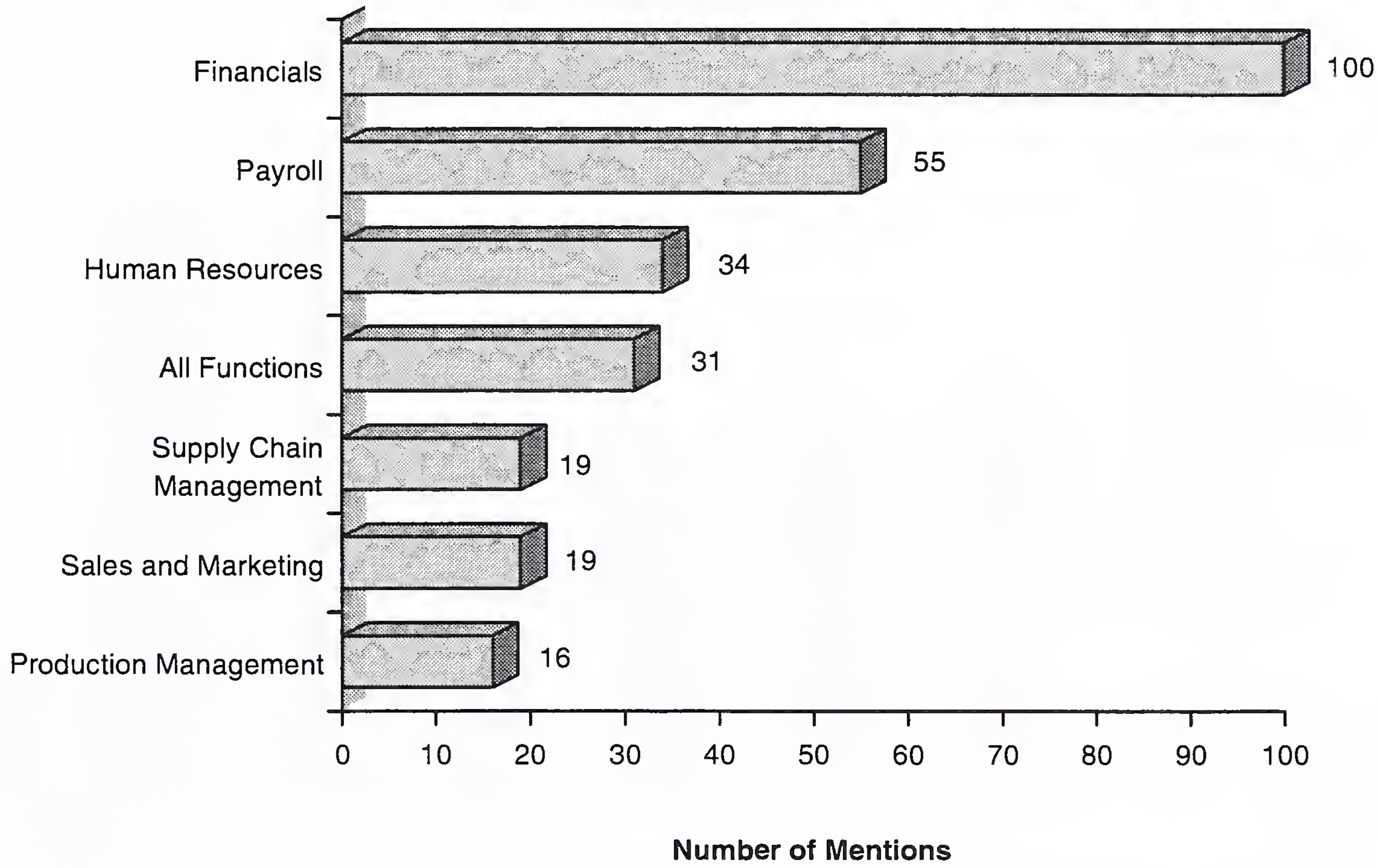
Sample of 47 IT Directors *Source: INPUT*

The majority of organisations currently use a range of products to meet their enterprise application needs. For example, Oracle Financials is well-established in the U.K. but Oracle has yet to establish firmly a wider product range.

Exhibit III-3 shows the number of organisations that use an enterprise application for each of a number of functions.

Exhibit III-3

Usage of EAS Software by Function



Sample of 173 IT Directors *Source: INPUT*

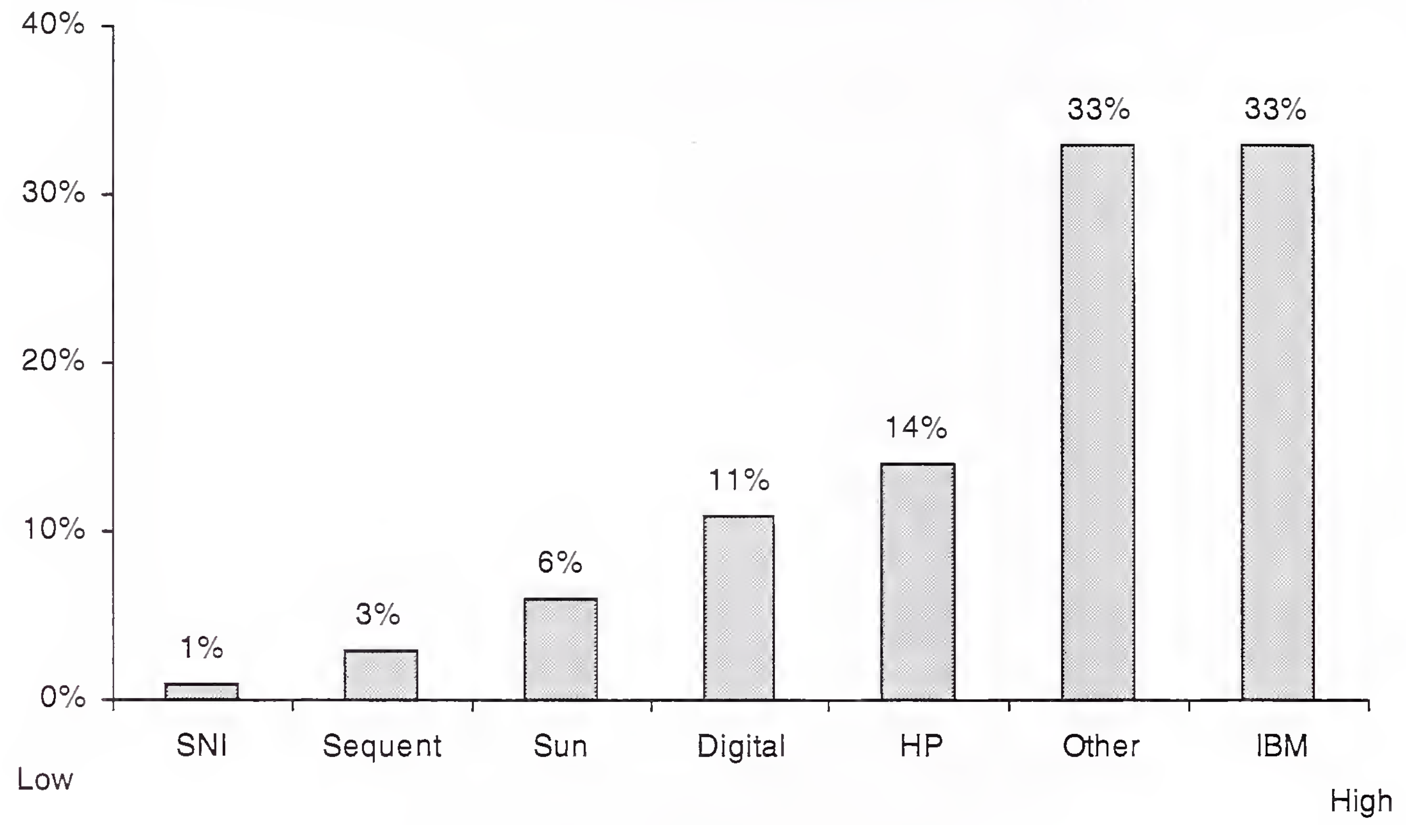
This confirms the view that organisations currently use a wide range of products to meet their needs rather than standardising on an individual enterprise application solution.

B
Platforms Used

Exhibit III-4 shows the profile of hardware presently underlying enterprise application solutions.

Exhibit III-4

Hardware Used



Sample of 107 IT Directors *Source: INPUT*

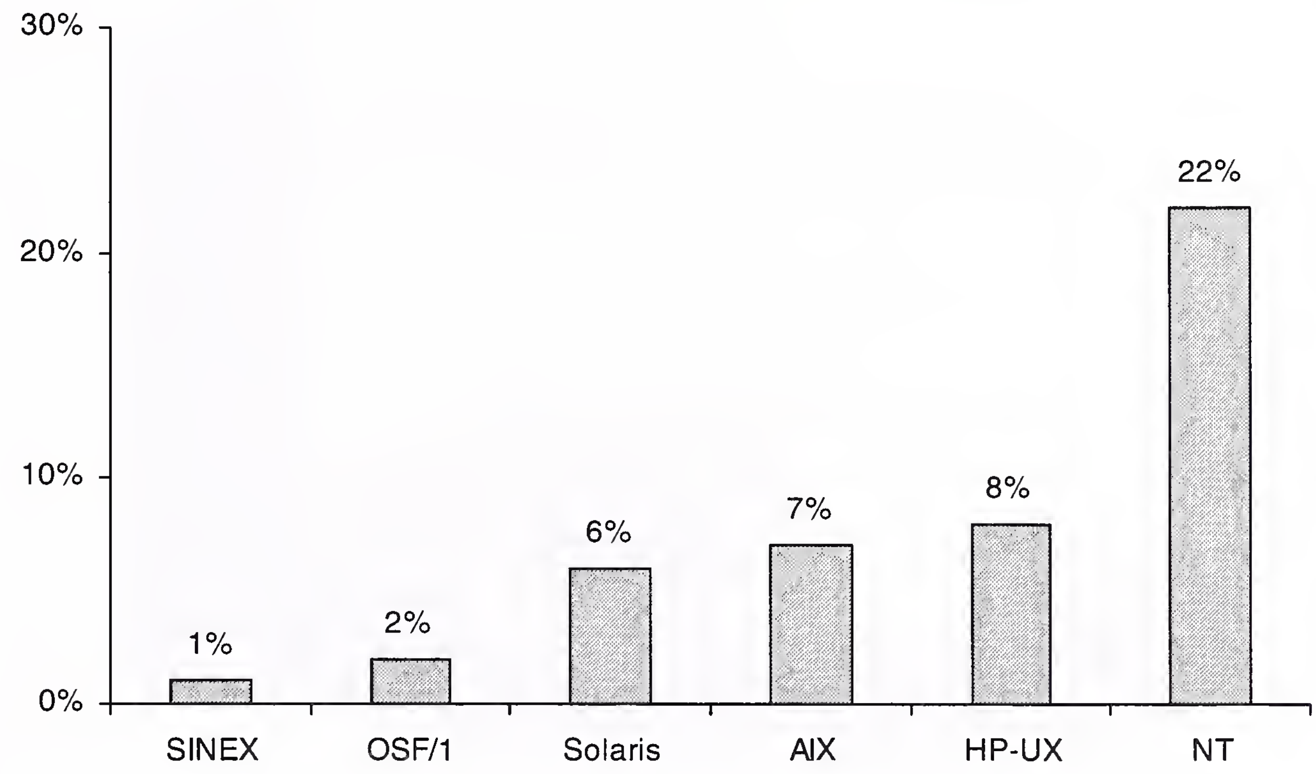
IBM retains a strong platform presence in the U.K. This presence is strengthened by its use to underly the indigenous suppliers, JBA and QSP. JBA solutions are traditionally sold in conjunction with the AS/400 platform while QSP's OLAS product was originally written for IBM mainframe platforms.

Companies with a strong presence in the other category include ICL and Compaq.

Exhibit III-5 shows the profile of operating systems presently underlying enterprise application solutions.

Exhibit III-5

Operating Systems Usage



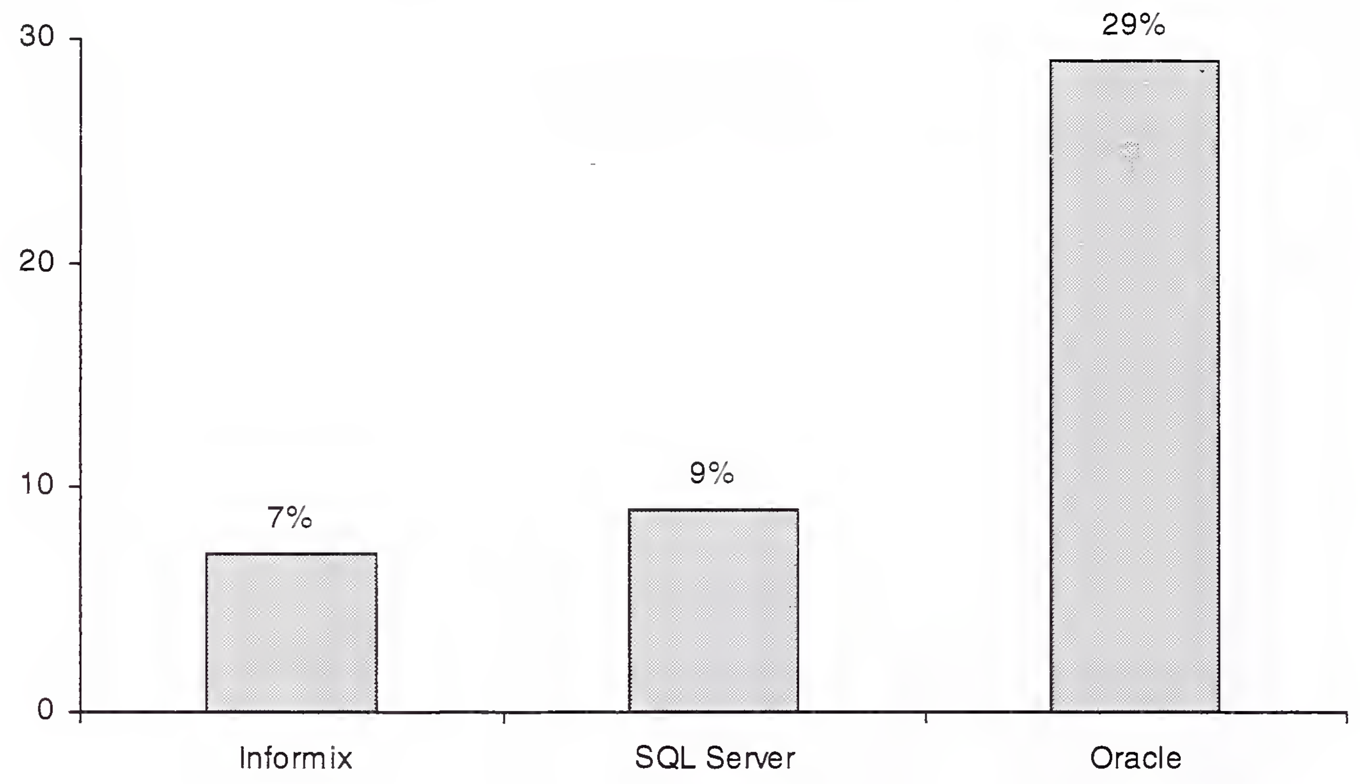
Sample of 107 IT Directors *Source: INPUT*

NT is already widely established within the U.K. as a platform for enterprise application solutions.

Exhibit III-6 shows the profile of databases presently underlying enterprise application solutions.

Exhibit III-6

Database Usage



Sample of 107 IT Directors *Source: INPUT*

Oracle dominates the database platforms underlying enterprise application solutions at present. However, SQL Server is rapidly becoming established on the back of NT.

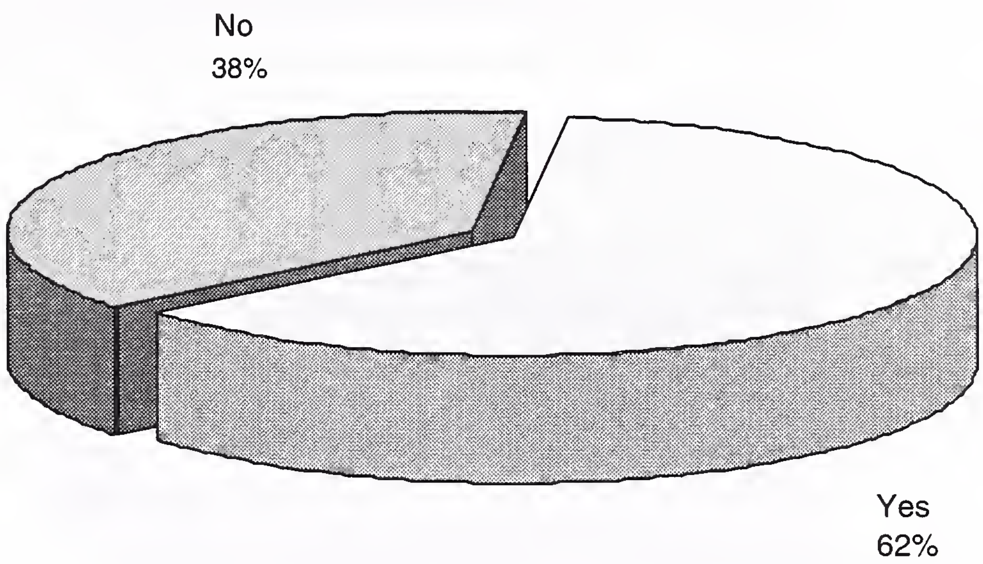
C

Future Usage of Enterprise Application Solutions

Exhibit III-7 shows the proportion of organisations that intend to replace their main enterprise application or ERP system within the next two years.

Exhibit III-7

EAS Replacement within Two Years



Sample of 172 IT Directors *Source: INPUT*

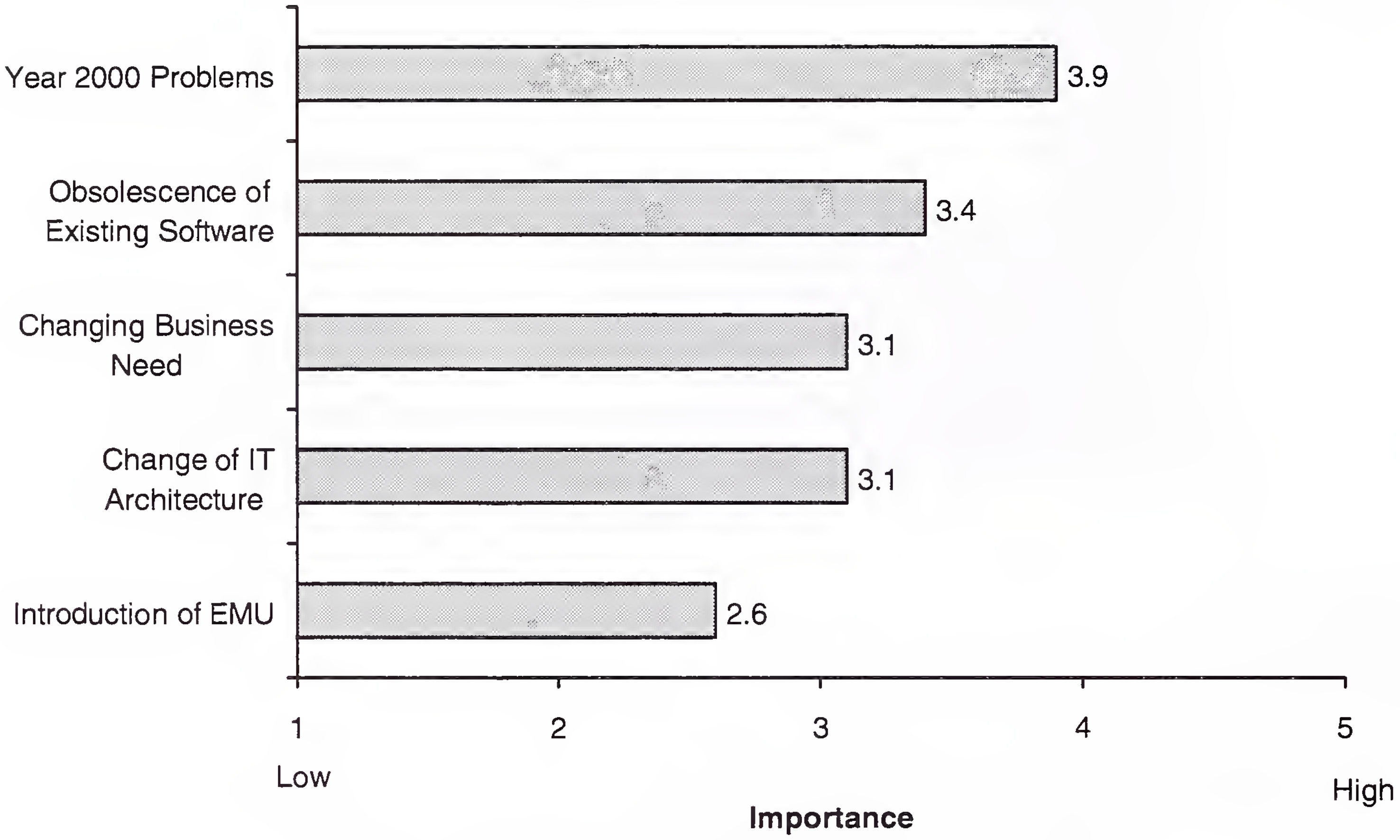
The current replacement rate is very high and is currently driven by the combination of ageing systems and Y2K problems.

Exhibit III-8 shows the importance of each a number of potential reasons for replacing the main enterprise application or ERP solution.

At the present time, the introduction of the Euro is not a major factor leading to enterprise application solution replacement.

Exhibit III-8

Reasons for Replacement of EAS Software



Sample of 107 IT Directors *Source: INPUT*

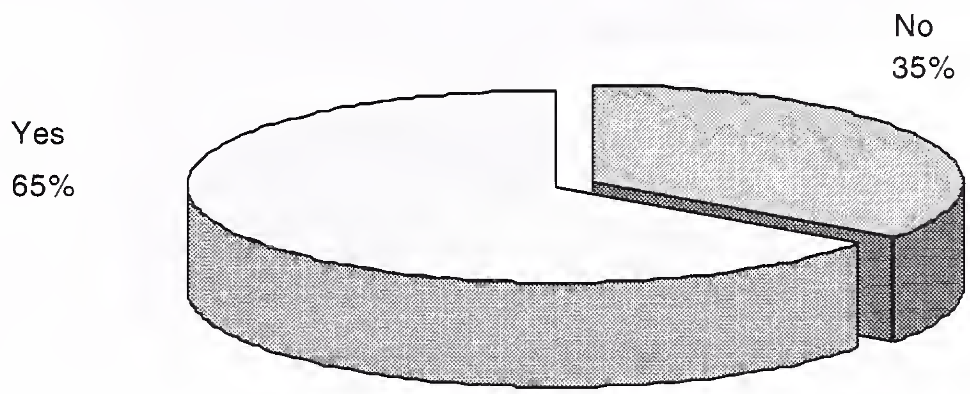
The proportion of organisations that will select a single enterprise application product rather than a range of best of breed applications is increasing. Undoubtedly this is a more convenient approach for buyers provided their needs can be met in this manner.

However, at present, the majority of buyers still expect to purchase multiple best of breed applications.

Exhibit III-9 shows the extent to which potential buyers intend to implement a set of "best of breed" applications rather than a single enterprise application product.

Exhibit III-9

Planned Use of Multiple Best of Breed Applications



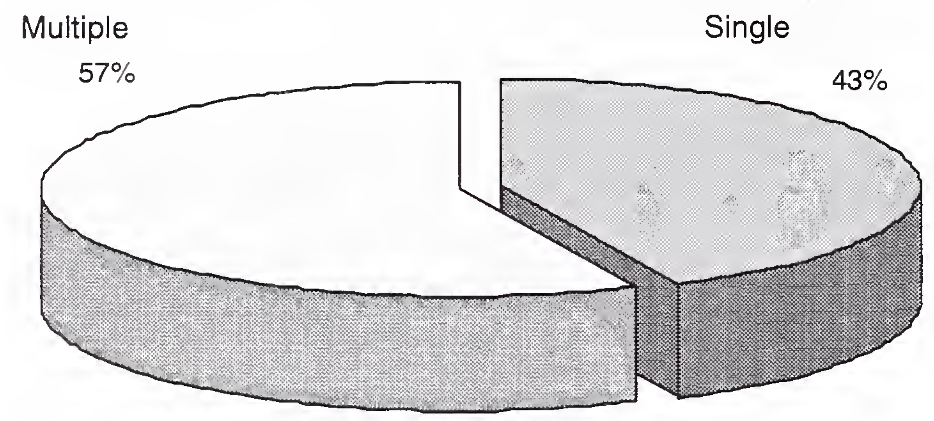
Sample of 65 IT Directors
Standard error = 0.1

Source: INPUT

Exhibit III-10 shows the extent to which potential buyers expect to implement a range of products versus a single integrated product.

Exhibit III-10

Planned Product Scope



Sample of 104 IT Directors

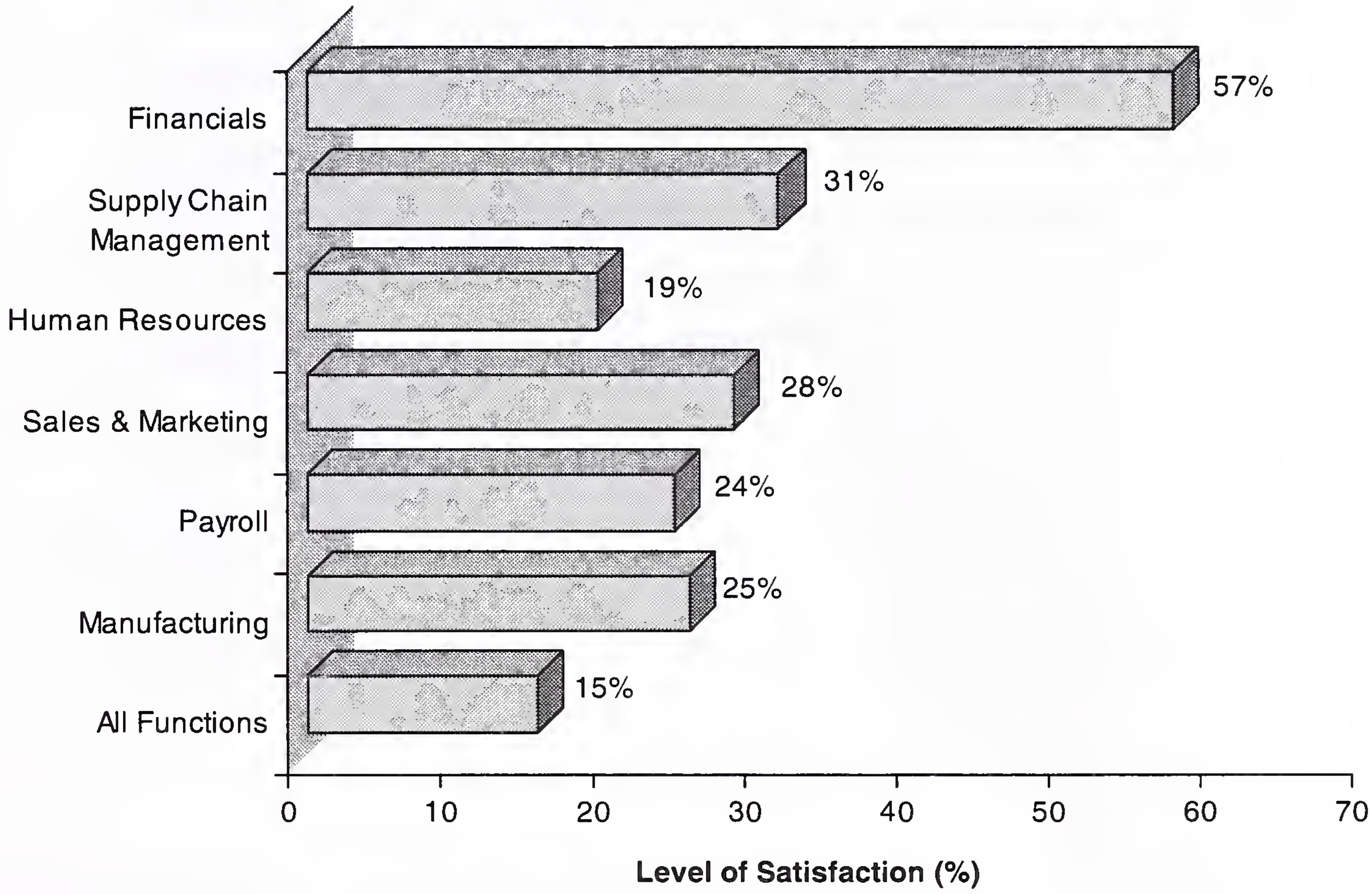
Standard error = 0.1

Source: INPUT

Exhibit III-11 lists the profile of functions that potential buyers intend to implement.

Exhibit III-11

Functions Planned



Sample of 72 IT Directors *Source: INPUT*

The range of modules planned is determined to a certain extent by the industry sector in which the buyer operates. Nonetheless only a small minority of buyers expect to implement all business functions using an enterprise application solution and enterprise application solutions will continue to be dominated by their financial modules.

The proportion of organisations that plan to implement payroll and human resources via their enterprise application solution is surprisingly low, given that these functions apply to the majority of organisations irrespective of industry sector.

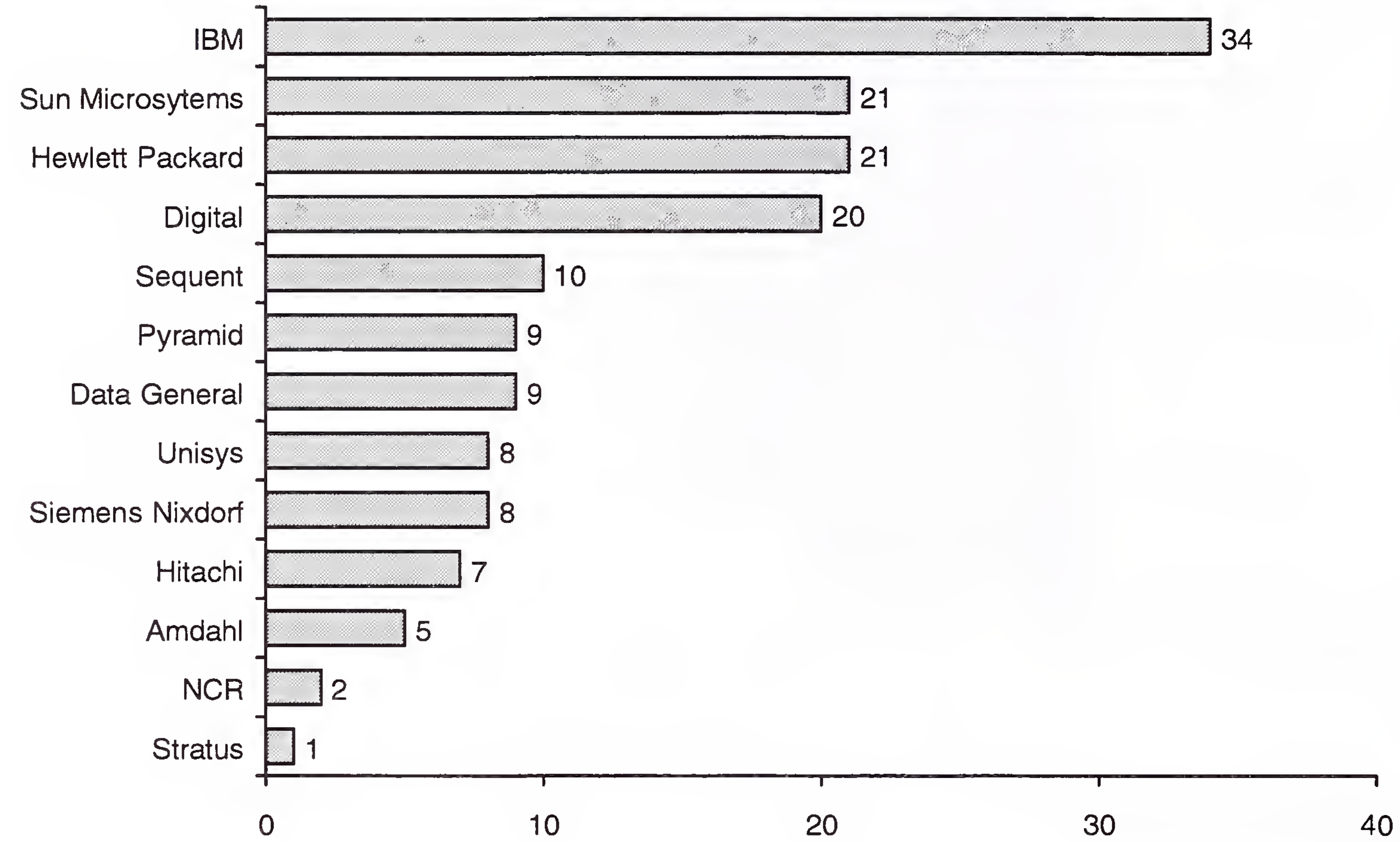
D

Platforms Planned

Exhibit III-12 lists the equipment platforms that potential buyers would consider as the main platform for their enterprise applications solution.

