

INPUT

STRATEGIC MARKETING PERSPECTIVE

Help Desk Service Opportunities in Europe 1996

Customer Services Programming - Europe

1 9 9 6

Help Desk Service Opportunities in Europe 1996

CA
INPUT
WBRAM

INPUT®

Frankfurt • London • New York • Paris • San Francisco • Tokyo • Washington D.C.

INPUT®

Clients make informed decisions more quickly and economically by using INPUT's services. Since 1974, information technology (IT) users and vendors throughout the world have relied on INPUT for data, research, objective analysis and insightful opinions to prepare their plans, market assessments and business directions, particularly in computer software and services.

Contact us today to learn how your company can use INPUT's knowledge and experience to grow and profit in the revolutionary IT world of the 1990s.

SUBSCRIPTION SERVICES

- Information Services Markets
 - Worldwide and country data
 - Vertical industry analysis
- Business Integration Markets
- Systems Integration and Professional Services Markets
- Client/Server Software Platforms
- Outsourcing Markets
- Information Services Vendor Profiles and Analysis
- Electronic Commerce/Internet
- U.S. Federal Government IT Markets
- IT Customer Services Directions (Europe)

SERVICE FEATURES

- Research-based reports on trends, etc. (Over 100 in-depth reports per year)
- Frequent bulletins on events, issues, etc.
- 5-year market forecasts
- Competitive analysis
- Access to experienced consultants
- Immediate answers to questions
- On-site presentations

DATABASES

- Software and Services Market Forecasts
- Software and Services Vendors
- U.S. Federal Government
 - Procurement Plans (PAR)
 - Forecasts
 - Awards (FAIT)
 - Agency Procurement Requests (APR)

CUSTOM PROJECTS

For Vendors—analyse:

- Market strategies and tactics
- Product/service opportunities
- Customer satisfaction levels
- Competitive positioning
- Acquisition targets

For Buyers—evaluate:

- Specific vendor capabilities
- Outsourcing options
- Systems plans
- Peer position

OTHER SERVICES

Acquisitions/partnerships searches

INPUT Worldwide

Frankfurt

Perchstätten 16
D-35428 Langgöns
Germany
Tel. +49 (0) 6403 911420
Fax +49 (0) 6403 911413

London

Cornwall House
55-77 High Street
Slough, Berkshire
SL1 1DZ UK
Tel: +44 (0) 1753 530444
Fax: +44 (0) 1753 577311

New York

400 Frank W. Burr Blvd.
Teaneck, NJ 07666
U.S.A.
Tel. +1 (201) 801-0050
Fax +1 (201) 801-0441

Paris

24, avenue du Recteur
Poincaré
75016 Paris
France
Tel. +33 (1) 46 47 65 65
Fax +33 (1) 46 47 69 50

San Francisco

1881 Landings Drive
Mountain View
CA 94043-0848
U.S.A.
Tel. +1 (415) 961-3300
Fax +1 (415) 961-3966

Tokyo

Saida Building, 4-6,
Kanda Sakuma-cho
Chiyoda-ku, Tokyo 101
Japan
Tel. +81 3 3864-0531
Fax +81 3 3864-4114

Washington, D.C.

1921 Gallows Road
Suite 250
Vienna, VA 22182 3900
U.S.A.
Tel. +1 (703) 847-6870
Fax +1 (703) 847-6872

Abstract

Many organisations, having made the transition to client/server computing, are facing a support crisis. In many cases, while the computing infrastructure has been modernised, the *IT support infrastructure* has remained in the dark ages.

However, organisations are beginning to realise the consequences of a poor support infrastructure and are looking increasingly to rebuild their internal help desks.

In so doing, organisations are also realising that the modern help desk is far more sophisticated and powerful than its predecessors. When deployed effectively, modern help desk technology not only ensures adequate support cover to end-users, it also enables a variety of otherwise disconnected IT functions and processes to be brought together in a very powerful way.

Consequently, there is now great demand for services related to the implementation, support and operation of IT help desks.

This report provides a comprehensive assessment of the market for IT help desk services in Europe today, and contains advice and guidance for *both suppliers and buyers* of help desk services. The report describes:

- The major trends in the European help desk services market
- The current state of IT help desks across Europe, including the use of technology such as call management tools, telephony, knowledge tools and on-line support services
- The attitudes and experiences of users who are purchasing help desk services
- The competitive environment for help desk services, including nine profiles of systems vendors/integrators and outsourcing companies who are currently promoting help desk services.

Published by
INPUT
Cornwall House, 55-77 High Street
Slough, Berkshire, SL1 1DZ
United Kingdom

**Customer Services Programme —
Europe**

***Help Desk Service Opportunities in
Europe, 1996***

Copyright © 1996 by INPUT. All rights reserved.
Printed in the United Kingdom. No part of the
publication may be reproduced or distributed in any
form, or by any means, or stored in a database or
retrieval system, without the prior written permission
of the publisher.

The information provided in this report shall be used
only by the employees of and within the current
corporate structure of INPUT's clients, and will not be
disclosed to any other organisation or person
including parent, subsidiary, or affiliated organisation
without prior written consent of INPUT.

INPUT exercises its best efforts in preparation of the
information provided in this report and believes the
information contained herein to be accurate. However,
INPUT shall have no liability for any loss or expense
that may result from incompleteness or inaccuracy of
the information provided.

