INPUT

RESEARCH REPORT

Assessment of Intranet Managed Services, U.S.

9037U

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- Peer position

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Abstract

IT architectures have changed dramatically in recent years and the data center environment is no longer the focus of either corporate IT or of operational services. The principal challenge for operational services vendors is now the management of distributed systems environments based around the UNIX and NT operating systems.

However, while distributed systems management remains the principal challenge, the technology continues to move ahead at a rapid pace. The result is that users now expect operational services vendors to assist them in introducing, supporting and operating new Internet and Intranet based IT infrastructures.

Consequently, it is important that outsourcing vendors develop operational capabilities in these areas.

This report aims to assist vendors by:

- Identifying organizations' current and planned use of Intranets
- Identifying the level of usage of Intranet managed services and the likely future demand for Intranet operations and support services
- Identifying service levels and levels of expenditure on Intranet support and operations services
- Analyzing current levels of satisfaction with both in-house and external provision of Intranet services and the benefits sought from outsourcing Intranet support and operations services
- Identifying the perceived suitability of individual vendors to offer Intranet managed services.

The report considers the market opportunities in supplying individual Intranet operations and support services as well as the likelihood of organizations adopting full outsourcing of their Intranet operations and support.

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I

Introduction

A
Scope and Objectives

Initially outsourcing was primarily concerned with the management of datacenter environments. However, IT architectures have changed dramatically in recent years and the datacenter environment is no longer the focus of either corporate IT or of operational services. Datacenter operations services, while remaining a major component of the operational services market, are now secondary in nature and the principal challenge for operational services vendors is the management of distributed systems environments based around the UNIX and NT operating systems.

While distributed systems management remains the principal challenge, the technology continues to move ahead at a rapid pace. The result is that users now expect operational services vendors to assist them in introducing, supporting and operating new Internet and Intranet based IT infrastructures.

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- Identifying the perceived suitability of individual vendors to offer Intranet managed services.

The report considers the market opportunities in supplying individual Intranet operations and support services as well as the likelihood of organizations adopting full outsourcing of their Intranet operations and support.

Outsourcing is defined by INPUT as follows.

Outsourcing is a long-term relationship (greater than one year) between a client and vendor in which the client delegates all, or a major portion, of an operation or function to the vendor. The operation or function may be solely Information Systems Outsourcing-based, or merely include Information Systems Outsourcing as a prominent component of the operation (at least 30% of the budget).

The critical components defining an outsourcing service are:

- Delegating an identifiable area of the operation to a vendor

- Single vendor responsibility for performing that delegated function

- Intended, long-term relationship between the client and vendor

- Contract term is at least one year

- Client's intent is not to perform this function with internal resources

- The contract may include non-Information Systems Outsourcing activities, but Information Systems Outsourcing must be an integral part of the contract

- Outsourcing is a collection of services integrated under a single, long-term contract with one vendor responsible for its operation and management.

Business Operations Outsourcing (also known as Business Outsourcing or Functional Outsourcing) is a relationship in which one vendor is responsible for performing an entire business/operations function including the Information Systems Outsourcing that support it. The Information Systems Outsourcing content of such a contract must be at least 30% of the total annual expenditure in order for INPUT to include it in the Business Operations Outsourcing market.

Information Systems (IS) Outsourcing can be viewed as a component of the Business Operations Outsourcing market (i.e., Information Systems Outsourcing is a business/operations function, see Exhibit I-1). However, in order to delineate between outsourcing contracts that are solely IS versus those that include IS as well as other functions, IS Outsourcing will be segregated from Business Operations Outsourcing. Information systems Outsourcing is divided into four service components as shown in Exhibit I-2.

- *Systems Operations* outsourcing describes a relationship in which a vendor is responsible for managing and operating a client's "computer system"/data center (*Platform Systems Operations*) or developing and/or maintaining a client's application as well as performing Platform Operations for those applications (Applications Systems Operations).

- *Desktop Services* is a relationship in which a vendor assumes responsibility for the deployment, maintenance and connectivity of personal computers, workstations, client/server and LAN systems in the client organization. To be considered as Desktop Services outsourcing, a contract must include a significant number of the individual services listed below.

    - Software Product Supply
    - Equipment Supply
    - Equipment/Software Installation
    - Equipment Maintenance
    - LAN Installation and Expansion
    - LAN Management
    - Network Interface Management
    - Client/Server Support
    - Logistics Management

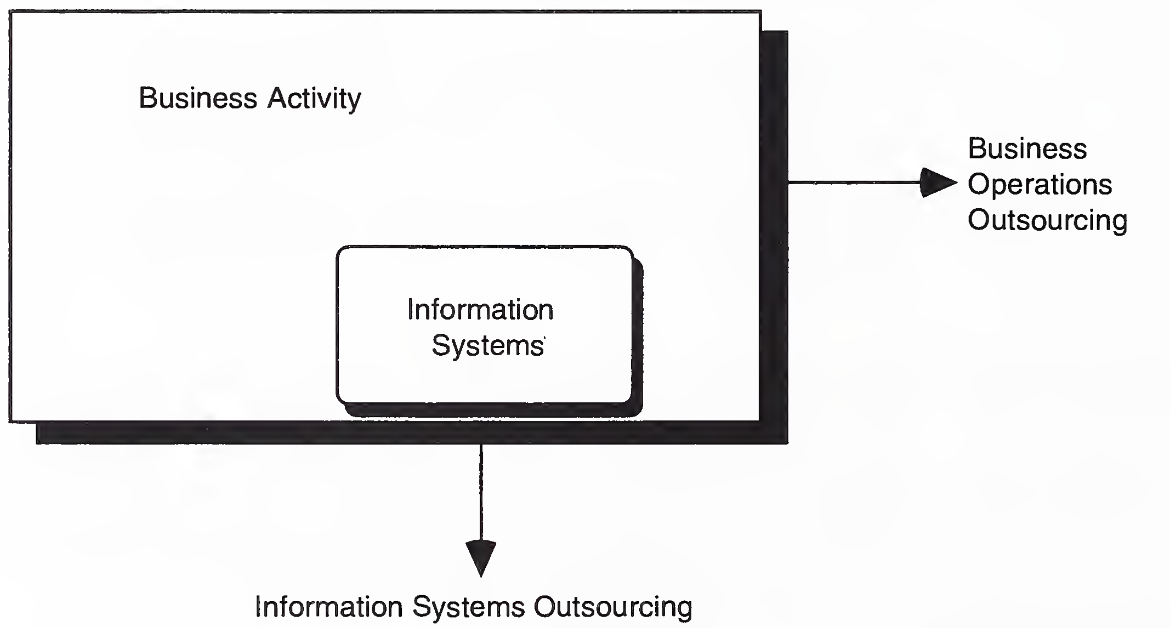
- User Support
- Help Desk Functions
- User Training and Education

- *Network Management* outsourcing is a relationship in which a vendor assumes full responsibility for operating and managing the client's data telecommunications systems. This may also include the voice, image and video telecommunications components.

- *Application Management* is a relationship in which the vendor has full responsibility for developing and maintaining all of the application or function.

Exhibit I-1

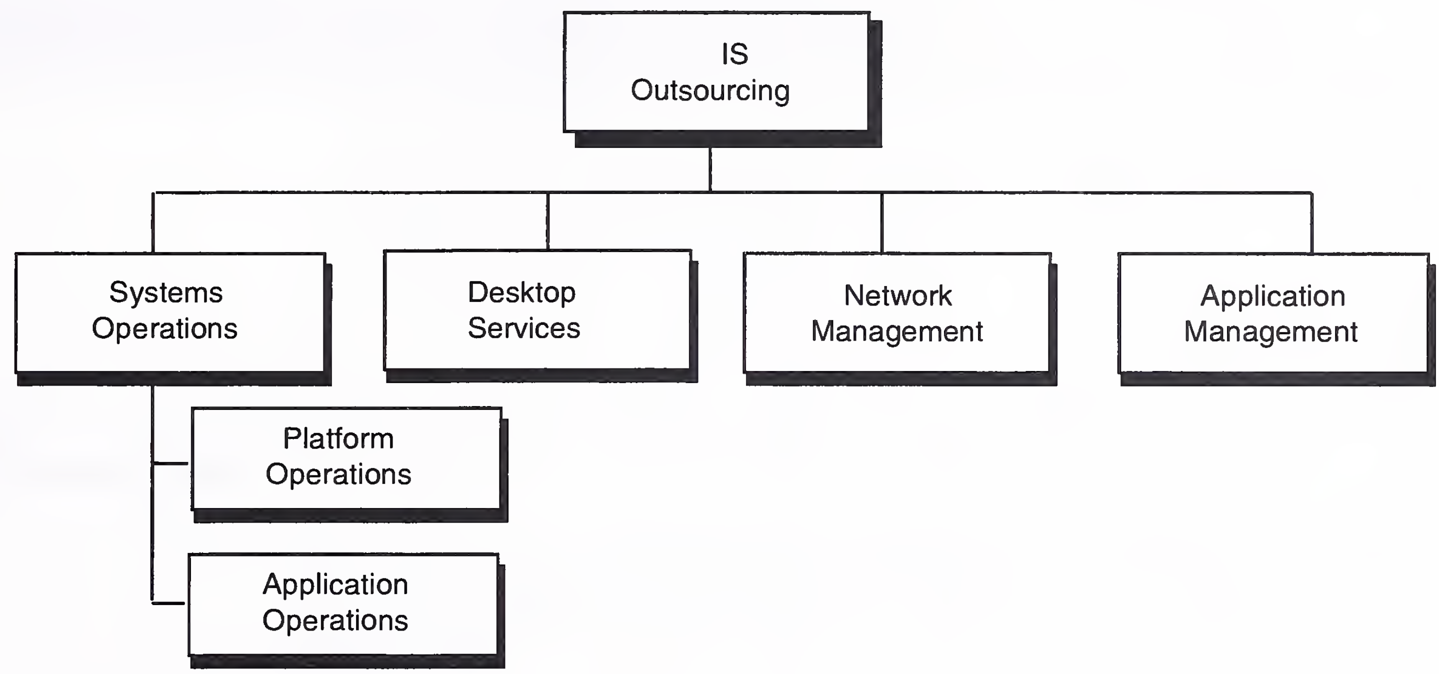
Business Operations Outsourcing



Source: INPUT

Exhibit I-2

Information Systems (IS) Outsourcing Service Categories



Source: INPUT

The above definitions focus on the services covered in the outsourcing contract. For example, an Application Operations contract can include all facets of Information Systems Outsourcing (platform operations, desktop services, network and application management). The key to INPUT's market definition is the service contract. If a customer only wants to outsource the network, it is Network Management outsourcing. If an airline, for example, wishes to outsource their reservation operation which includes not only the network, but also its infrastructure, applications and the people running the operation, this is a Business Operations Outsourcing contract. Exhibit I-3 shows the service components that may be included in each outsourcing service category.

Exhibit I-3

Outsourcing Service Components

Component	Platform Ops	Appl. Ops.	Desktop Services	Network Mgt.	Appl. Mgt.	Business Ops.
Project/Contract Management	X	X	X	X	X	X
Data Center Management	X	X				X
Client\Server Operations	X	X	X			X
Equipment Maintenance	X	X	X			X
System Software Maintenance	X	X	X	X		X
Application Software Maintenance		X	X		X	X
Application Development		X			X	X
LAN Management		X	X	X		X
WAN/MAN Management		X		X		X
Transaction Processing Services		X				X
Other Professional Services		X	X		X	X
Business Process Operations						X

Source: INPUT

The largest, most visible contracts awarded in recent years have been typically Application Operation outsourcing contracts since they, at least, included management of the infrastructure (data centers and various computing platforms) and the support of some the legacy applications. In the past, most Application and Platform Operation outsourcing contracts included network management but recent contracts have also included desktop services.

What is not included in INPUT's world of outsourcing are the following:

- Project based services are not considered as part of outsourcing. Thus, Systems Integration and application development projects are not included

- Services that were never intended to be performed internally. Maintenance-only services do not constitute an outsourcing function by itself. However, responsibility for hardware and software maintenance is inherent in most outsourcing contracts

- Processing services contracts of less than one year
- Voice-only network management
- Business operations with minimal information systems content. The outsourcing of the marketing communication function to an outside agency is not covered by INPUT's analysis. A function or business operation must at least have 30% of its budget attributed to information technology to be included.

B
Methodology

The report is based on telephone interviews with 51 IT managers in the U.S. The breakdown of the interviews by industry sector is shown in Exhibit I-4

Exhibit I-4

Sample by Industry Sector

Industry Sector	Number of Interviews
Financial Services	17
Manufacturing	19
Retail	15

C
Report Structure

Chapter II consists of the Executive Summary, which is a summary of the key conclusions and recommendations of the research.

Chapter III contains an analysis of current and planned Intranet operations and support service usage, including:

- Current and planned Intranet use
- Current and planned use of Intranet operations and support services
- Intranet operations and support expenditure
- Future service requirements.

Chapter IV evaluates current levels of satisfaction with Intranet support and operations services, including:

- Satisfaction with in-house support and operations
- The nature of current service level agreements

Chapter V analyzes the current levels of awareness of potential Intranet operations and support service providers.

Appendix A provides an analysis of perceived capability by services vendor.

Appendix B provides a copy of the user questionnaire.

D
Related Reports

Outsourcing Pricing Mechanisms - U.S., 1995

Information Systems Outsourcing Market – U.S., 1997-2002

Outsourcing Vendor Performance Analysis, U.S., 1997

Call Center Operations, Requirements and Opportunities, U.S., 1997

II

Executive Summary

A
Requirement for Intranet Operations and Support will Increase as Application Mix Changes

The initial development of Intranets has many parallels with the early use of personal computers within organizations. For example, the initial use of Intranets, like that of personal computers, represented a significant break from the IT tradition of the time. The first Intranets were often the result of ad hoc development within user organizations. Early Intranets were informal and unplanned, often built 'after hours' using freely available software, and did not rely on established user/vendor relationships.

Until 1995, many if not most IT vendors were unaware of this new development taking place on some of their customers' sites. During that year, however, news of the Intranet phenomenon was spread quickly by an IT and business press eager to pick up on the latest hot story. By late-1996, any product vendor who had not made an Intranet-related announcement was beginning to look behind the times.

Now it is the turn of IT services vendors to catch up in the Intranet market.

The problem facing services vendors is that the legacy of 'guerrilla' Intranet development and support remains—Intranets are widely perceived as low-cost, low-effort developments, with minimal support needs which implies low need for external services. Use of services is in fact moderate, and shows few signs of increasing per Intranet in the short term.

Indeed Intranet operations and support services have much in common with desktop services for distributed systems operations and support. Vendors should learn from their experience in the desktop services market and recognize that organizations are unlikely to purchase Intranet managed services on the grounds of reduced support costs. Instead they will increasingly purchase Intranet operations and support services as Intranets come to play an important role in supporting mission critical applications and certainty of service levels becomes important.

At present, Intranets remain largely used in the U.S. to host human resources and sales and marketing applications. Most organizations have yet to implement accounting, sales order processing and purchase order processing applications on their Intranets. At the same time, the majority of organizations have yet to implement service level agreements for their Intranets.

As organizations begin to implement these applications and face an increasing requirement for stringent service level agreements, vendors should:

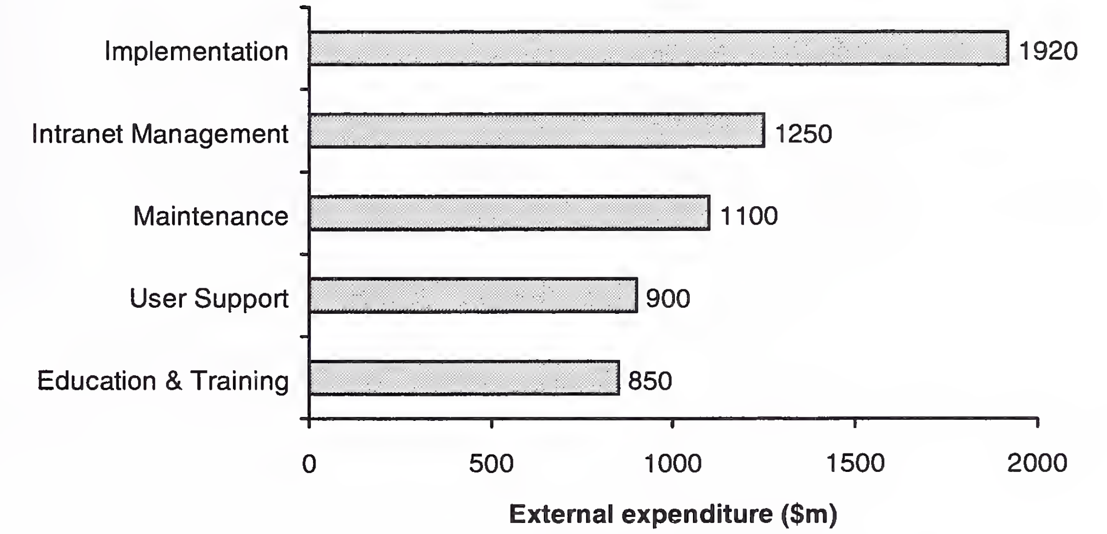
- Develop services based on remotely hosted applications
- Offer service level agreements incorporating very high levels of network availability and service coverage
- Stress their ability to supply higher levels of user support and training than in-house support organizations

B
Vendors Should Develop Services Based On Remotely Hosted Applications

Exhibit II-1 provides a breakdown of external expenditure by service type for 1997.