Exhibit III-12

Equipment Platforms Considered



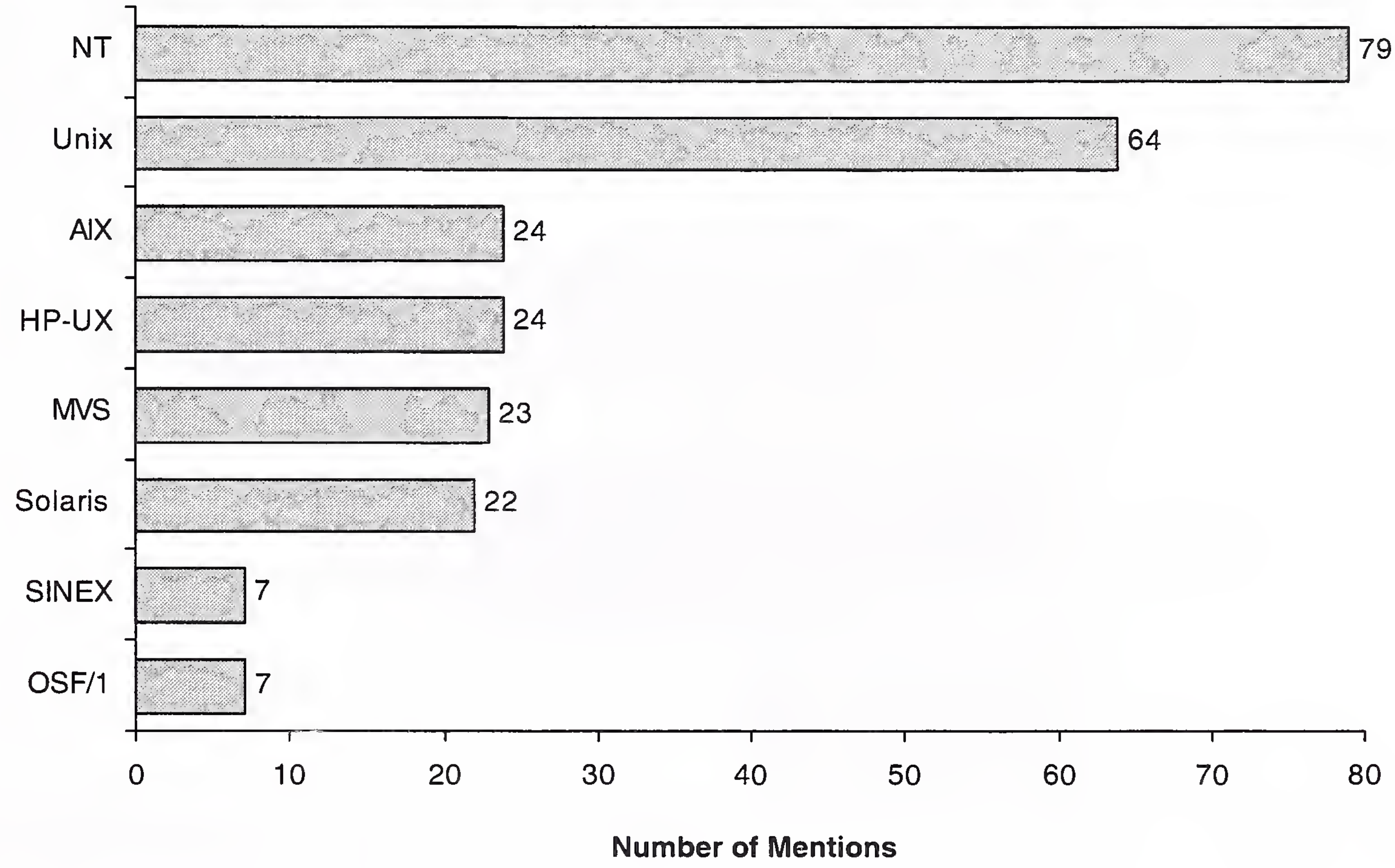
Sample of 107 IT Directors *Source: INPUT*

IBM is expected to maintain its leadership position in supplying platforms to underly enterprise application solutions in the short-term. However, the company will be increasingly challenged by platforms from Sun Microsystems Hewlett-Packard and Digital which will increase in importance in this marketplace.

Exhibit III-13 lists the operating systems that potential buyers would consider as the main platform for their enterprise applications solution.

Exhibit III-13

Operating System Platforms Considered



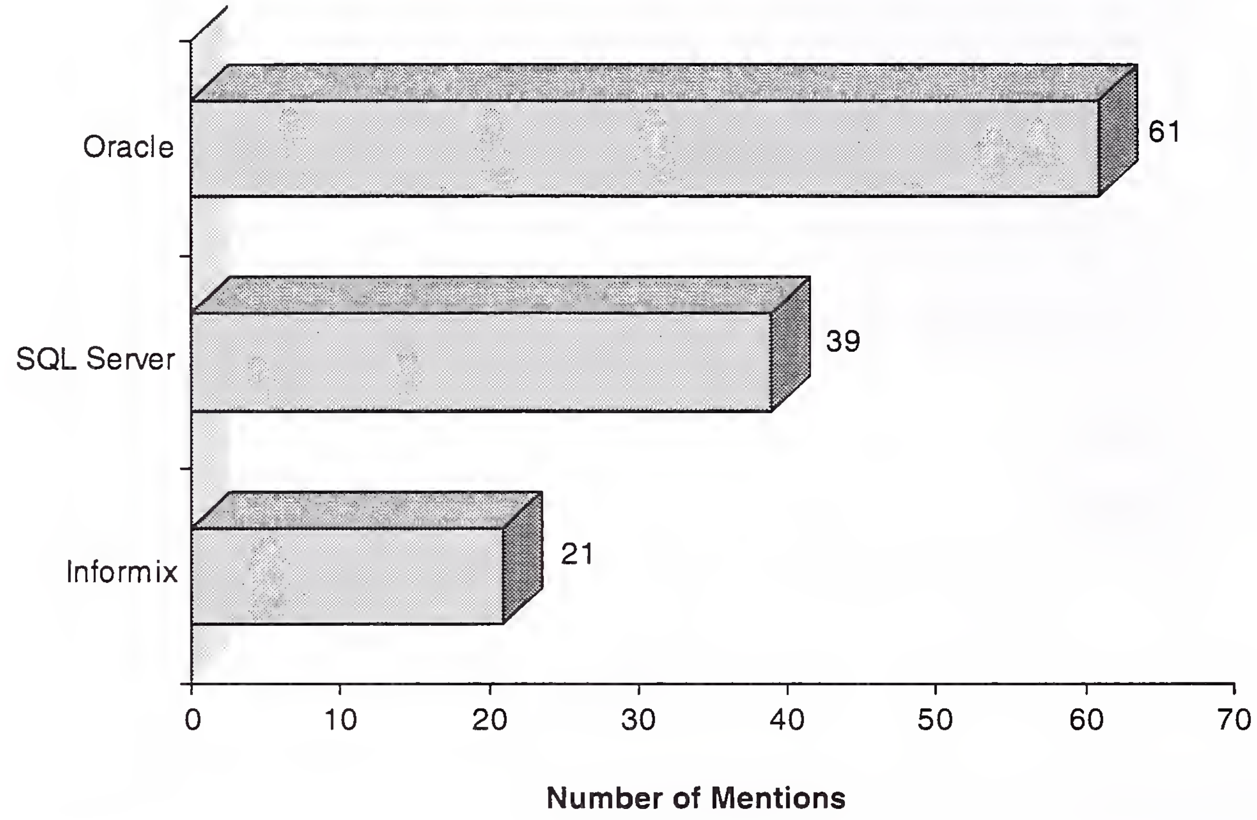
Sample of 107 IT Directors *Source: INPUT*

NT is expected to maintain its lead over Unix in this marketplace, though Unix will continue to maintain a strong market share.

Oracle is expected to be strongly challenged by SQL Server over the next few years reflecting the strong presence of NT as the operating system of choice. Exhibit III-14 lists the database platforms that potential buyers would consider as the main platform for their enterprise applications solution.

Exhibit III-14

Database Platforms Considered



Sample of 107 IT Directors *Source: INPUT*

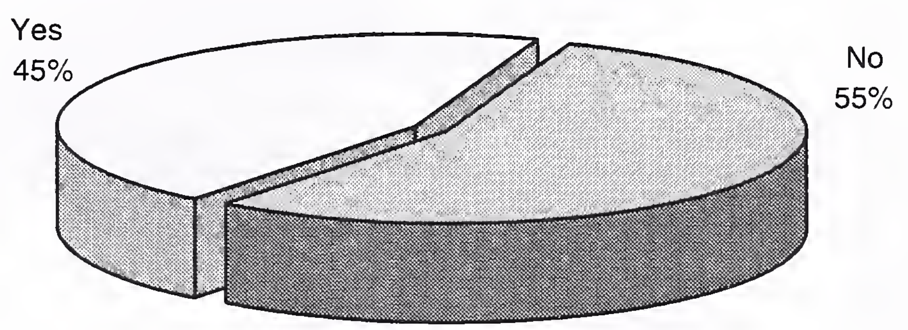
E

Usage of Implementation Services

Exhibit III-15 shows the proportion of organisations that used external services to support their enterprise application implementation.

Exhibit III-15

Use of External Services to Support Implementation

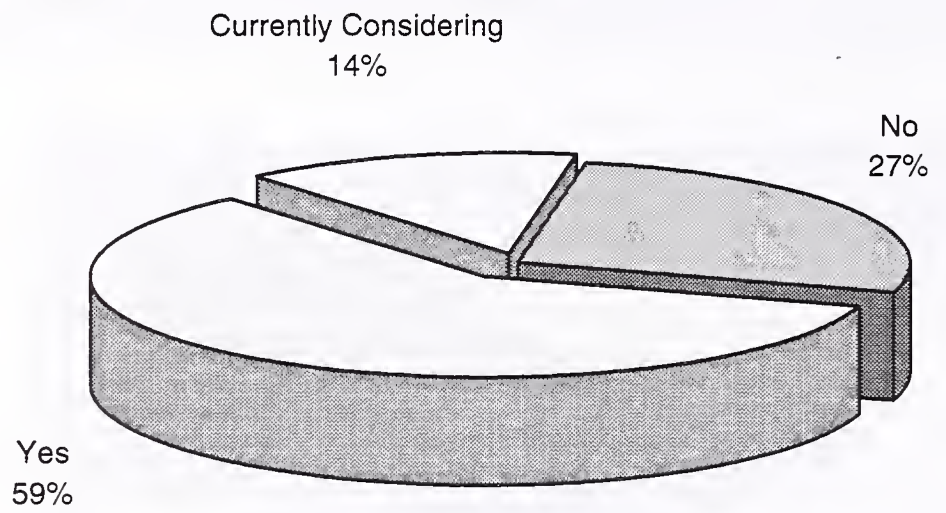


Sample of 65 IT Directors

Source: INPUT

Exhibit III-16 shows the extent to which potential buyers intend to use an external IT services vendor to assist them in implementing their enterprise application.

Exhibit III-16
Planned Use of External Services Vendor



Sample of 106 IT Directors. Standard error = 0.1 *Source: INPUT*

Accordingly, the proportion of organisations using external vendors to assist them in enterprise application solutions is expected to increase. Factors behind this increased usage of external vendors include:

- The shortage, and high cost, of skills in the leading enterprise application solutions
- The need to complete implementations in time to meet the Y2K deadline

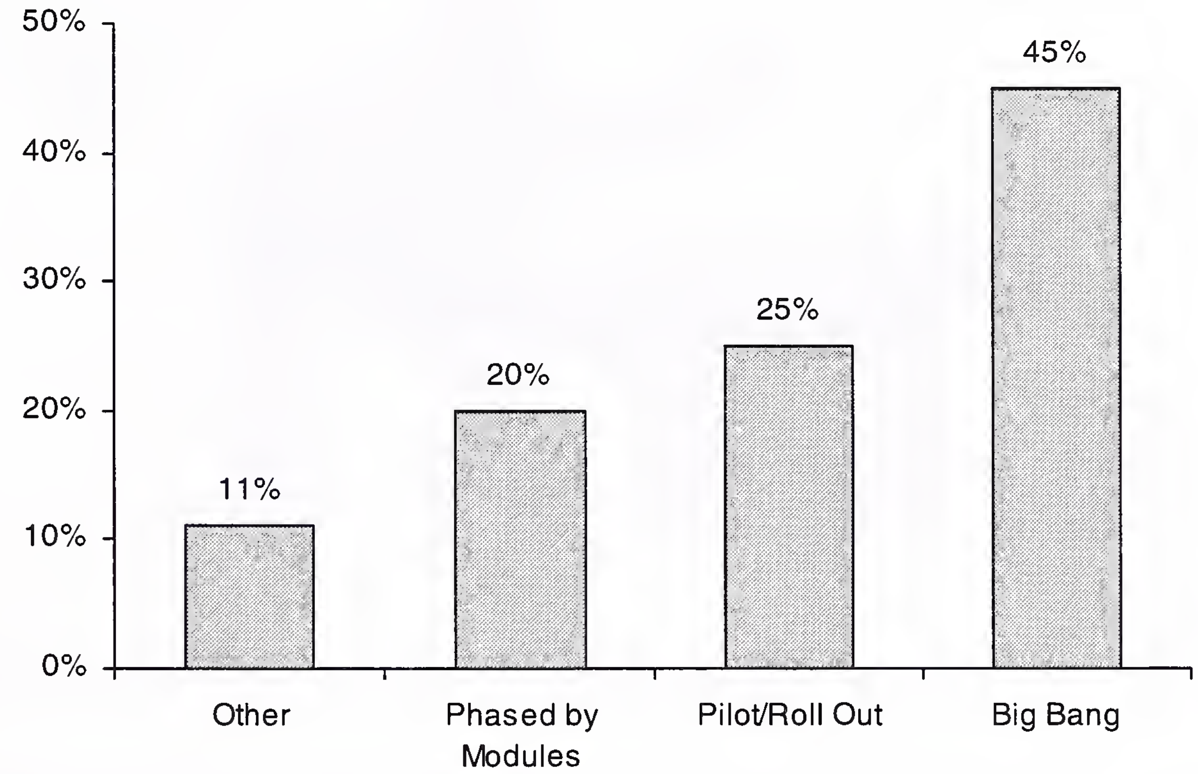
F

Implementation Approaches

Exhibit III-17 shows the profile of implementation approaches adopted by organisations.

Exhibit III-17

Implementation Approaches Adopted

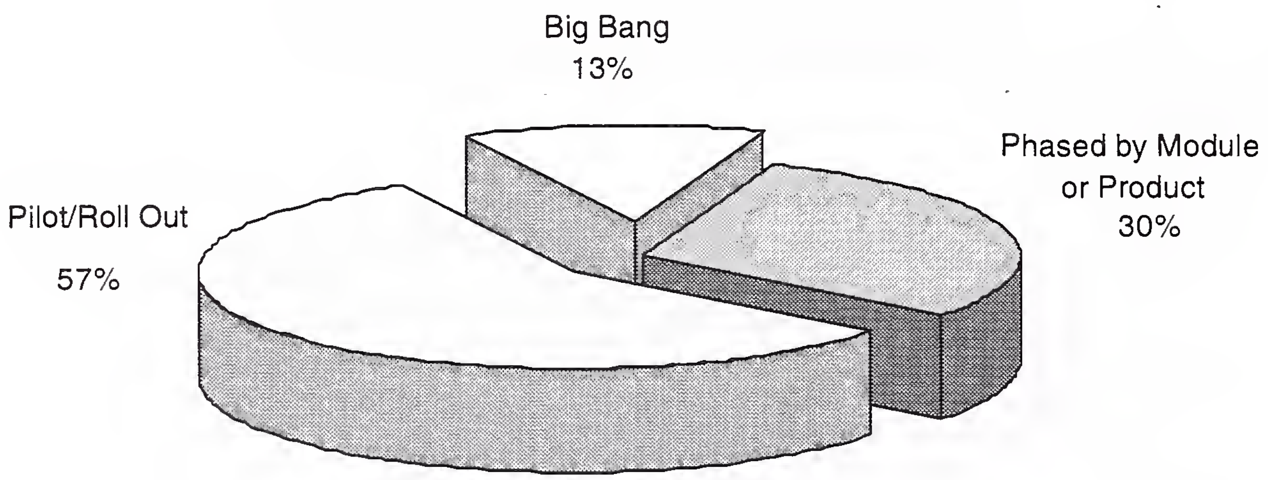


Sample of 65 IT Directors *Source: INPUT*

Exhibit III-18 lists the extent to which various implementation approaches are favoured by potential buyers.

Exhibit III-18

Implementation Approaches Favoured



Sample of 107 IT Directors
Standard error = 0.1
Source: INPUT

Historically, buyers seem to have favoured the big bang approach to enterprise application solution implementation. However, this approach appears to be falling from favour with organisations now preferring to adopt the pilot/roll out and phased approaches.

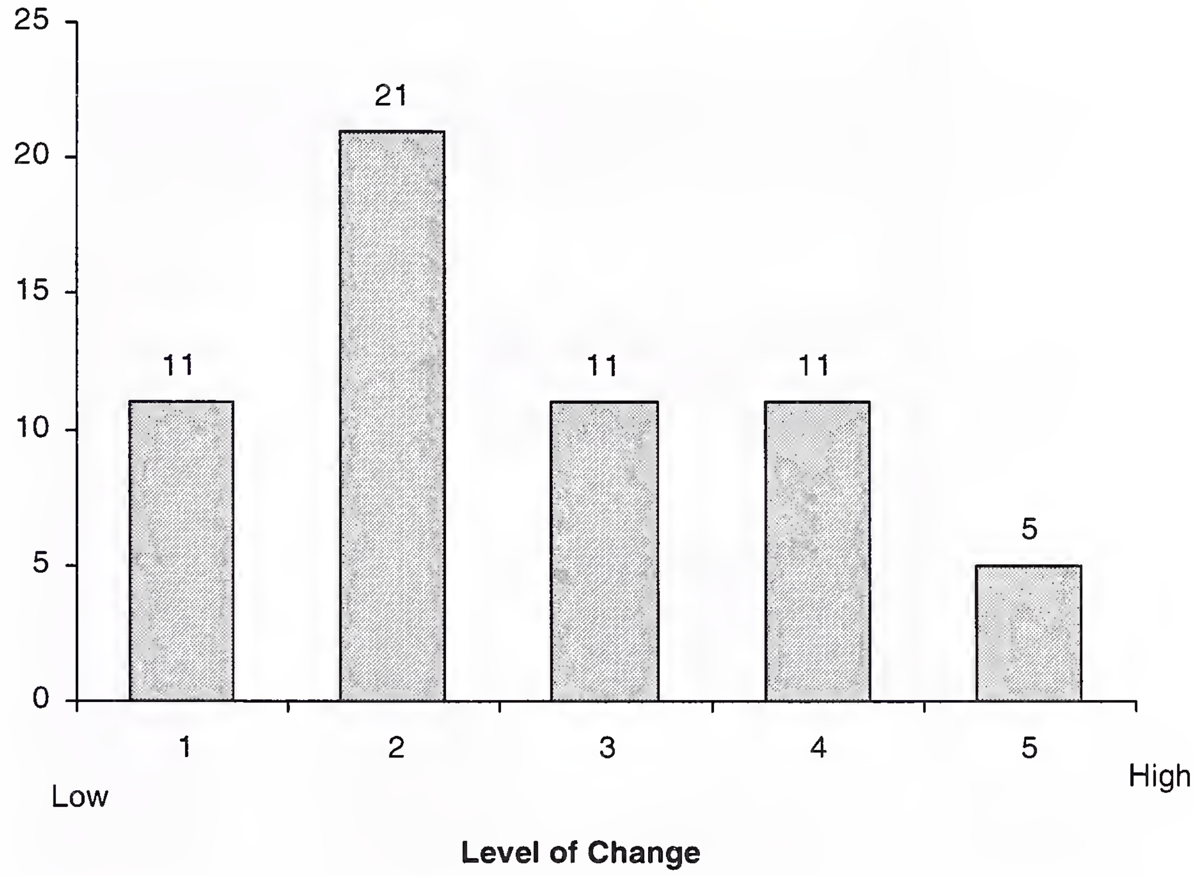
This change in approach may reflect the increasing geographic scope of enterprise application solutions, with organisations often standardising on particular products and implementing them in an integrated manner across countries or geographies.

It also reflects the gradually increasing range of business functions being addressed by enterprise application solutions.

Exhibit III-19 shows the profile of level of business change that accompanied enterprise application implementation.

Exhibit III-19

Level of Business Change: Existing Implementations



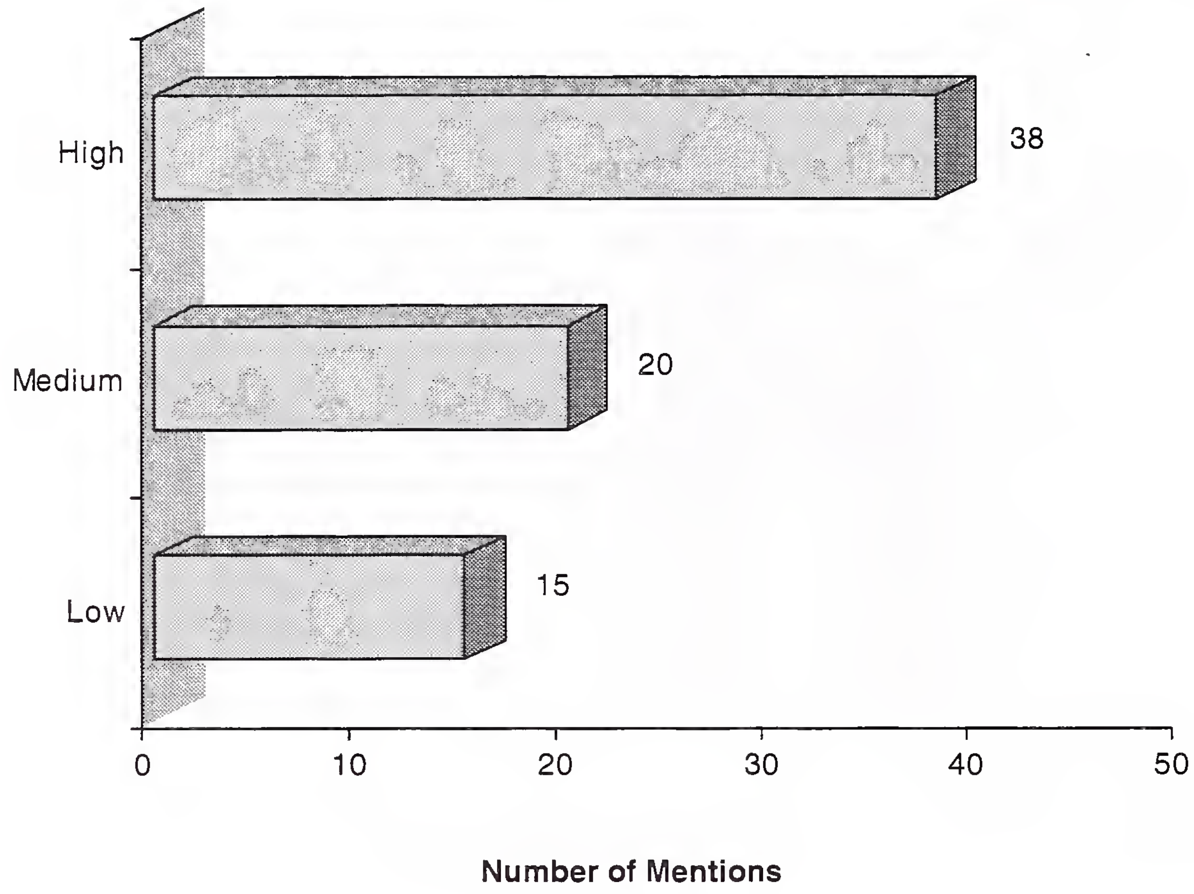
Sample of 59 IT Directors

Source: INPUT

Exhibit III-20 shows the profile of level of business change that buyers expect will accompany enterprise application implementation in future.

Exhibit III-20

Level of Business Change Planned



Source: INPUT

The level of business change that accompanies enterprise application solution implementations is increasing considerably. In existing implementations, the level of business change is typically low. In future implementations, the level of business change is typically high.

A high level of business change was seen to be both business-driven and application-driven:

- Sixteen buyers mentioned that enterprise application solution implementation is part of a major business process review or company reorganisation and that the need for business change was paramount

- On the other hand, fourteen buyers stated that considerable business process change was unavoidable when implementing a new enterprise application solution and was necessary to benefit from the technology change.

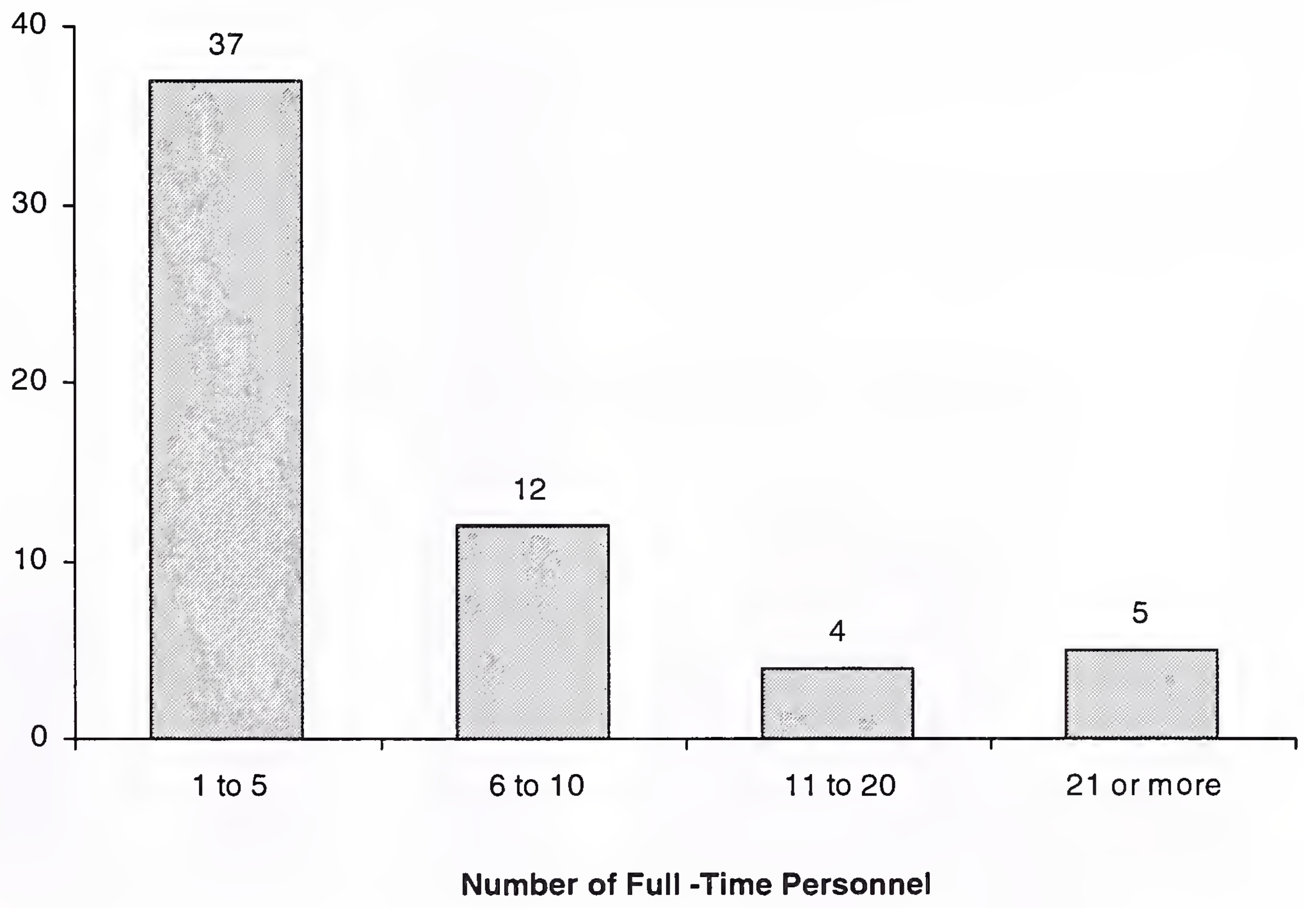
G

Implementation Costs and Timescales

Exhibit III-21 shows the profile of number of personnel involved in implementation.

Exhibit III-21

Number of Personnel Involved in Implementation



Sample of 20 IT Directors *Source: INPUT*

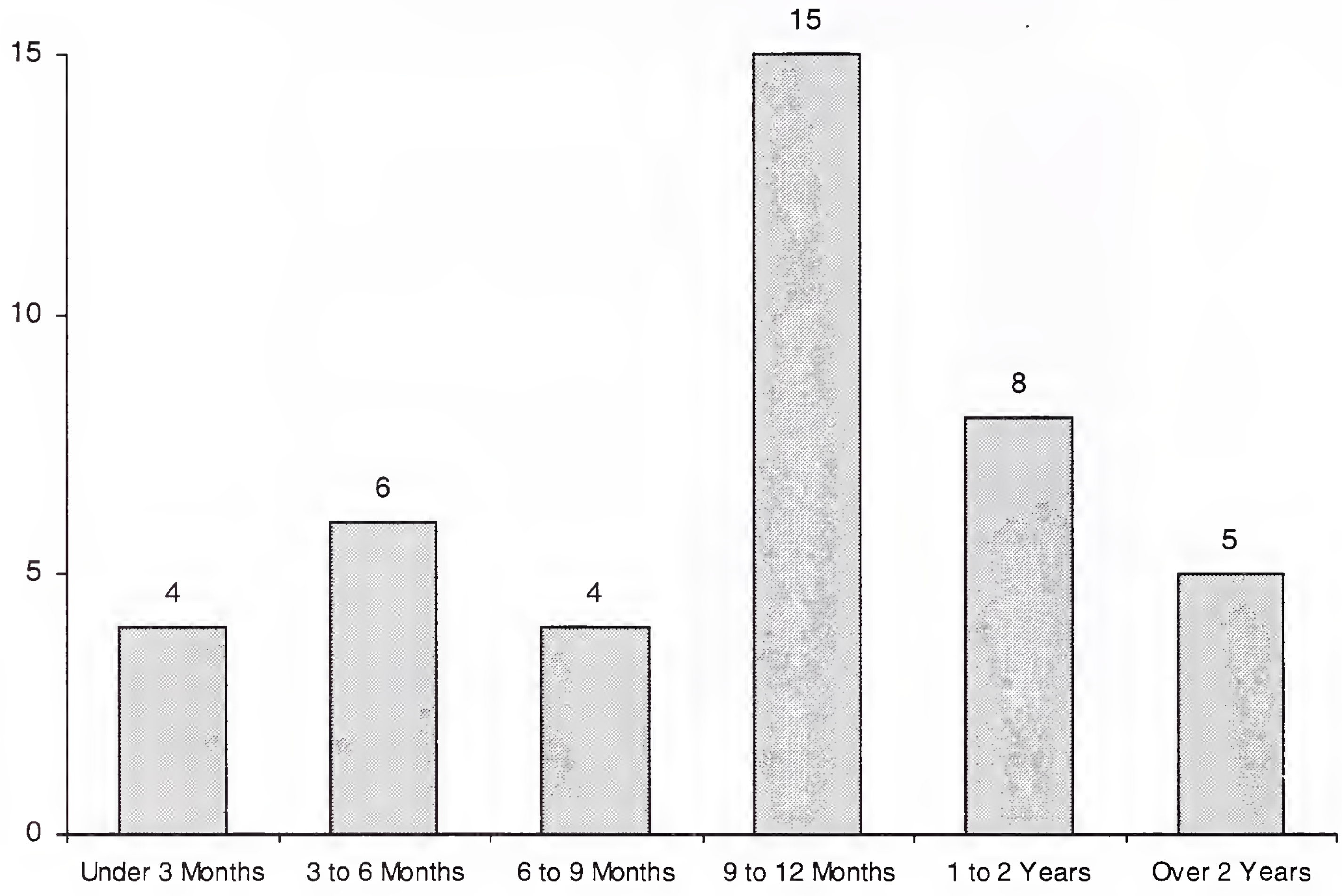
On average, twelve full-time personnel were involved in enterprise application solution implementations, though, in the majority of cases the number of full-time personnel involved was five or less.