Exhibit II-1

External Expenditure by Service Type: U.S., 1997

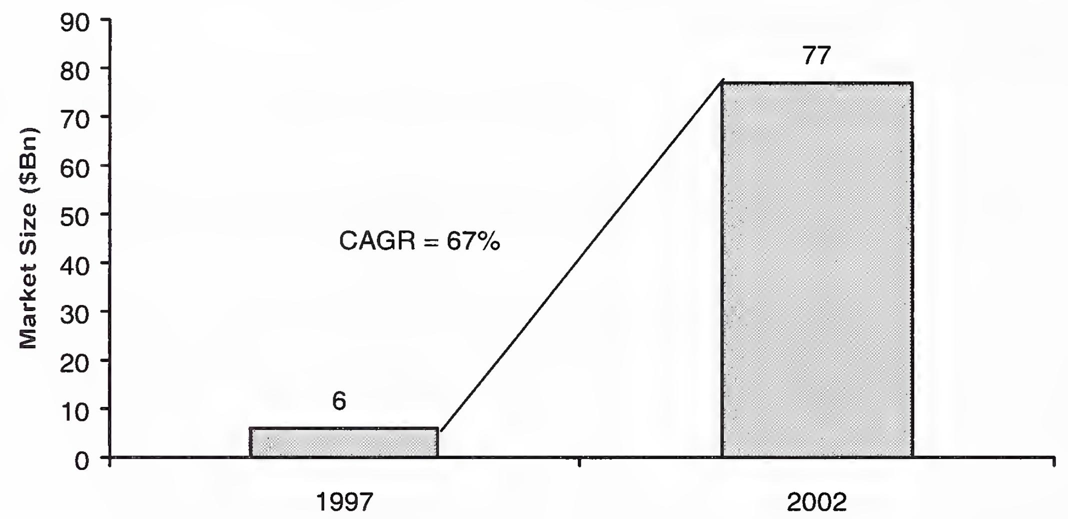


Source: INPUT

Exhibit II-2 forecasts the growth in the Intranet support and operations market over the period 1997 to 2001. This forecast includes Intranet design and implementation services in addition to ongoing operations and support services.

Exhibit II-2

Market Forecast: Intranet Support and Operations



Source: INPUT

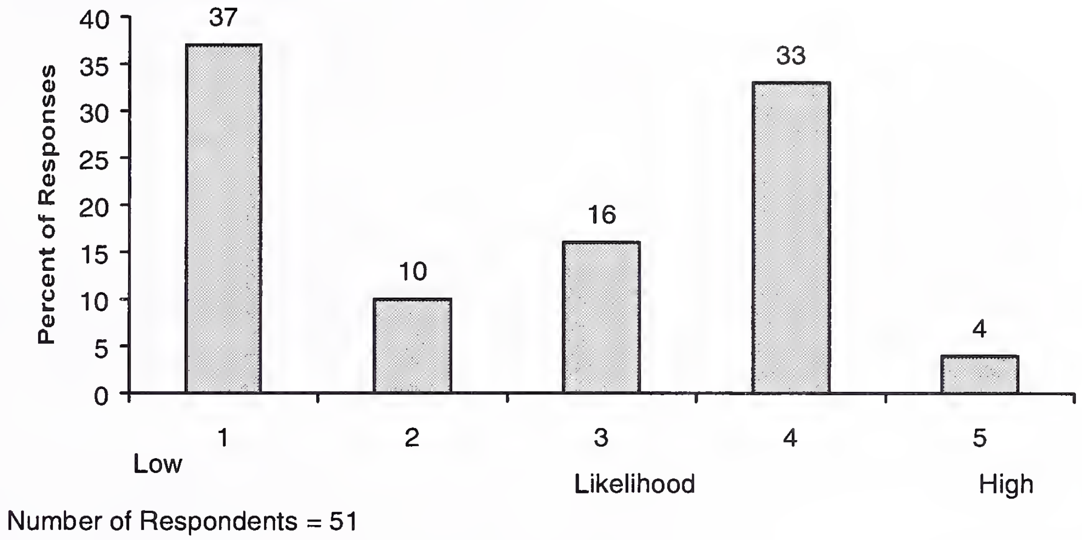
Most of the short-term market growth is forecast to come from increased usage of Intranets rather than from a greatly increased propensity to subcontract operations and support services to external vendors. On average, organizations expect the proportion of Intranet support and operations handled externally to remain constant over the next two years at 8% of activity.

Similarly organizations do not expect widespread outsourcing of their entire Intranet operations and support. Only 4% of organizations expect to adopt this approach by end 1999.

However, respondents did express a much higher level of interest in purchasing secure access to remotely hosted applications via the Internet or their Intranet. As shown in Exhibit II-3, 37% of respondents expressed a high level of interest in this type of service.

Exhibit II-3

Likelihood of Purchasing Access to Remotely Hosted Applications



Source: INPUT

Accordingly, vendors should develop this type of offering in additional to more traditional operations and support services.

The ERP vendors, in particular SAP, are examples of organizations that are seeking partners to assist them in offering these types of services, for example ERP utility services. These services are seen as being particularly attractive to small and medium sized organizations.

The types of applications that respondents mentioned that they would like to access in this manner are well suited to ERP solutions, covering:

- All applications
- Financial applications
- Purchasing/purchase order processing
- Sales/sales order processing
- Electronic commerce.

Exhibit II-4 lists the extent to which IT managers whose organizations had already implemented an Intranet are aware of a number of vendors as potential Intranet support and operations vendors. The exhibit contrasts the level of awareness with the perceived capability of each vendor in this area.

Exhibit II-4

Vendor Awareness and Capability

	High Awareness	Medium Awareness	Low Awareness
High Capability			
Medium Capability	IBM	MCI	
Low Capability	HP, AT&T Solutions, Sun, Digital	Unisys, Cap Gemini, CSC, EDS, GEIS, Andersen Consulting, NCR, Sprint,	PW & Coopers & Lybrand, Alltel

Source: INPUT

At present, the overall levels of perceived capability are low indicating that few vendors have begun to establish themselves as market leaders in this activity.

C

High Levels of Availability Are Required

The substantial increase in number of users and the changing nature of applications will place increasing pressure on Intranet operations and support.

This will lead to increased pressure on:

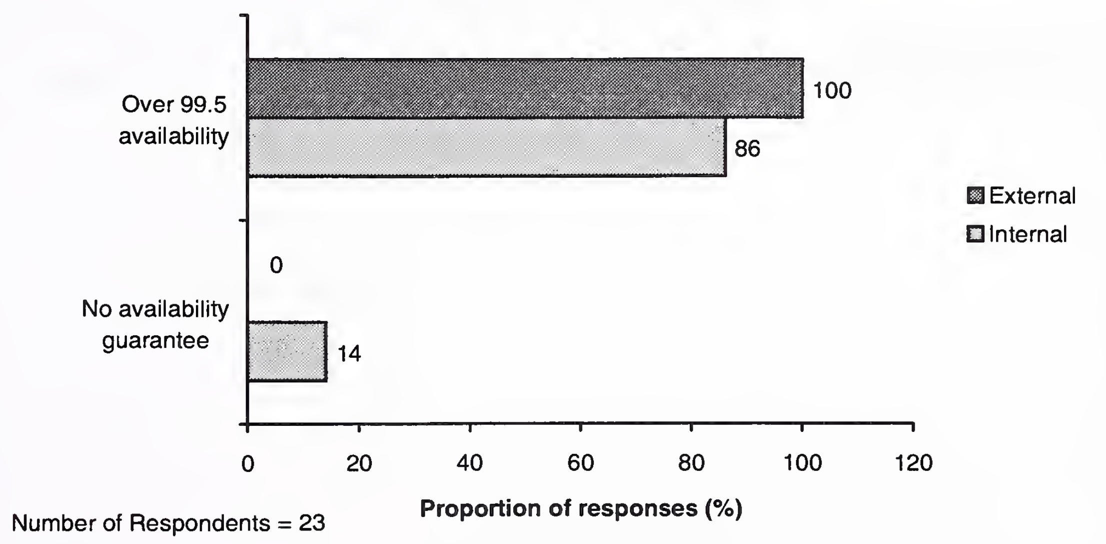
- Network response times
- Intranet availability.

This is an area that vendors must address if they are to compete with in-house service organizations and other vendors for Intranet support and operations contracts. In particular, vendors must guarantee very high levels of Intranet availability and service coverage. These features are arguably more critical for Intranets than for traditional distributed systems management since Intranets will be accessed out of hours for applications such as customer information and sales order processing and for self-service human resources purposes.

Exhibit II-5 compares the profile of Intranet availability guarantees supplied by in-house operations departments and external vendors.

Exhibit II-5

Intranet Availability



Source: INPUT

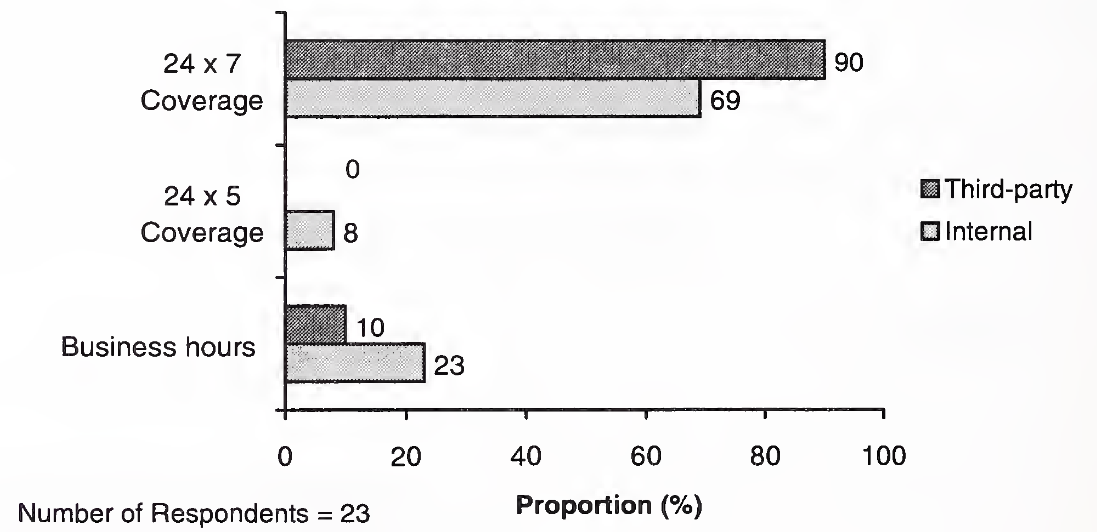
External vendors currently appear to offer higher Intranet availability guarantees than in-house service providers putting them at a competitive advantage.

In addition, possibly because of the current immaturity of Intranet use, many organizations presently supported by in-house service providers have not yet established service level agreements for their Intranet operations and support. Currently only 40% of U.S. organizations with Intranets have established service level agreements. However, as the use of Intranets develops so SLAs will become critical creating an opening for external vendors.

Exhibit II-6 compares the profiles of Intranet service coverage from in-house service providers and external service providers.

Exhibit II-6

Service Coverage



Source: INPUT

Again, Intranet service coverage is extremely high and the highest guarantees of service coverage currently come from external vendors rather than in-house service providers.

The development of use of Intranets by application in the retail, manufacturing and financial services sectors is shown in Exhibits II-7 to II-9.

Exhibit II-7

Development of Intranet Use: Retail Sector

	Low Current Use	Medium Current Use	High Current Use
High Future Use	Stock Control	Human Resources	
Medium Future Use	Purchase Order Processing Sales Order Processing Accounting		
Low Future Use	Internal Requisitions Distribution & Logistics		

Source: INPUT

Exhibit II-8

Development of Intranet Use: Manufacturing Sector

	Low Current Use	Medium Current Use	High Current Use
High Future Use	Human Resources	Sales & Marketing	
Medium Future Use	Internal Requisitions Purchase Order Processing Sales Order Processing Accounting		
Low Future Use	Stock Control Distribution & Logistics		

Source: INPUT

Exhibit II-9

Development of Intranet Use: Financial Services Sector

	Low Current Use	Medium Current Use	High Current Use
High Future Use			Human Resources
Medium Future Use	Sales & Marketing		
Low Future Use	Internal Requisitions Accounting		

Source: INPUT

The considerable increase in use of Intranets for purchase order processing, sales order processing and accounting applications in the retail and manufacturing sectors will considerably increase the demand for high service coverage and service levels over the next 18 months.

However, the stance of these two sectors towards the benefits sought from external vendors differs markedly. The retail sector will be the most promising area for services vendors since organizations in this sector will primarily seek improved network availability and security while the manufacturing sector remains concerned with improved cost-effectiveness of support.

Organizations in the financial services sector, as in the retail sector, will seek improved network availability and security rather than cost reduction.

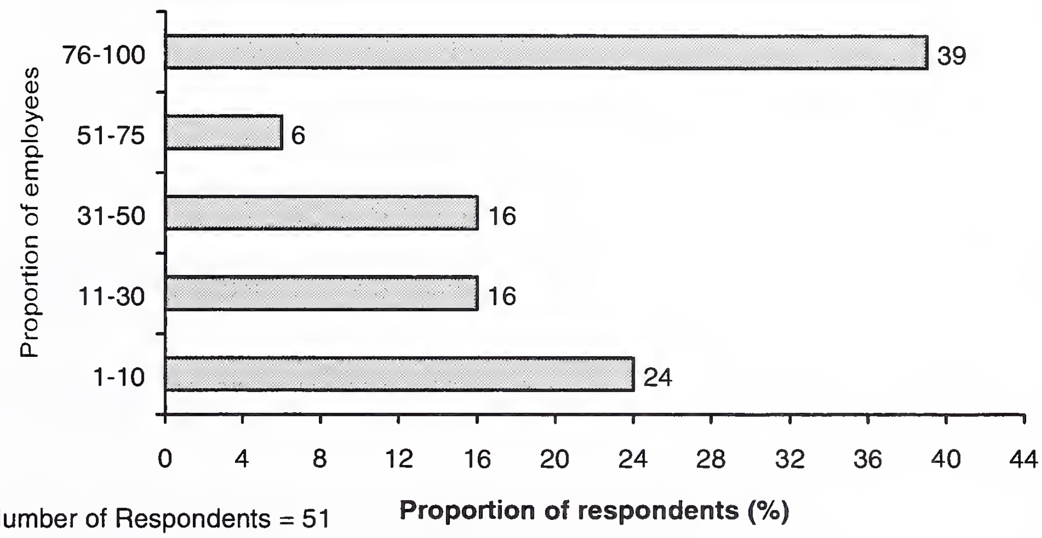
D

Buyers Require High Level of User Support and Training

Exhibit II-10 shows the profile of Intranet access within organizations in the U.S.

Exhibit II-10

Proportion of Employees with Intranet Access



Source: INPUT

At present, access to Intranets is strongly polarized. At one extreme, a large number of organizations (nearly 40% of all medium to large organizations) have already made their Intranets widely accessible. These organizations have made their Intranets accessible to more than three-quarters of their employees. At the other extreme, approximately a quarter of organizations have yet to make their Intranets widely available.

However, organizations are initially using their Intranets for administrative and human resources applications that depend on all employees having Intranet access. Although many Intranets currently show low levels of accessibility, this situation is likely to change rapidly as these Intranets mature and access becomes widespread throughout the organization.

Accordingly it is important that organizations have access to widespread training and support. These areas are seen as relative weaknesses of in-house service providers and are the service categories that CIOs are most inclined to subcontract to external vendors.

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III

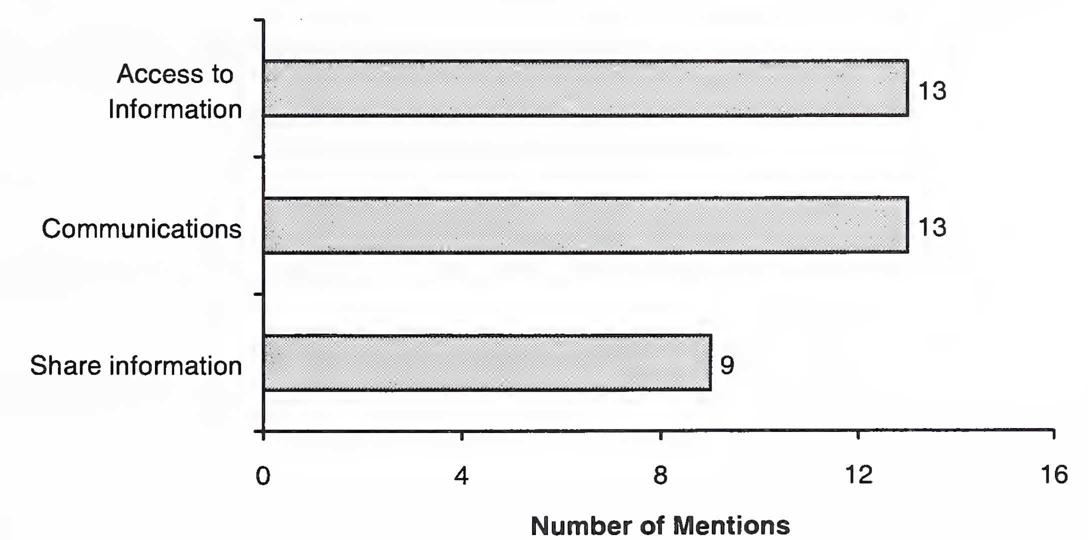
Use of Intranet Support Services

A
Current and Planned Intranet Usage

Exhibit III-1 lists the major reasons why organizations in the U.S. have implemented Intranets.

Exhibit III-1

Major Reasons for Implementing an Intranet



Source: INPUT

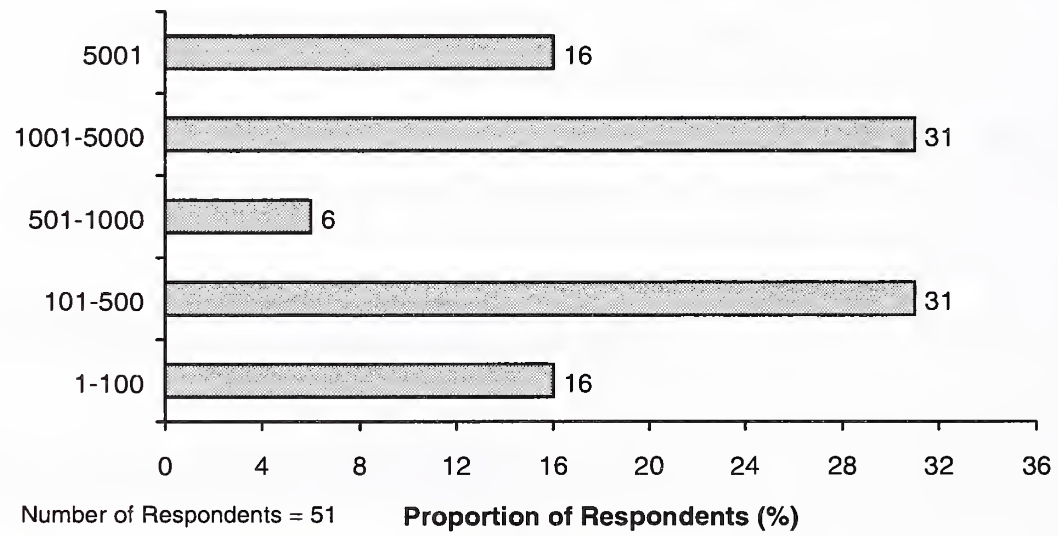
The main themes to emerge are improved communication within the organization and improved access to information. Historically most of the emphasis has been on improved access to internal information such as human resources and administrative information. Indeed a current focus of Intranet activity is the use of Intranet technology to deliver self-service capability for human resources information.

At present, usage of Intranets for more externally focused activity such as the development of electronic commerce capability is limited.

Exhibit III-2 shows the profile of number of users with access to Intranets and Exhibit III-3 shows this as a proportion of the total number of personnel.

Exhibit III-2

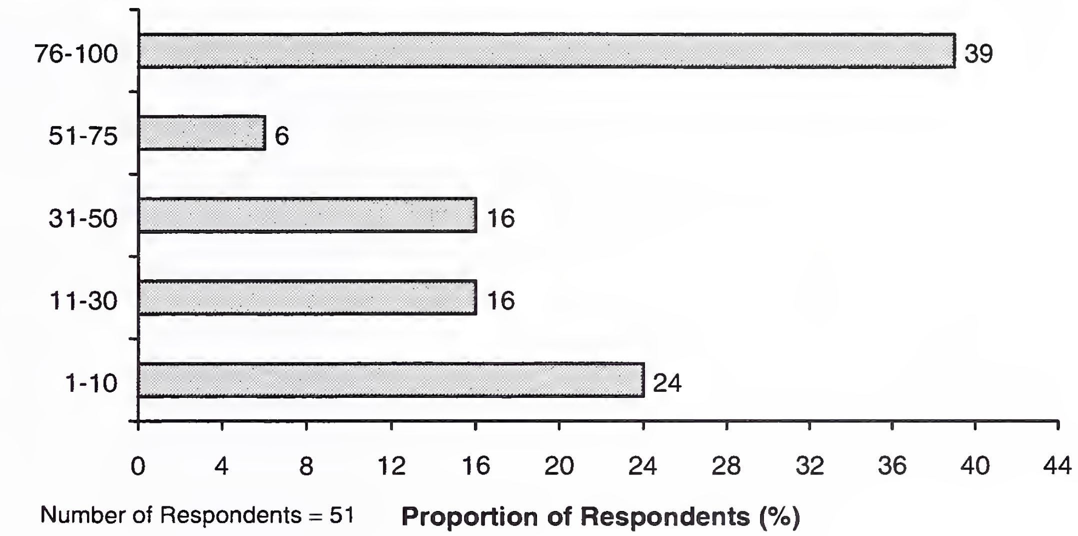
Number of Users Accessing Intranet



Source: INPUT

Exhibit III-3

Proportion of Users with Access to Intranet



Source: INPUT

At present, there is considerable polarization in the use of Intranets, with approximately 40% of organizations where Intranet access is very high – accessible by over 75% of the workforce- and a quarter of organizations where Intranet access is very low – less than 10% of the workforce.

Exhibit III-4 shows the extent of Intranet support by application.

Exhibit III-4

Current Intranet Support for Applications

Source: INPUT

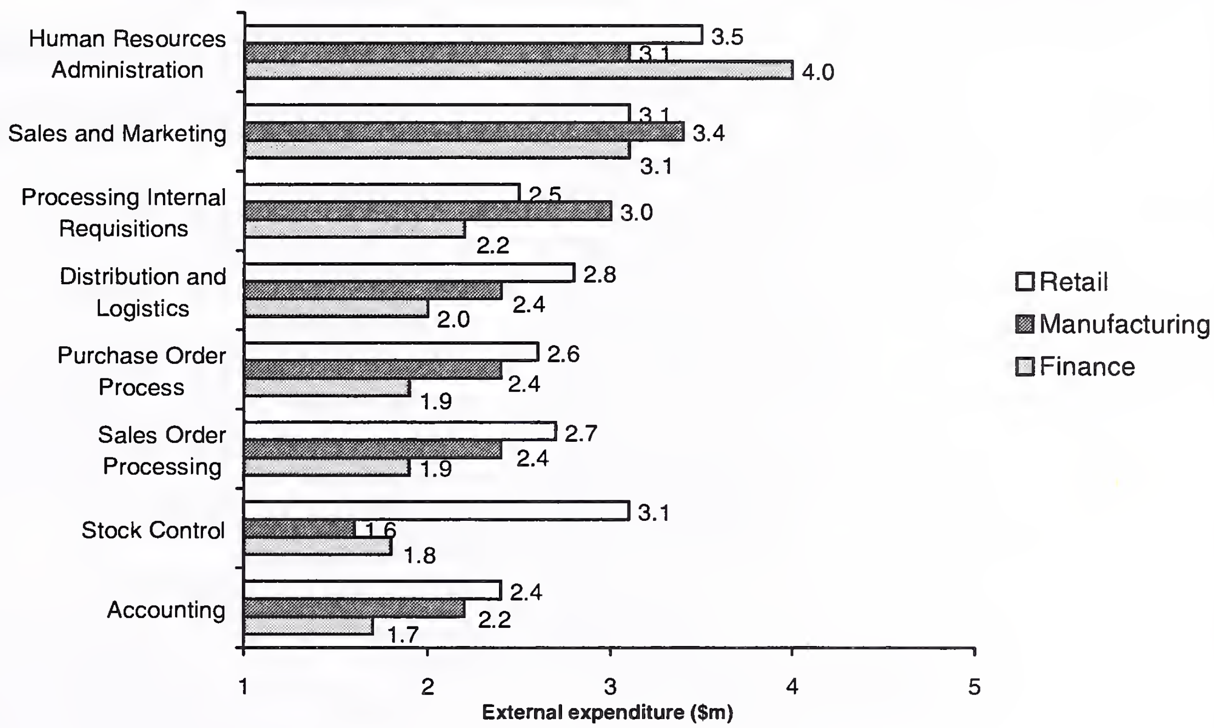
Historically, the focus has been highest for internally focused dissemination of information such as human resources administration. However, having experimented with low-risk applications such as human resources and the sharing of administrative information, organizations are now increasingly turning to the use of Intranets to strengthen their ties with external trading partners.

The use of Intranets for human resources and sales and marketing support services is becoming well developed in the U.S. The U.S. is appreciably ahead of Europe in developing Intranet support in these two areas. In other functional areas, Intranet support is at a low stage of development in both the U.S. and Europe.

Exhibit III-5 shows the extent of Intranet support for each industry sector by application.

Exhibit III-5

Current Intranet Support for Applications by Industry Sector



Source: INPUT

All three sectors show relatively high use of Intranet support for human resources administration and sales and marketing.

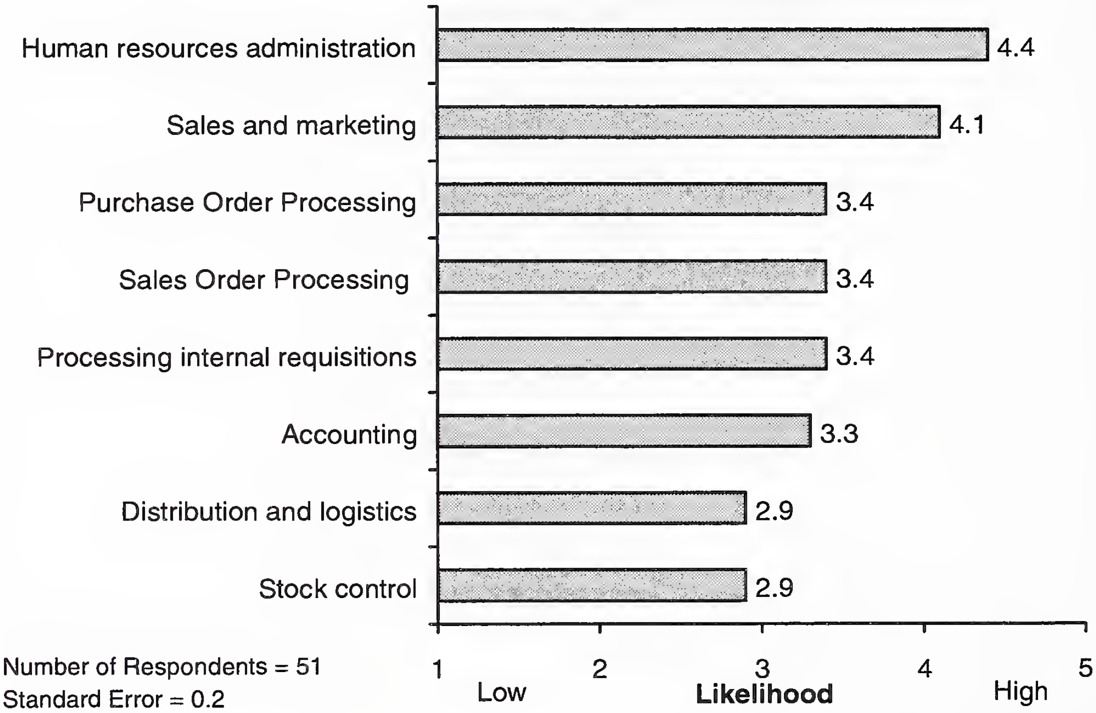
However, the highest levels of Intranet support for human resources administration are found in the financial services and retail sector, which typically have large numbers of highly distributed personnel.

While the manufacturing sector exhibits a relatively high propensity to use the Intranet for processing of internal requisitions, the retail sector is the most advanced in integrating Intranet support into its business processes. The retail sector shows relatively high levels of Intranet usage in core business functions such as stock control, distribution and logistics and sales order processing.

Exhibit III-6 shows the extent to which organizations are planning to Intranet-enable extensively each application by the end of 1998.

Exhibit III-6

Future Intranet-Enabling of Applications



Number of Respondents = 51
Standard Error = 0.2

Source: INPUT

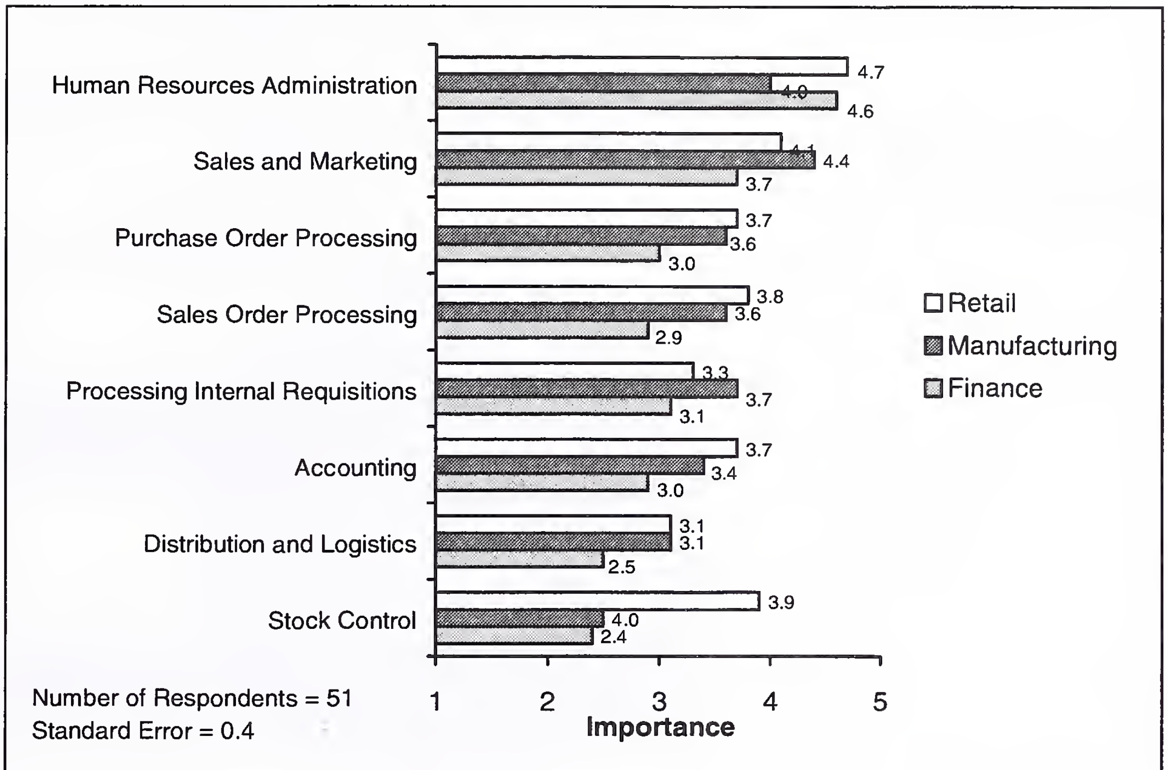
The focus of Intranet enabling in the short-term remains in continuing to develop support for human resources administration and sales and marketing.

Again the focus on developing Intranet support for sales and marketing is much more advanced in the U.S. than in Europe.

Exhibit III-7 shows, by industry sector, the extent to which organizations are planning to Intranet-enable extensively each application by the end of 1998.

Exhibit III-7

Future Intranet-Enabling of Applications by Industry Sector



Source: INPUT

Outside the areas of human resources administration and sales and marketing, the retail sector continues to have the most highly developed plans for Intranet support. Indeed, the retail sector is the only sector that shows a high level of propensity to Intranet enable stock control, reflecting the importance of tight stock control and visibility of product availability across numerous outlets. In addition, the retail sector has relatively high intentions to Intranet enable the related functions of sales order processing, purchase order processing and accounting.

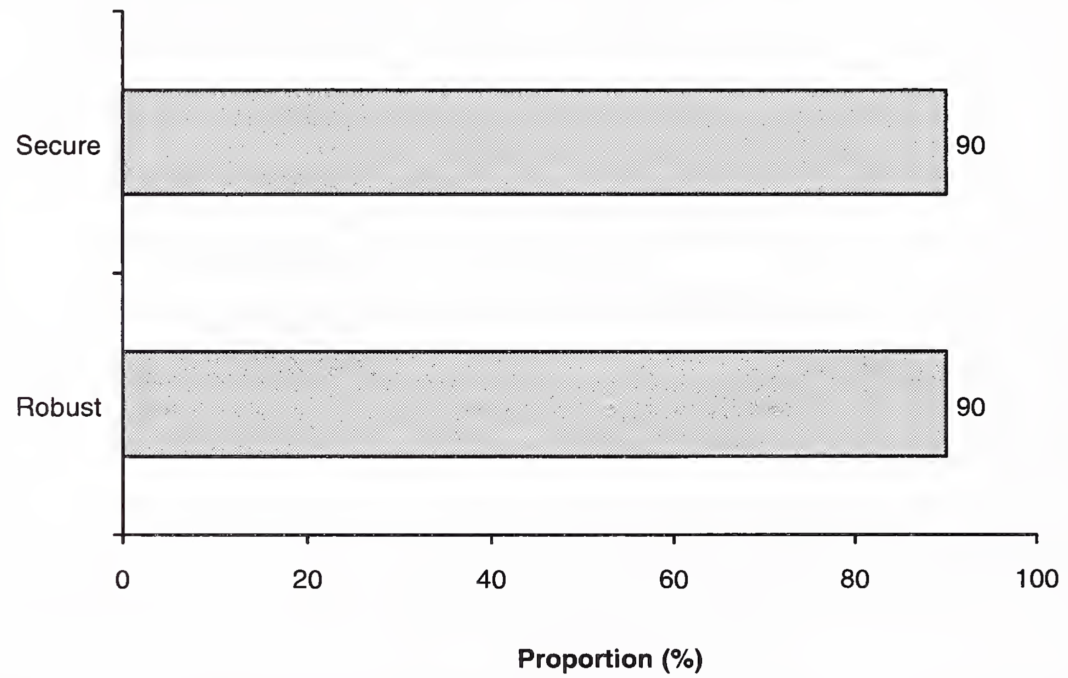
However, the manufacturing sector in the U.S. is beginning to show an increasing propensity to Intranet enable the processing of internal requisitions, purchase orders and sales orders.