The average implementation times for companies and units within companies are 12 months and 6 months respectively.

Exhibit III-22 shows the profile of enterprise application implementation periods for companies in toto.

Exhibit III-22

Implementation Timescales: Company



Sample of 42 IT Directors *Source: INPUT*

Despite the pressure on IT managers and vendors to reduce implementation times, buyers do not expect enterprise application solution implementation times to decrease in the short-term.

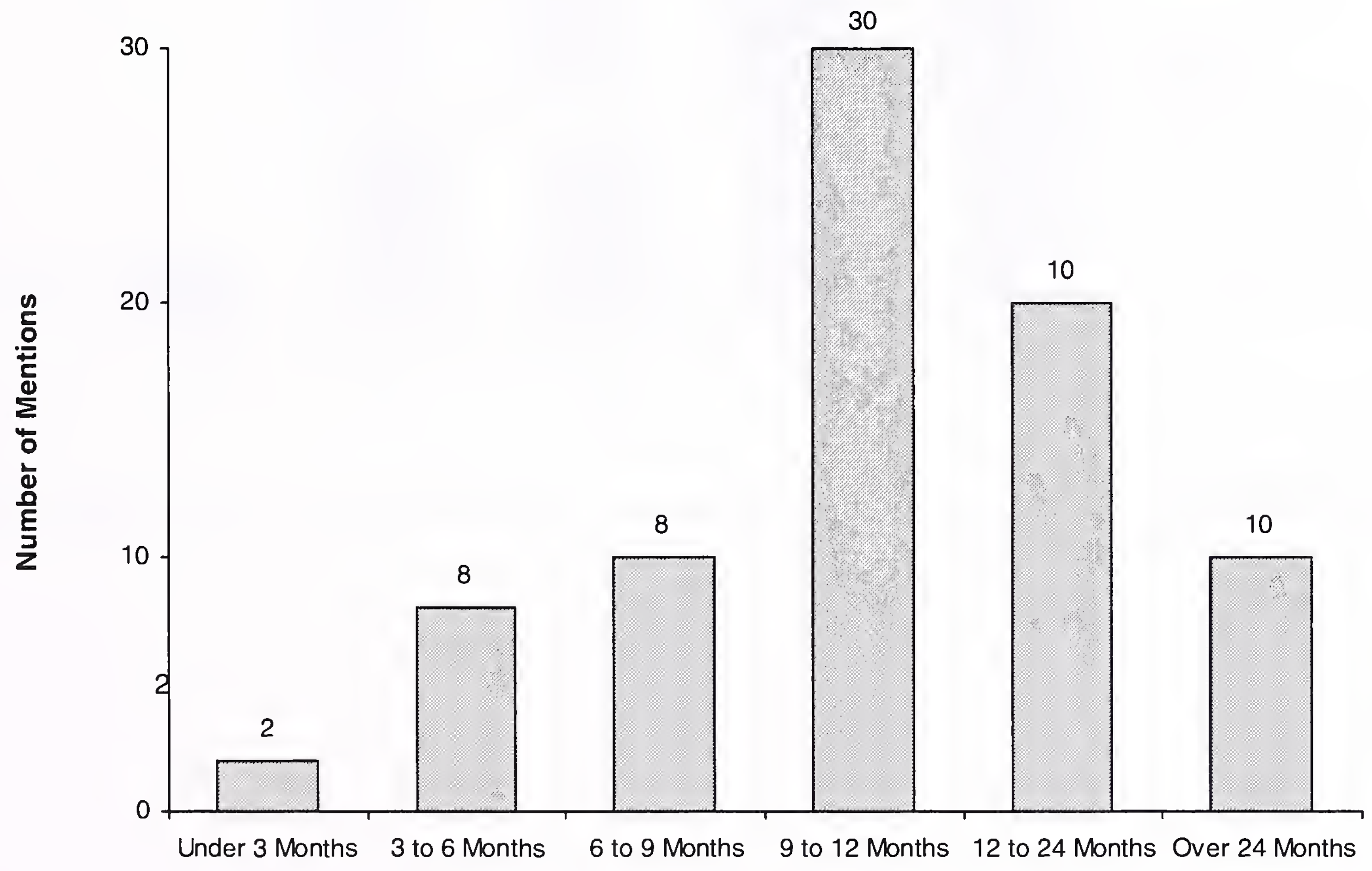
Potential buyers anticipate that the average implementation times for companies and units within companies will be 14 months and 8 months respectively.

This slight lengthening of expected lead times is not statistically significant, but could arise from the higher levels of business process reengineering and greater scope of enterprise application coverage arising in future implementations.

Exhibit III-23 lists the expected implementation times of potential buyers for enterprise application implementation at the company level.

Exhibit III-23

Implementation Time Planned: Company



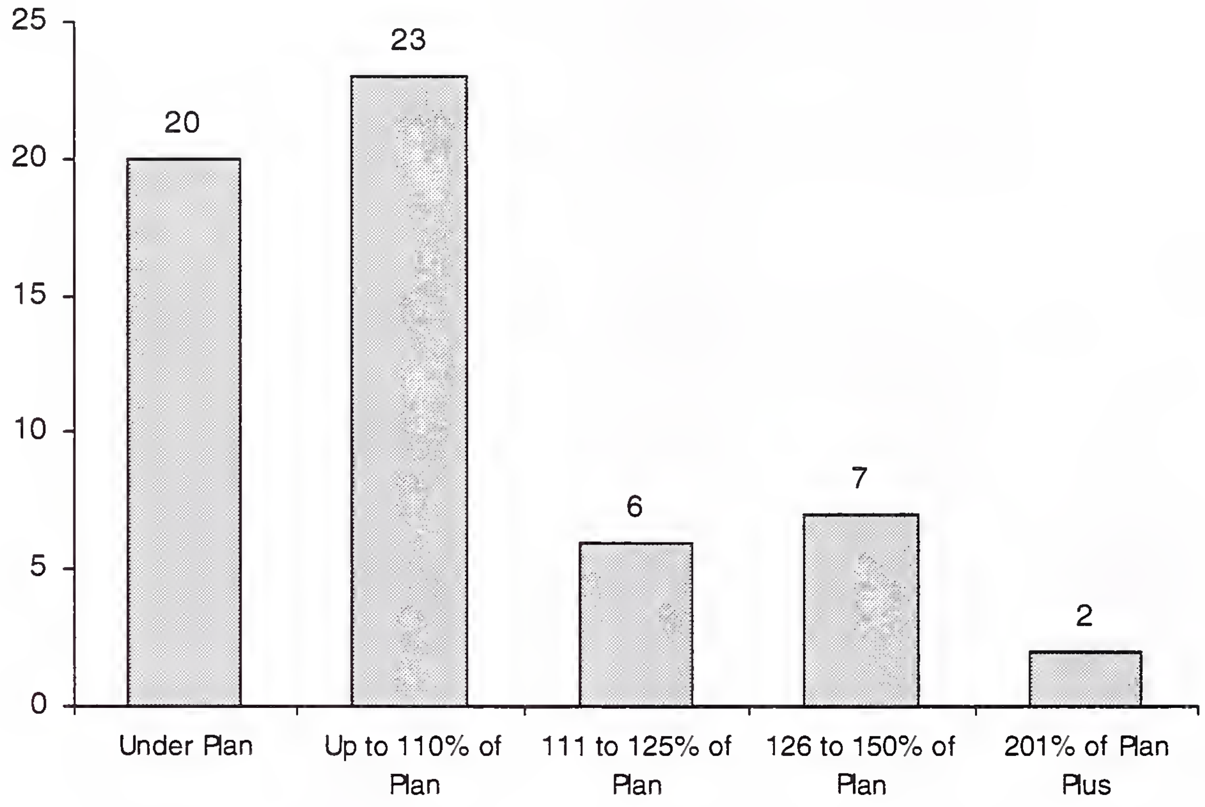
Sample of 80 IT Directors *Source: INPUT*

Overall, organisations have been successful in implementing enterprise applications to time and budget. On average, organisations were within 2% of their implementation budgets and within 5% of their implementation time-scales.

Exhibit III-24 shows how implementation times compared to plan.

Exhibit III-24

Implementation Time vs Plan

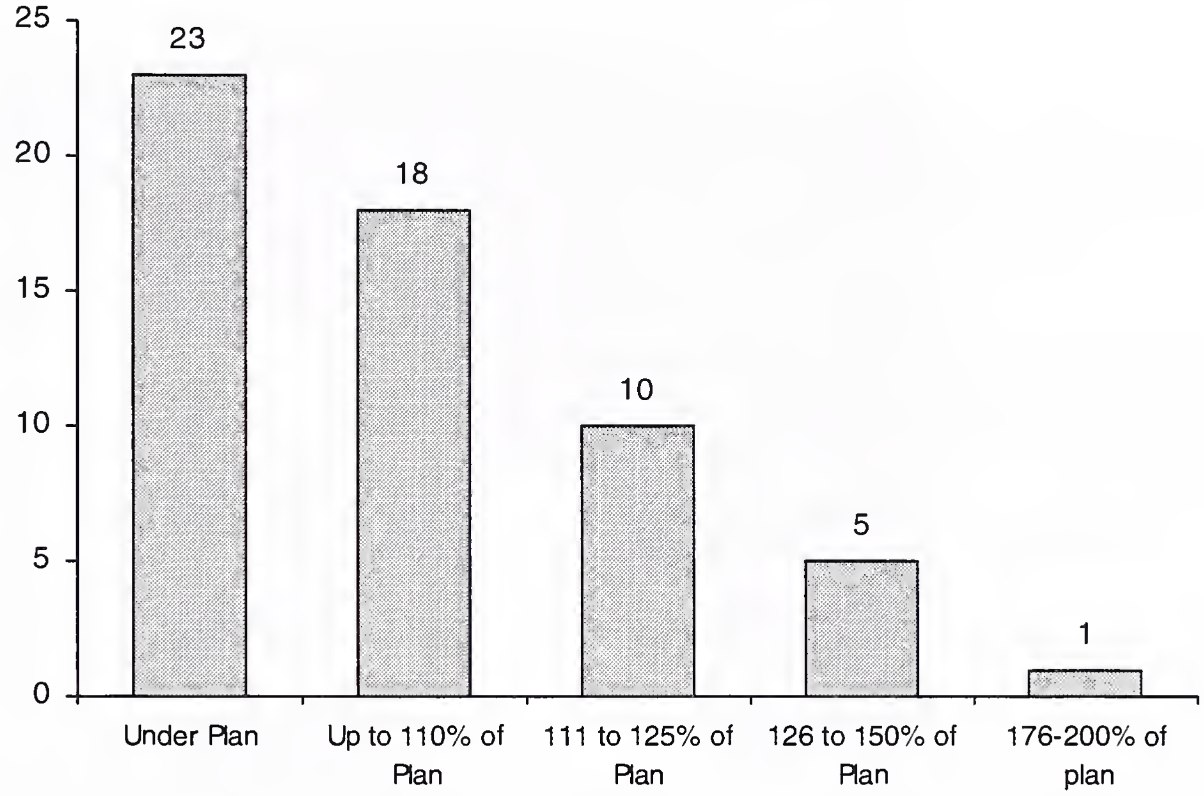


Sample of 58 IT Directors *Source: INPUT*

Exhibit III-25 shows how implementation budgets compared to plan.

Exhibit III-25

Implementation Budget vs Plan

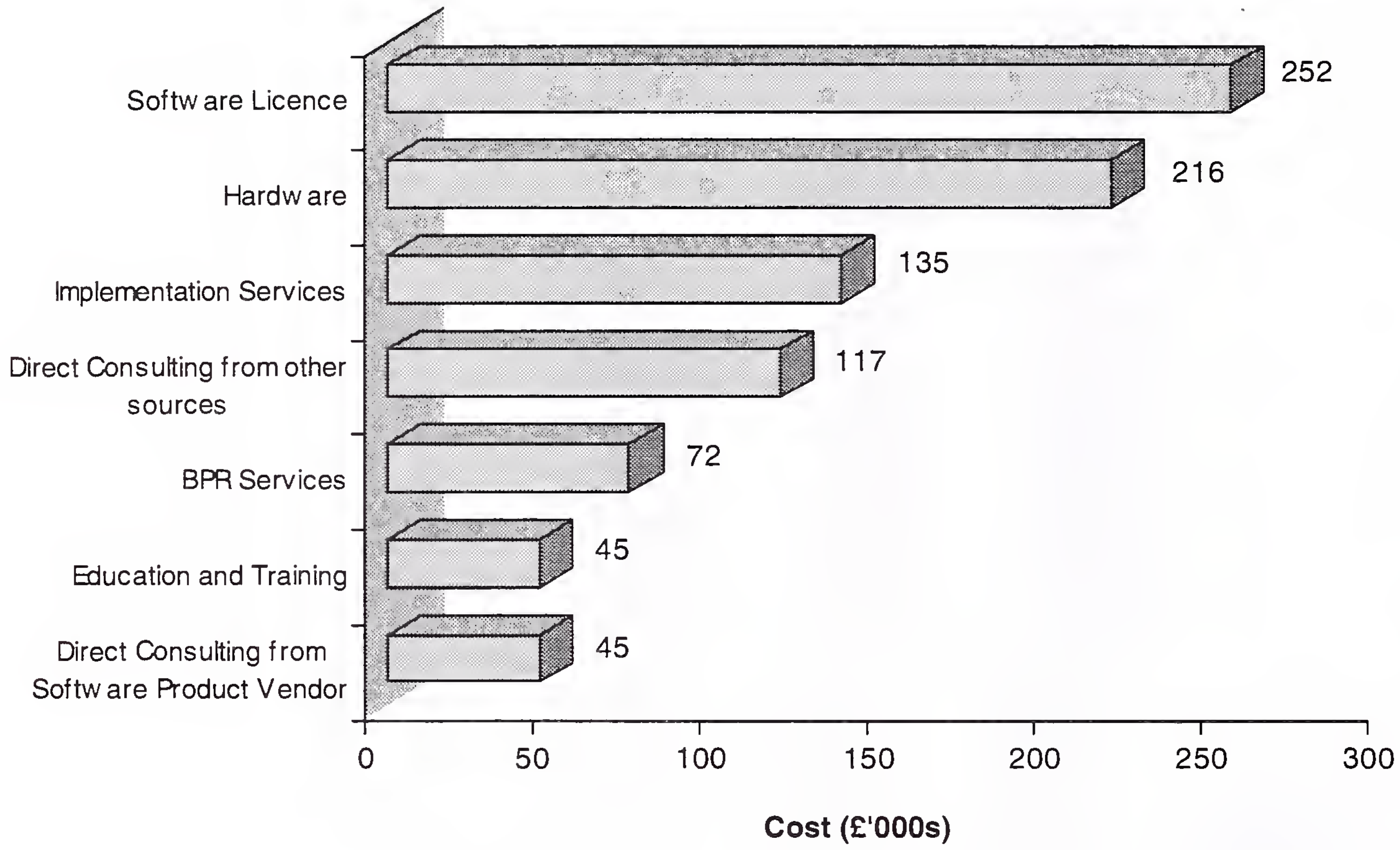


Sample of 57 IT Directors *Source: INPUT*

Exhibit III-26 shows the average implementation budget broken down by category.

Exhibit III-26

Implementation Cost Breakdown: Absolute Value

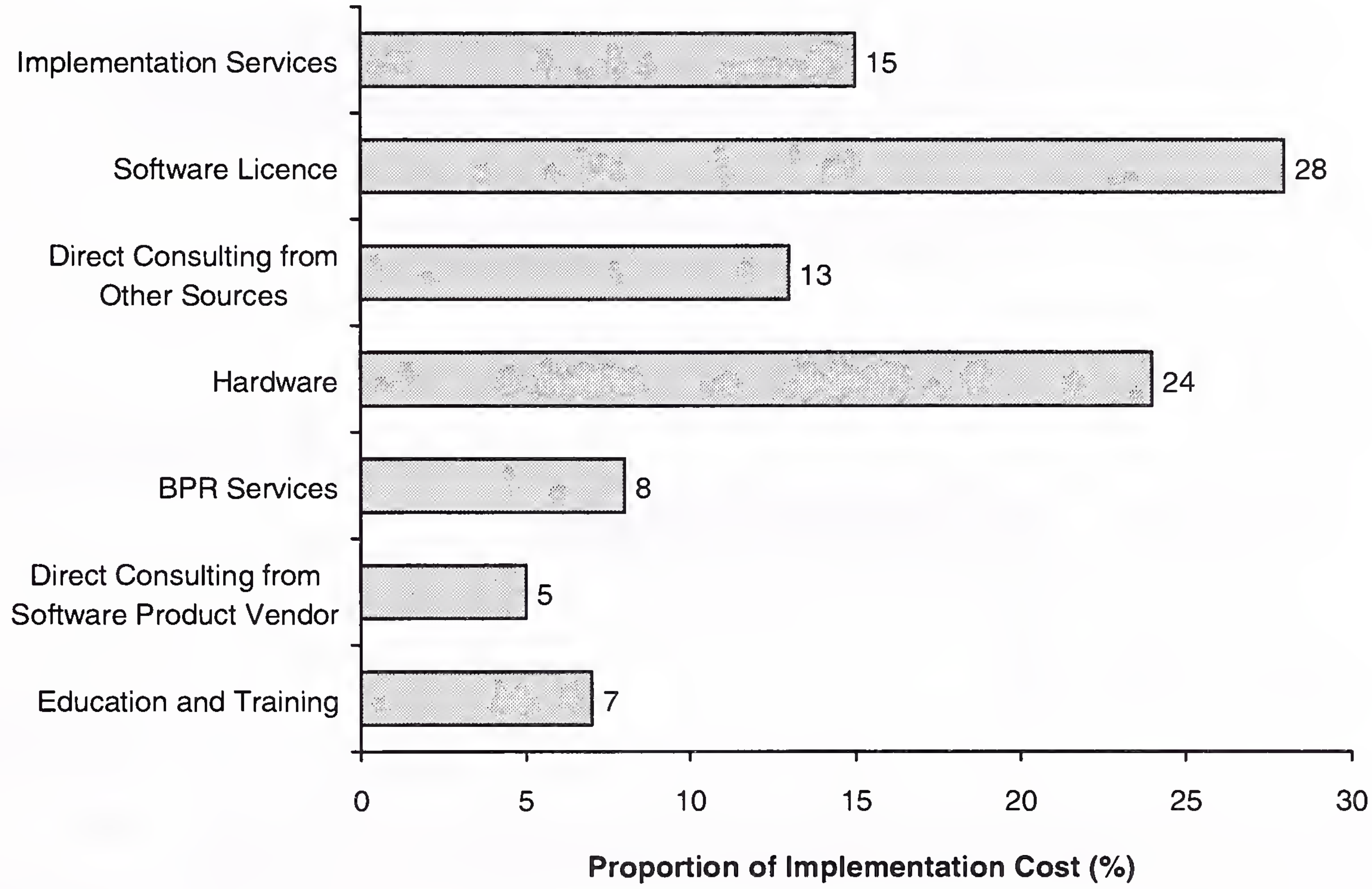


Source: INPUT

Exhibit III-27 shows the implementation costs broken down in percentage terms.

Exhibit III-27

Implementation Cost Breakdown: Percentage Split



Sample of 66 IT Directors

Source: INPUT

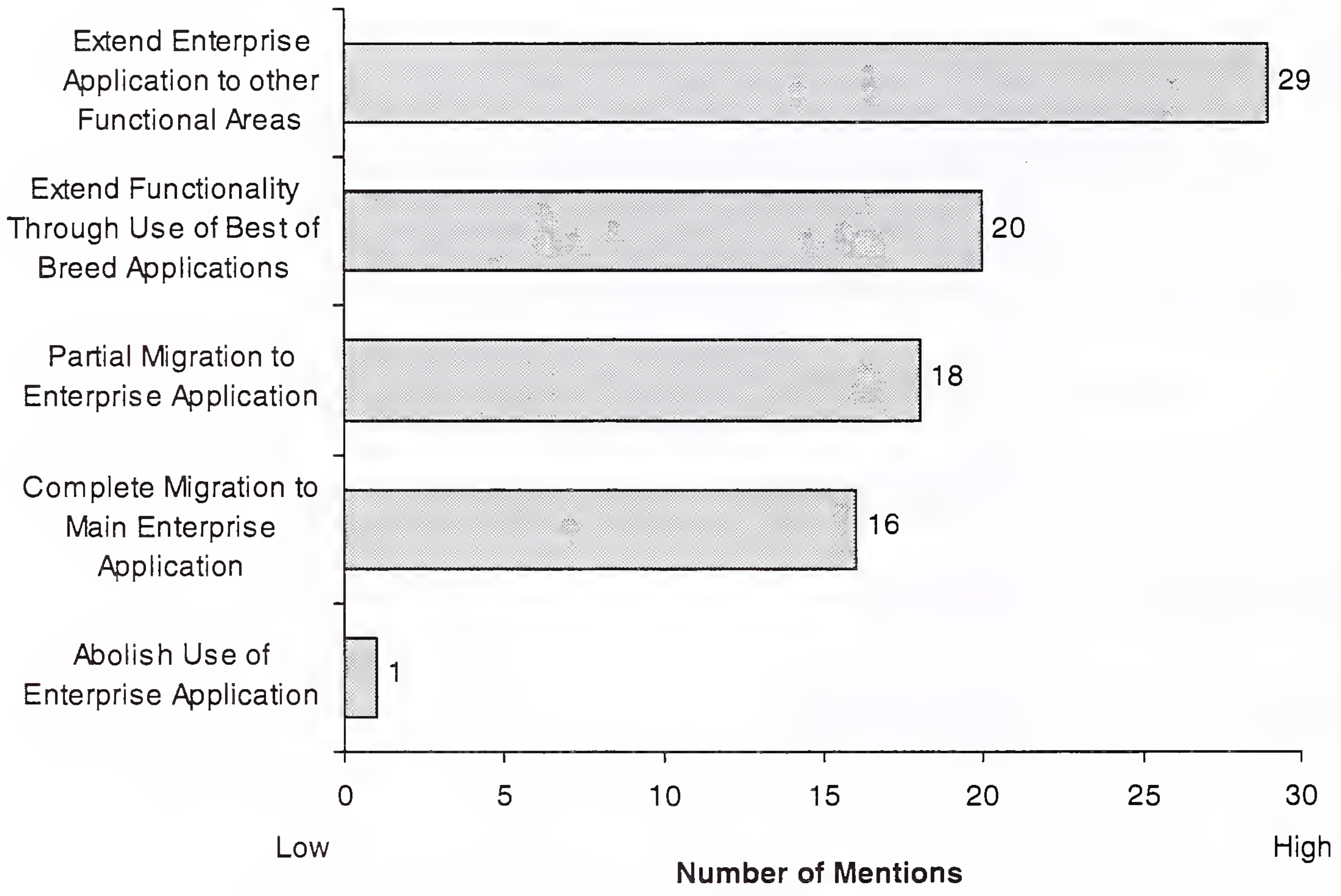
Product purchases, both hardware and software, account for over half of implementation costs. External implementation services, excluding training, account for approximately 40% of the cost of implementation. External implementation services remain dominated by services provided by service partners rather than by direct services supplied by the product vendor.

Earlier studies suggested that training is an aspect of implementation that is frequently inadequately resourced. Here, this may again be the case, with training accounting for only 7% of implementation cost.

Exhibit III-28 lists the plans of existing users of enterprise applications over the next two years.

Exhibit III-28

Future Plans



Sample of 66 IT Directors *Source: INPUT*

This suggests that organisations are still concerned with extending the functionality of their enterprise applications to give a wider coverage of business processes. However, a considerable proportion of organisations still find that this is best achieved by use of multiple best of breed applications rather than attempting to use a single integrated product for all business processes.

IV

Satisfaction with Enterprise Application Solutions

A
Achievement of Benefits

Exhibit IV-1 shows the difference between importance and achievement for a number of potential benefits from use of enterprise application solutions.

Exhibit IV-1

Satisfaction with Benefit Achievement

	Importance	Satisfaction	Difference
Reducing business costs	3.8	2.9	0.9
Overall business benefit	3.5	3.0	0.5
Addressing Year 2000 issues	3.4	3.8	-0.4
Tactical reengineering	3.1	3.2	-0.1
Improved interaction with suppliers	2.9	3.3	-0.4
Strategic reengineering of the business	2.7	3.0	-0.3
Gaining/retaining competitive edge	2.6	2.9	-0.3
Improving responsiveness to customer demand	2.3	3.2	-0.9
Accessing new revenue channels	1.6	2.8	-1.2
Creating business barriers to competition	1.6	2.0	-0.4

Source: INPUT

Business process reengineering in the U.K. has often been strongly associated with cost reduction and the major benefit sought by buyers of enterprise application solutions in the past was the reduction of business cost. Overall the current enterprise application solution installed base has performed poorly in this respect.

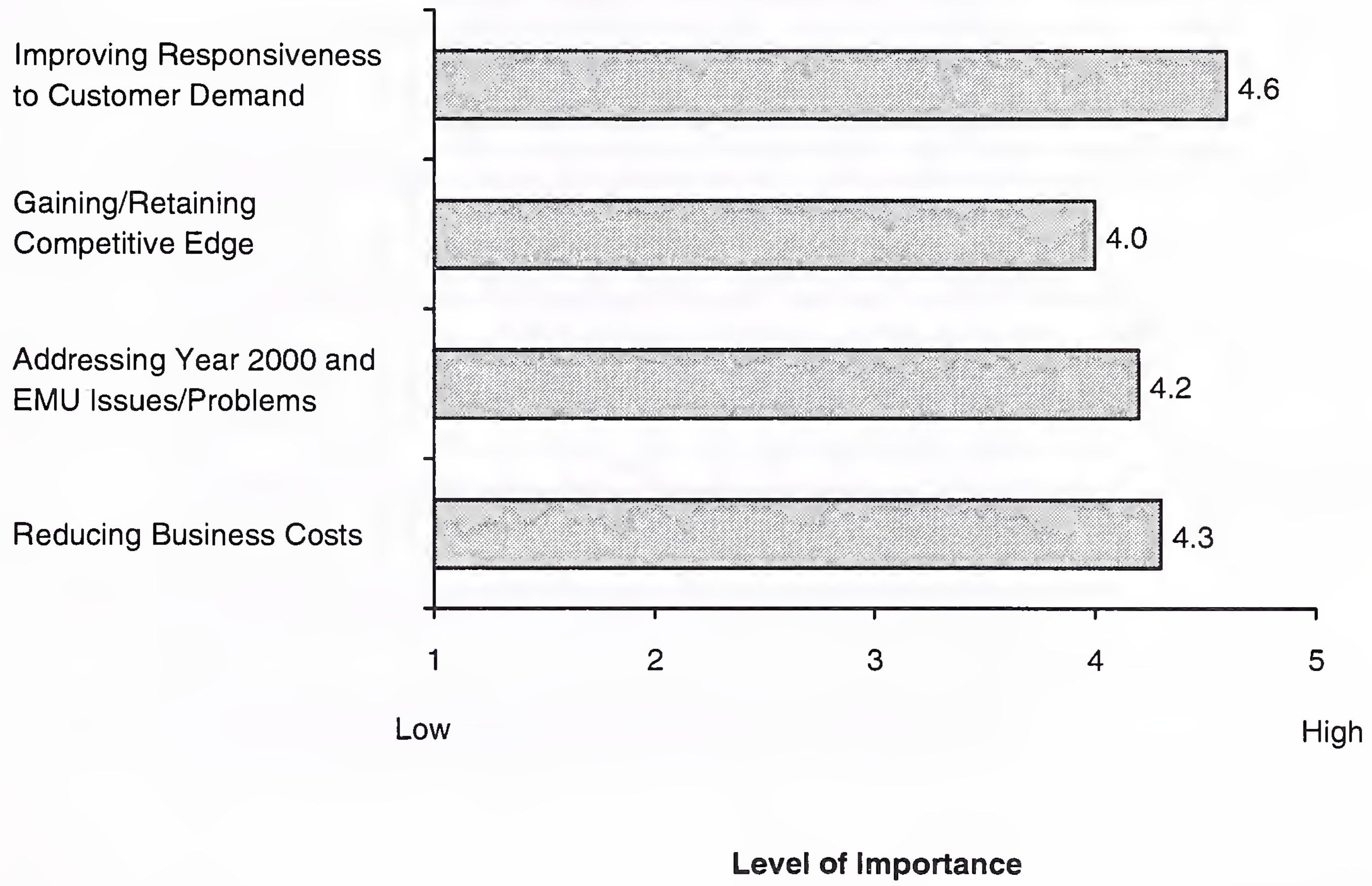
However, addressing Year 2000 issues was also an important driving force in the enterprise application solution market, and enterprise application solutions are perceived to have performed well in addressing this issue.

Creating business advantage whether through improved responsiveness to clients or improved interaction with suppliers was not seen to be an important factor in enterprise application solution purchase amongst the current installed base.

However, there are signs that the key driving forces are changing. Exhibit IV-2 lists the most important benefits sought by potential buyers from enterprise application implementation.