Since Intranets are increasingly being used for mission critical applications such as sales order processing, it is important that they have the level of performance, stability and maturity appropriate to such use. Exhibit III-8 shows the ratings that respondents gave to their Intranets in terms of their:

- Robustness to support critical applications
- Being sufficiently secure to support critical applications.

Exhibit III-8

Maturity of Intranet



Number of Respondents = 51

Source: INPUT

The majority of respondents clearly perceive that their Intranets have achieved this level of maturity and these concerns should not impede the future development of Intranet usage.

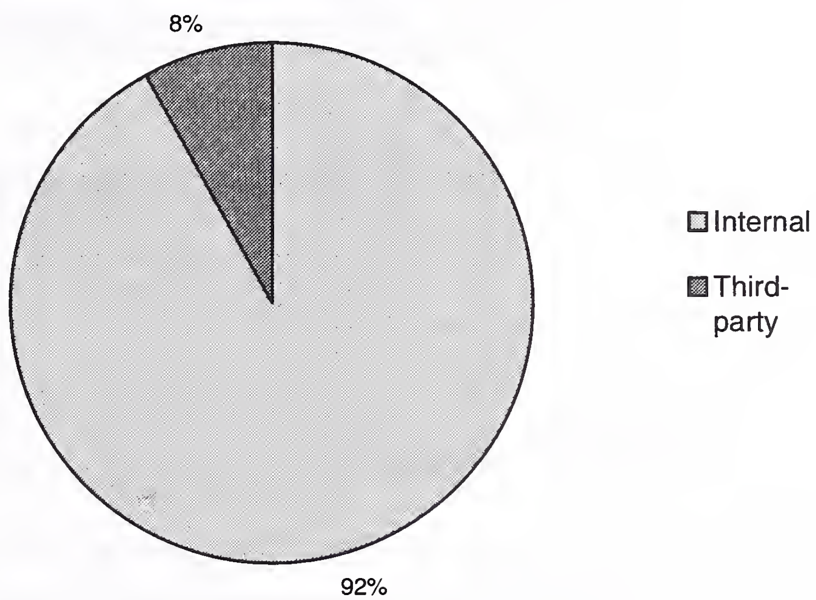
B

Intranet Support and Management

Exhibit III-9 shows the current split between internal and external Intranet operations and support.

Exhibit III-9

Source of Intranet Operations and Support



Source: INPUT

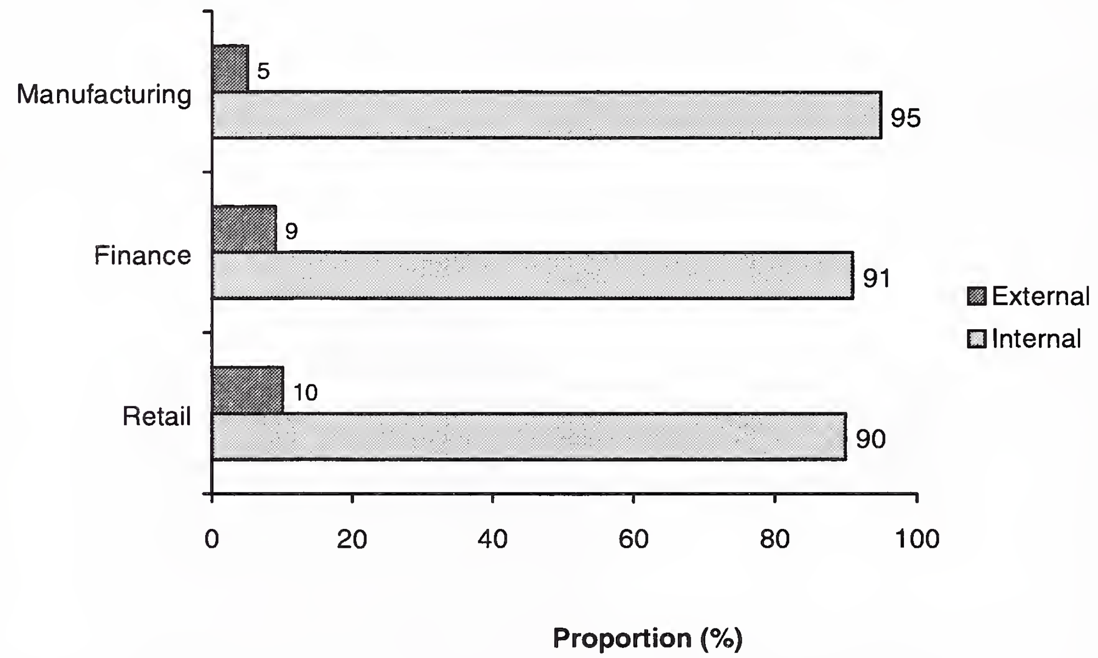
So far, organizations have tended to rely heavily on internal support. Intranets are typically viewed as relatively easy technology to support compared to traditional distributed systems technologies leading to greater emphasis on internal support and operations.

However, it is expected that the level of external involvement in Intranet operations and support will increase as use of Intranets becomes more extensive and Intranets become extensively used for mission critical applications such as sales order processing.

Exhibit III-10 shows, by industry sector, the current split between internal and external Intranet operations and support.

Exhibit III-10

Source of Intranet Operations and Support by Sector



Number of Respondents = 51

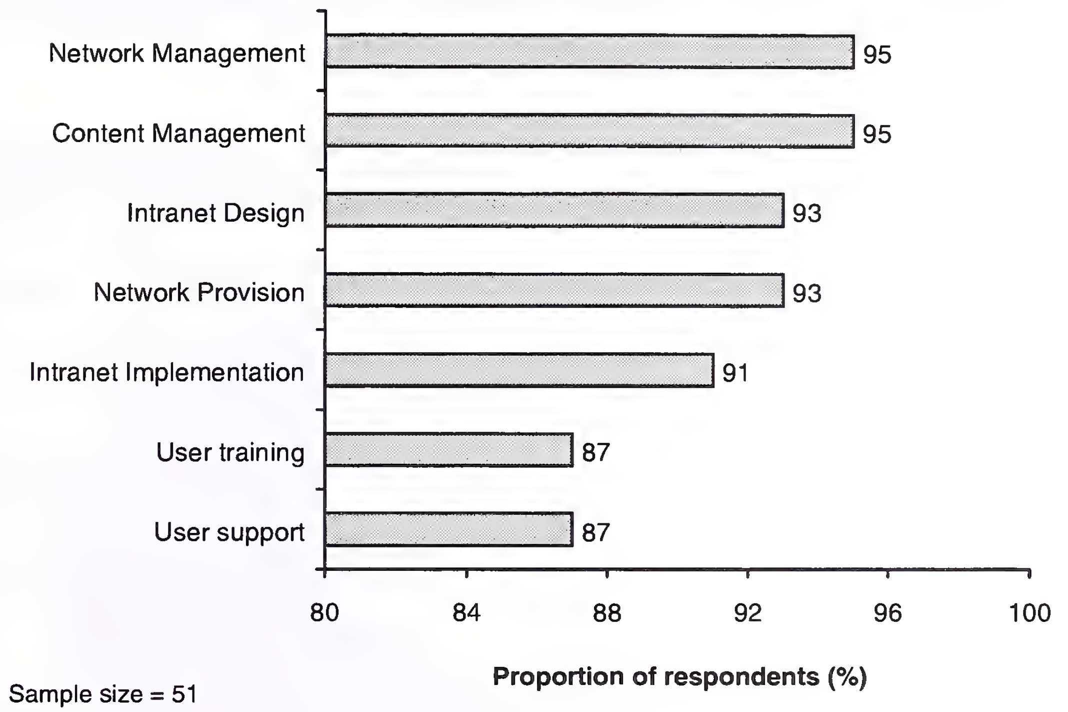
Source: INPUT

The retail sector, which has the greater use of Intranets for business critical applications, already shows the greatest propensity to subcontract Intranet operations and support, though the difference is ery marginal at present.

Exhibit III-11 shows the proportions of each support activity that are currently performed in-house.

Exhibit III-11

Source of Operations & Support by Activity



Source: INPUT

As is usual, with new IT technologies, organizations show some level of reliance on external vendors for design and implementation services. However, the level of reliance on external vendors for implementation is very low in the case of Intranet enabling compared to other technologies and types of development project. For example, the level of vendor involvement in a typical ERP implementation would be at least five times as high.

The highest reliance on external vendors in the U.S. is for user training and support. This pattern contrasts with that in Europe where IT departments are more reluctant to assign user support responsibility to vendors, believing that this weakens their ties with their internal clients.

Content management is an activity that would naturally be expected to remain in-house. However, the reliance on internal network management is surprisingly high, possibly the reflecting the perceived importance of this function within the organization.

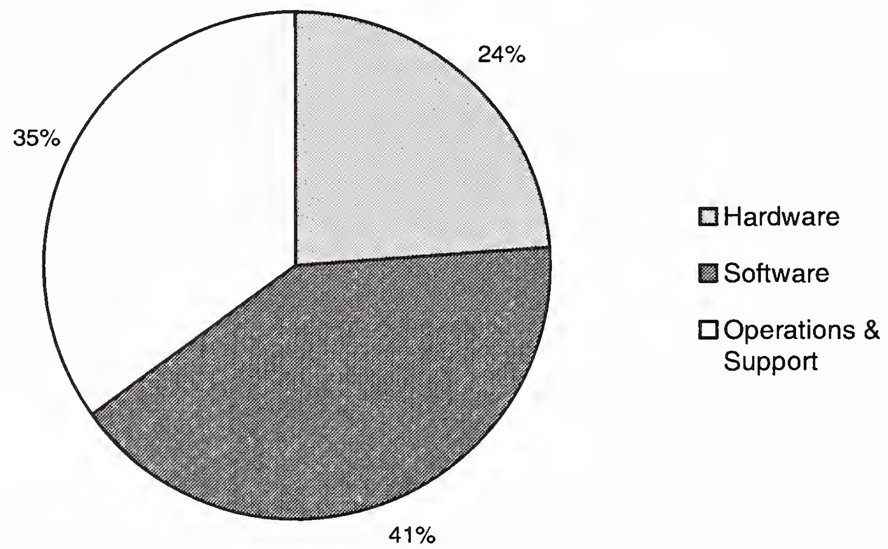
C

Intranet Support Expenditure

Organizations in the U.S. currently spend approximately $200 per employee per annum on Intranets and their support, a similar figure to that for Europe. Exhibit III-12 provides an estimate of the breakdown of Intranet budgets.

Exhibit III-12

Breakdown of Intranet Budget



Number of Respondents = 51

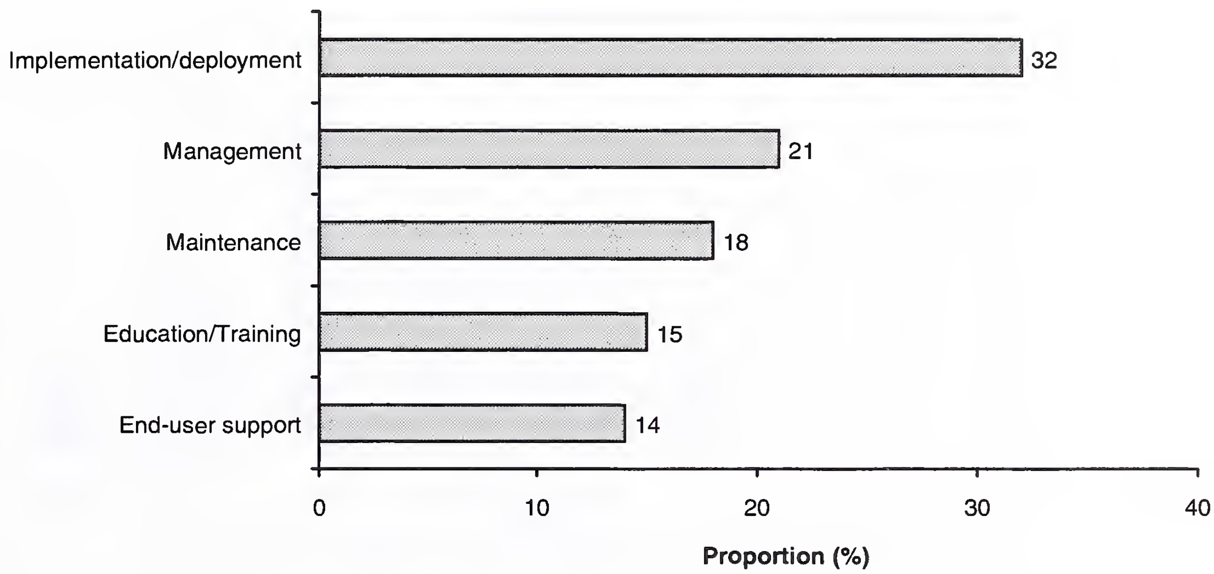
Source: INPUT

Operations and support costs account for less than half of the Intranet budget, suggesting that the overheads involved in supporting an Intranet are much lower than those incurred in supporting and operating a traditional desktop environment.

Intranet operations and support expenditure is further broken down by service type in Exhibit III-13. In this chart, the U.S. data is supplemented by that from the European interviews, giving a more global perspective.

Exhibit III-13

Breakdown of Intranet Operations and Support Expenditure



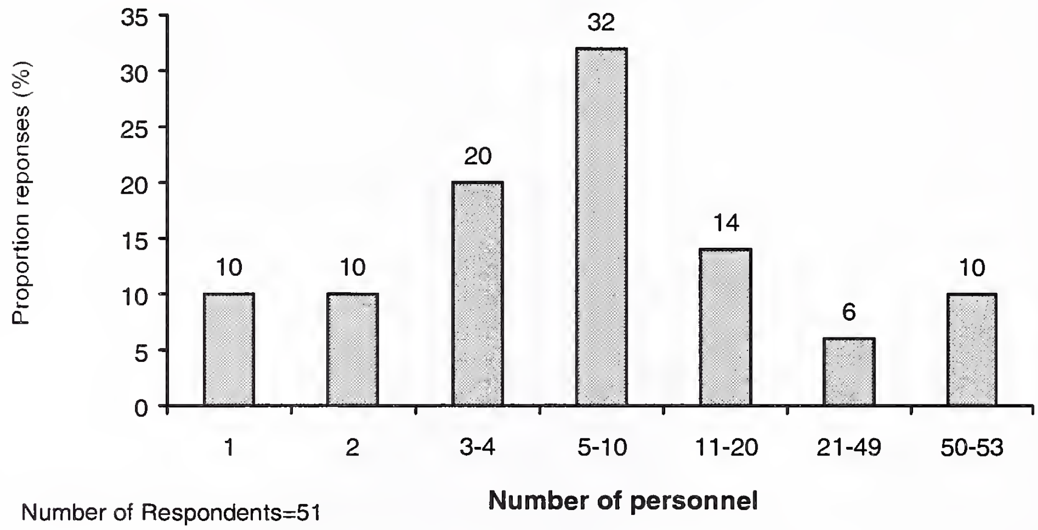
Number of Respondents = 50

Source: INPUT

Exhibit III-14 shows the profile of number of full-time personnel engaged in Intranet management and operations.

Exhibit III-14

Number of Personnel Involved in Intranet Management and Operations



Source: INPUT

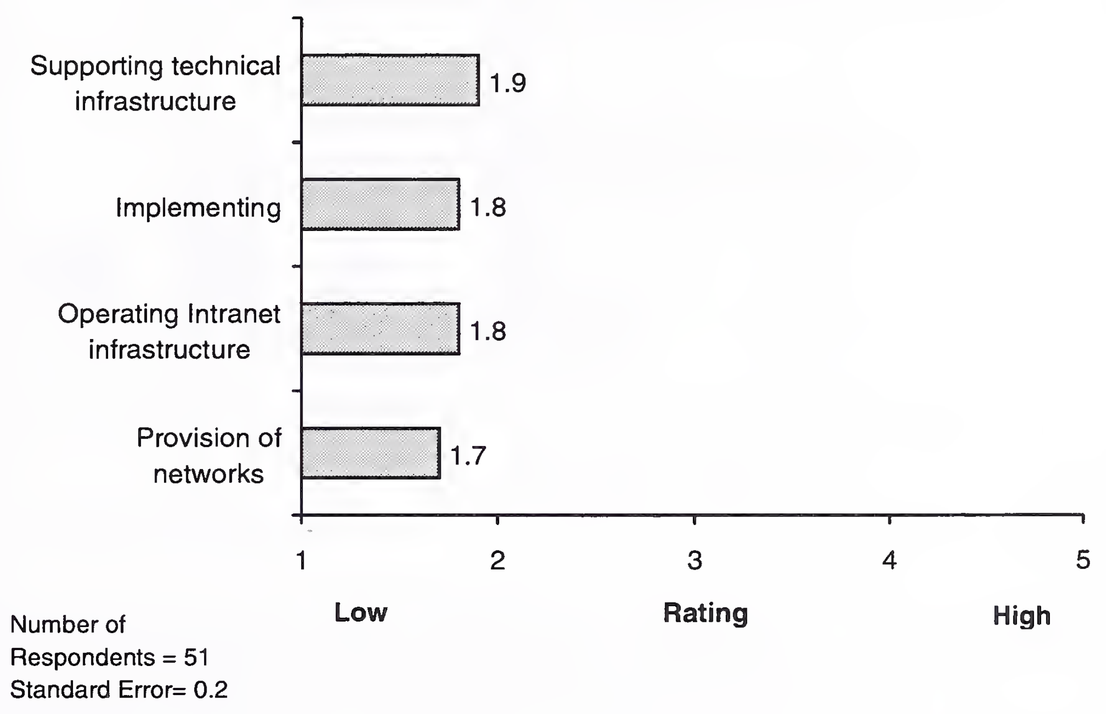
On average, organizations employ 11 full-time personnel in these activities. Only 1% of this manpower is currently estimated to be sourced from external service providers.

D
Future Service Requirements

Exhibit III-15 shows the extent to which organizations require support in each of a number of potential service areas.

Exhibit III-15

Future Service Requirements



Source: INPUT

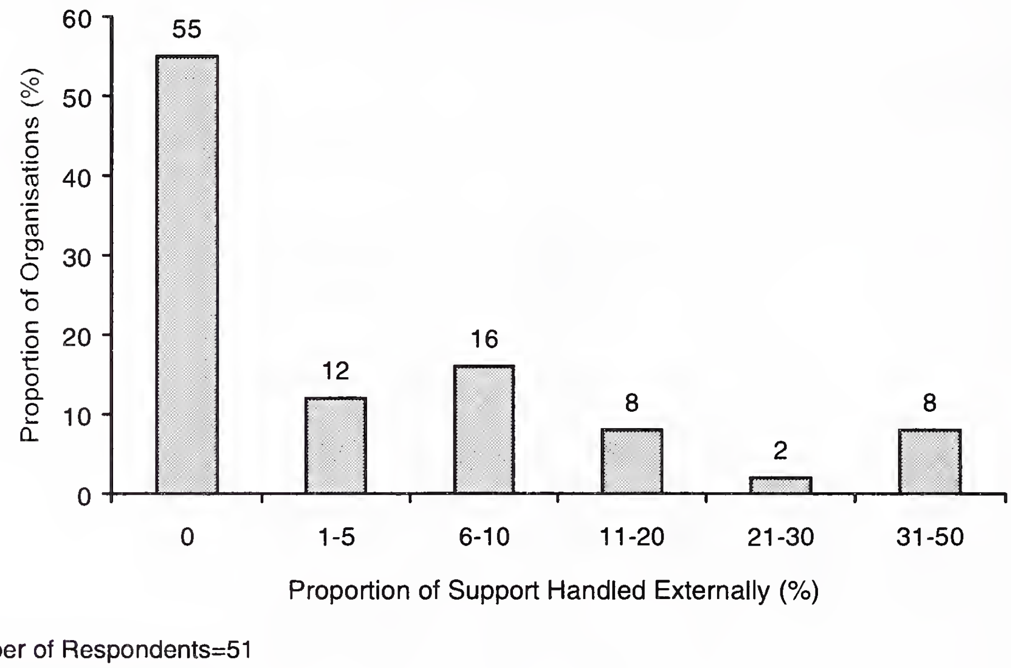
The overall ratings are similar across service areas and reflect a low level of interest in external services. However, the higher levels of interest in the use of external vendors are in the managed services aspects rather than in implementation services.

Eighteen per cent of respondents expressed a high level of interest in using external vendors for the operation of their Intranet infrastructure and 12% in supporting the technical infrastructure compared to the 6% of respondents who expressed a high level of interest in using external vendors for Intranet implementation services.

Exhibit III-16 shows the proportion of Intranet operations and support that organizations expect to be handled by third parties by year-end 1999.

Exhibit III-16

Planned Use of External Intranet Operations and Support



Source: INPUT

On average, organizations expect 8% of this activity to be handled externally in two years time, the same proportion as at the end of 1997. However with the proportion of medium to large organizations that are major Intranet users likely to increase from approximately 50% to 80% over this period, the overall growth in this market could reach 30% per annum in the short-term.

Exhibit III-17 shows, by industry sector, the proportion of Intranet operations and support that organizations expect to be handled by third parties by year-end 1999.

Exhibit III-17

Planned Use of External Intranet Operations and Support by Sector

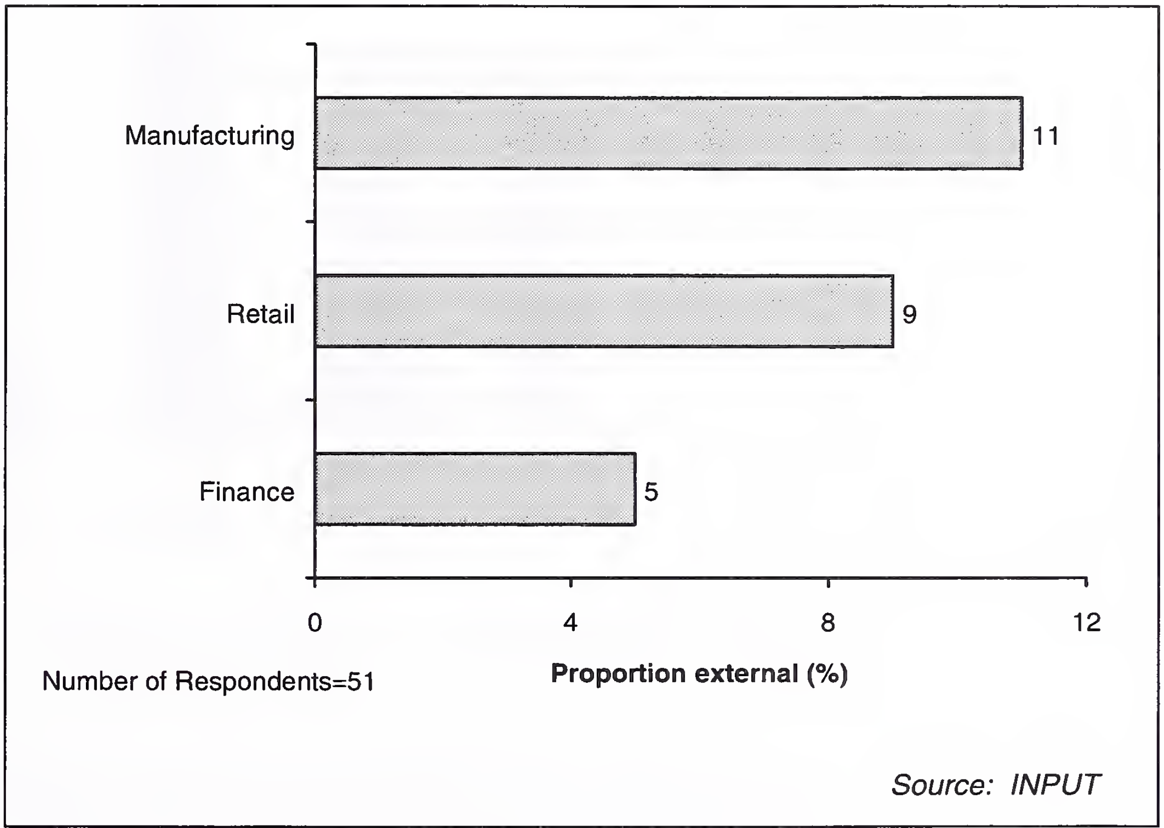
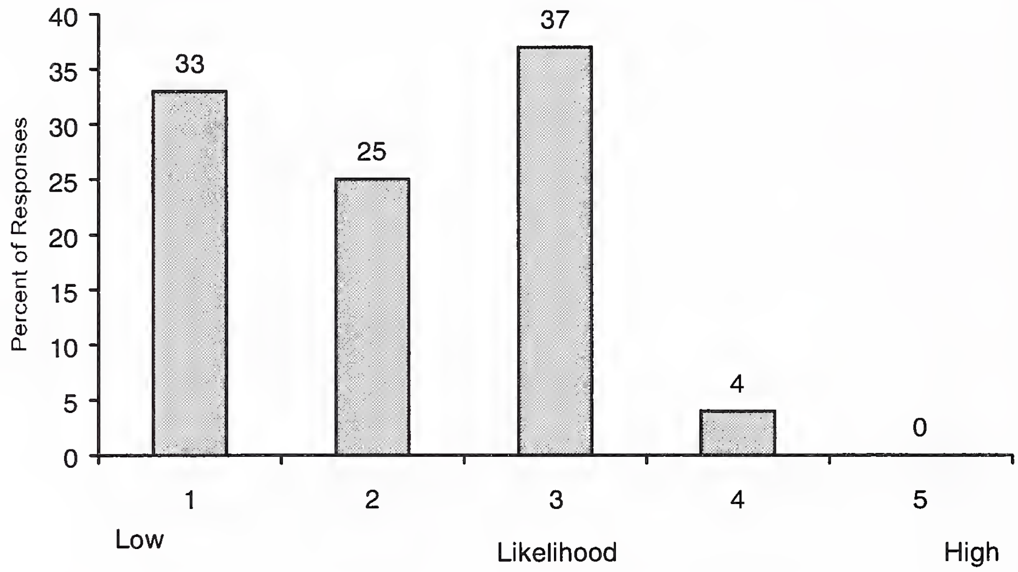


Exhibit III-18 shows the likelihood of organizations outsourcing the entire operation and support of their Intranet by year-end 1999.

Exhibit III-18

Planned Intranet Outsourcing



Number of Respondents=51

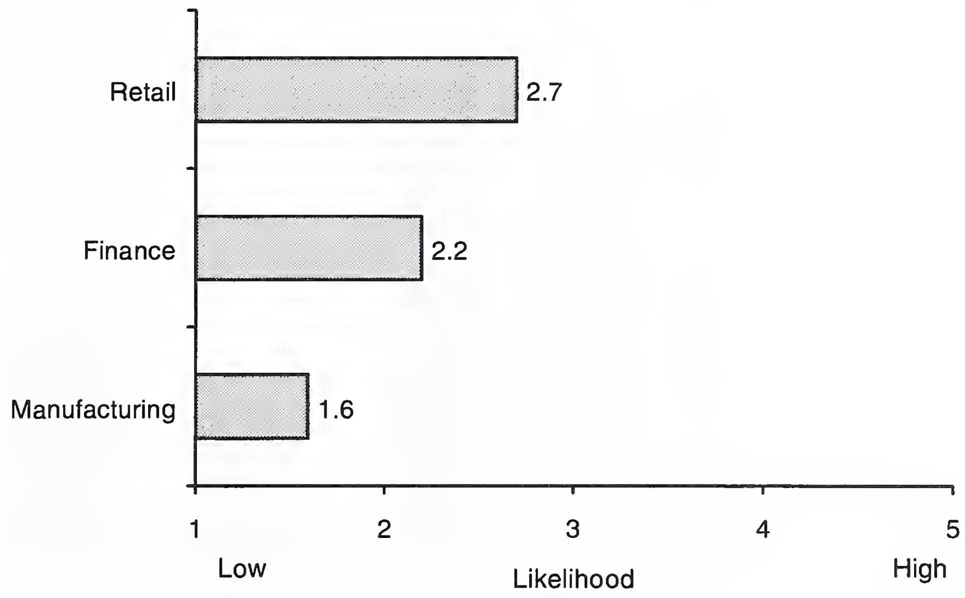
Source: INPUT

Approximately 4% of organizations are likely to take this approach to Intranet operations and support.

Exhibit III-19 shows, by industry sector, the likelihood of organizations outsourcing the entire operation and support of their Intranet by year-end 1999.

Exhibit III-19

Planned Intranet Outsourcing



Number of Respondents=51
Standard Error=0.2

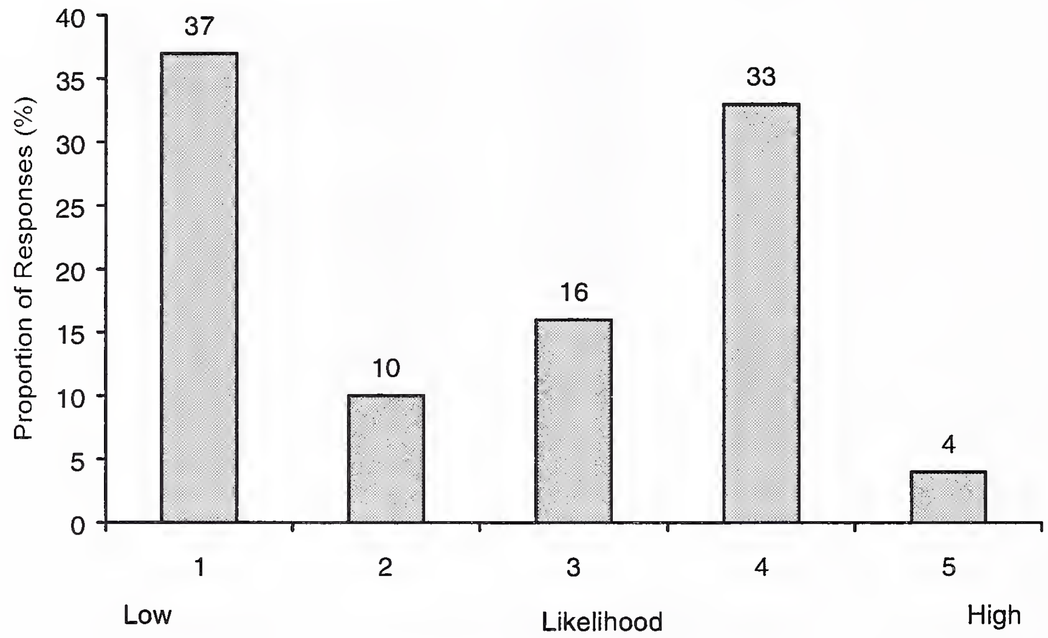
Source: INPUT

This suggests that organizations in the manufacturing sector in the U.S. will exhibit a relatively high level of demand for Intranet support services but will tend to stop short of outsourcing the entire operation and support of their Intranet. Organizations in the retail sector will show a similar overall propensity to purchase Intranet operations and support services, but will have a much higher propensity to adopt full outsourcing solutions.

Exhibit III-20 shows the extent to which organizations would like to purchase secure access to remotely hosted applications via the Internet or their Intranet.

Exhibit III-20

Likelihood of Purchasing Access to Remotely Hosted Applications



Number of Respondents=51

Source: INPUT

This approach is currently being considered by a number of vendors who perceive applications offered over the Internet as one way of targeting small and medium-sized organizations. In particular, ERP vendors such as SAP are considering this approach. SAP is believed to be currently searching for partners to offer SAP utility services on its behalf.

However, this survey suggests that there is also a market for this type of service among larger organizations. Indeed, respondents expressed much higher levels of interest in this type of service than in traditional Intranet operations and support services.

World-wide the types of application that respondents mentioned that they would like to access in this way included:

- All applications (14 mentions)
- Financial applications (9 mentions)
- Sales/sales order processing (4 mentions)

- Purchasing/purchase order processing (3 mentions)
- Electronic commerce (2 mentions)
- Customer data (2 mentions).

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IV

Satisfaction with Intranet Support and Management

A

In-house Support and Management

Exhibit IV-1 lists those aspects of in-house Intranet support and operations where respondents expressed a high level of satisfaction.

Exhibit IV-1

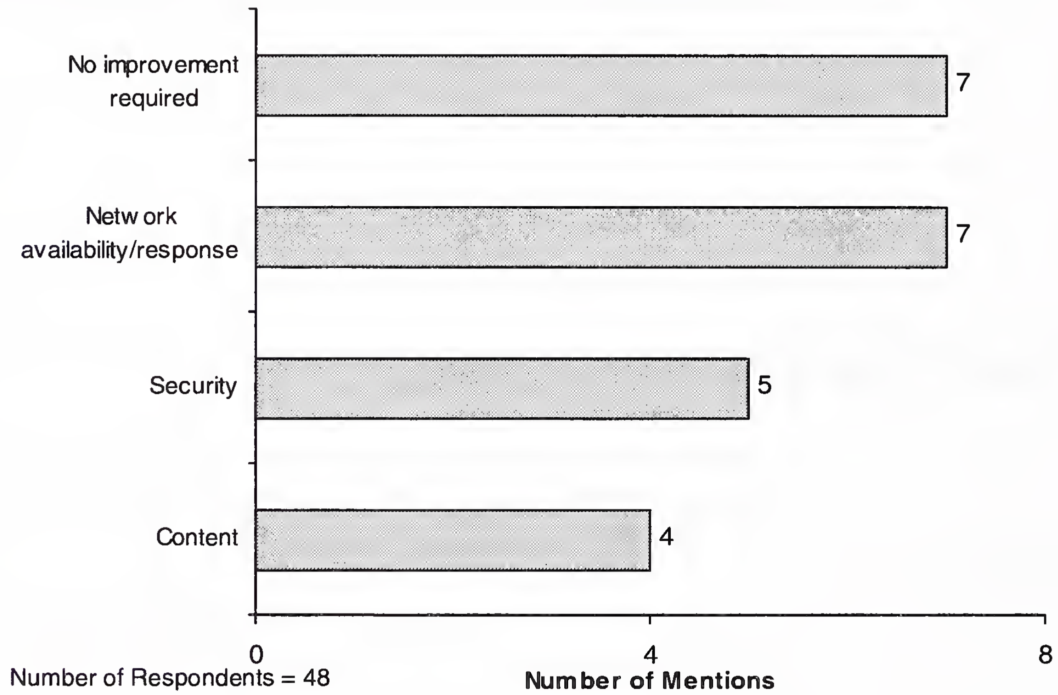
Areas of High Satisfaction

Source: INPUT

Overall there is a high level of satisfaction with in-house provision of Intranet support and operations, though respondents expressed a need for improvement in the areas listed in Exhibit IV-2.