Exhibit IV-2

Most Important Benefits Sought



Sample of 105 IT Directors *Source: INPUT*

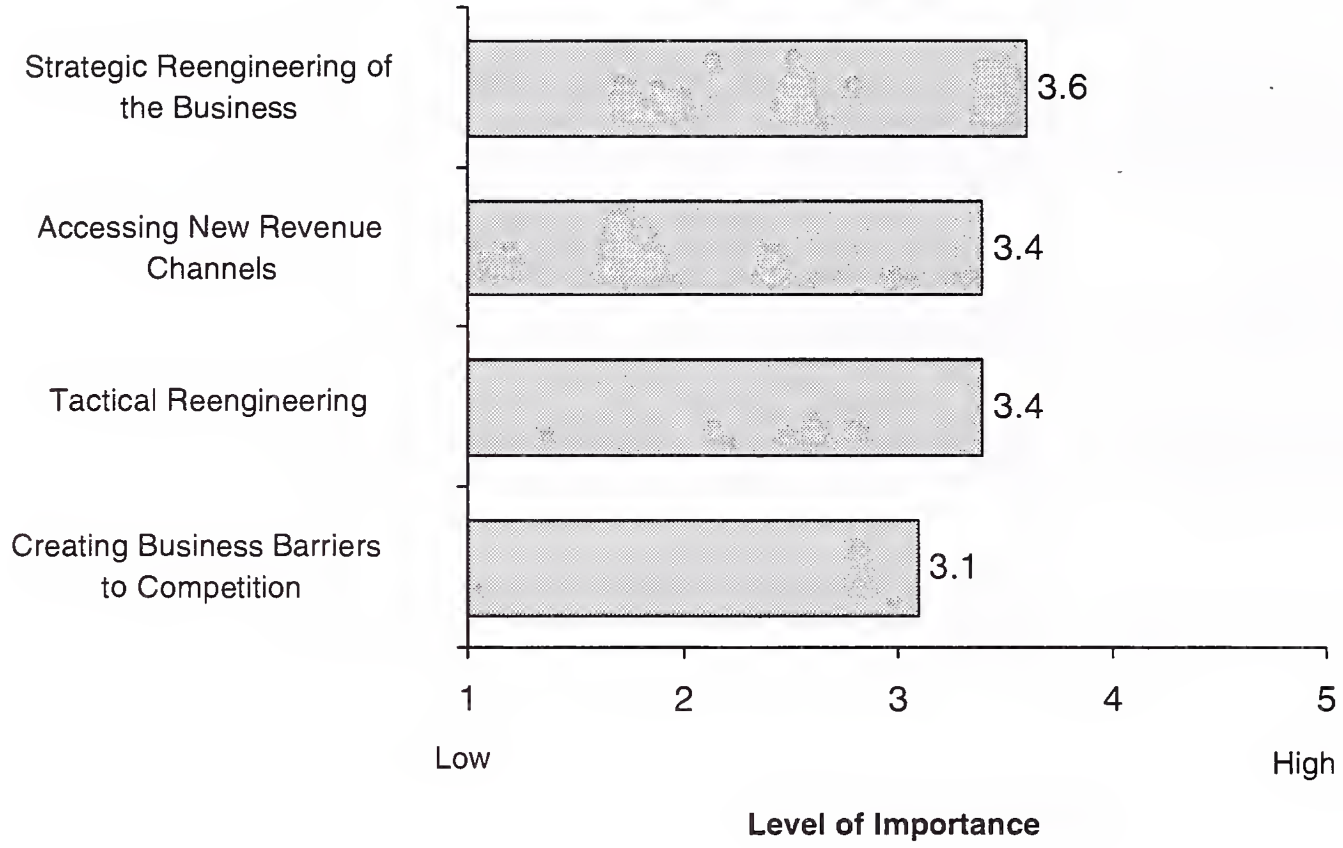
Reducing business costs and addressing Year 2000/Euro issues continue to be important to buyers. However, the most important benefit sought by current purchasers is improved responsiveness to customer demand. Developing a competitive edge is also an important requirement.

This has important implications both for the functionality of enterprise application solutions, which now need to be more customer-focused rather than largely emphasising materials and supplier management, and for the competencies of services vendors which also need to be more outward looking with strong distribution and sales and marketing expertise.

Exhibit IV-3 lists the less important benefits sought by potential buyers from enterprise application implementation.

Exhibit IV-3

Less Important Benefits Sought



Sample of 105 IT Directors
Standard error = 0.1

Source: INPUT

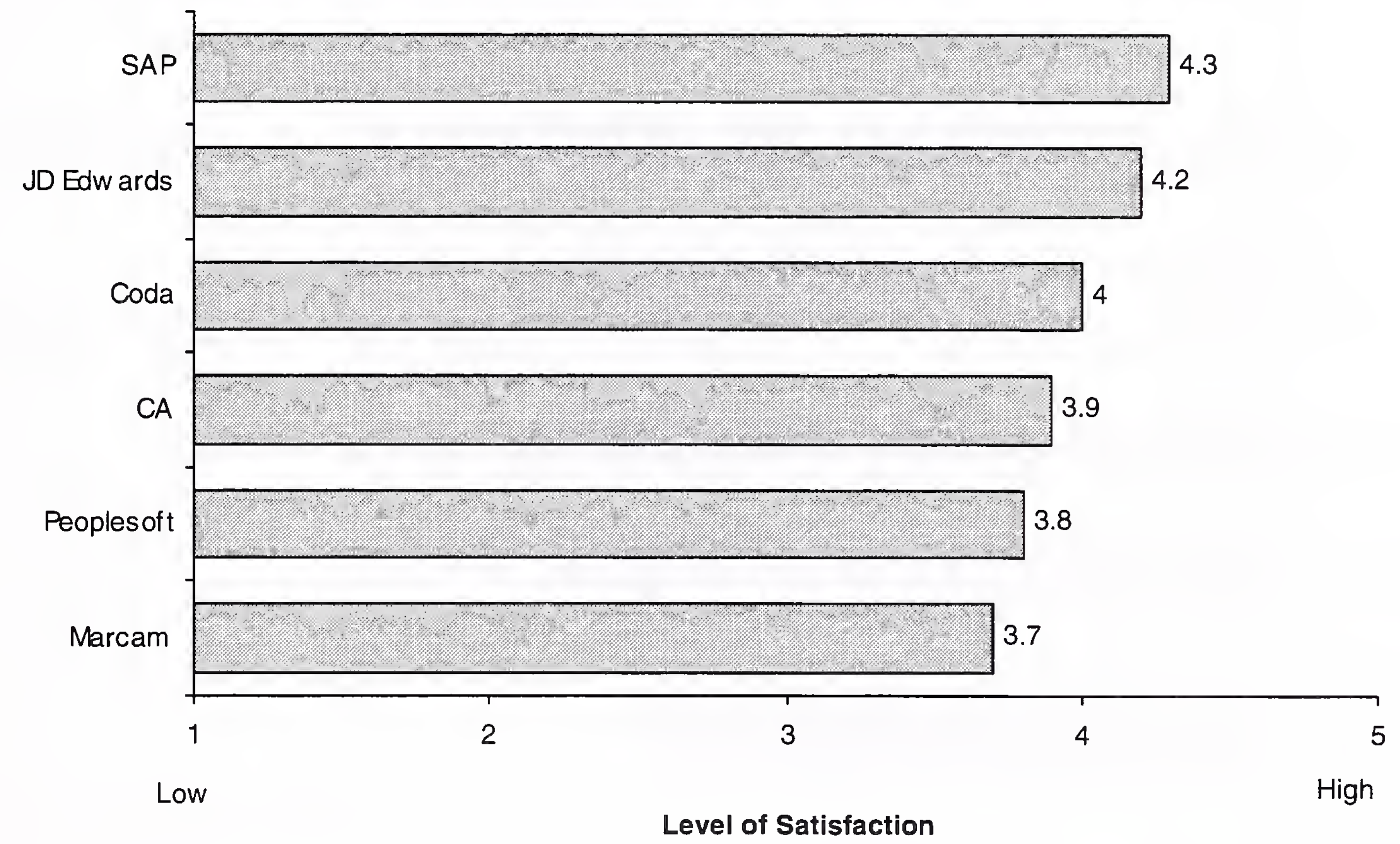
B

Satisfaction with Enterprise Application Solutions

Exhibit IV-4 lists those EAS vendors with whom buyers expressed a relatively high level of satisfaction.

Exhibit IV-4

Satisfaction with EAS Software: High Satisfaction



Source: INPUT

The areas of high satisfaction tend to represent the newer products now making their way in the installed base of enterprise application solutions in the U.K. such as SAP, JD Edwards and PeopleSoft.

The key strengths reported for SAP were:

- The high level of integration and similarity between modules
- Its ease of use
- Its ability to cope with change

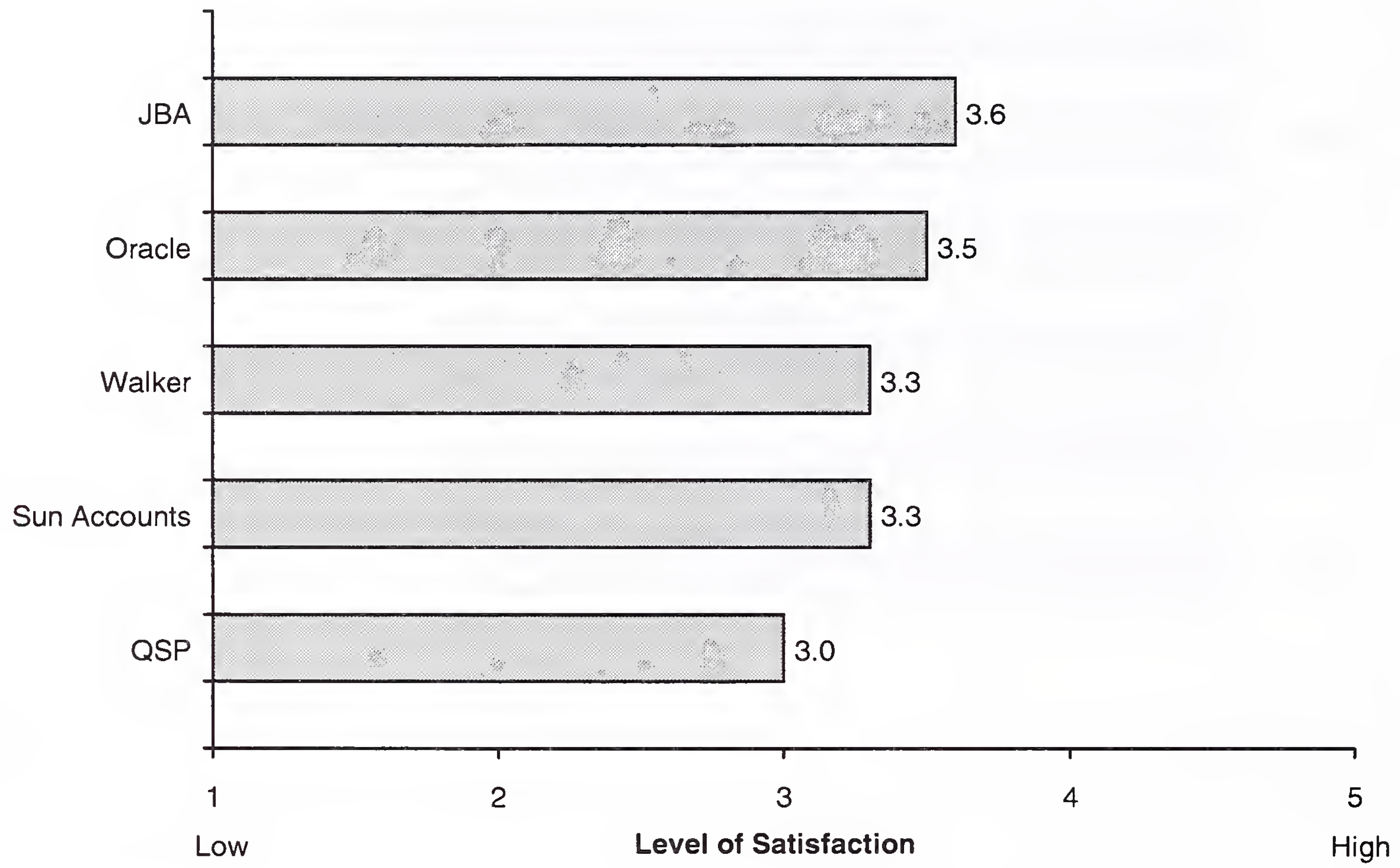
Weaknesses reported for SAP enterprise applications included:

- Its high resource usage difficulty of implementation
- Its reporting capabilities.

Exhibit IV-5 lists those EAS vendors with whom buyers expressed a relatively low level of satisfaction.

Exhibit IV-5

Satisfaction with EAS Software: Low Satisfaction



Source: INPUT

Buyers expressed lower levels of satisfaction with the originally more proprietary products such as QSP, Walker and JBA.

Buyers also expressed a relatively low level of satisfaction with Oracle enterprise applications.

While the JBA enterprise application was praised for its business orientation and completeness, specific criticisms raised included:

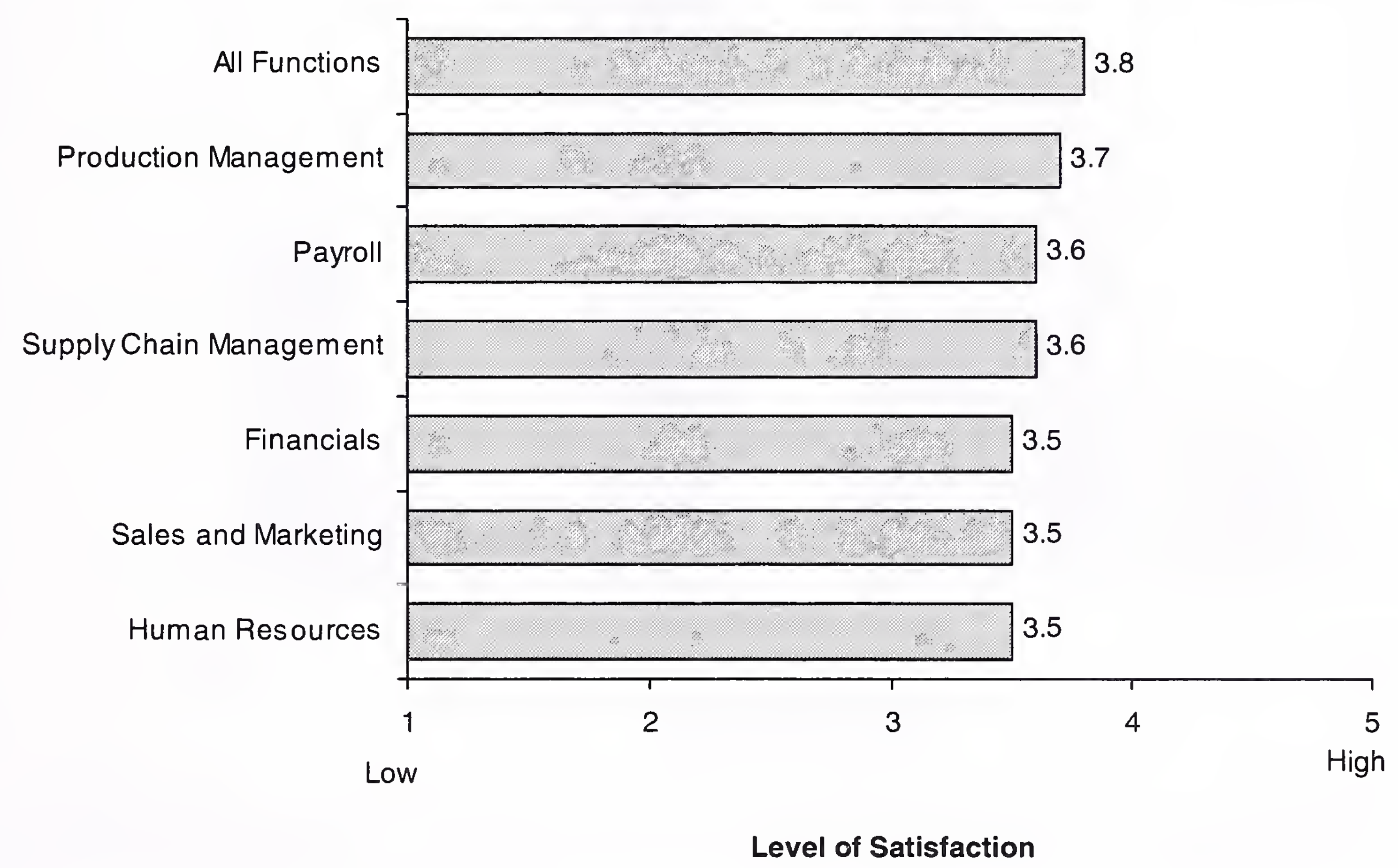
- The age of the system, its slowness and its high dependence on batch processing
- The high cost of software upgrades

- Poor documentation and shortage of qualified personnel with experience in the product.

Exhibit IV-6 lists the satisfaction with the module implemented for each of a number of functional areas.

Exhibit IV-6

Satisfaction with EAS Software by Function



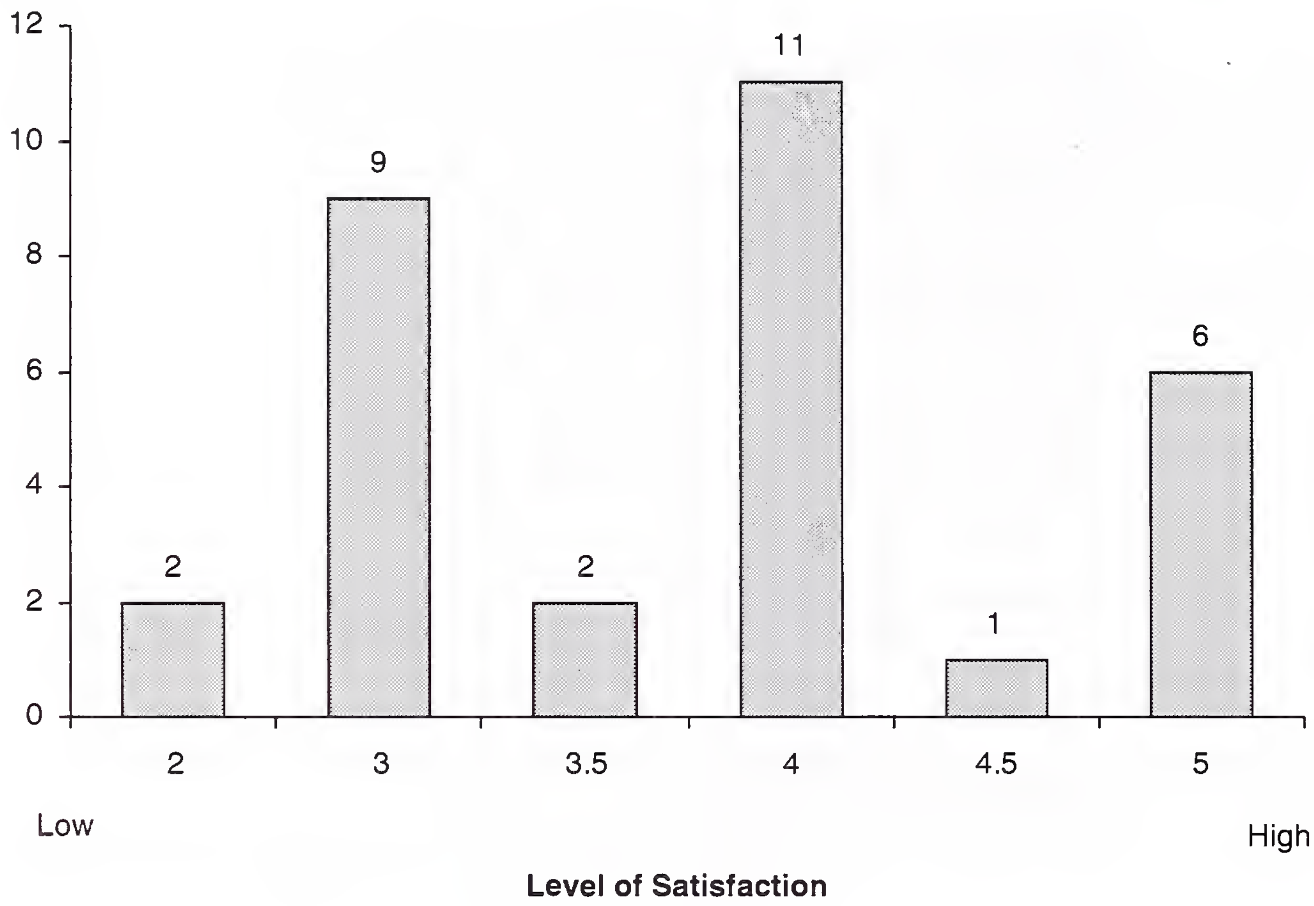
Sample of 40 IT Directors. Standard error = 0.2 *Source: INPUT*

Overall satisfaction levels are only moderate, particularly in increasingly key areas such as sales and marketing and human resources.

Exhibit IV-7 lists the profile of satisfaction with integrated systems covering all major functional areas.

Exhibit IV-7

Satisfaction with EAS Software: Integrated System

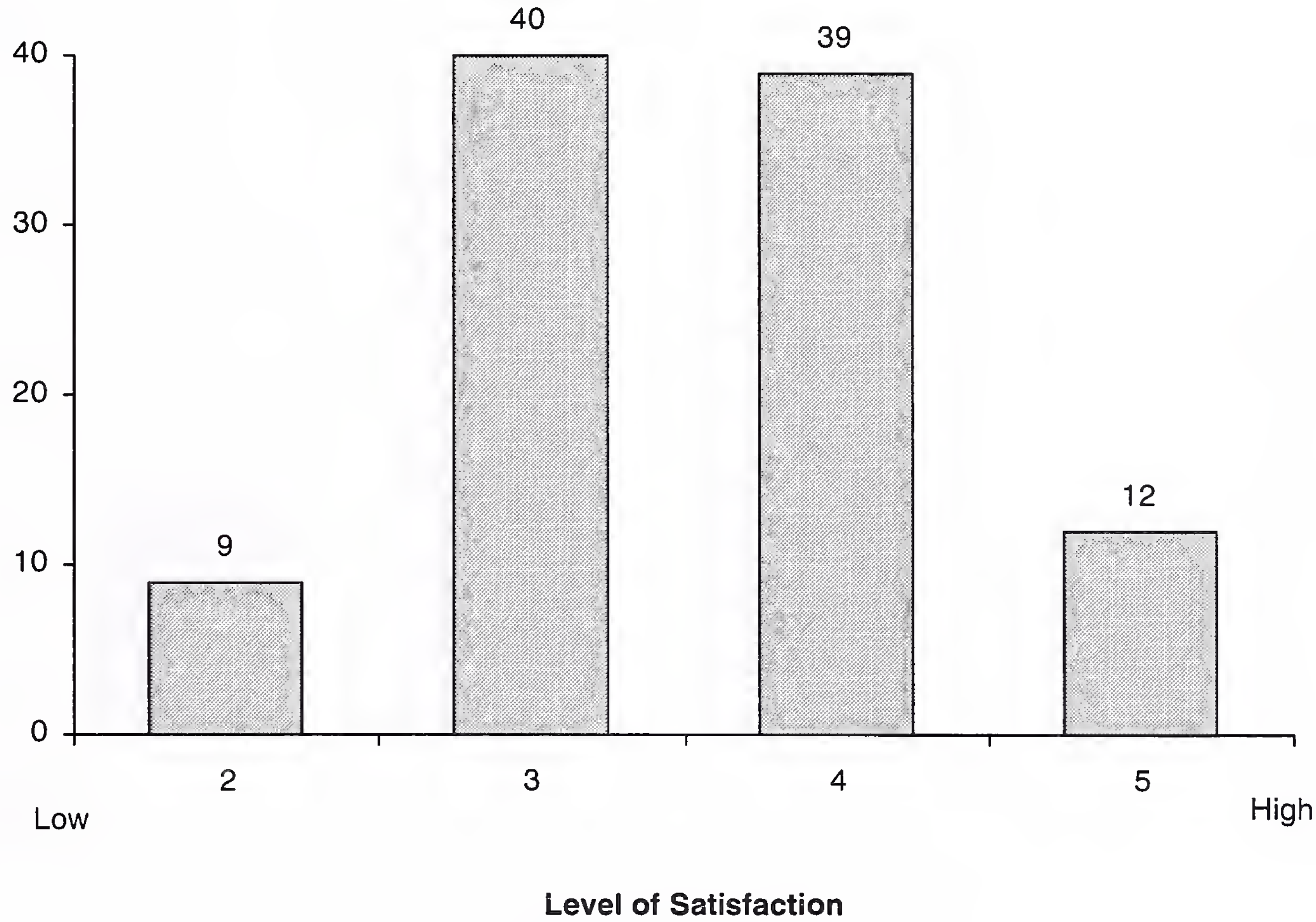


Sample of 31 IT Directors *Source: INPUT*

Exhibit IV-8 lists the profile of satisfaction with products supporting the financials function.

Exhibit IV-8

Satisfaction with EAS Software: Financials

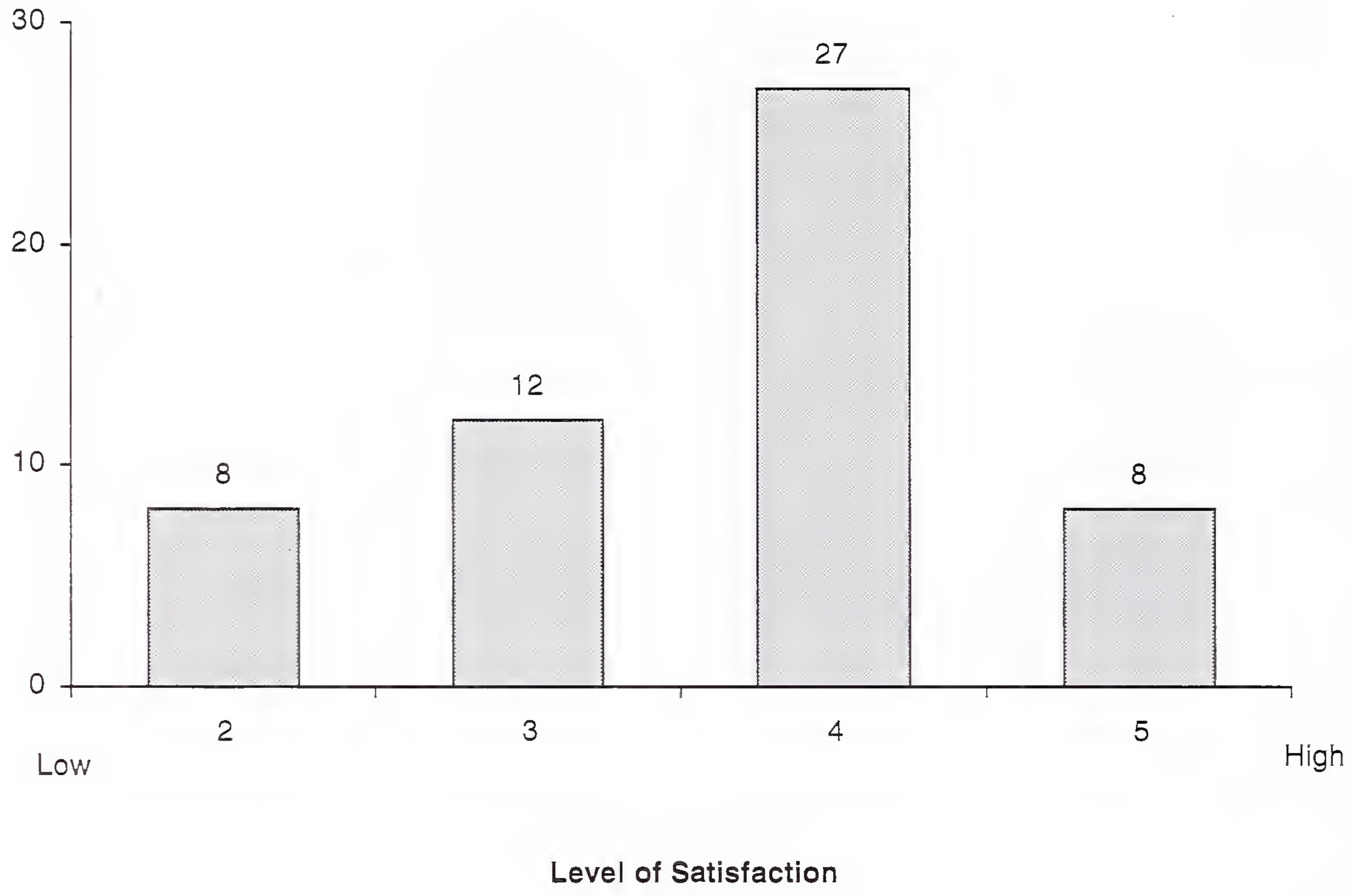


Sample of 100 IT Directors *Source: INPUT*

Exhibit IV-9 lists the profile of satisfaction with products supporting the payroll function.

Exhibit IV-9

Satisfaction with EAS Software: Payroll

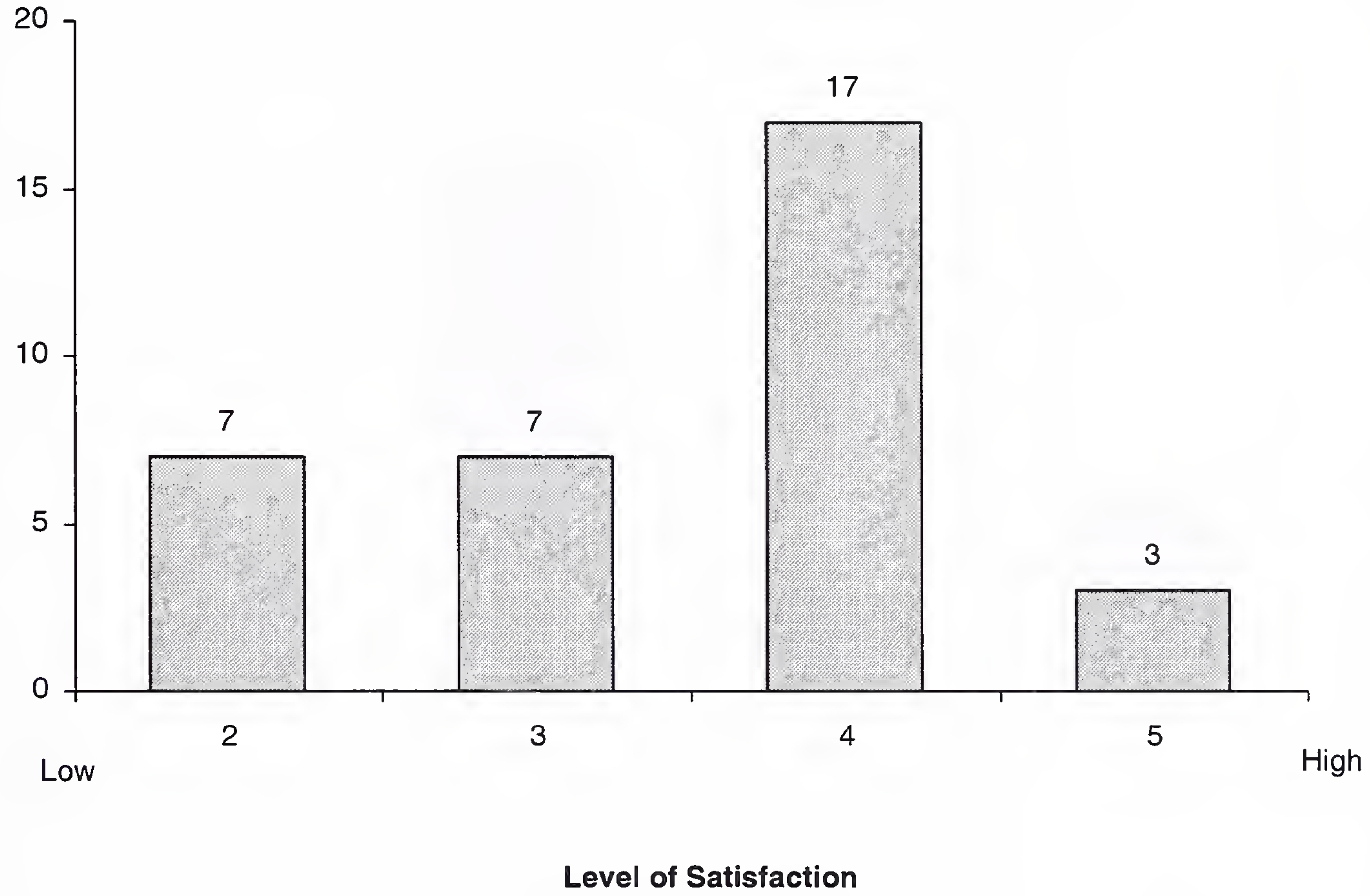


Sample of 55 IT Directors *Source: INPUT*

Exhibit IV-10 lists the profile of satisfaction with products supporting the human resources function.

Exhibit IV-10

Satisfaction with EAS Software: Human Resources

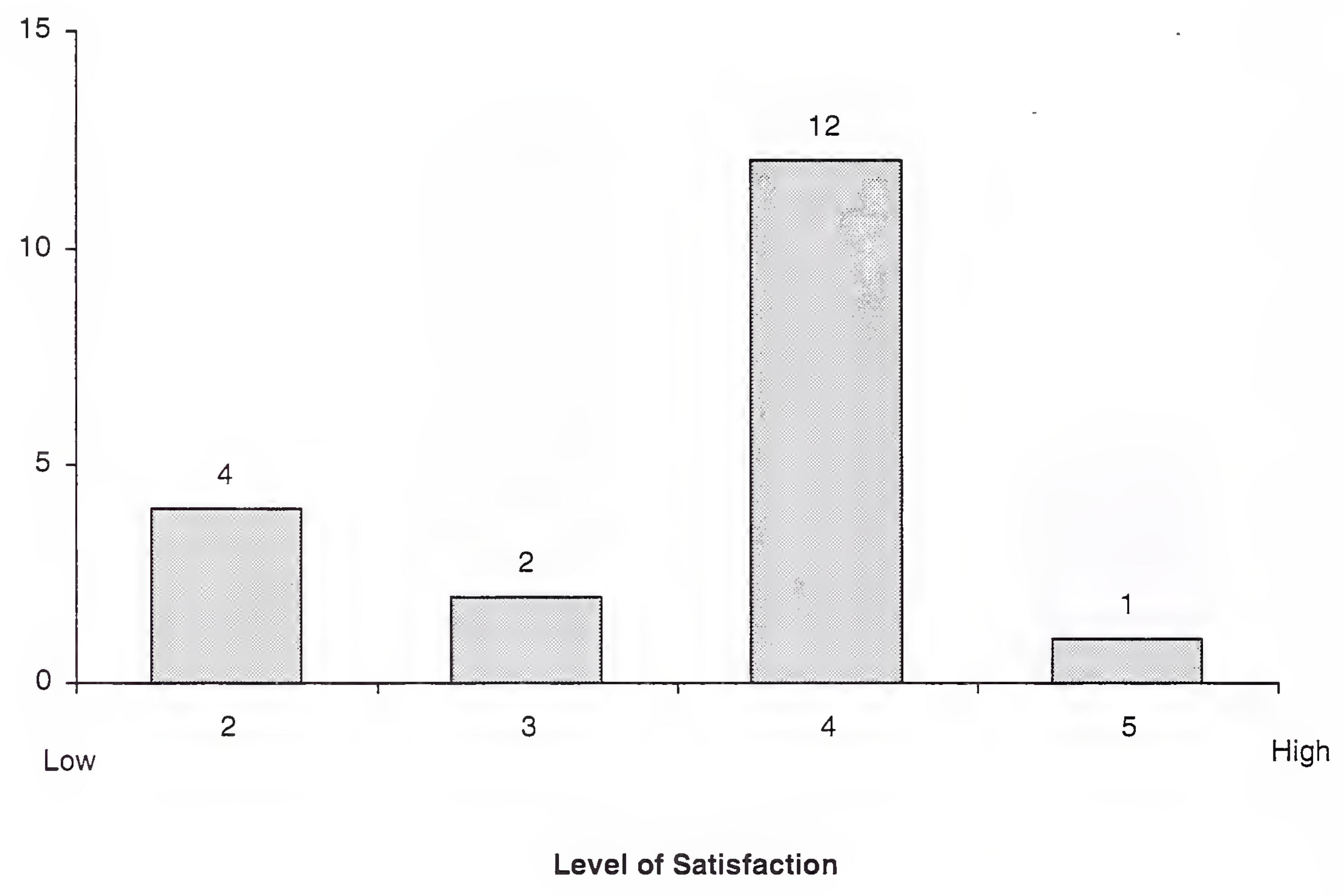


Sample of 34 IT Directors *Source: INPUT*

Exhibit IV-11 lists the profile of satisfaction with products supporting the sales and marketing function.

Exhibit IV-11

Satisfaction with EAS Software: Sales & Marketing

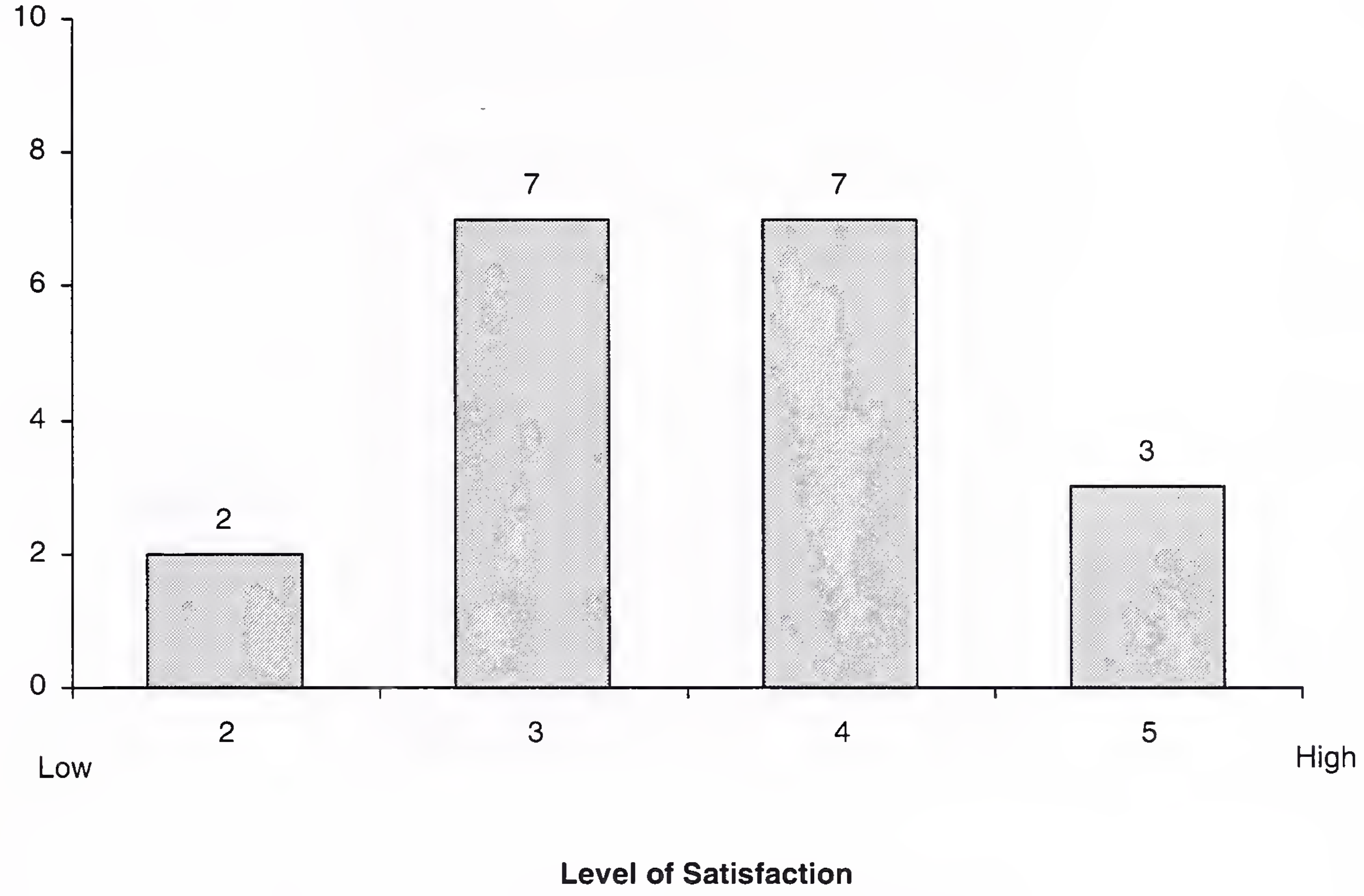


Sample of 19 IT Directors *Source: INPUT*

Exhibit IV-12 lists the profile of satisfaction with products supporting the supply chain management function.

Exhibit IV-12

Satisfaction with EAS Software: Supply Chain Management

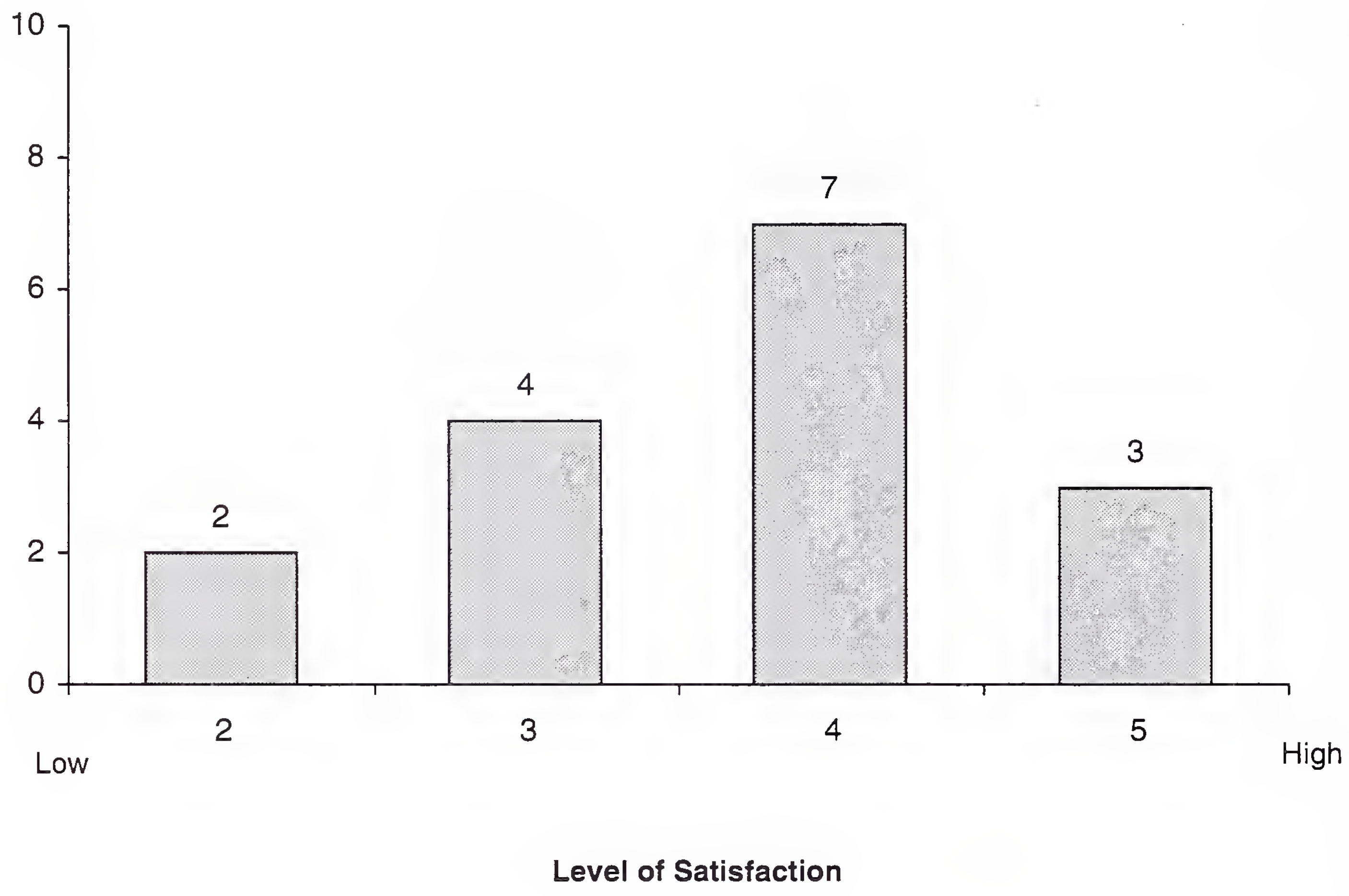


Sample of 19 IT Directors *Source: INPUT*

Exhibit IV-13 lists the profile of satisfaction with products supporting the production management function.

Exhibit IV-13

Satisfaction with EAS Software: Production Management



Sample of 16 IT Directors   *Source: INPUT*

Exhibit IV-14 lists the elements of the main enterprise application solution with which buyers are most satisfied.

Exhibit IV-14

Satisfaction with EAS Solution: High Satisfaction

Sample of 55 IT Directors. Standard error = 0.1

Source: INPUT

Overall enterprise application solutions are seen to represent reasonably high value for money and to fit defined requirements well.

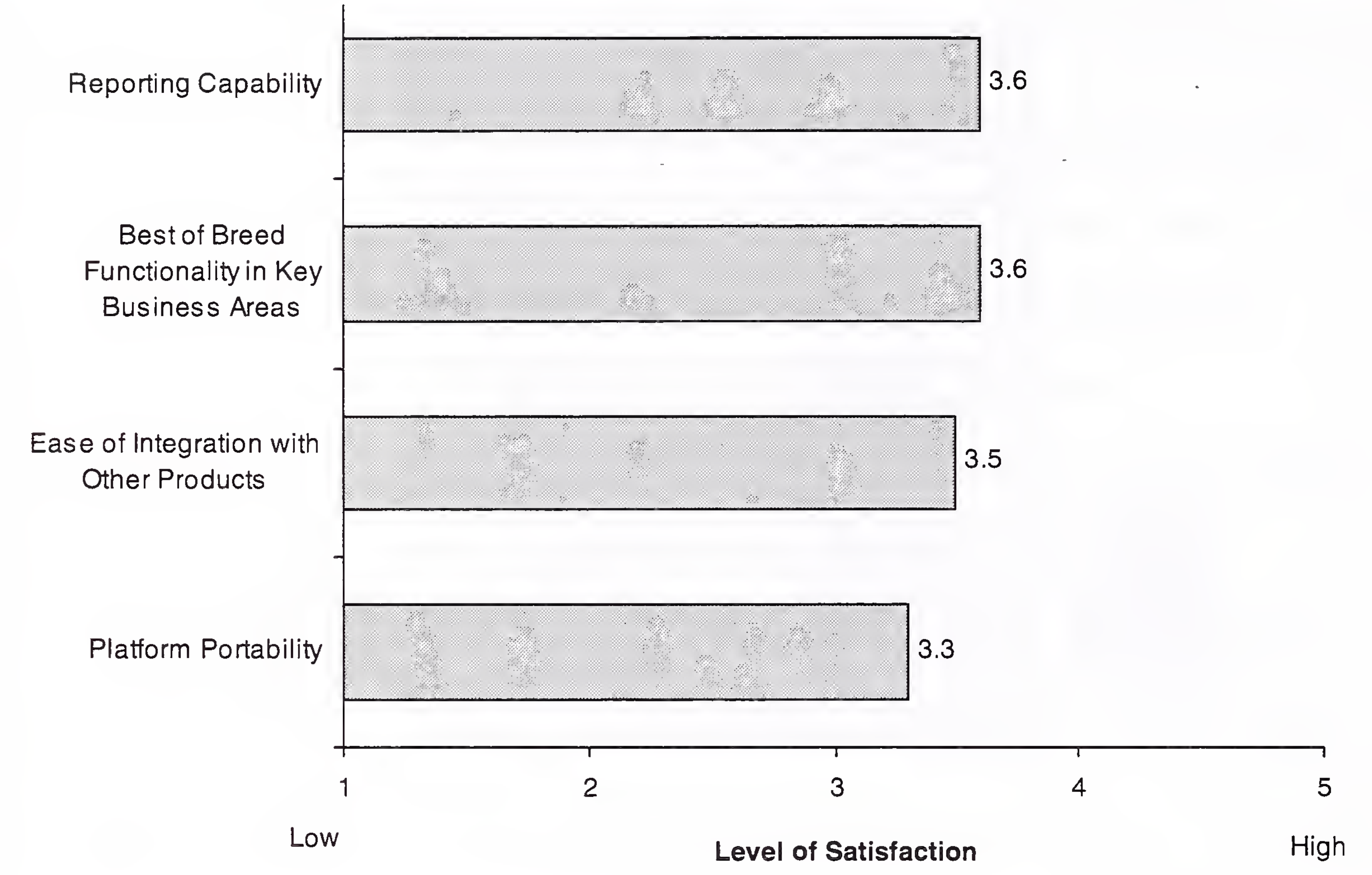
The key challenge for enterprise application solution vendors remains the need to extend the functionality available to buyers. This can be achieved both by:

- Extending the capabilities of their own products to develop best of breed capability in each key area
- Improving the ease of integration with complementary products.

Exhibit IV-15 lists the elements of the main enterprise application solution with which buyers are least satisfied.

Exhibit IV-15

Satisfaction with EAS Solution: Low Satisfaction



Sample of 50 IT Directors. Standard error = 0.1 *Source: INPUT*

C
Satisfaction with Services

Exhibit IV-16 shows the difference between importance and satisfaction for a number of aspects of enterprise application implementation and support through external services providers.

Exhibit IV-16

Satisfaction with External Service Provision

Characteristic	Importance	Satisfaction	Difference
Meeting cost/price calculations	4.1	4.0	0.1
Training/skills transfer	4.0	4.0	0.0
Breadth and depth of vendor skills	4.0	3.9	0.1
Ongoing support	4.0	3.9	0.1
Industry sector/business knowledge	4.0	3.8	0.2
Availability and co-operation of vendor personnel	3.9	3.9	0.0
Meeting deadlines	3.9	3.6	0.3
Overall	3.7	3.6	0.1
Change management	3.0	3.6	-0.6
Business process reengineering	2.5	3.4	-0.9

Source: INPUT

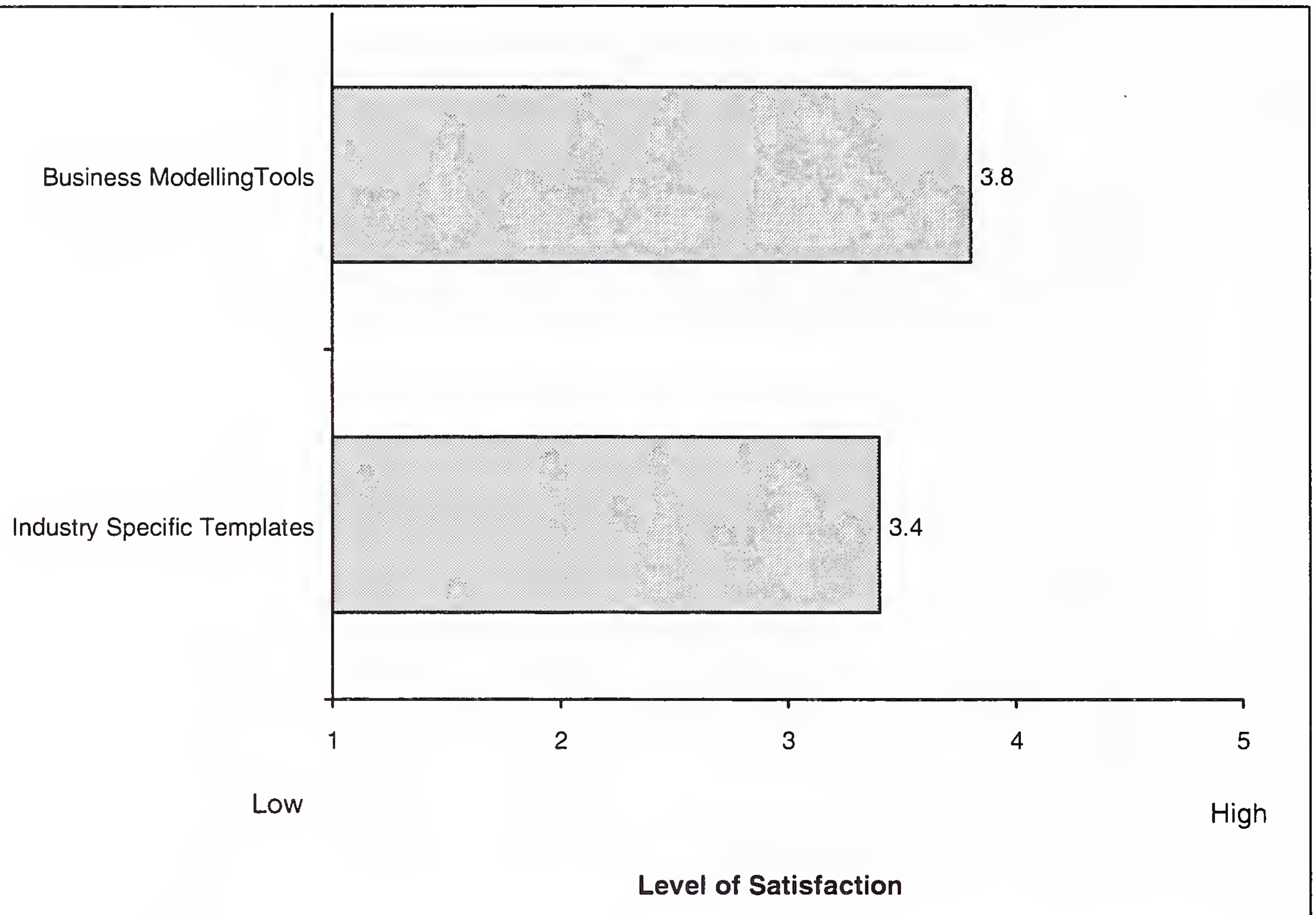
External service partners are perceived to perform very well against a wide range of criteria. The principal areas for improvement are:

- Improved ability to meet deadlines
- Improved industry-specific knowledge to improve the ability of the vendor to apply the enterprise application solution to the client's business.

Exhibit IV-17 lists the levels of satisfaction of organisations with implementation techniques used by external services vendors.

Exhibit IV-17

Satisfaction with Tools



Source: INPUT

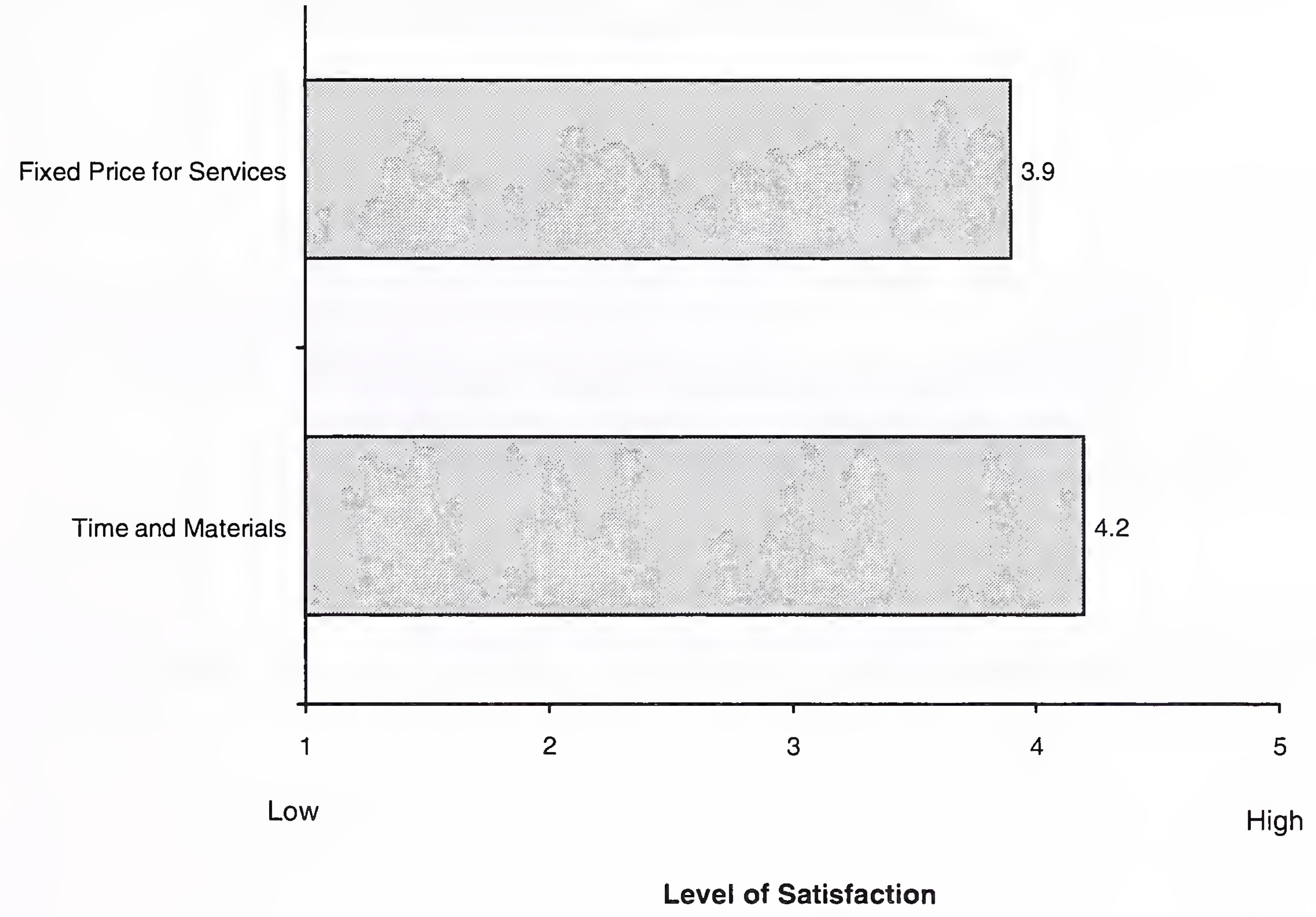
The need to adapt enterprise application solutions to specific industries and clients remains a challenge for vendors. While generic business modelling tools are perceived to be relatively successful, the level of satisfaction with industry-specific templates remains quite low.

In terms of pricing, buyers prefer a fixed price implementation but are currently highly satisfied with both fixed price and time and materials approaches.

Exhibit IV-18 lists the level of satisfaction with the various contractual approaches used for enterprise application implementation.

Exhibit IV-18

Satisfaction with Contractual Approach

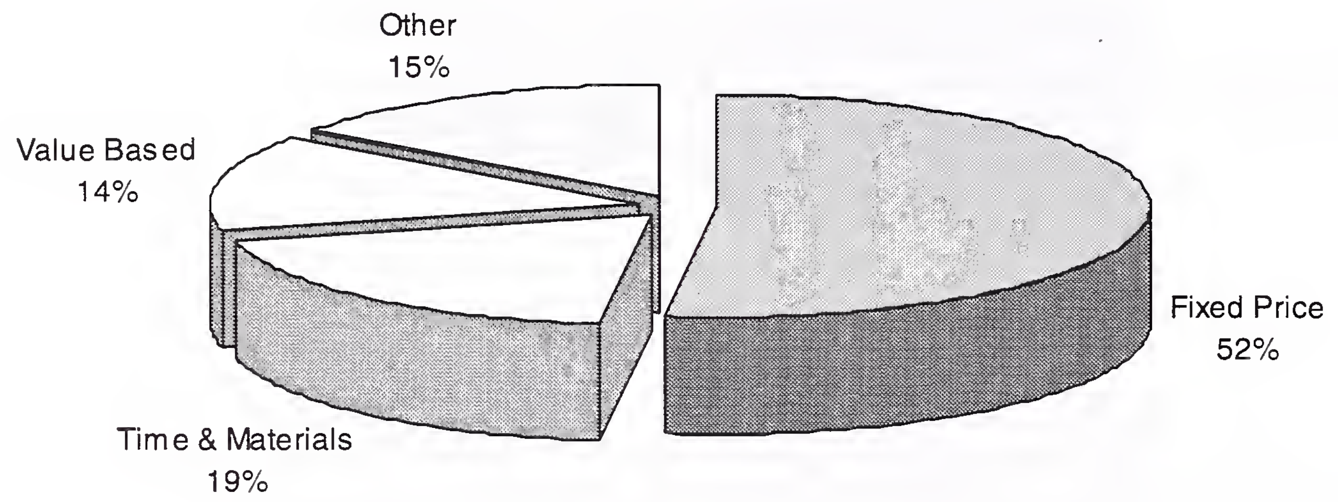


Sample of 50 IT Directors. Standard error = 0.1 *Source: INPUT*

Exhibit IV-19 shows the relative extent to which potential buyers favour each of the various forms of project pricing.

Exhibit IV-19

Form of Contract Pricing Favoured



Sample of 78 IT Directors. Standard error = 0.1 *Source: INPUT*

V

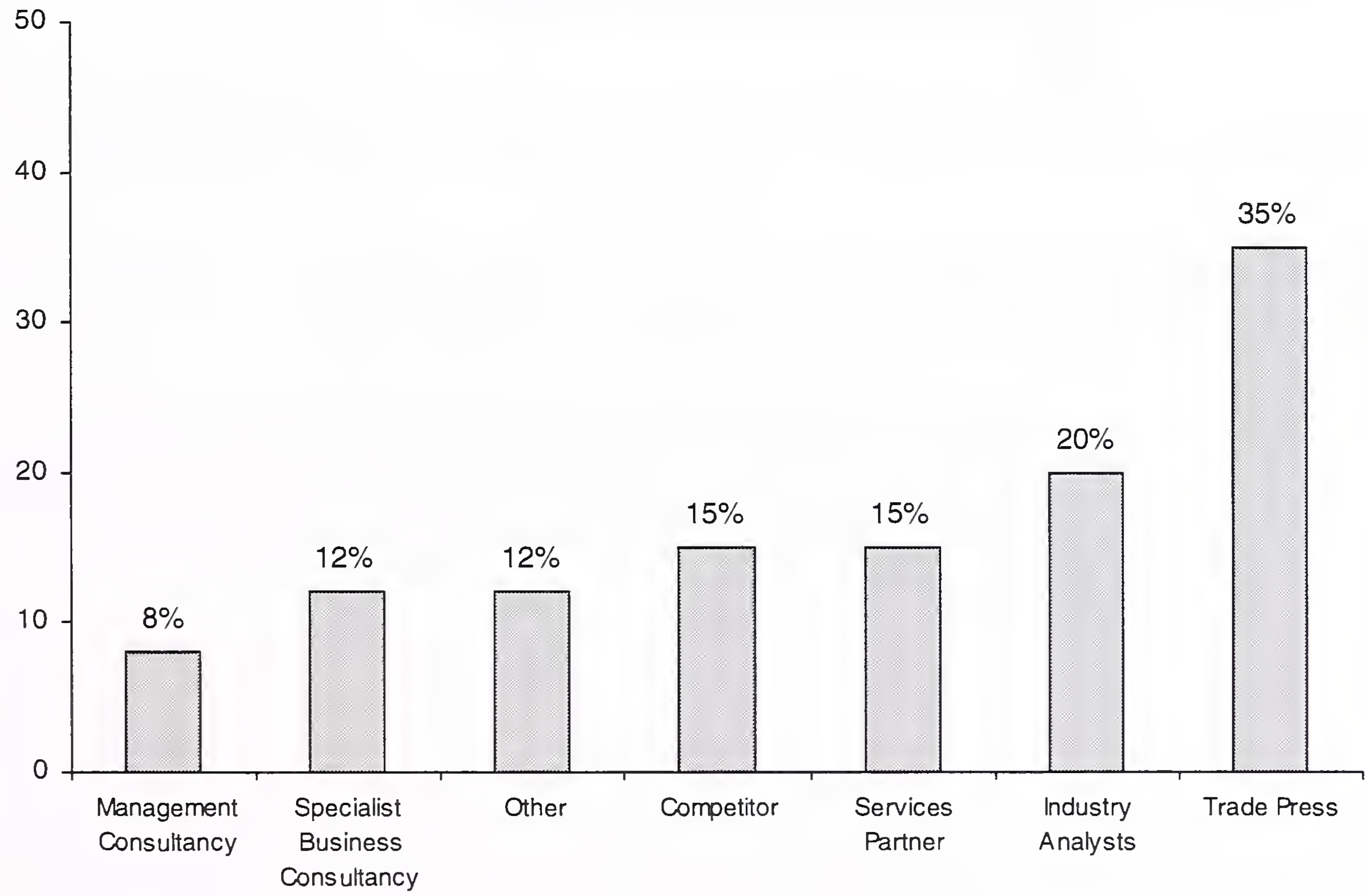
Purchasing Process

A
Product Purchasing

Exhibit V-1 shows the relative extent to which organisations found out about their main enterprise application through a number of potential sources of information.