Exhibit IV-2

Improvements Required



Source: INPUT

There are a number of areas where the number of mentions of high satisfaction was exceeded by the number of respondents seeking further improvement. These were:

- Network availability/response times
- Intranet content
- Training.

Clearly these represent service opportunities for vendors, though it may be difficult for vendors to improve the content management of Intranets since this would appear to be primarily an in-house responsibility.

The best strategies for vendors will be to emphasize their:

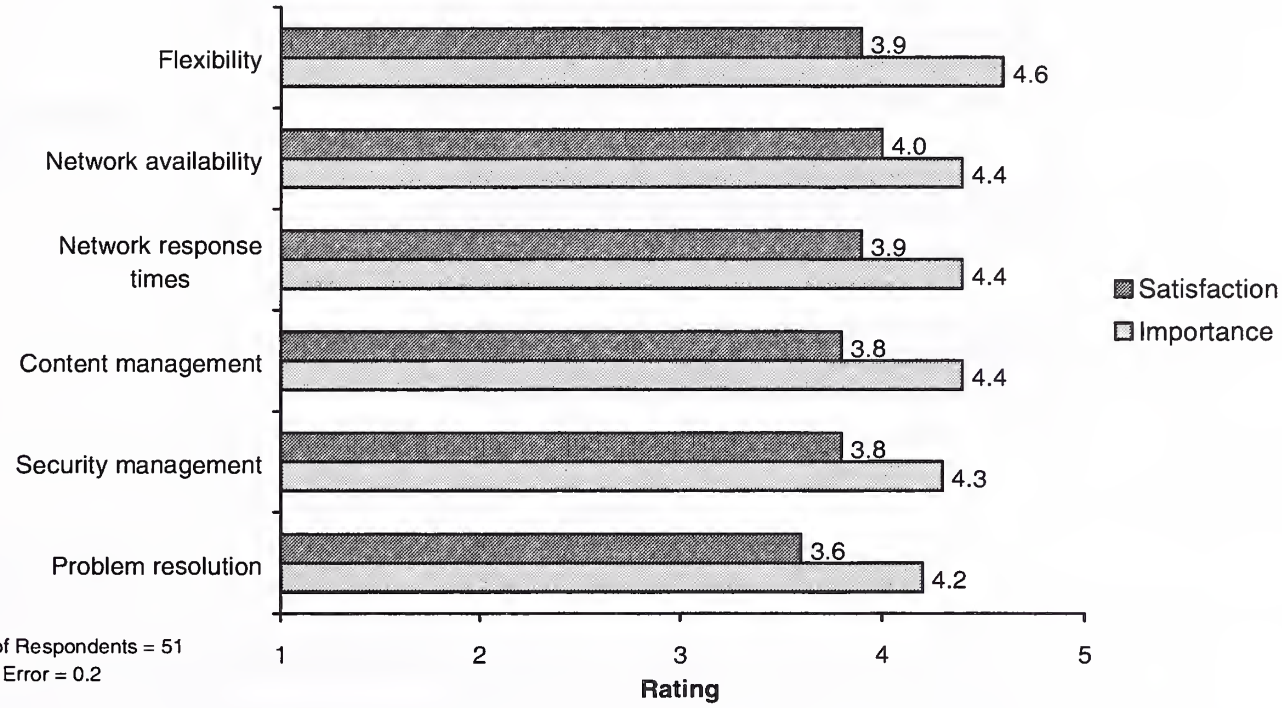
- Ability to organize large-scale user training and support facilities

- Ability to guarantee network availability, service levels and response times.

Exhibits IV-3 and IV-4 contrast importance and satisfaction with a number of features of in-house support and operations.

Exhibit IV-3

Areas of High Importance: In-house Support and Operations

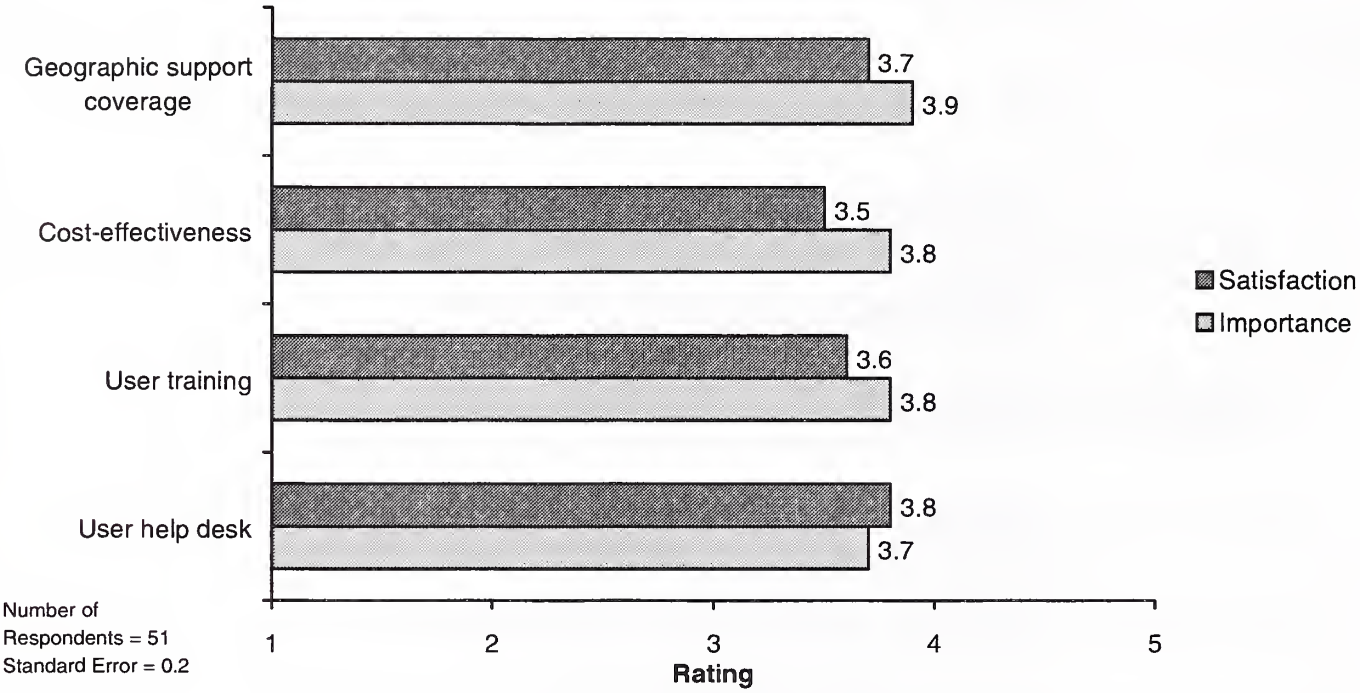


Number of Respondents = 51
Standard Error = 0.2

Source: INPUT

Exhibit IV-4

Areas of Lesser Importance: In-house Support and Operations



Number of Respondents = 51
Standard Error = 0.2

Source: INPUT

Problem resolution and user training are areas of relatively low satisfaction within in-house Intranet support and operations. These are areas in which vendors should emphasize their capability though user training was stated to be an area of only medium importance.

Other areas where there is a significant gap between importance and satisfaction are content management and security management. Vendors should emphasize security management as part of a high availability Intranet offering.

Exhibits IV-5 to IV-7 contrast importance and satisfaction with a number of features of in-house support and operations for the financial services, manufacturing and retail sectors respectively.

Exhibit IV-5

Satisfaction with In-house Support and Operations: Financial Services Sector

Feature	Importance	Satisfaction	Difference
Flexibility	4.7	4.6	0.1
Security management	4.7	4.2	0.5
Network response	4.7	4.1	0.5
Content management	4.6	4.3	0.3
Problem resolution	4.6	3.9	0.7
Network availability	4.5	4.3	0.2
Geographic coverage	4.3	4.3	0.0
User training	4.3	4.1	0.2
User help-desk	4.2	4.3	-0.1
Cost-effectiveness	4.1	3.9	0.3

Source: INPUT

Exhibit IV-6

Satisfaction with In-house Support and Operations: Manufacturing Sector

Feature	Importance	Satisfaction	Difference
Network availability	4.8	4.2	0.6
Network response	4.6	4.2	0.5
Content management	4.5	3.6	0.9
Flexibility	4.4	3.8	0.6
Security management	4.4	3.7	0.7
Problem resolution	4.4	3.5	0.9
Cost-effectiveness	4.0	3.4	0.6
User training	3.8	3.6	0.3
User help-desk	3.7	3.5	0.3
Geographic coverage	3.6	3.3	0.3

Source: INPUT

Exhibit IV-7

Satisfaction with In-house Support and Operations: Retail Sector

Retail	Importance	Satisfaction	Difference
Content management	4.9	4.4	0.4
Network response	4.7	4.2	0.5
Flexibility	4.6	4.4	0.3
Geographic coverage	4.6	4.4	0.2
Security management	4.6	4.2	0.4
Network availability	4.5	4.3	0.2
Problem resolution	4.4	4.4	0.0
Cost-effectiveness	4.1	4.0	0.1
User help-desk	3.9	4.4	-0.4
User training	3.9	3.9	0.0

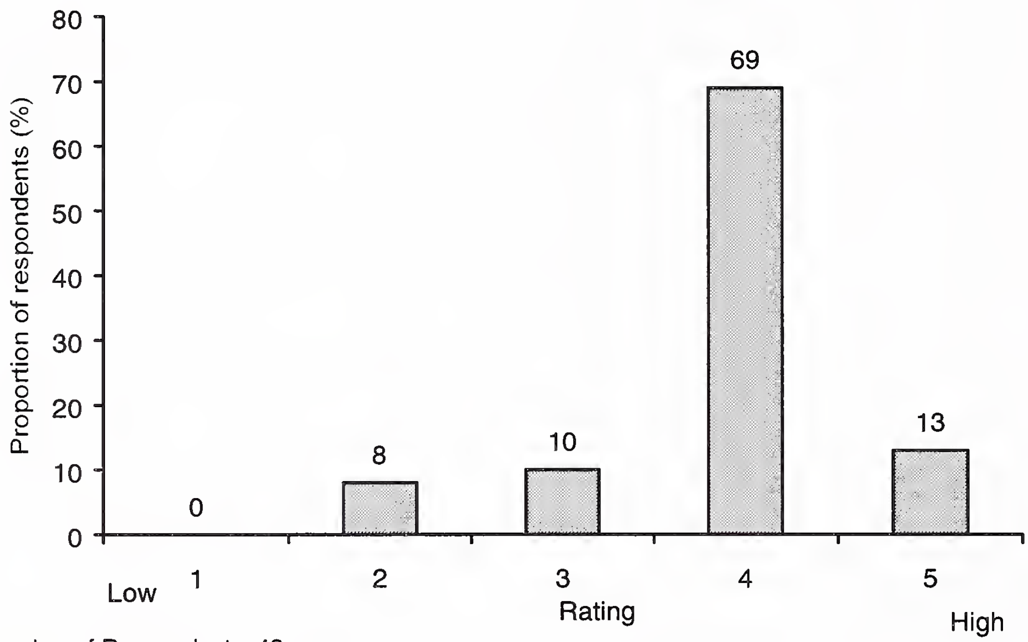
Source: INPUT

The shortfalls indicated reflect the natures of the differing industries with cost-effectiveness being a major concern and shortfall in the manufacturing sector and network availability and security the major concerns in the financial services and retail sectors.

IT managers' perception of the overall adequacy of their in-house Intranet support and operations to support future business needs is shown in Exhibit IV-8.

Exhibit IV-8

Suitability of In-house Support and Operations for Future Business Needs



Number of Respondents=48

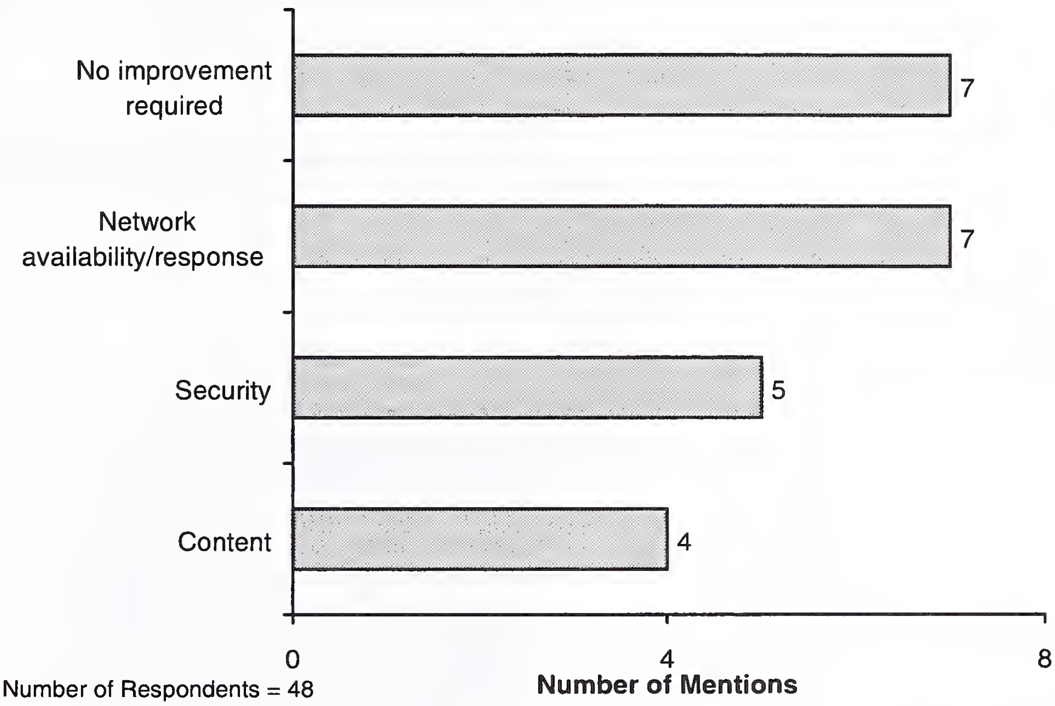
Source: INPUT

A much higher proportion of IT managers in the U.S. (80%) than in Europe (55%) perceive that in-house support and operations are highly adequate to support their organization's future business needs. The opportunity for vendors lies in the 8% who perceive that their in-house Intranet support and operations are inadequate to support future business needs. Of course, a proportion of these may take action to improve their in-house capabilities rather than turn to an external vendor for assistance.

Exhibit IV-9 lists the areas that IT managers identified as being in need of improvement in order to address future business needs.

Exhibit IV-9

Areas for Improvement: In-house Intranet Support and Operations



Number of Respondents = 48

Source: INPUT

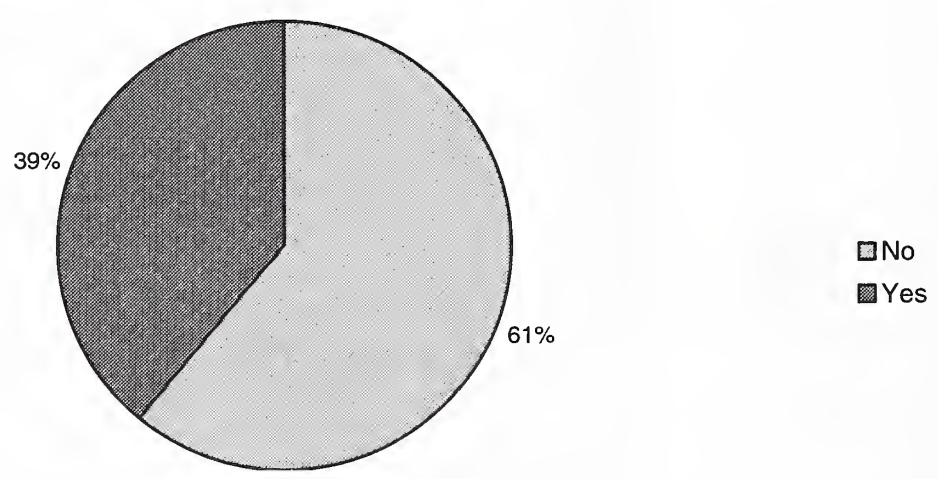
Network availability and security is a major theme and hence significant opportunity for external vendors.

B
Service Level Agreements

Exhibit IV-10 shows the proportion of organizations that have a service level agreement in place for their Intranet.