Exhibit V-1

Source of Product Knowledge



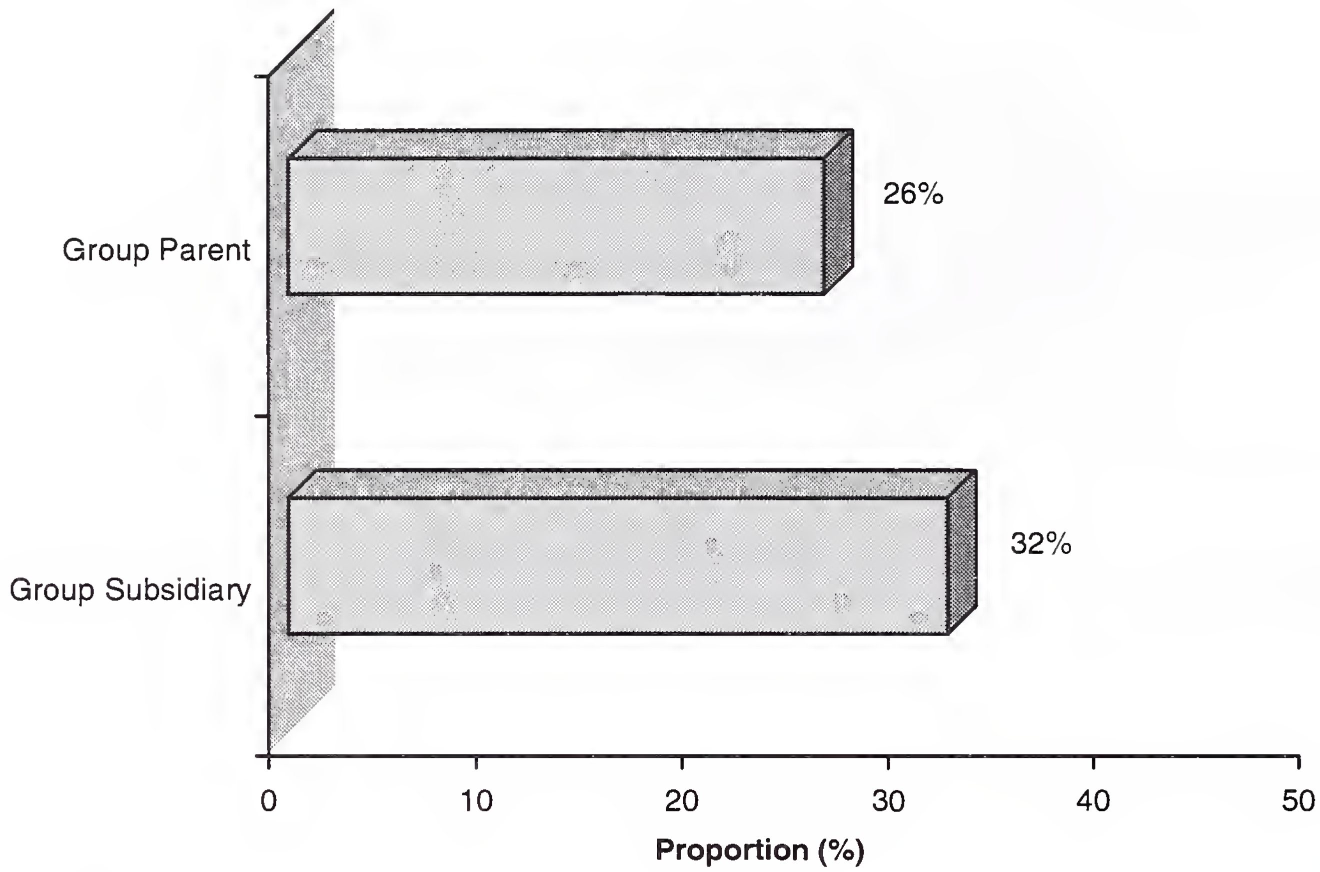
Sample of 66 IT Directors *Source: INPUT*

The trade press appears to the major influence in establishing awareness of individual enterprise application solutions.

Exhibit V-2 shows the relationship between the respondent's organisation and other units that that use the same enterprise application solution.

Exhibit V-2

Inter-Organisational Relationship



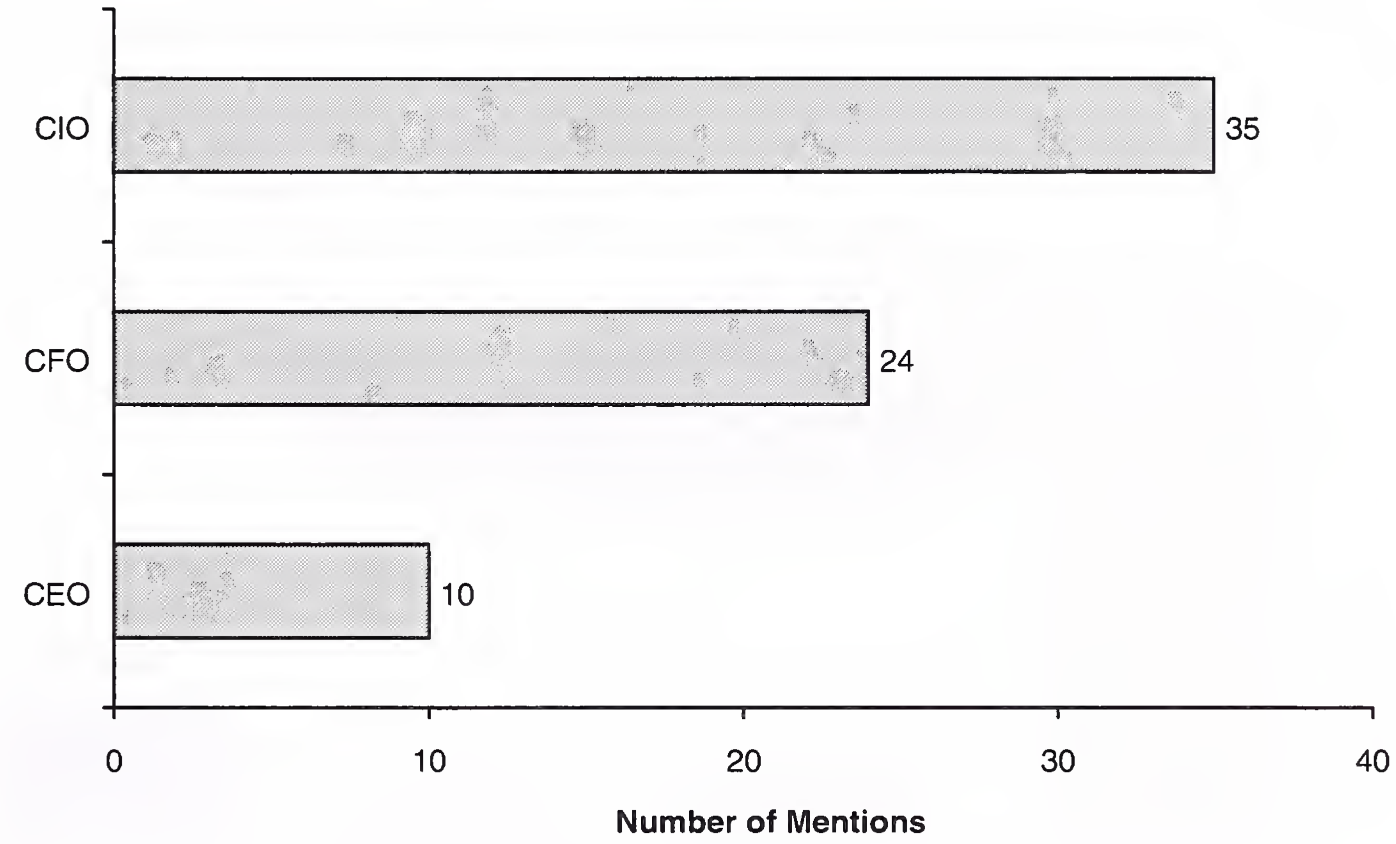
Sample of 66 IT Directors *Source: INPUT*

In the majority of organisations surveyed, the principal enterprise application solution was used across multiple subsidiaries. Organisations are increasingly standardising their use of enterprise application solution across group subsidiaries, to facilitate sharing and consolidation of information.

Exhibit V-3 lists the relative levels of influence of key decision-makers in selecting the chosen enterprise application product.

Exhibit V-3

Key Decision-Makers



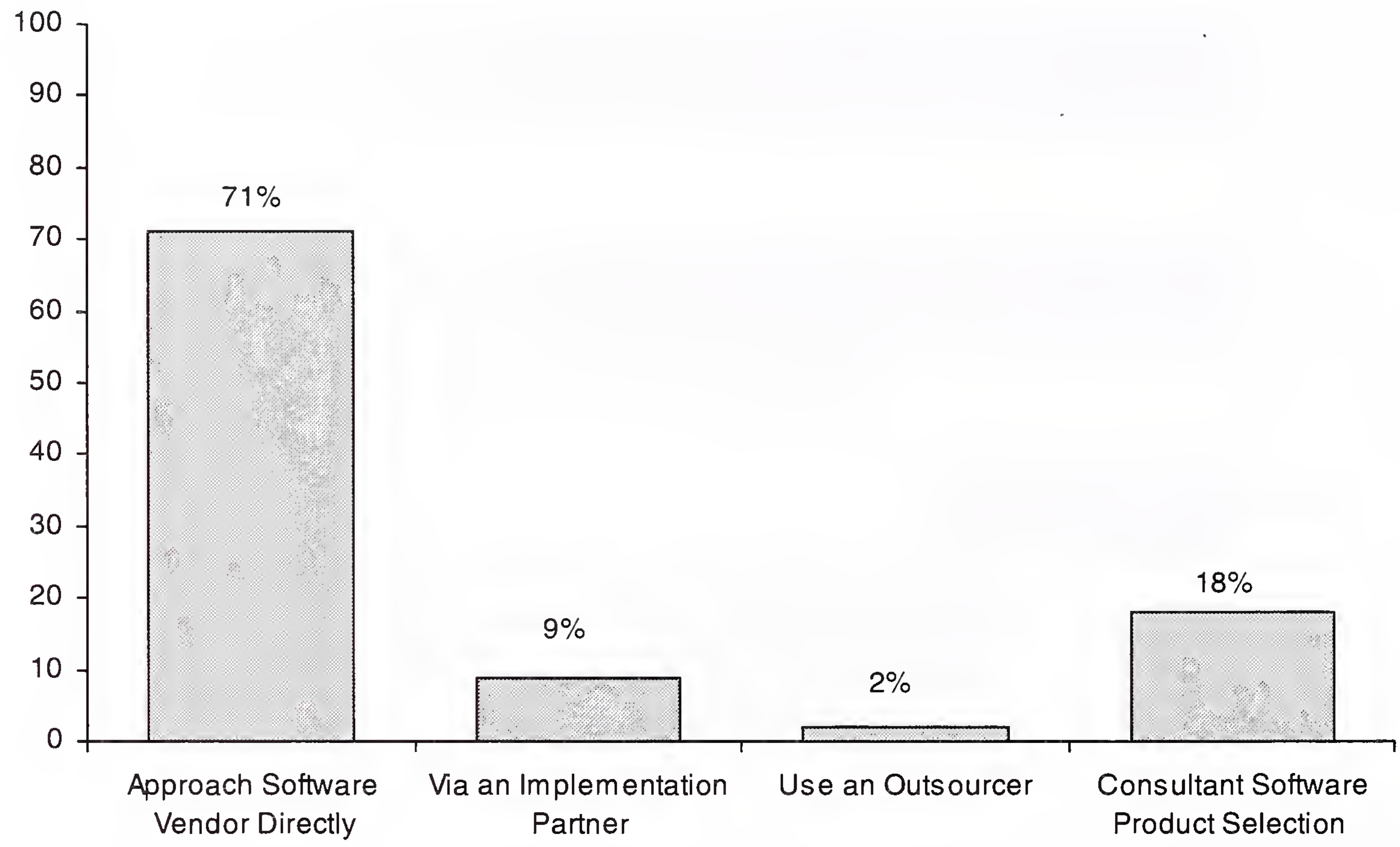
Sample of 40 IT Directors *Source: INPUT*

The CEO seems to have a low level of influence in purchase decisions, with CIOs and CFOs being the principal decision makers in the selection of an enterprise application solution.

Exhibit V-4 shows the purchasing channel used to purchase the main enterprise application.

Exhibit V-4

Purchasing Channel



Sample of 56 IT Directors *Source: INPUT*

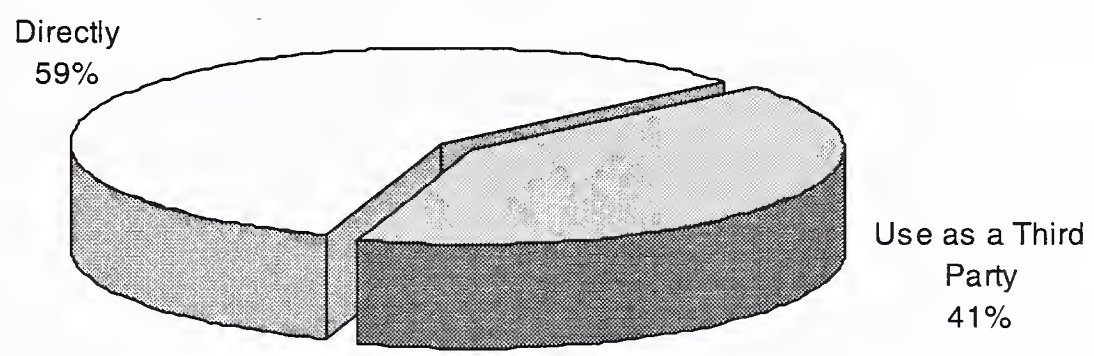
In the past, buyers tended to approach the software vendor direct rather than through an implementation partner. Even though enterprise application solutions are increasingly being targeted at the SME marketplace, it is probable that the majority of buyers will continue to approach the software vendor directly.

This suggests that the choice of implementation partner is taken separately from the choice of implementation partner and is a secondary decision.

Exhibit V-5 lists the likely sources of enterprise application solutions to be used by potential buyers.

Exhibit V-5

Likely Source of EAS Solution

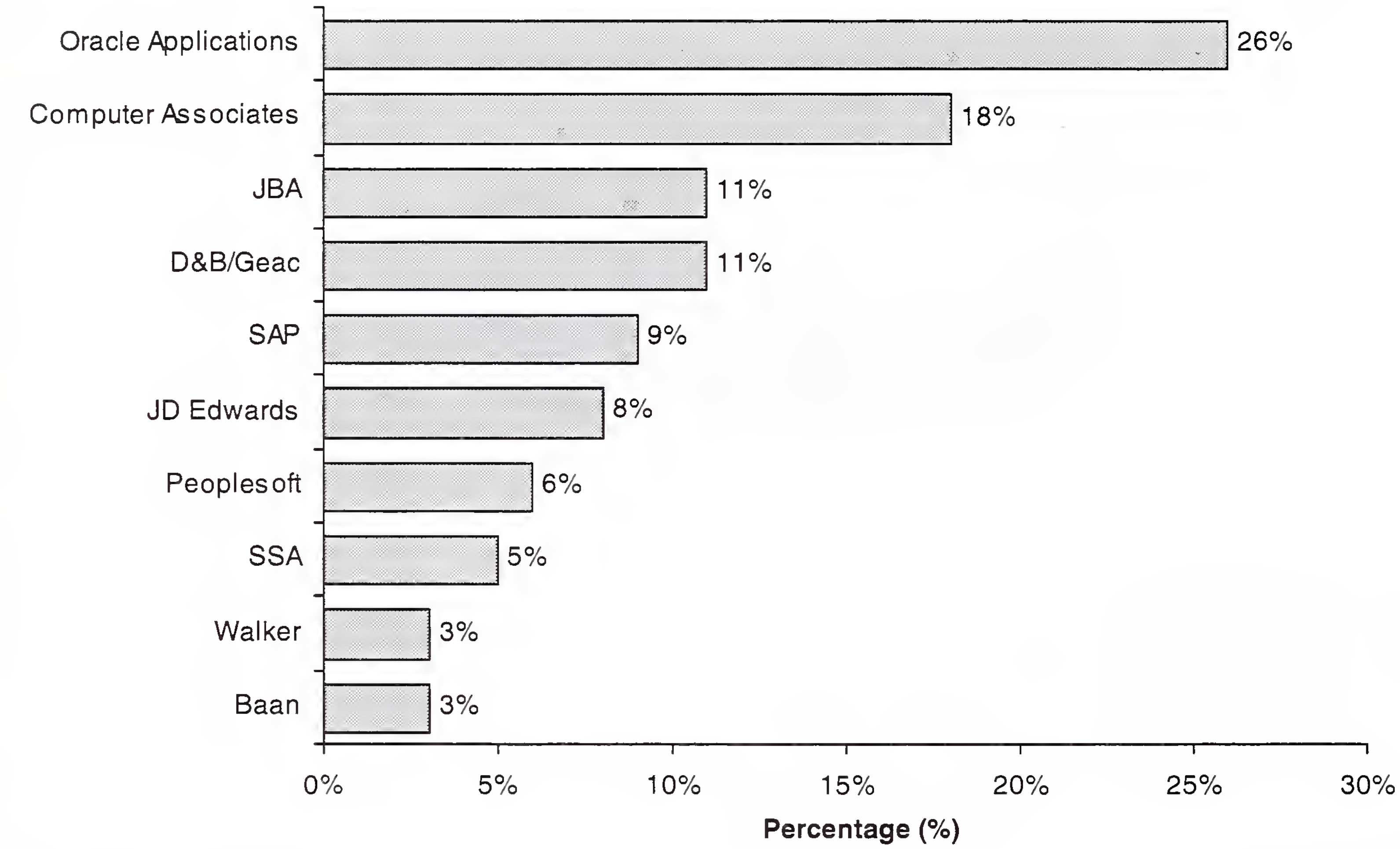


Sample of 79 IT Directors *Source: INPUT*

Exhibit V-6 lists the products/vendors considered when selecting the organisation's current enterprise application solution.

Exhibit V-6

EAS Solutions Considered



Sample of 66 IT Directors *Source: INPUT*

In the case of past purchase decisions, the level of awareness of vendors such as Baan, PeopleSoft, JD Edwards and SAP was relatively low. The main enterprise application solution vendors considered were Oracle and Computer Associates.

However, while the awareness of Oracle Applications and Computer Associates remains high, there is now a much greater awareness of Baan, PeopleSoft and JD Edwards. The level of awareness of SAP is now very high superseding that of Computer Associates in the enterprise application solutions field.

Exhibit V-7 lists the extent to which buyers have heard of each of a range of potential enterprise-wide business application software vendors.

Exhibit V-7

Level of Awareness of Vendors

Vendor	Number of mentions
Oracle Applications	100
SAP	92
Computer Associates	84
D&B/Geac	79
JBA	64
JD Edwards	58
Peoplesoft	56
Baan	47
SSA	42
Walker	41
Systems Union	36
Manugistics	31
Industrie-Mathematik	15

Exhibit V-8 lists the extent to which buyers would consider using each of a range of potential enterprise-wide business application software vendors.

Exhibit V-8

Willingness to Consider Using Vendors

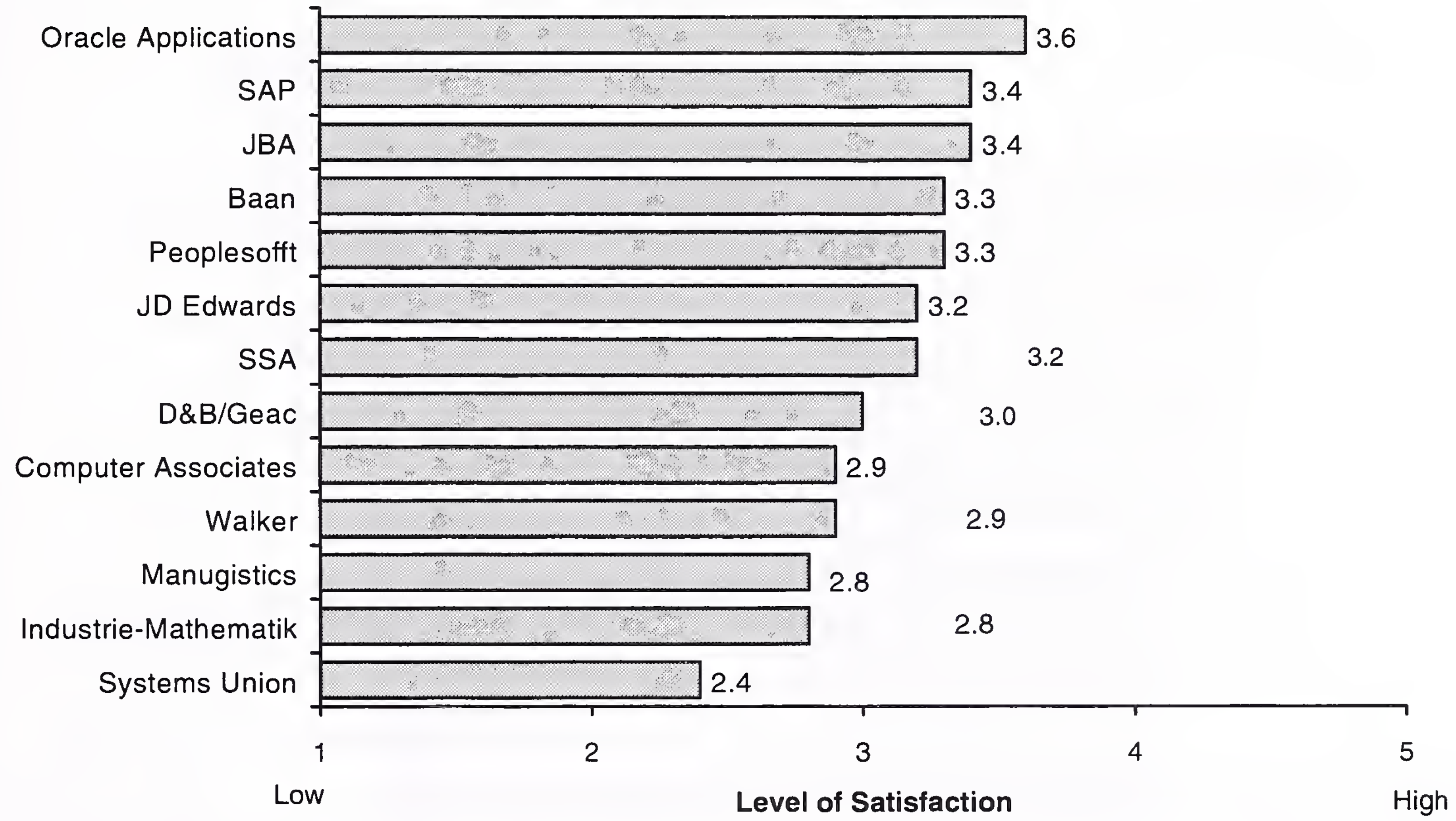
Vendor	Number of mentions
Oracle Applications	77
SAP	57
Computer Associates	54
D&B/Geac	53
JBA	35
JD Edwards	35
Peoplesoft	29
SSA	23
Manugistics	18
Baan	16
Walker	14
Systems Union	6
Industrie-Mathematik	1

Source: INPUT

Exhibit V-9 lists the rating given to each of a number of vendors of enterprise-wide business application software by potential buyers.

Exhibit V-9

Perception of Vendor



Sample Of 45 IT Directors. Standard error = 0.1 *Source: INPUT*

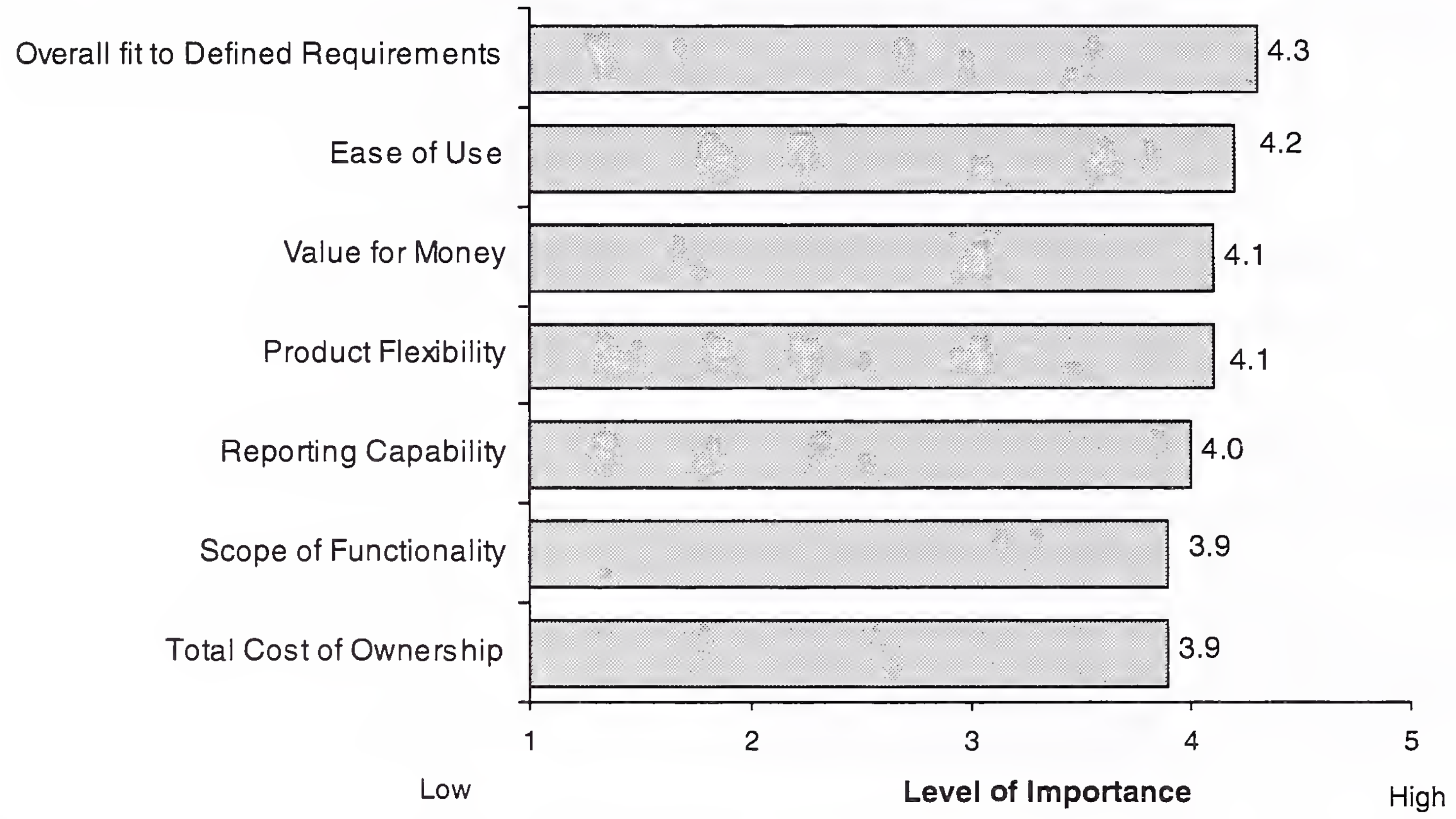
There is some mismatch between the level of satisfaction of existing clients and the perceptions of capability held by potential buyers. While Oracle and JBA were only moderately ranked in terms of capability by existing clients, they were highly ranked in terms of capability by potential purchasers.

Similarly, the capability of PeopleSoft and JD Edwards perceived by potential buyers lags behind its ranking from current clients.

Exhibit V-10 lists the importance of each of a number of potential selection criteria in choosing the current enterprise application.

Exhibit V-10

Product Selection Criteria



Sample of 105 IT Directors. Standard error = 0.1 *Source: INPUT*

The product selection criteria used by organisations that have purchased enterprise application solutions in the past are broadly similar to the selection criteria anticipated by future purchasers.

The major differences are the increasing importance attached to:

- Ease of integration with complementary products
- Ease of implementation

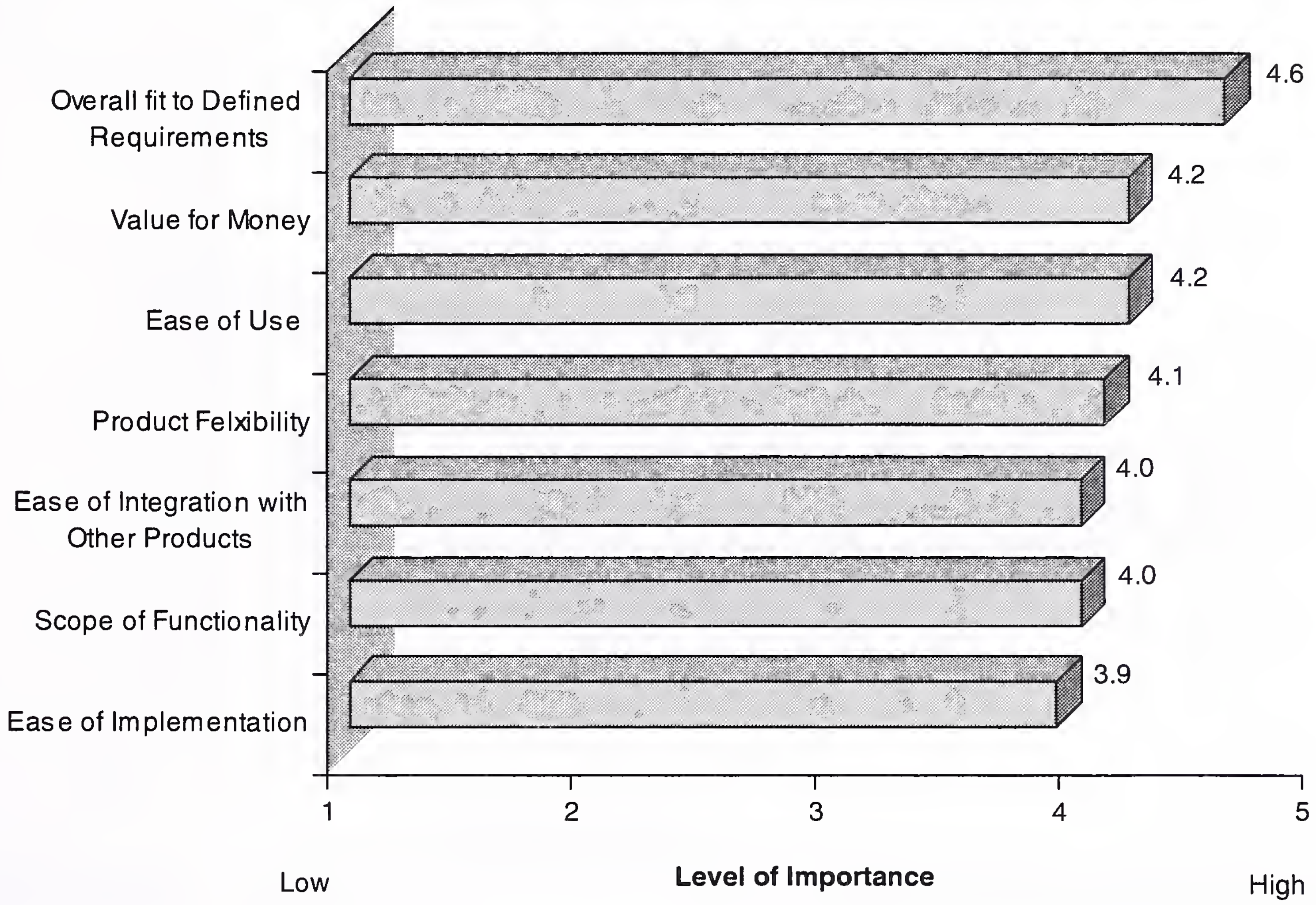
and the apparent decrease in importance attached reporting capability.

Buyers appear not to expect an enterprise application solution to have best of breed capability in all areas. However, they would like to be able to integrate their principal enterprise application solution easily with complementary products offering specialised best of breed functionality.

Exhibit V-11 lists the most important selection criteria to potential buyers of enterprise application solutions.

Exhibit V-11

Product Selection Criteria: High Importance

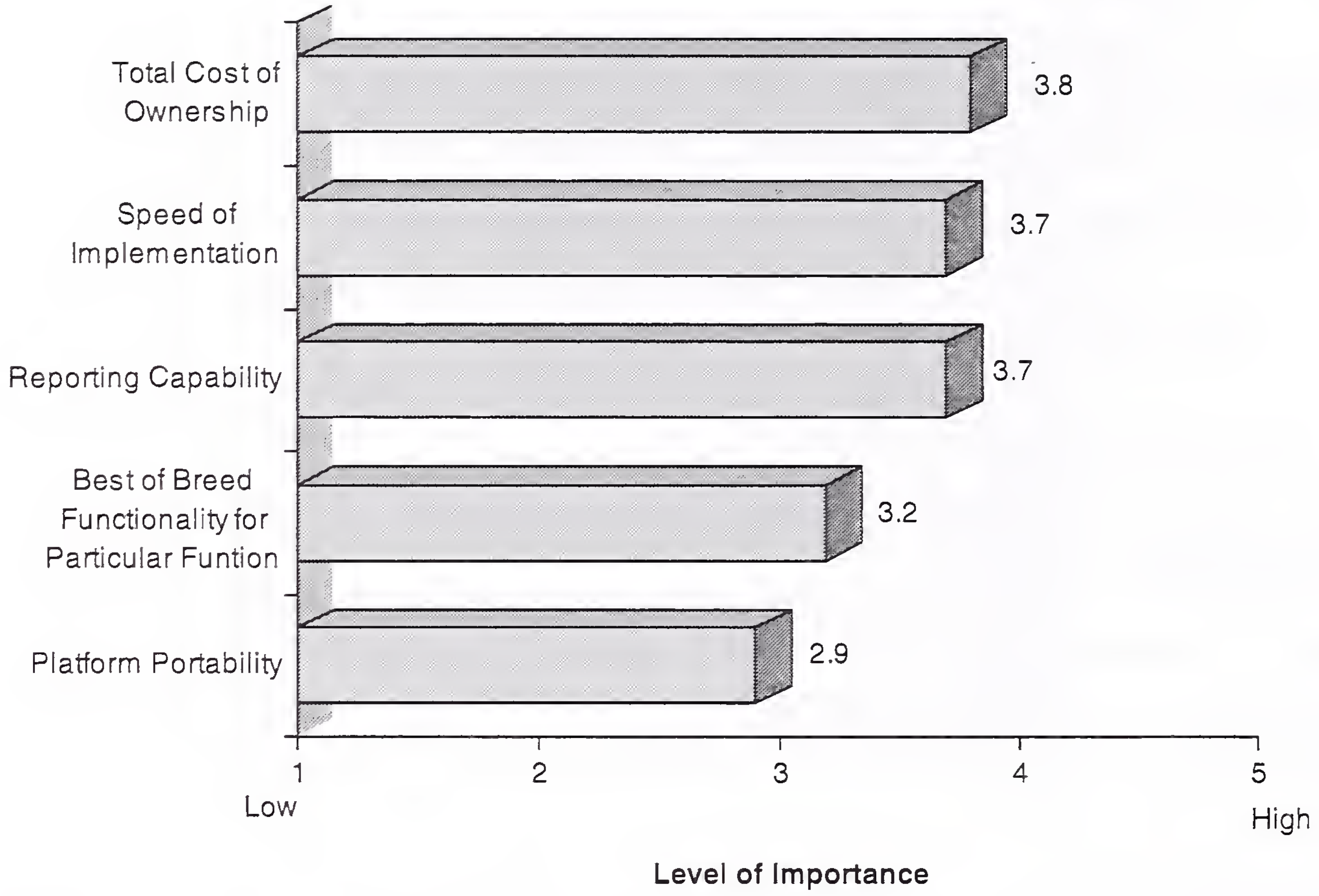


Sample of 105 IT Directors. Standard error = 0.1 *Source: INPUT*

Exhibit V-12 lists the less important selection criteria to potential buyers of enterprise application solutions.

Exhibit V-12

Product Selection Criteria: Low Importance



Sample of 35 IT Directors. Standard error = 0.1 *Source: INPUT*

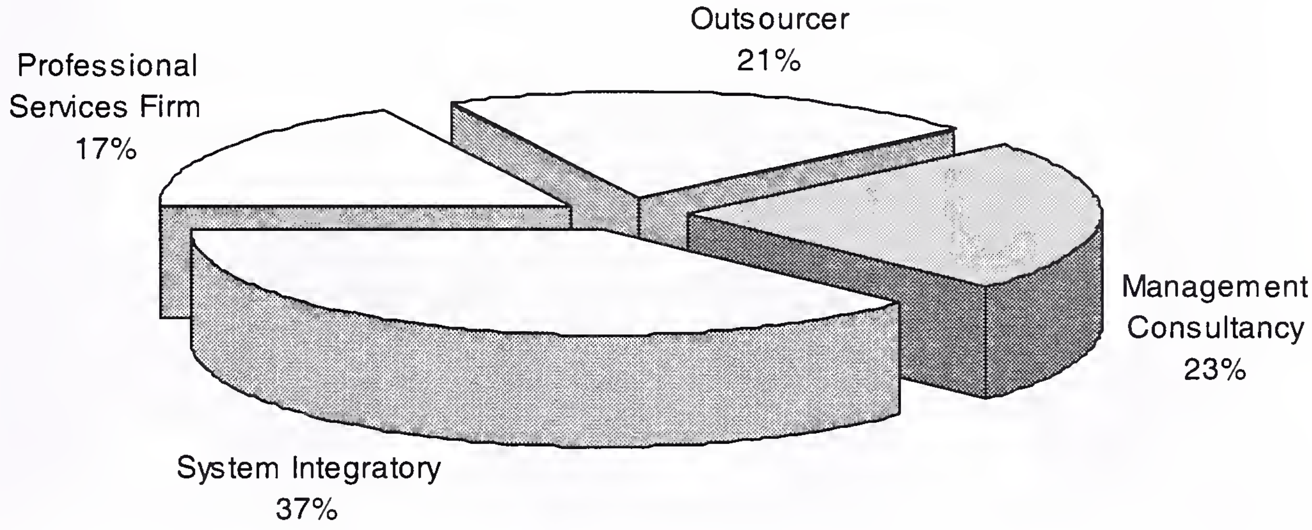
B

Services Purchasing

Exhibit V-13 shows the type of external IT services vendor that potential buyers intend to use to assist them in implementing their enterprise application.

Exhibit V-13

Type of External Vendor to be Used



Sample of 98 *Source: INPUT*

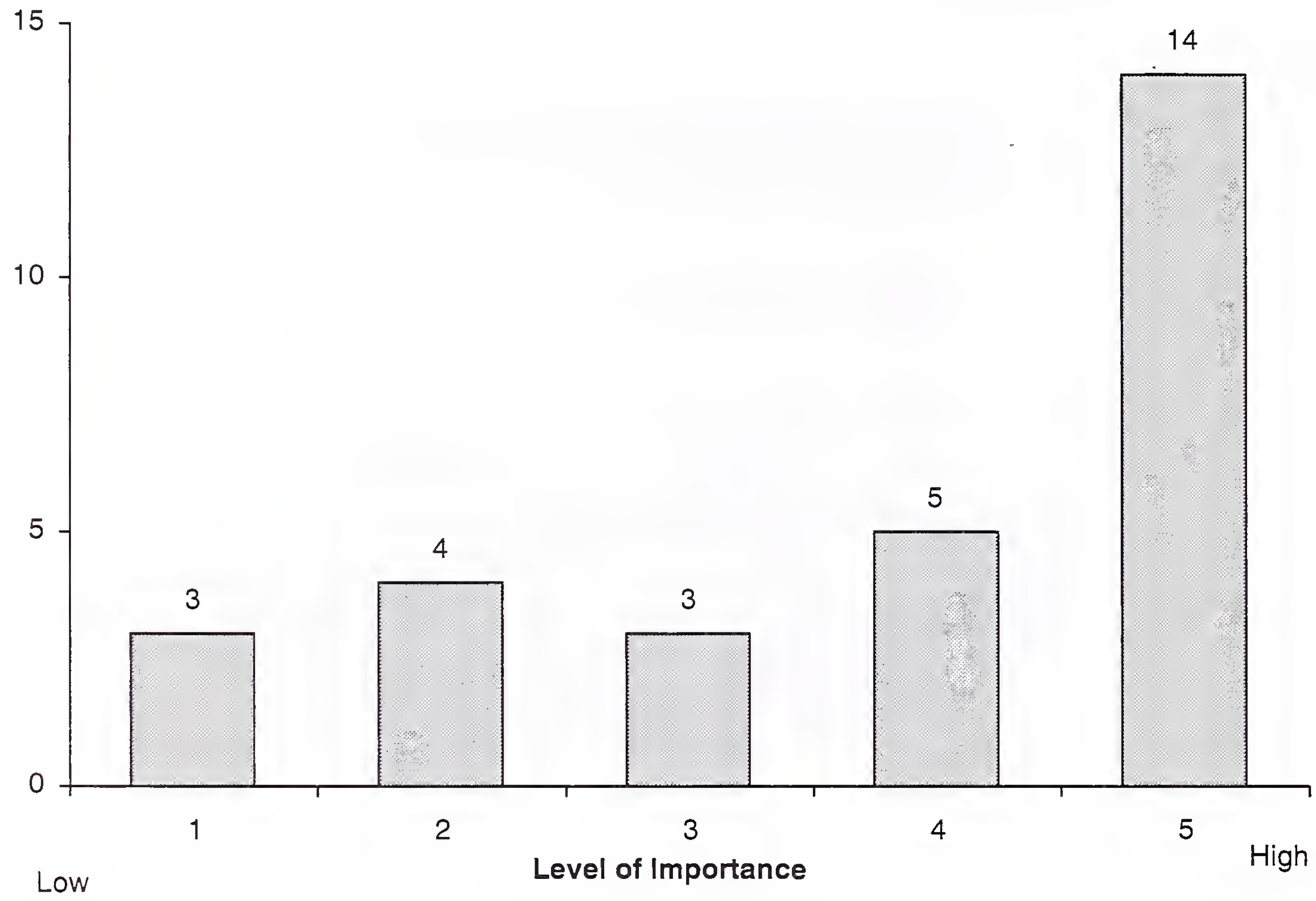
A broad mix of supplier types is favoured, with management consultancies being more highly favoured than systems integrators and professional services organisations. This may reflect a perception of higher levels of business knowledge amongst management consultancies and a higher level of ability to apply the enterprise application solution to the client's specific business need.

In addition, a high level of organisations are prepared to use outsourcers to assist them in implementing their enterprise application solution.

Exhibit V-14 shows the profile of importance that the services provider was an implementation partner of the chosen software vendor.

Exhibit V-14

Importance of Service Vendor Partnership with Software Vendor



Sample of 29 IT Directors *Source: INPUT*

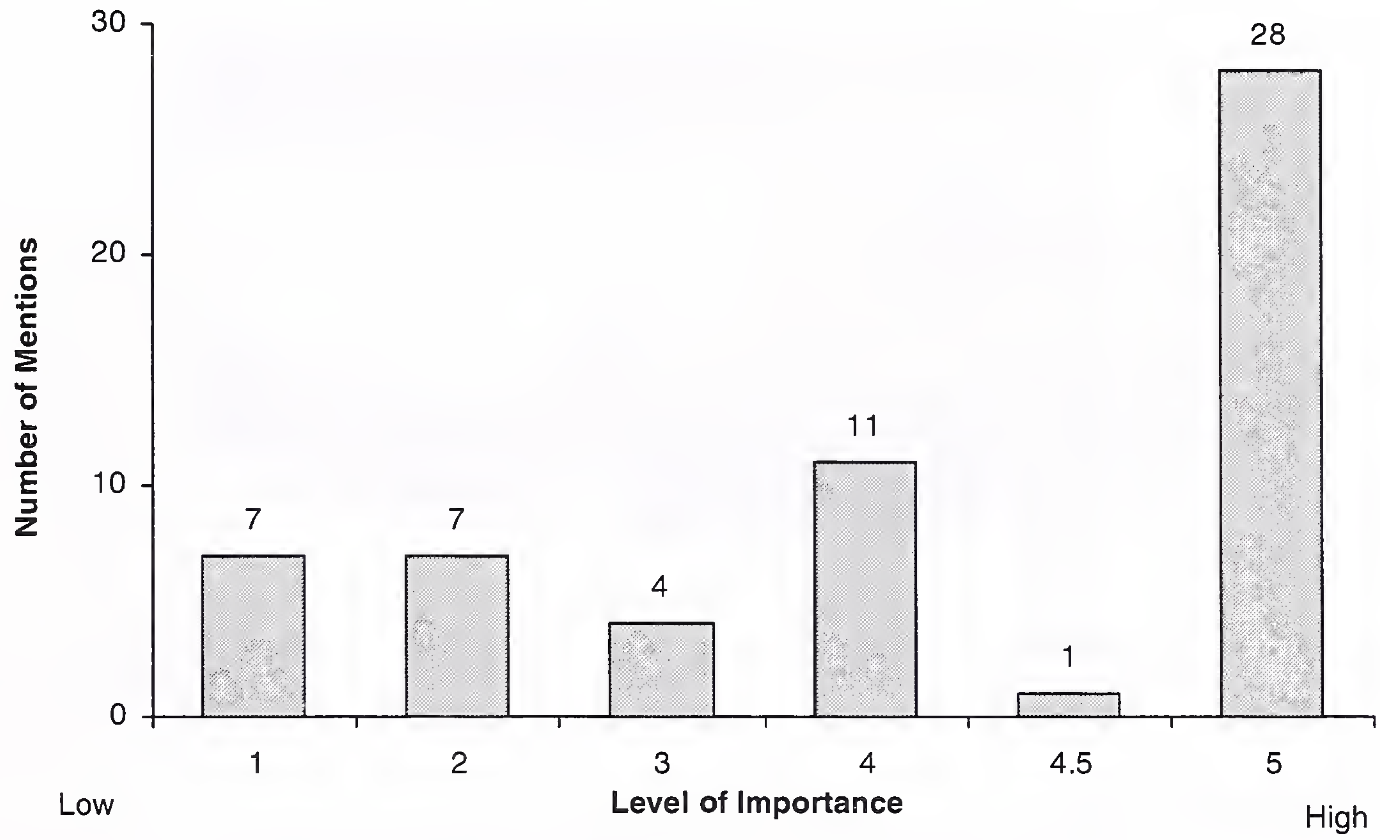
As seen earlier, it is apparent that buyers tend to choose their enterprise application solution irrespective of their implementation partner. Clearly, it is very important that implementation partners are seen to have strong expertise in the particular solution chosen and to have close links with the software product vendor.

This will remain equally important in the future.

Exhibit V-15 shows the perceived profile of importance to potential buyers of the services provider being an implementation partner of the software product vendor.

Exhibit V-15

Importance of Partnership



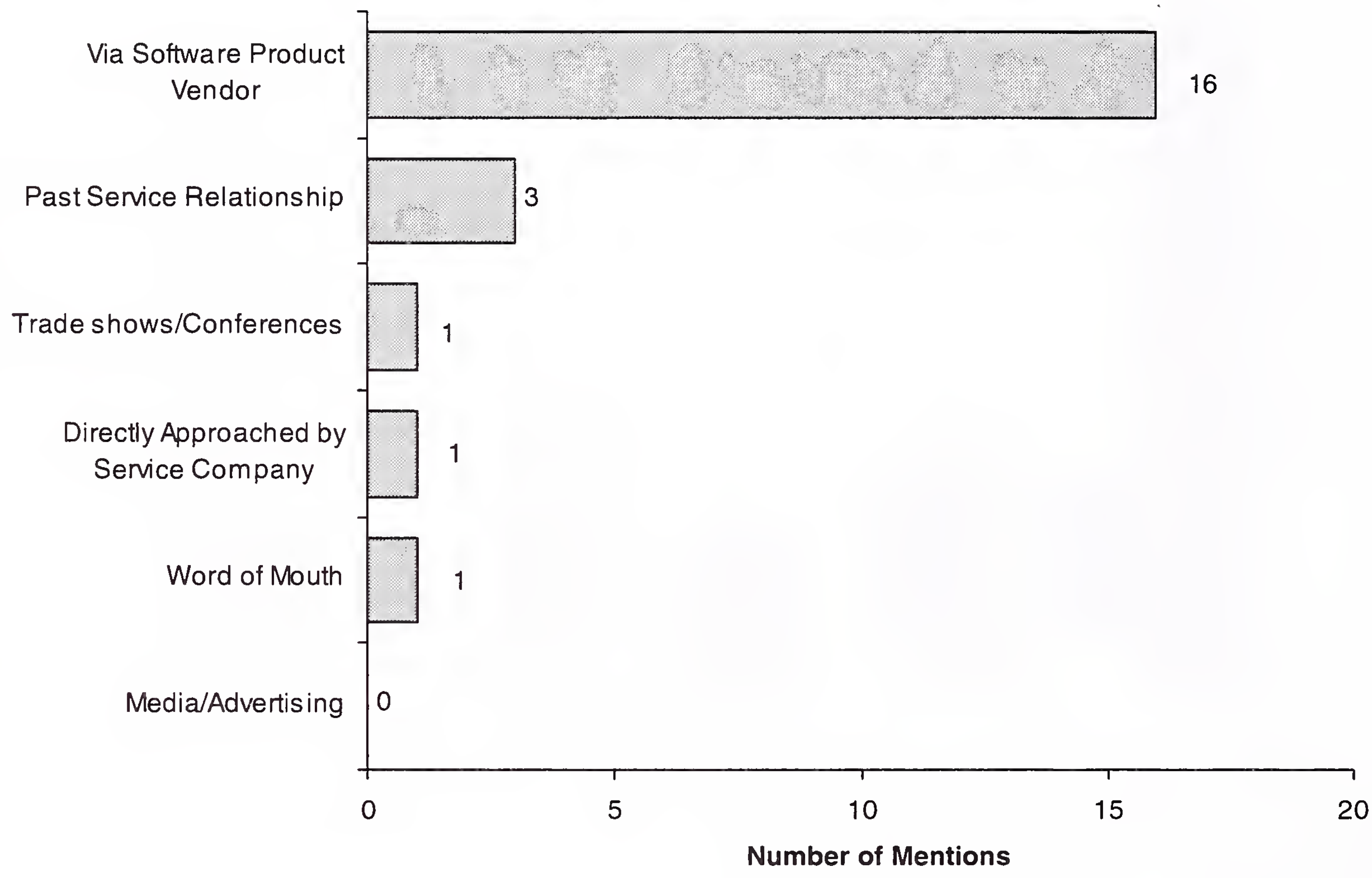
Sample of 107 IT Directors

Source: INPUT

Exhibit V-16 shows the extent to which organisations found out about their enterprise application services partner through each of a variety of sources.

Exhibit V-16

Source of Information on Services Vendor



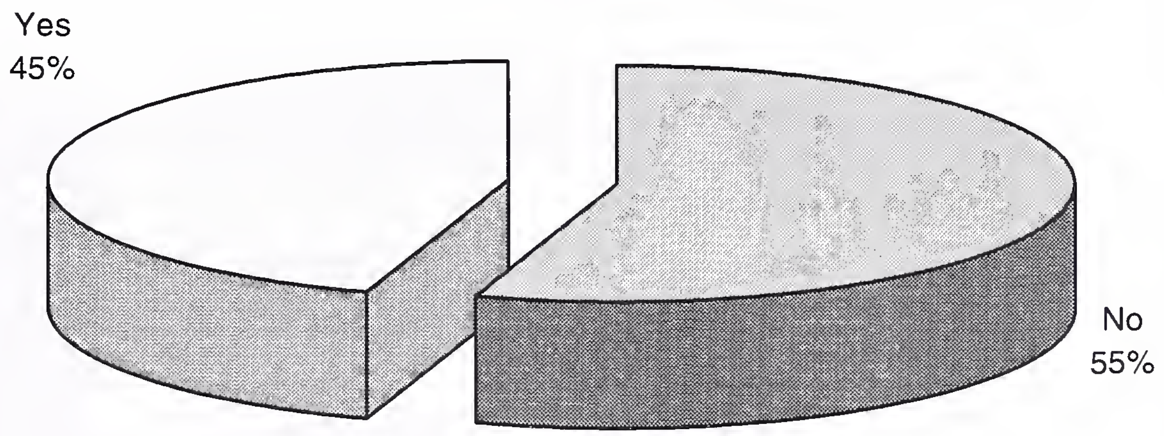
Sample of 22 IT Directors *Source: INPUT*

Indeed, software product vendors are the major source of awareness for services vendors in the enterprise application solution implementation market.

Exhibit V-17 shows the proportion of organisations that were aware of their software product vendor's certification program.

Exhibit V-17

Awareness of Certification Program



Sample of 29 IT Directors *Source: INPUT*

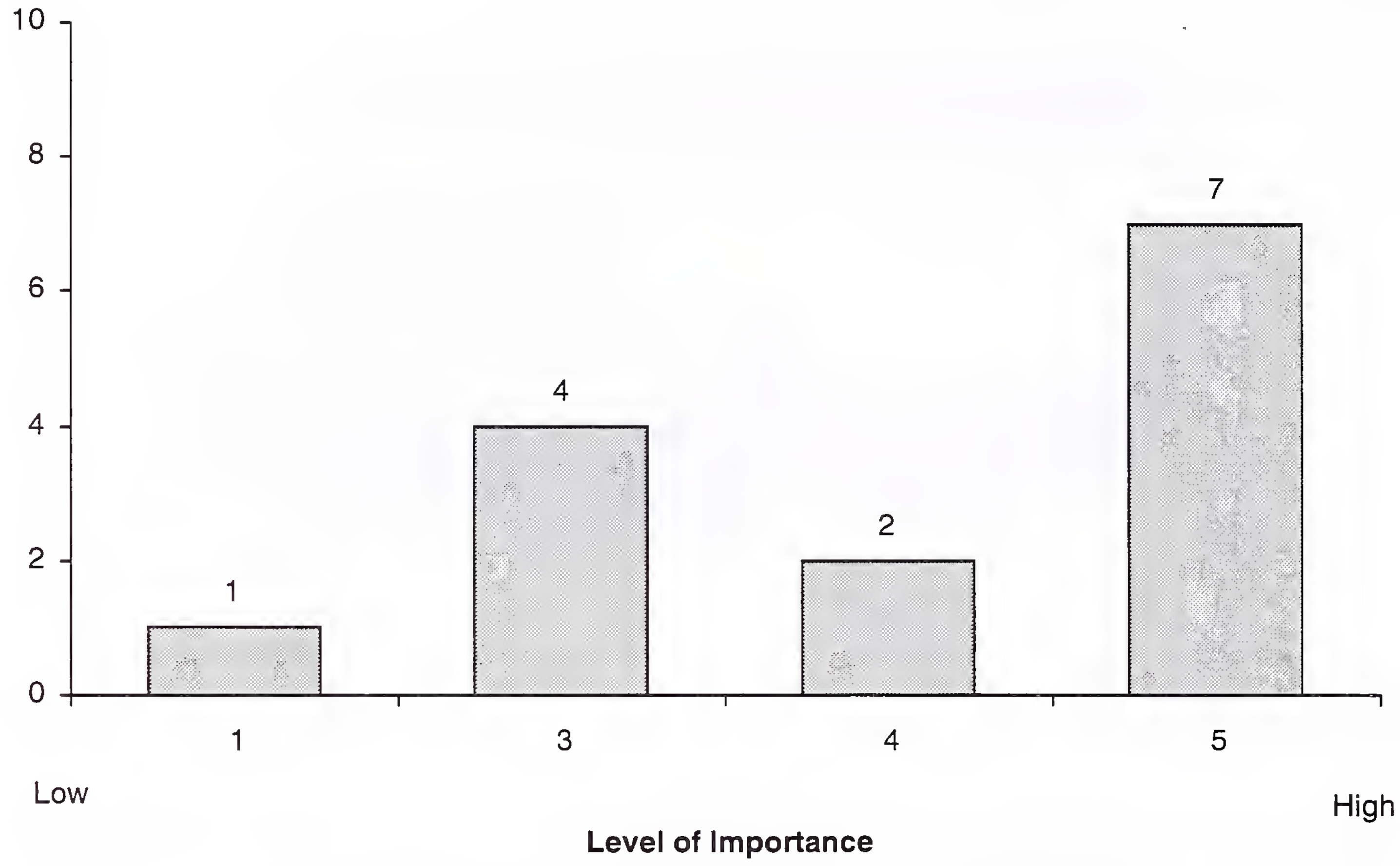
In the past, buyers have tended to have relatively low levels of awareness of certification programs relying instead on knowledge of a close relationship between the services partner and the software product vendor.

However, as the market matures, the importance of partner certification is steadily increasing.

Exhibit V-18 shows the profile of importance attached to certification in future partner selection.

Exhibit V-18

Importance of Certification Program

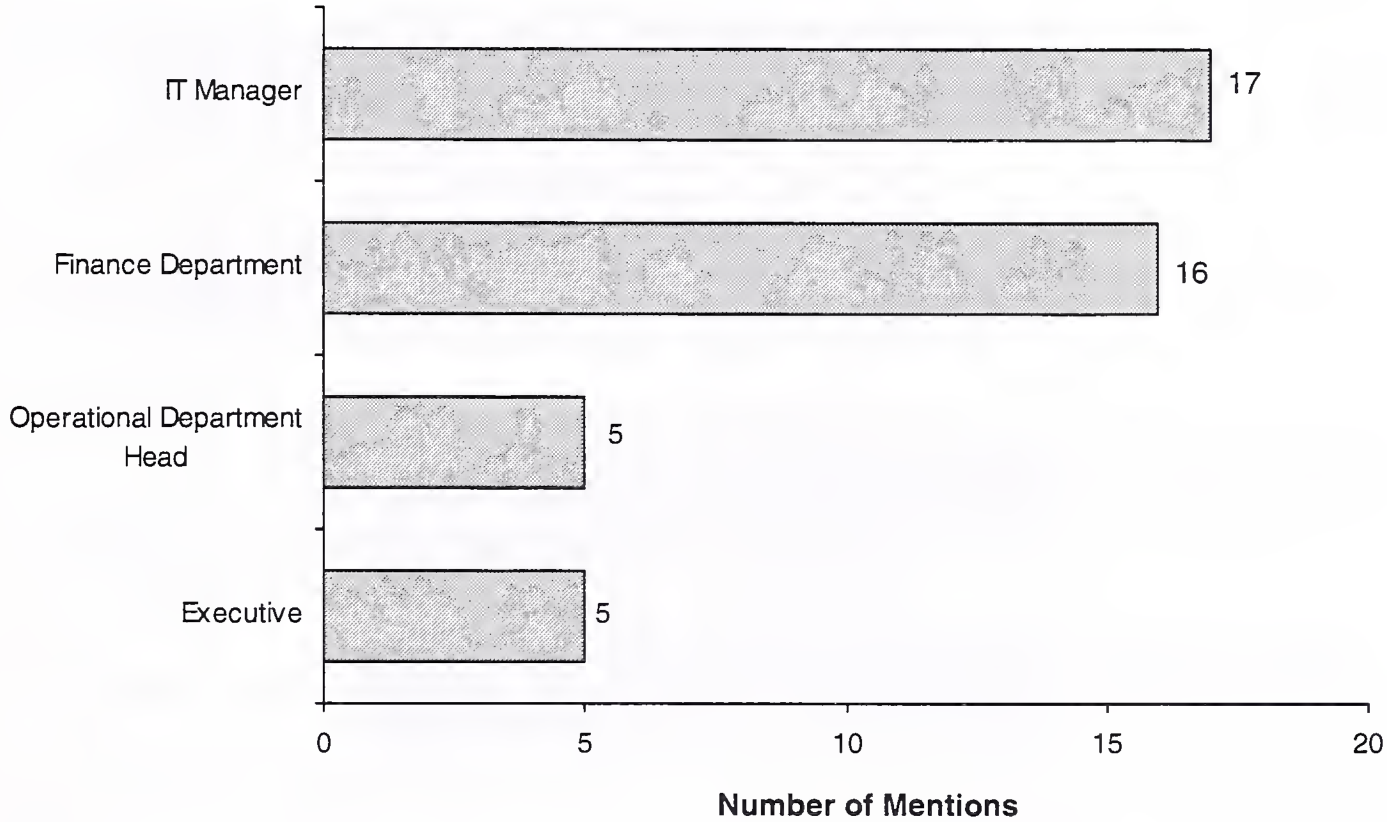


Sample of 14 IT Directors *Source: INPUT*

Exhibit V-19 shows the relative importance of buyer personnel in services partner selection.

Exhibit V-19

Decision-Makers for Services Partners



Sample of 43 IT Directors *Source: INPUT*

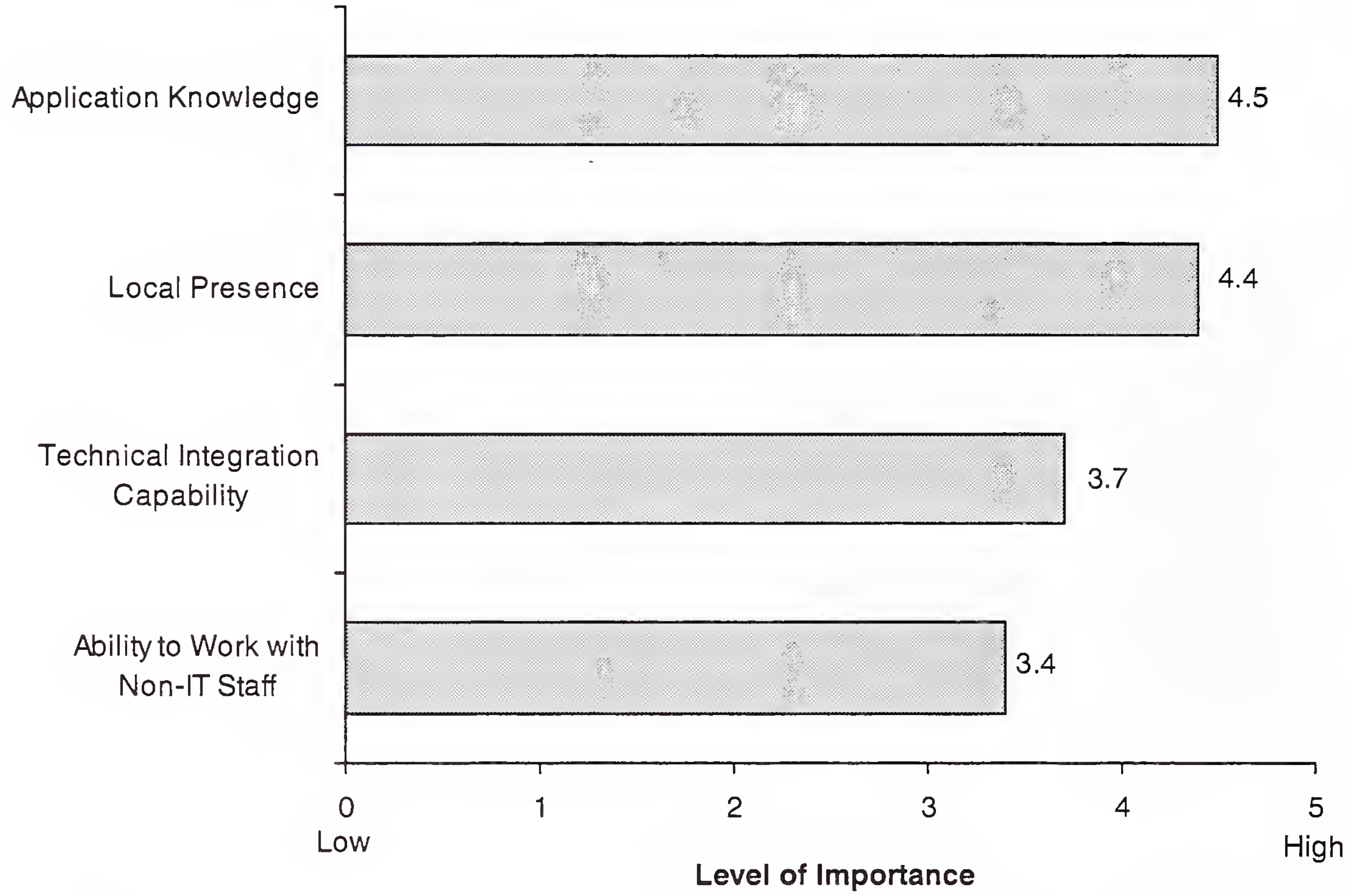
While the CEO and CFO are perceived to be the key decision-makers in enterprise application solution selection, the CFO and the CIO are the key decision-makers in partner selection.