Exhibit IV-10

Presence of Service Level Agreement



Number of Respondents=51

Source: INPUT

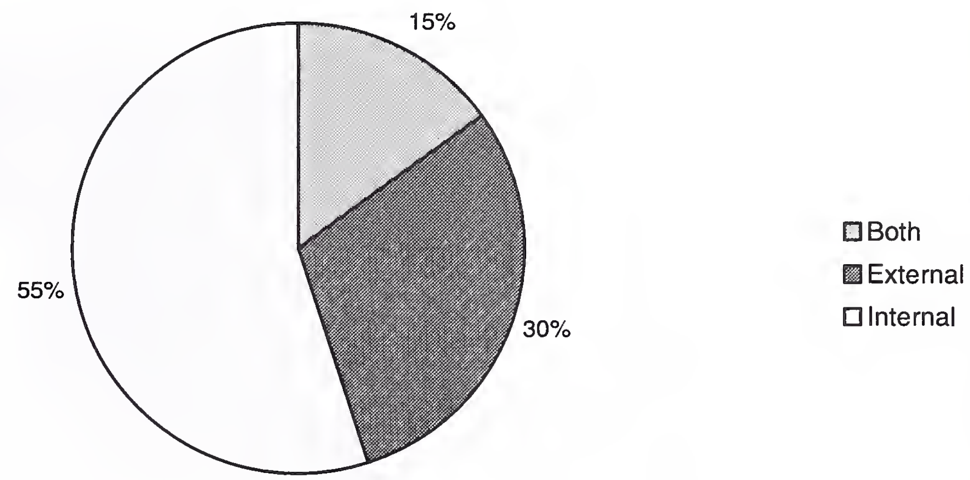
Surprisingly the majority of organizations in the U.S. do not yet have service level agreements in place for their Intranet support and operations.

To some extent, this reflects the bimodal pattern of Intranet usage with a minority of organizations having made their Intranets available to more than 75% of the organization's employees while others are still only piloting their Intranets to a relatively small proportion of users.

Exhibit IV-11 shows the profile of types of SLA in place.

Exhibit IV-11

Type of SLA



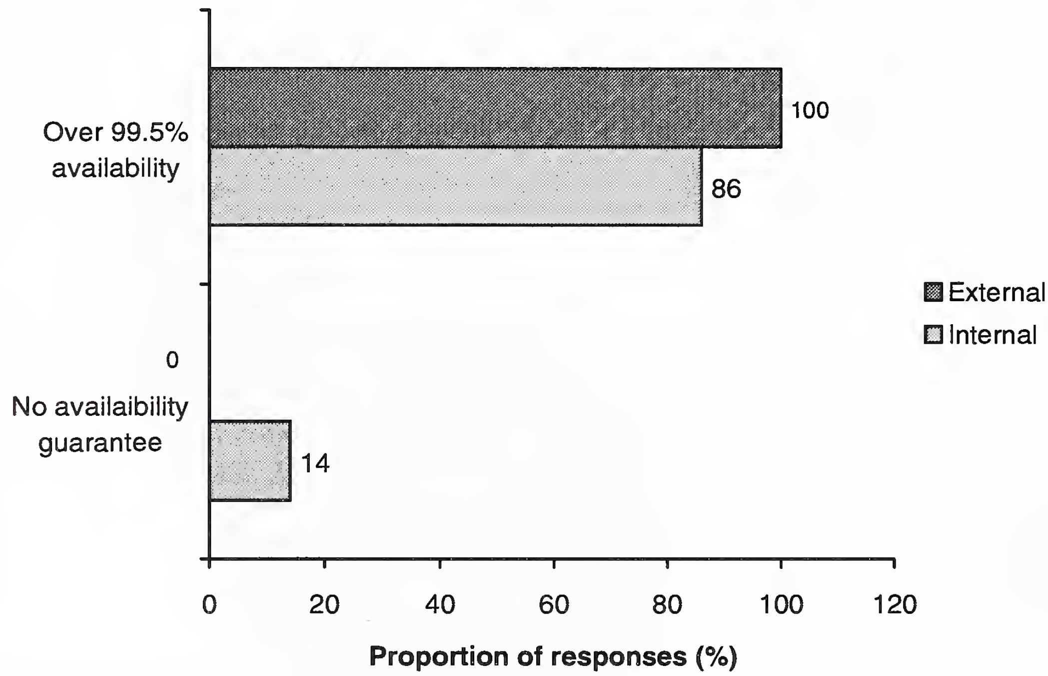
Number of Respondents=20

Source: INPUT

Exhibit IV-12 contrasts the profile of network availability guarantees between internal and external Intranet support and operations agreements.

Exhibit IV-12

Network Availability: Internal & External SLAs



Number of Respondents = 23

Source: INPUT

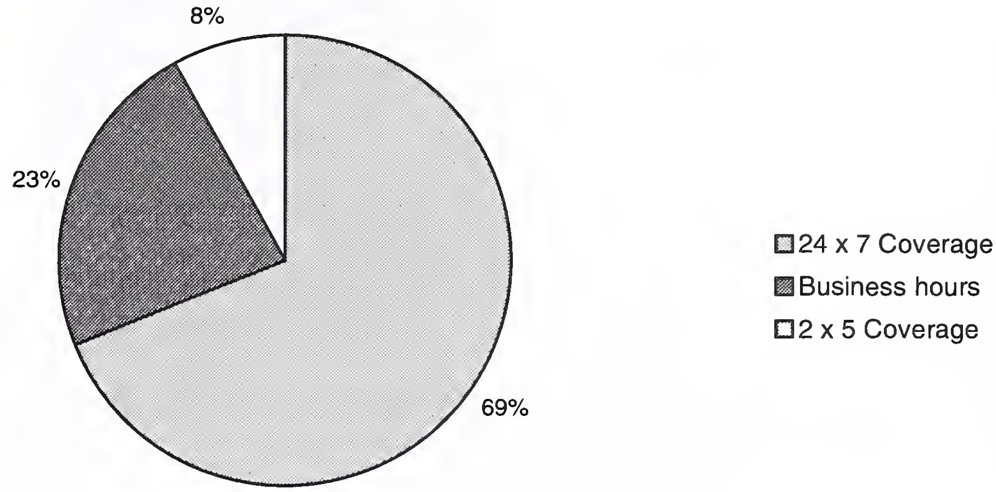
Overall network availability guarantees are very high for Intranets with the overwhelming majority of Intranet availability guarantees exceeding 99.5% availability.

Similarly service coverage is very high with the majority of both internal and external service level agreements providing 24x7 coverage. As might be expected, both SLAs and service coverage tend to be higher with external vendors than agreements with in-house service providers.

Exhibits IV-13 and IV-14 show the profile of service coverage for internal and external service level agreements.

Exhibit IV-13

Service Coverage: Internal SLAs

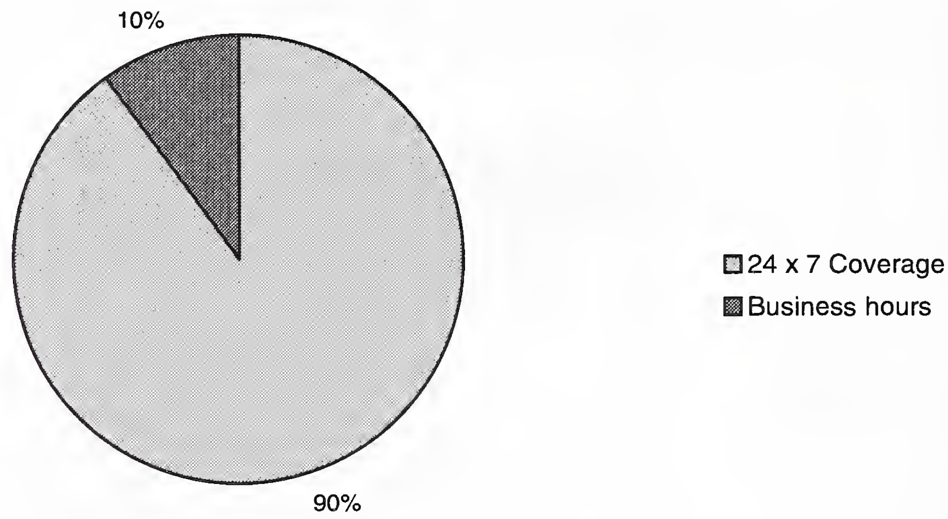


Number of Respondents=13

Source: INPUT

Exhibit IV-14

Service Coverage: External SLAs



Number of Respondents=10

Source: INPUT

V

Vendor Positioning

A Awareness of Vendors

Exhibit V-1 lists the number of organizations in the sample that use, or have used, each of the vendors mentioned for Intranet support or operations.

Exhibit V-1

Vendors Used

Vendor	Use or have used (number of mentions)
IBM	7
HP	4
MCI/SHL	4
Sun	2
Digital	1
GEIS	1
Unisys	1

Source: INPUT

At present, organizations tend to favor the major equipment and telco vendors, such as IBM, HP, Sun and MCI, rather than the major services vendors such as EDS, CSC and Andersen Consulting.

Exhibit V-2 lists the level of awareness of a range of potential Intranet services vendors.

Exhibit V-2

Vendor Awareness

Vendor	Awareness (Number of mentions)
IBM	30
HP	24
Sun	20
AT&T Solutions	20
Digital	18
Andersen Consulting	12
Sprint	12
Unisys	11
Cap Gemini	11
NCR	11
EDS	10
MCI/SHL	9
GEIS	9
CSC	9
PW & Coopers & Lybrand	6
Alltel	2

Source: INPUT

In terms of overall awareness as vendors of Intranet services, the list is still headed by the same leading equipment vendors. However, the telcos AT&T Solutions and Sprint are becoming more prominent in the marketplace and can be expected to increase their presence.

Exhibit V-3 lists the number of respondents that were able to provide a rating of the Intranet operations and management services for each vendor together with the rating received.

Exhibit V-3

Awareness of Capability

Supplier	Number of mentions	Average
IBM	30	3.6
HP	24	3.2
Sun	20	3.1
AT&T Solutions	20	2.9
Digital	18	3.1
Andersen Consulting	12	2.5
Sprint	12	2.2
Unisys	11	2.9
Cap Gemini	11	2.6
NCR	11	2.4
EDS	10	2.7
MCI/SHL	9	3.4
GEIS	9	2.7
CSC	9	2.3
PW & Coopers & Lybrand	6	2.8
Alltel	2	2.0

Source: INPUT

Exhibit V-4 provides the same information sorted by capability rating.

Exhibit V-4

Perceived Capability Rating

Supplier	Average	Number of mentions
IBM	3.6	30
MCI/SHL	3.4	9
HP	3.2	24
Sun	3.1	20
Digital	3.1	18
AT&T Solutions	2.9	20
Unisys	2.9	11
PW & Coopers & Lybrand	2.8	6
EDS	2.7	10
GEIS	2.7	9
Cap Gemini	2.6	11
Andersen Consulting	2.5	12
NCR	2.4	11
CSC	2.3	9
Sprint	2.2	12
Alltel	2.0	2

Source: INPUT

IBM, Sun, HP and Digital are among the leading vendors both in terms of current usage and level of perceived capability.

Among the telcos MCI has a relatively high level of current usage and a high perceived capability. However, the company has only a relatively moderate level of awareness and lags behind AT&T Solutions in terms of overall awareness.

Appendix A

Perceived Intranet Services Capability Profiles by Vendor

Exhibits A-1 to A-6 show the perceived Intranet services capability profiles by vendor.

Exhibit A-1

AT&T

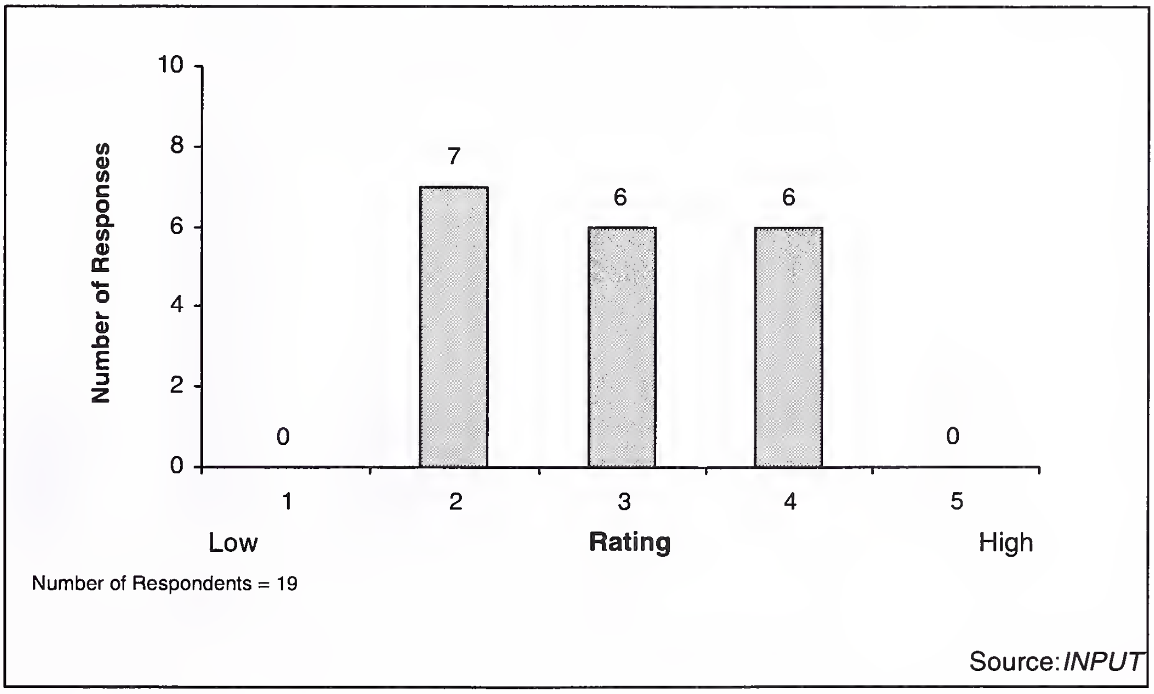
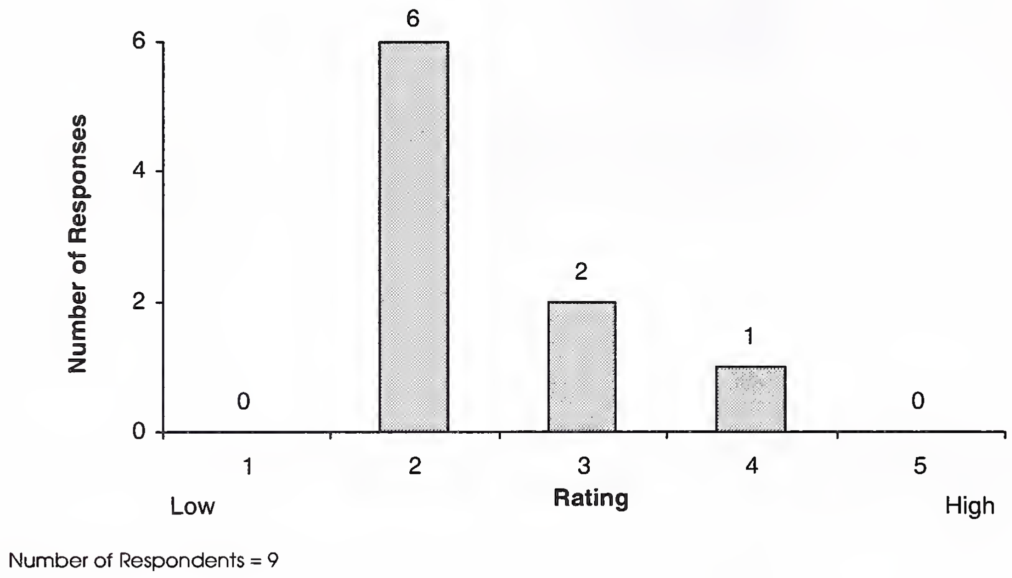


Exhibit A-2

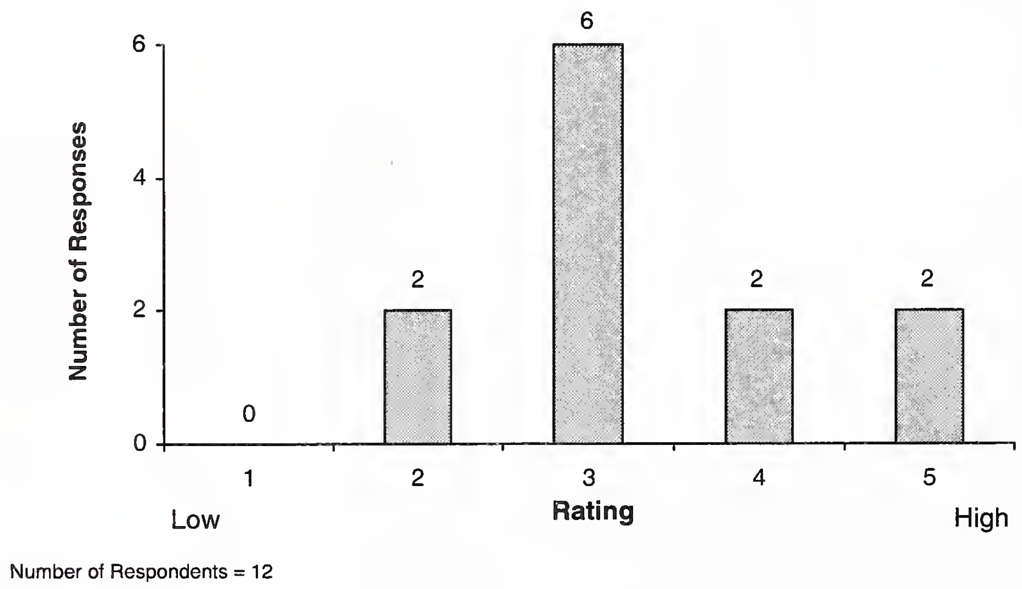
Alltel



Source: INPUT

Exhibit A-3

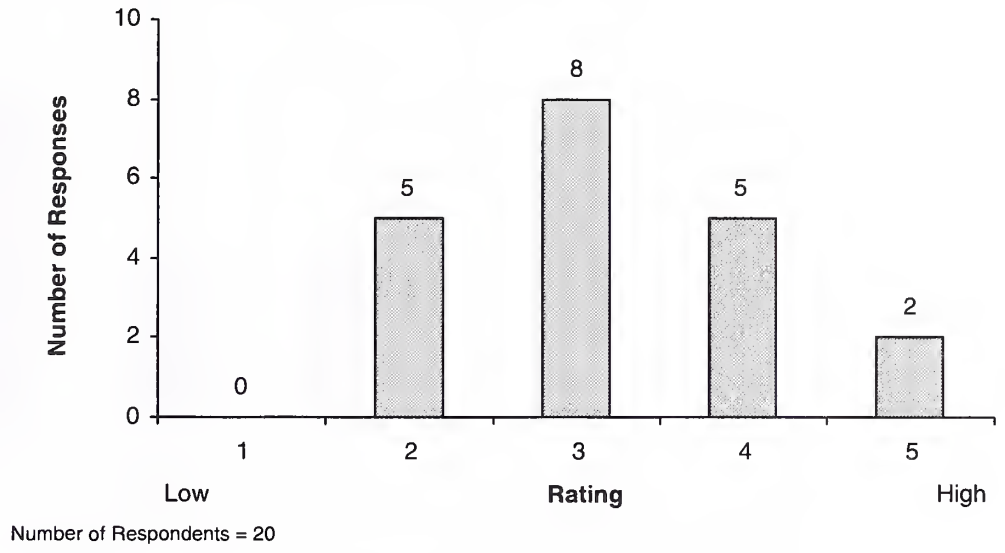
Digital



Source: INPUT

Exhibit A-4

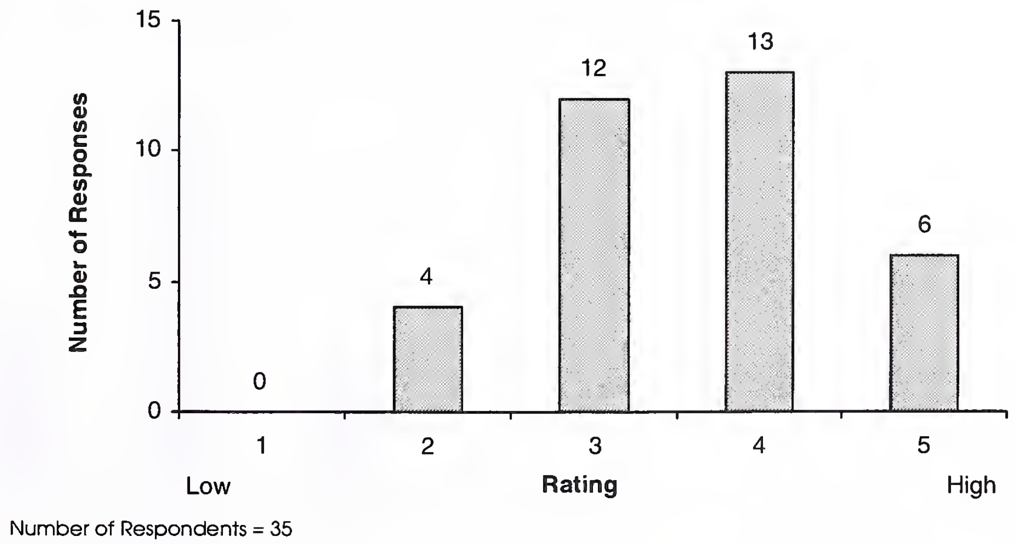
HP



Source: INPUT

Exhibit A-5

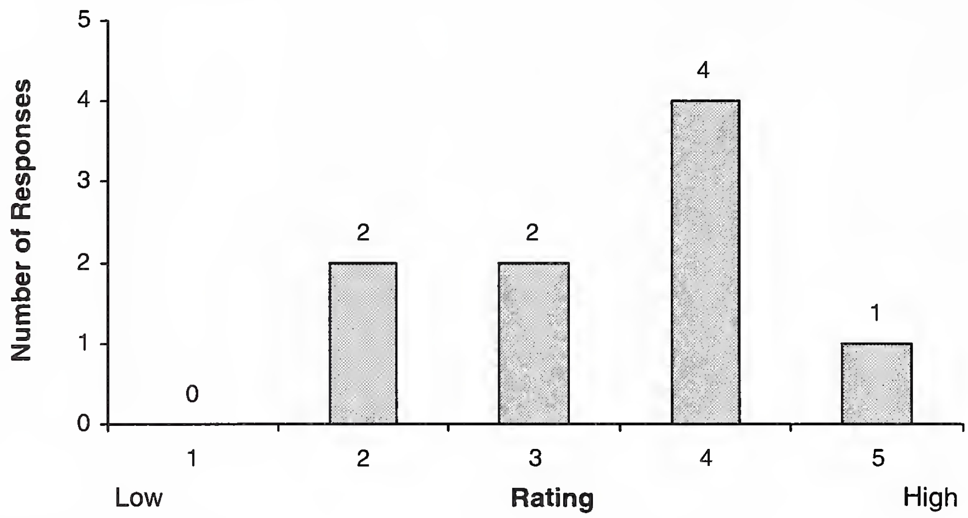
IBM



Source: INPUT

Exhibit A-6

MCI/SHL

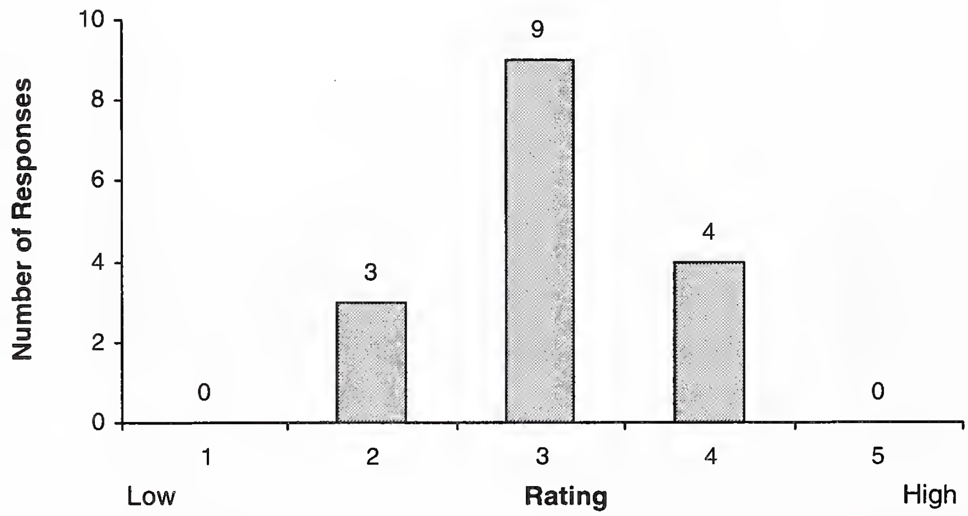


Number of Respondents = 8

Source: INPUT

Exhibit A-7

SUN

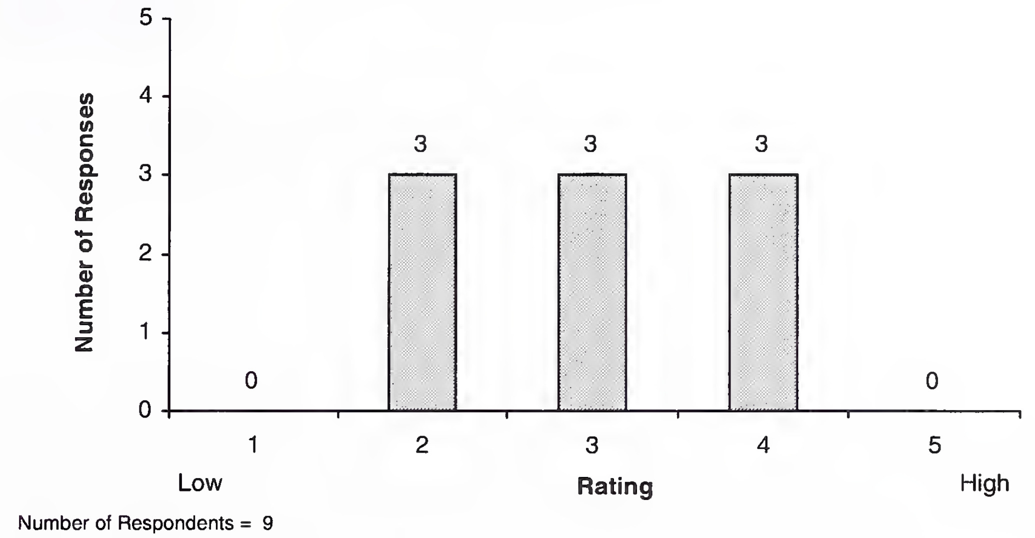


Number of Respondents = 16

Source: INPUT

Exhibit A-8

Unisys



Source: INPUT

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B

Questionnaire

The areas covered by this questionnaire relate to Assessment of Intranet Managed Services. The questionnaire is to be completed by or on behalf of Chief Information Officers, Financial & Administrative Directors, and Chief Executive Officers who are directly implicated in Intranet Managed Services Operations. A report will be produced from the analysis of the completed questionnaires.

All interviewees will receive the executive overview of the survey and a Buyers' Guide presenting the Intranet Managed Services offering of all vendors sponsoring INPUT market research.

SECTION A - Current Intranet Usage

1. Has your organization already implemented an Intranet?*(please circle)*

   Yes No

   Interviewer - If the Answer is Yes - GO TO Question 2
   If the Answer is No - Stop the interview

2. What were your major reasons for implementing an Intranet?

   ____
   ____
   ____

3. How important were each of the following reasons? (Please rate on a scale of 1-5 where 1=not at all important and 5=very important)

   ___ Ease of access to internal information

   ___ Integration of key applications

   ___ Ease of communication with customers and/or suppliers

   ___ To prepare for development of electronic commerce

   ___ Platform standardization

   ___ Business cost savings Level of savings achieved ___%

   ___ IT cost savings Level of savings achieved ___%

4. What are the main applications supported by your Intranet?

   ____
   ____
   ____

   To what extent does your Intranet currently support each of the following applications? (Please rate on a scale of 1-5 where 1=not at all and 5=extensively)

   ___ Accounting

   ___ Sales order processing

   ___ Purchase order processing

___ Processing of internal requisitions

___ Distribution and logistics

___ Sales and marketing

___ Stock control

___ Human resources administration

___ Other (please specify:_______________________________)

6. How likely are you to extensively Intranet-enable each of the following applications within 12 months? (Please rate on a scale of 1-5 where 1=not at all likely and 5=very likely)

___ Accounting

___ Sales order processing

___ Purchase order processing

___ Processing of internal requisitions

___ Distribution and logistics

___ Sales and marketing

___ Stock control

___ Human resources administration

___ Other (please specify:_______________________________)

7. Is your Intranet?

___ Sufficiently robust to support critical applications?

___ Sufficiently secure to support critical applications?

Comments:____

____

SECTION B - Intranet Support and Management

8. What proportion of your Intranet operations and support are handled internally and what proportion handled by a third-party?

   ____% Internal

   ____% External

9. What proportion of each of the following activities are performed in-house?

   ___% Intranet design

   ___% Intranet implementation

   ___% User training

   ___% User support

   ___% Network provision

   ___% Network management

   ___% Content management

Note to interviewer: If external spending in question 8 is more than 50% skip Section C and ask Section D. Otherwise omit Section D.

SECTION C - In-house Intranet Support and Management

10. Which aspects of your in-house provision of Intranet support and operations are you pleased with?

____

____

____

11. Which aspects of your in-house provision of Intranet support and operations show room for improvement?

____

____

12. How important are and how satisfied are you with each of the following aspects of in-house Intranet support and operations? (Please rate on a scale of 1-5 where 1=not at all important/satisfied and 5=very important/satisfied)

	Importance	Satisfaction
Network response times	___	___
Network availability	___	___
Geographic support coverage	___	___
Cost-effectiveness	___	___
User training	___	___
User help-desk	___	___
Problem resolution	___	___
Security management	___	___
Content management	___	___
Flexibility	___	___

13a How adequate is your in-house Intranet support and operations to support future business needs? (Please rate on a scale of 1-5 where 1=not at all adequate and 5=very adequate)

___

If scores 4 or more, go to Q14.

13b Which aspects of your in-house Intranet support and operations need to be improved to address future needs?

____

____

SECTION D - Third-Party Intranet Support and Management

14. Which aspects of your third-party provision of Intranet support and operations are you pleased with?

____

____

____

15. Which aspects of your third-party provision of Intranet support and operations show room for improvement?

____

____

16. How important are and how satisfied are you with each of the following aspects of third-party Intranet support and operations? (Please rate on a scale of 1-5 where 1=not at all important/satisfied and 5=very important/satisfied)

	Importance	Satisfaction
Network response times	___	___
Network availability	___	___
Geographic support coverage	___	___
Cost-effectiveness	___	___
User training	___	___
User help-desk	___	___

Problem resolution	___	___
Security management	___	___
Content management	___	___
Flexibility	___	___

17a What benefits did you expect to achieve by using a third party for Intranet support? To what extent have each of these benefits been achieved? (Please rate on a scale of 1-5 where 1=not at all and 5=very well)

Benefit	*Level of achievement*
______________________________	__________
______________________________	__________
______________________________	__________

17b If you expected to achieve cost savings, what proportion cost savings have you achieved in practice? ___%

SECTION E - SLAs

18a. Do you have a Service Level Agreement (SLA) in place for your Intranet?

Y/N

18b. If yes, is the SLA an external or internal agreement?

Internal/External

18c. If external, please name the supplier with whom it was agreed.

Supplier ______________

19. What network availability guarantees does your Intranet support/management SLA include?

___ 90%-95% availability

___ 95%-97% availability

___ 97%-99% availability

___ 99% - 99.5% availability

___ Over 99.5% availability

___ No availability guarantee

20. What service coverage does your SLA guarantee?

___ 24x7 Coverage

___ 24x5 Coverage

___ Business hours

___ No service coverage

___ Other (please specify)_________________

SECTION F - Attitudes to Outsourcing

21. To what extent do you require external assistance in: (Please rate on a scale of 1-5 where 1=very little and 5=very considerable)

___ Implementing Intranets

___ Provision of networks

___ Supporting your technical Intranet infrastructure

___ Operating your Intranet infrastructure

22a To what extent would you like to purchase secure access to remotely hosted applications via the Internet or your Intranet? (Please rate on a scale of 1-5 where 1=not at all and 5=very important)___

Why/why not?

___

___

___

If score 2 or less, go to Q23

22b Which applications would you like to access in this way?

___

___

23a What proportion of your Intranet operations and support do you expect to be handled externally in two years? ___%

23b How likely are you to outsource the entire operation and support of your Intranet within the next two years? (Please rate on a scale of 1-5 where 1=not at all likely and 5=very likely)

___

23c What do you perceive to be the major benefits of outsourcing the operation and support of your Intranet?

___

___

SECTION G - Buying Process

24. Which Intranet managed services and operations providers do you already use? Which Intranet managed services and operations providers are you most likely to evaluate?

ALREADY USE: ---

MOST LIKELY TO EVALUATE: ---

25. Which vendors do you believe are best positioned to manage and operate your Intranet or provide Intranet based-services? *(please indicate if you use or know them and rate their capabilities on a scale of 1 to 5, where 1 = poor, to 5 = extremely capable)*

Interviewer PLEASE ROTATE when needing to read out list

	Use or have used Y/N	Only know Y/N	Unknown Y/N	Capabilities (1-5)
Vendor 1 etc				
Other *(please define)*				

SECTION H - Background and Costs

26a How many users currently have access to your Intranet? ____

26b What proportion of your organization's employees currently have access to your Intranet?___%

27a Could you estimate your annual Intranet expenditure? ____£m

27b What proportion of this expenditure is spent with third party vendors? ___%

28 Could you estimate the proportion of your Intranet budget dedicated to:

. Hardware equipment: _______%

. Software products: _______%

. Operations and support: _______%

Total ***100%***

Regarding your Intranet operations and support, could you estimate the proportion dedicated to:

. Implementation/Deployment: _______%

. Maintenance: _______%

. Management: _______%

. Education/Training: _______%

. End-User Support: _______%

. Other (please define): _______%

Total ***100%***

29. How many people (full-time equivalent) are involved in your Intranet management and operations? ________ people of which ________ % external

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