Services vendors are chosen primarily on their knowledge of the application and the chosen enterprise application solution. However, despite the increasing adoption of enterprise application solutions across a wide range of subsidiaries and geographies, buyers still prefer their services vendor to have a local presence.

Exhibit V-20 lists the most important criteria in selection of the external enterprise application services vendor.

Exhibit V-20

Services Vendor Selection Criteria: High Importance



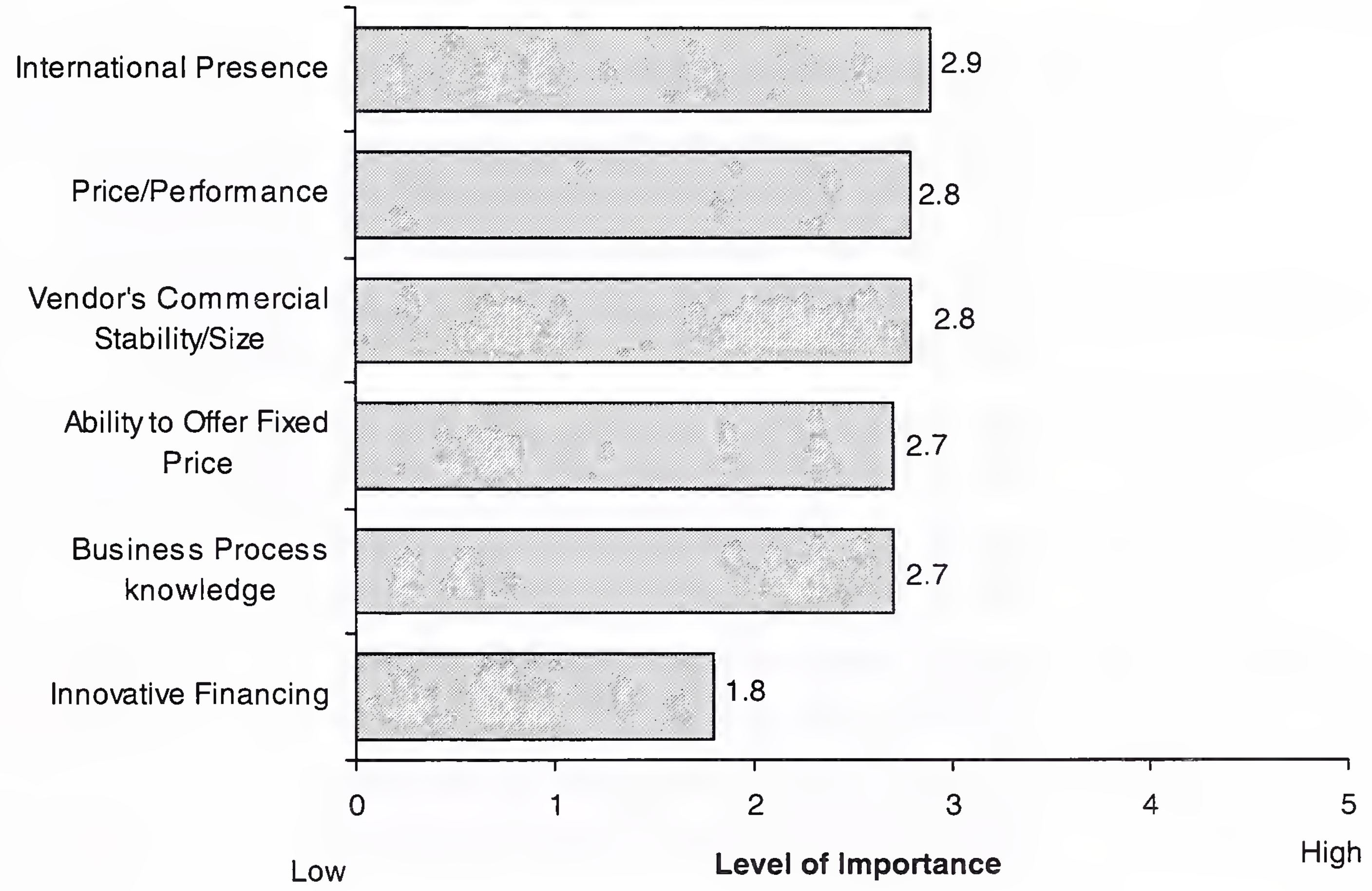
Sample of 47 IT Directors. Standard error = 0.2

Source: INPUT

Exhibit V-21 lists the less important criteria in selection of the external enterprise application services vendor.

Exhibit V-21

Services Vendor Selection Criteria: Low Importance



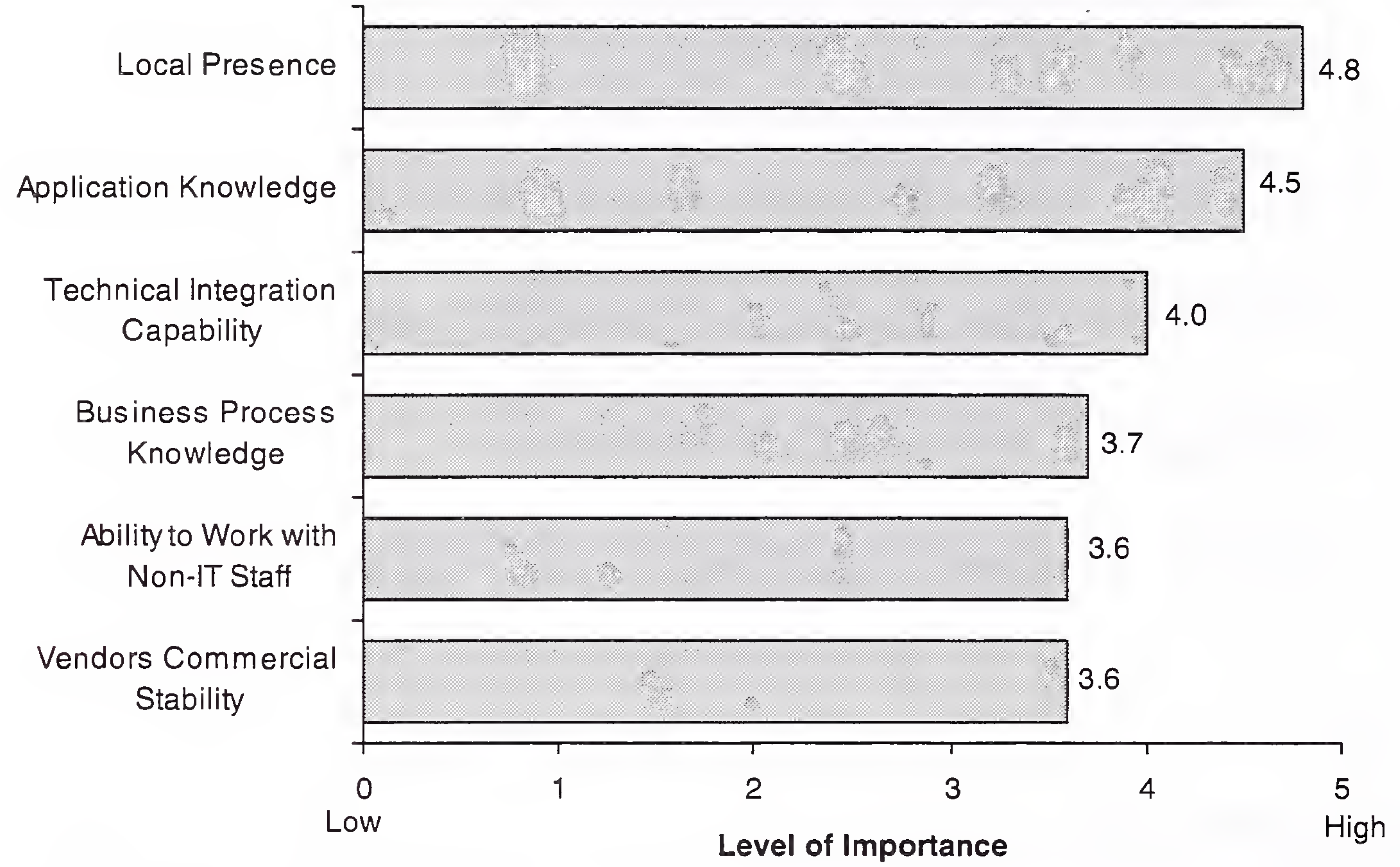
Sample of 47 IT Directors. Standard error = 0.3 *Source: INPUT*

In the future, the services vendor's technical integration capability and business process knowledge will be increasingly important.

Exhibit V-22 lists the most important selection criteria to potential buyers when choosing an external services vendor.

Exhibit V-22

Services Vendor Selection Criteria: High Importance

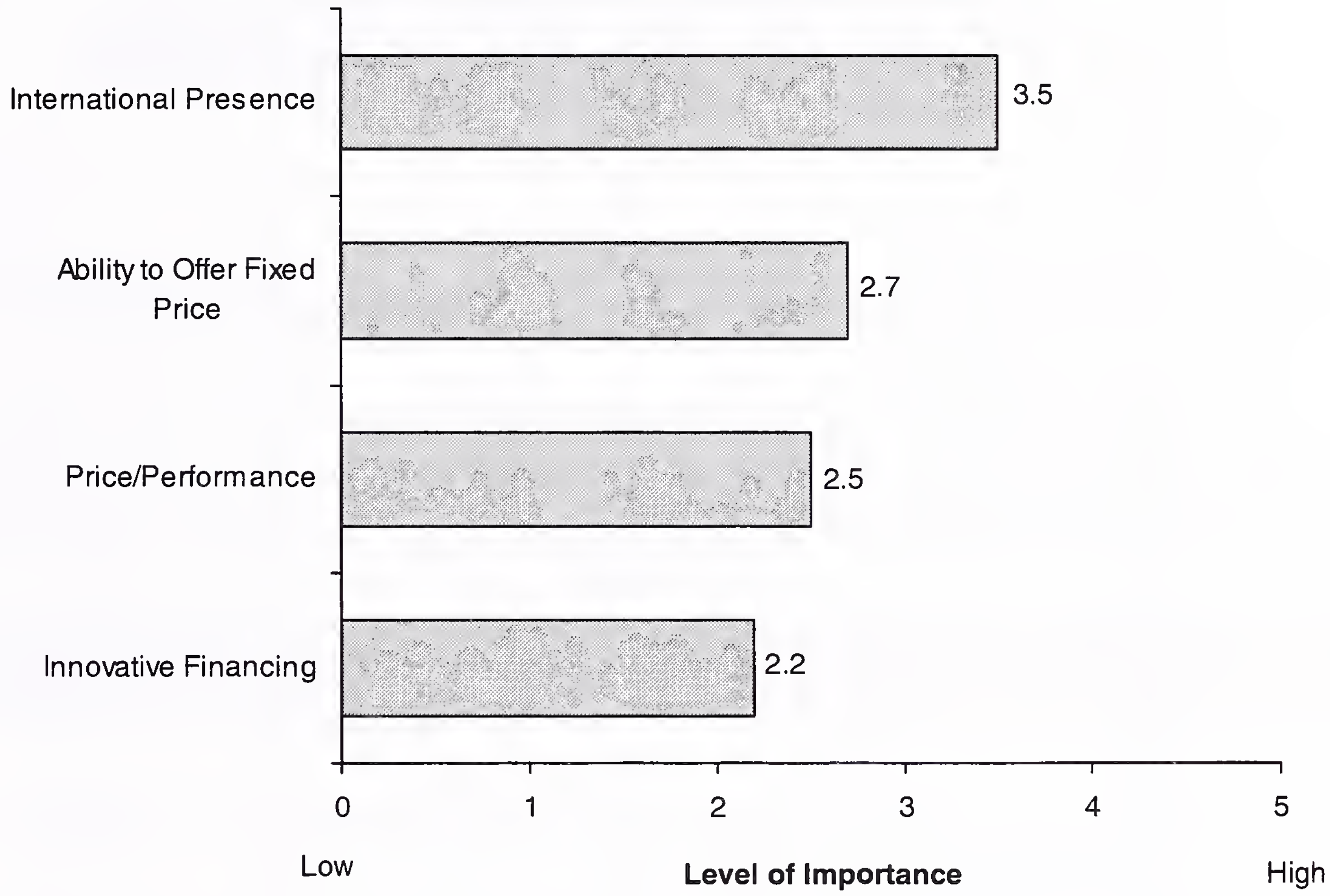


Sample of 38 IT Directors. Standard error = 0.15 *Source: INPUT*

Exhibit V-23 lists the less important selection criteria to potential buyers when choosing an external services vendor.

Exhibit V-23

Services Vendor Selection Criteria: Low Importance



Sample of 38 IT Directors. Standard error = 0.15 *Source: INPUT*

Exhibit V-24 lists the perceived suitability of each of a number of major services organisations to assist potential buyers with enterprise application projects.

Exhibit V-24

Perceived Suitability of Services Vendors

Vendor	Rating	Number of mentions
IBM	3.3	26
Andersen Consulting	3.0	23
Cap Gemini	3.6	23
Price Waterhouse	3.5	19
Sun Microsystems	3.1	17
Digital	2.7	15
Coopers & Lybrand	3.0	15
CMG	2.8	14
KPMG	3.2	13
CSC	3.7	13
EDS	3.8	13
HP	2.9	12
Ernst & Young	3.3	12
ICL	2.9	11
PA	3.3	8
Unisys	4.0	5
Data General	1.3	3
ECSoft	3.0	3
Logica	2.0	2

Source: INPUT

A

Appendix A

A
USAGE OF ENTERPRISE APPLICATION SOFTWARE

1 What Enterprise Application or ERP software do you have installed in your organization? Do you use a single product from one vendor or multiple highly integrated products? How satisfied are you with each of these products? Please rate on a scale of 1-5 where 1= not at all satisfied and 5 = very satisfied.

Product name	Vendor	Satisfaction (1-5)

0Single product/Multiple productsS/M

2. For your enterprise application, can you indicate which product you have used for each function? *(Multiple responses allowed)* Can you also indicate your satisfaction with each area and the number of users typically using a particular module? ______________________________

____

3.

Function	Product/Vendor Used	Module Implemented (Y/N)	Satisfaction (1-5)	Number of Users
All functions				
Financials				
Payroll				
Human Resources				
Sales & Marketing				
Supply chain Management				
Production management				
Industry-specific modules (Please detail)				
Industry-specific modules (Please detail)				
Industry-specific modules (Please detail)				

3. Can you please provide some basic details concerning the IT infrastructure supporting your main Enterprise Applications or ERP products? *(Multiple ticks allowed)*

Hardware	*Please define*	Digital	HP	IBM	SNI	Sun	Sequent	Other *(Details)*
Operating System	NT	OSF/1	HP-UX	AIX	SINEX	Solaris	DB2	Other *(Details)*
Database	Oracle	Informix	SQL Server	Other *(Detail)*				

4a. Do you intend implementing enterprise applications or ERP solutions within two years?

Yes_______ Any particular software vendor(s) selected?______________________

No **IF NO, USE NON-BUYER QUESTIONNAIRE**

4b. If so, why?____

____

4c. How important are each of the following reasons? Please rate on a scale of 1-5 where 1 = not at all important and 5= very important.

Year 2000 problems____________________

Change of IT architecture______________

Changing business need________________

Obsolescence of existing software________

Introduction of EMU__________________

B.
0BUYING PROCESS

5a. In regard to the following suppliers of enterprise-wide business application software can you detail (a) whether you have heard of them (b) whether you would consider using them and (c) how you would rate them using a scale of 1 - 5 where 5 = Highest Regard. *(Multiple ticks allowed)*

Interviewer Please Note - Rotate

	Heard of as Supplier of Enterprise-Wide Business Applications Software	Would Consider Using	View of Vendor as Supplier of Enterprise-Wide Business Applications Software
	Yes/No	*Yes/No*	*1-5*
BAAN			
Computer Associates			
D&B/Geac			
Industrie-Mathematik			
JBA			
JD Edwards			
Manugistics			
Oracle Applications			
Peoplesoft			
SAP			
SSA			
Systems Union			
Walker			
Other (Please detail)			

5b What criteria will you use to select Enterprise Applications or ERP solutions?

Please specify:..

....

5c How important are each of the following selection criteria? Please rate on a scale of 1 to 5 where 1= not at all important and 5 = very important.

Overall fit to defined requirements	____
Best of breed functionality in a particular function	____
Which function(s)	____
Product flexibility	____
Ease of implementation	____
Speed of implementation	____
Total cost of ownership	____
Value for money	____
Scope of functionality	____
Ease of use	____
Reporting capability	____
Ease of integration with other products	____
Platform portability	____

5d. Which solution do you currently flavor? Why? ....

....

6. Do you intend to use an external IT service vendor to assist you in implementing an enterprise application(s) or ERP solution(s)?

Yes ______

No ______

Currently Considering

IF NO, GO TO QUESTION 10

7. If "yes" or "currently considering" what type of external service vendor will you use ?

System Integrator (e.g. IBM, A/C) _______

Outsourcer (e.g. EDS, CSC) _______

Professional Services Firm (eg.,) _______

Management Consultancy (e.g. C&L, PW, Deloitte Touche)

Other *(please describe)* ....

....

8. Would you consider implementing a set of "best of breed" applications rather than a single Enterprise Application product through such a vendor? Yes/No

9. In enterprise application or ERP implementation projects, what form of contract pricing does your organization flavor ?

Fixed price __________

Time & materials __________

Value based __________

Other (please describe)..

....

10. If you are considering implementing an enterprise application, can you indicate whether this system would comprise a range of products, or a single integrated product?

Single/multiple products

Which of the following functions do you want to implement? *(Multiple ticks allowed)*

All functions ____________

Financials ____________

Supply chain management ____________

0 **Payroll** ____________

Human Resources ____________

Manufacturing ____________

Sales & Marketing ____________

Industry-specific function (please specify)____________

Industry-specific function (please specify)____________

Other *(Please define)*

....

....

....

Don't Know

Comments:

....

....

....

11a. Can you indicate whether you would consider using any of the following equipment manufacturers' technology as the main platform for ERP or other enterprise application solutions. *(Multiple ticks allowed)* To what extent would you flavor equipment from each of these vendors in any enterprise application implementation?

Equipment Manufacturer	Consider Using	Extent Flavored (1-5)
Amdahl		
Data General		
Digital		
Hewlett Packard		
Hitachi Data Systems		
IBM		
NCR		
Pyramid		
Sequent		
Siemens Nixdorf		
Sun Microsystems		
Stratus		
Unisys		
Other *(Please Detail)*		
Don't Know		

11b. Can you indicate whether you would consider using any of the following operating systems as the main platform for ERP or other enterprise application solutions. *(Multiple ticks allowed)* To what extent would you flavor each of the following operating systems in any enterprise application implementation?

Operating System	Consider Using	Extent Flavoured (1-5)
MVS		
Unix		
NT		
OSF/1		
HP-UX		
AIX		
SINEX		
Solaris		
Other *(Please Detail)*		
Don't Know		

11c. Can you indicate whether you would consider using any of the following database technology as the main platform for ERP or other enterprise application solutions. *(Multiple ticks allowed)* To what extent would you flavor each of these databases in any enterprise application implementation?

Database	Consider Using	Extent Flavored (1-5)
Oracle		
Informix		
SQL Server		
Other *(Please Detail)*		
Don't Know		

12. Can you indicate how important the following benefits would be for you in enterprise application or ERP projects? *(Please rate on a scale of 1 - 5 where 1 = low importance and 5 = high importance)*

Interviewer - PLEASE ROTATE

Benefit	**Importance**
Tactical reengineering e.g. process change/workflow improvement etc.	
Gaining/retaining competitive edge	
Reducing business costs	
Improving responsiveness to customer demand	
Accessing new revenue channels	
Creating business barriers to competition	
Strategic reengineering of the business	
Addressing Year 2000 and EMU issues/problems	

13a. To what extent would you flavor each of the following implementation approaches in any ERP or other enterprise application project ?

Big Bang ____________

Phased By Module or product ____________

Pilot/Roll Out ____________

Other *(Please Detail)* ____________

....

....

....

13b. What level of business process change do you expect will accompany your enterprise application implementation? Please rate on a scale of 1-5 where 1= low change and 5= extensive change.

....

....

13c. Why?

....

....

13d. Can you indicate how long you would expect an ERP or other enterprise application implementation to take for your unit and company total?

<u>UnitCompany</u>

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	__________	__________

14. If you were intending to purchase an enterprise application solution would you

Approach the software product vendor directly ? __________

Use a third party ? __________

Comments: ....

....

15. Can you indicate how capable or suitable you consider the following services organisations for assisting your organisation with ERP or enterprise application projects? *(Please rate on a scale of 1-5 where 1 = not capable / not suitable perception and 5 = extremely capable / suitable) 0= no perception.*

Vendor	Perception of Capability
Andersen Consulting	
Cap Gemini (Hoskyns)	
CMG	
Coopers & Lybrand	
CSC	
Data General	
Digital	
ECSoft	
EDS	
Ernst & Young	
HP	

Vendor	Perception of Capability
IBM	
ICL	
KPMG	
Ernst & Young	
Logica	
Origin	
PA	
PW	
Sun Microsystems	
Unisys	
Other (Please Detail)	

16 If you were intending to implement enterprise applications or ERP solutions with the assistance of an external IT services supplier how important would it be that the IT services provider was an implementation partner of the software product vendor? *(Please rate on a scale of 1-5 where 1 = very unimportant and 5 = very important)*

....

....

17. If you were choosing an external services vendor, how important would the following criteria be in your selection ? *(Please rate on a scale of 1 - 5 where 5 = very important)*

Interviewer note: please rotate

Price/performance ______

Vendor's commercial stability/size ______

Technical integration capability ______

Application knowledge ______

Business Process knowledge ______

Ability to work with non-IT staff ______

Ability to offer fixed price ______

Innovative financing (shared risk etc.) ______

Local presence ______

International presence ______

Other *(Please describe and rate)*

....

....

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

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B

Appendix B

A
USAGE OF ENTERPRISE APPLICATION SOFTWARE

1 What Enterprise Application or ERP software do you have installed in your organization? Do you use a single product from one vendor or multiple highly integrated products? How satisfied are you with each of these products? Please rate on a scale of 1-5 where 1= not at all satisfied and 5 = very satisfied.

Product name	Vendor	Satisfaction (1-5)

Single product/Multiple products S/M

Vendor/product name of main product: ______________________

2. For your enterprise application, can you indicate which product you have used for each function? *(Multiple responses allowed)* Can you also indicate your satisfaction with each area and the number of users typically using a particular module?

____

____

Function	Product/Vendor Used	Module Implemented (Y/N)	Satisfaction (1-5)	Number of Users
All functions				
Financials				
Payroll				
Human Resources				
Sales & Marketing				
Supply chain Management				
Production management				
Industry-specific modules (Please detail)				
Industry-specific modules (Please detail)				
Industry-specific modules (Please detail)				

3. Can you please provide some basic details concerning the IT infrastructure supporting your main Enterprise Applications or ERP products? *(Multiple ticks allowed)*

Hardware	*Please define*	Digital	HP	IBM	SNI	Sun	Sequent	Other *(Details)*
Operating System	NT	OSF/1	HP-UX	AIX	SINEX	Solaris	DB2	Other *(Details)*
Database	Oracle	Informix	SQL Server	Other *(Detail)*				

4a. Do you intend implementing enterprise applications or ERP solutions within two years?

Yes_______ Any particular software vendor(s) selected?____________________

No **IF NO, GO O QUESTION 5**

4b. If so, why?____

____

4c. How important are each of the following reasons? Please rate on a scale of 1-5 where 1 = not at all important and 5= very important.

Year 2000 problems____________________

Change of IT architecture______________

Changing business need________________

Obsolescence of existing software________

Introduction of EMU__________________

GO TO BUYERS QUESTIONAIRE

B.
0BUYING PROCESS

B.1 Product Awareness

5a How did you originally find out about your main Enterprise Application or ERP product?

Competitor ____

Trade press ____

Services partner ____

Management consultancy ____

Specialist business consultancy ____

Hardware vendor ____

Industry Analysts ____

Other (please define) ___

5b. Is your organization part of a Group that already uses this Enterprise Application or ERP product ? What is the business relationship between your organization and these other units ? e.g. parent, sister organization etc. *(Please define)*

Group subsidiary ___

Group parent ___

Other (please define) ___

5c Who drove the decision to choose your enterprise application or ERP product?

CEO ___

CFO ___

CIO ___

Functional manager (please define) ________________________________

Other (please define) ________________________________

6. In purchasing your main Enterprise Application or ERP Solution did you

Approach the software vendor directly ? ___

Via an implementation partner ? ___

Use an outsourcer? ___

Consultant software product selection process? ___

Other - *please specify:* ____

____

B.2 PRODUCT - SELECTION

7a. When making the decision to implement your chosen Enterprise Application or ERP solution what other company's products did you consider, please identify product considered ? *(Multiple choices allowed)*

Interviewer PLEASE ROTATE when needing to read out list

Baan ___

Computer Associates ___

Dun & Bradstreet/GEAC ___

Industrie Mathematik ___

JBA ___

JD Edwards ___

Manugistics ___

Oracle Applications ___

Peoplesoft ___

SAP ___

SSA ___

Systems Union ___

Walker ___

Other - *please specify:* ____

____

7b. Why did you select your current Enterprise Application or ERP solution?

Please specify: ____

7c. How important were each of the following selection criteria? Please rate on a scale of 1 to 5 where 1= not at all important and 5 = very important.

Overall fit to defined requirements ___

Best of breed functionality in a particular function ___

Which function(s) ___

Product flexibility ___

Ease of implementation ___

Speed of implementation ___

Total cost of ownership ___

Value for money ___

Scope of functionality ___

Ease of use ___

Reporting capability ___

Ease of integration with other products ___

Platform portability ___

B.3 SERVICES - SELECTION

Section C - Questions Regarding Enterprise Application Implementation Services Assistance

8. Do/Did you use external services to support your Enterprise Application or ERP implementation?

Yes/No

If the Answer is NO USE of Vendors- Go To Q14

9a. In your selection process how important was it that the services provider was an implementation partner of your software vendor? *(Please rate on a scale of 1-5 where 1 = very unimportant and 5 = very important*

9b. How did you find out about your Enterprise Application or ERP services partner? *(Multiple ticks allowed)*

Interviewer note: please rotate

Via software product vendor ___

Word of mouth ___

Media/Advertising ___

Past service relationship ___

Directly approached by services company ___

Trade shows/conferences ___

Other (Please define)____

9c. Were you aware of your software product vendor's Certification Program?

Yes/No

If yes, how important for partner selection was this certification, please rate on a scale of 1 to 5 where 1= not aware/not important at all to 5 very aware/very important?

Important:

10. Which external services provider was involved in each of the following phases?

Decision phase..(Name)

Planning phase..(Name)

Implementation phase...(Name)

Outsourcing/operational phase..(Name)

11. Who made the decision to select each of these partners?

Executive	Yes/No
IT manager	Yes/No
Finance dept	Yes/No
Operational department head	Yes/No

12. Can you please rate the importance of the following criteria in your initial selection of the external Enterprise Application or ERP services vendor ? *(Please rate on a scale of 1 - 5 where 1 = unimportant and 5 = very important)*

Interviewer note: please rotate

Price/performance	___
Vendor's commercial stability/size	___
Technical integration capability	___
Application knowledge	___
Business Process knowledge	___
Ability to work with non-IT staff	___
Ability to offer fixed price	___
Innovative financing (shared risk etc.)	___
Local presence	___
International presence	___

Other *(Please describe and rate)* ________________________________

13a. Which organizations did you consider to provide Enterprise Application or ERP services to your organization? ____

____

Vendor
1.
2.
3.
4.
5.

C.1 Products

14. What do you consider the three main strengths and weaknesses of your main Enterprise Application or ERP solution?

Vendor/Product name:____

	Strength	Weakness
1		
2		
3		

15. How satisfied are you with the following elements of the main Enterprise Application or ERP solution you have implemented ? (Please rate on a scale of 1-5 where 1 = extremely dissatisfied and 5 = extremely satisfied) *Answer relevant sections*

Vendor/Product name:____

Interviewer note: Please Rotate

	Satisfaction
Overall fit to defined requirements	
Best of breed functionality in key business areas	
Product flexibility	
Ease of implementation	
Speed of implementation	
Total cost of ownership	
Value for money	
Scope of functionality	
Ease of use	
Reporting capability	
Ease of integration with other products	
Platform portability	
Overall	

16. How would you like to see your current enterprise application or ERP solution improved?

C.2 Service Providers

17. How important and how satisfactory were the external provision of each of the following aspects of the enterprise application implementation and support?

Characteristeric	Importance	Satisfaction
Business process reengineering		
Change management		
Meeting cost/price calculations		
Meeting deadlines		
Availability and co-operation of vendor personnel		
Training/Skills transfer		
Breadth and depth of vendor skills		
Industry sector/business knowledge		
On-going support		
Overall		

C.3 Benefits

18. Can you please rate the level of importance of the following benefits from your Enterprise Application or ERP solution and the extent to which these have been met ? (Please rate both on a scale of 1 - 5 where 1 = not important at all/low level of achievement and 5 = very important/objectives completely met)?

Interviewer - PLEASE ROTATE

	Importance Rating	Satisfaction Rating
Tactical reengineering e.g. process change/workflow improvement etc.		
Gaining/retaining competitive edge		
Reducing business costs		
Accessing new revenue channels		
Creating business barriers to competition		
Strategic reengineering of the business		
Addressing Year 2000 issues/problems		
Improving responsiveness to customer demand		
Improved interaction with suppliers		
Overall business benefit		
Other (s) *(Please define)*		

D. IMPLEMENTATION AND COST ISSUES

D.1 Implementation

19a. What implementation approach did your organisation adopt in your Enterprise Application or ERP project ?

Big Bang ______

Phased By Modules ______

Pilot/Roll Out ______

Other *(Please Detail)* ________________________________

19b. What level of business process change accompanied your enterprise application implementation? Please rate on a scale of 1-5 where 1= low change and 5= extensive change. ______

20. Did your 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
Business Modelling Tools		
Industry specific Templates		

21a. What contractual approach did you use for your enterprise application 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
Fixed Price for Services		
Time and Material		
Value-based		
Other *(Please explain)*		

D.2 COST

22a. Can you please detail the approximate total cost of your enterprise application or ERP implementation in terms of the following categories?

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

5 Implementation Categories	Project Cost ($,000s or %) (Please state units)
Software Licence	
Hardware	
Direct Consulting from software product vendor	
Direct Consulting from other sources	
Business Process Reengineering Services	
Systems Tailoring/Enhancement and Implementation Services	
Education & Training	
Other *(Please Detail)*	
Total	

22b. How many people (full-time equivalent) are or were involved in implementation ?

D.3 TIMESCALES

23a. Can you indicate how long your enterprise application implementation period was or is planned to be for your unit and company total?

	Unit	Company
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	_______	_________

23b. How did your implementation compare to plan regarding time and budget? *(check as appropriate)*

	Time	Budget
Under plan		
up to 110% of plan		
111 - 125% of plan		
126 - 150% of plan		
151 - 175% of plan		
176 - 200% of plan		
201% of plan plus.		
Comments		

24. What are your plans over the next two years ?

Complete migration to main Enterprise Application or ERP solution	Yes/No
Partial migration to Enterprise Application or ERP solution	Yes/No
Extend Enterprise Application or ERP solution to other functional areas	Yes/No
Extend functionality through the use of best of breed applications	Yes/No
Build up more internal Enterprise Application or ERP solution knowledge	Yes/No
Abolish use of Enterprise Application or ERP solution	Yes/No

Thank you very much for your time and assistance