Table of Contents

I	Introduction	1
	A. Objectives and Scope	1
	B. Methodology	2
	C. Report Structure	4
	D. Related INPUT Reports	5
II	Executive Overview	7
	A. Help Desk Services — A \$3bn Market By 2000	7
	B. Phoenix From The Ashes — The New IT Help Desk	10
	C. Help Desks Need Help With Technology Now	11
	D. Help Desk Operations Will Be Increasingly Outsourced	13
	E. Help Desk Managers Open-Minded About Future Service Partners	14
	F. Recommendations For Vendors	15
	G. Recommendations For Buyers	16
III	Dynamics of the Help Desk Services Market in Europe	17
	A. The Help Desk Re-Emerges At The Heart Of IT	17
	B. Market For Help Desk Tools Starting To Consolidate	19
	C. The Growing Trend Towards Operational Support	20
	D. Help Desks Link Up To The Internet	22
	E. Advances In Telephony And Knowledge Tools Will Drive The Market	23
	1. Computer Telephony Integration Taking Off	23
	2. Knowledge Tools Hold the Key	24
IV	The Current State of IT Help Desks	27
	A. Help Desks Struggle To Cope In Client/Server Environment	27
	B. Only 50% Of Help Desks Have Implemented SLAs	28
	C. Keeping Pace With Technology Poses Major Problem For Help Desks	30
	D. Much Of Europe Still Using Bespoke Help Desk Systems	31
	E. Most Help Desks Rely On Primitive Telephony Systems	34

F. Few Help Desks Have Implemented Knowledge Tools	36
G. Help Desks Using On-Line Support Tools Increasingly	38

V	Purchasing Help Desk Services — The User Perspective	41
A.	Software, Consultancy, Training In Demand	41
B.	Second Level Help Desk Operations Increasingly Outsourced	42
C.	Professional Services Firms And VARs Currently Preferred	44
D.	Help Desk Managers Open-Minded About Future Service Partners	46
E.	Integration Plans Point To Significant Vendor Opportunities	46

VI	Vendor Initiatives in Help Desk Services	49
A.	The Competitive Landscape For Help Desk Services	49
B.	Bull's Service Desk	54
C.	CGS Focuses On The Support of Core Business Applications	55
D.	Digital Promotes Multivendor Client/Server Expertise	56
E.	EDS Invests Heavily In Help Desk Automation	57
F.	IBM's Integrated Help Desk	58
G.	ICL Sorbus Offers Full Range Of Help Desk Services	59
H.	Olivetti's ITHelp — The Latest Addition To Desktop Services Family	60
I.	SHL's Enterprise Help Desk	61
J.	SunService's Help Desk System Implementation Service	62

APPENDICES

A	Help Desk Survey — Benelux	65
A.	Call Management Software	65
B.	Telephony	66
C.	Knowledge Tools	66
D.	On-Line Support Tools	67
E.	Service Level Agreements	67
F.	Preferred Supplier Type	68
G.	Integration Issues	68

B	Help Desk Survey — Central Europe	69
	A. Call Management Software	69
	B. Telephony	70
	C. Knowledge Tools	70
	D. On-Line Support Tools	71
	E. Service Level Agreements	71
	F. Preferred Supplier Type	72
	G. Integration Issues	72
C	Help Desk Survey — France	73
	A. Call Management Software	73
	B. Telephony	74
	C. Knowledge Tools	74
	D. On-Line Support Tools	75
	E. Service Level Agreements	75
	F. Preferred Supplier Type	76
	G. Integration Issues	76
D	Help Desk Survey — UK	77
	A. Call Management Software	77
	B. Telephony	78
	C. Knowledge Tools	78
	D. On-Line Support Tools	79
	E. Service Level Agreements	79
	F. Preferred Supplier Type	80
	G. Integration Issues	80
E	Help Desk Survey — Scandinavia	81
	A. Call Management Software	81
	B. Telephony	82
	C. Knowledge Tools	82
	D. On-Line Support Tools	83
	E. Service Level Agreements	83
	F. Preferred Supplier Type	84
	G. Integration Issues	84
F	Help Desk Survey — Questionnaire	85
G	The Customer Services Market Defined	95

Exhibits

I

-1	Help Desk Survey — Sample Statistics	3
-2	Help Desk Survey — Sample by Industry	3

II

-1	Help Desk Services Market, Europe 1995–2000	8
-2	Help Desk Services Market by Territory, Europe 1995–2000	8
-3	Features and Benefits of the Modern Help Desk	11
-4	Major Help Desk Technology Issues, Europe 1995–2000	12
-5	Proportion of Organisations Outsourcing Second Line Help Desk — 1993, 1996 and 1999	13
-6	Preferred Service Suppliers, Europe 1996	15

III

-1	Today's Chaotic IT Environment	17
-2	The Help Desk at the Heart of IT	18
-3	Proportion of Organisations Outsourcing Second Line Help Desks — 1993, 1996 and 1999	21
-4	Proportion of Help Desks Using the Internet, Europe 1996	22

IV

-1	Take-Up of Help Desk SLAs, Europe 1996	28
-2	Biggest Challenges Facing Help Desks (Unprompted), Europe 1996	29
-3	Biggest Challenges Facing Help Desks (Prompted), Europe 1996	30
-4	Need For Improved Help Desk Functionality (Unprompted), Europe 1996	31
-5	Packaged Vs Bespoke Help Desk Software, Europe 1996	32
-6	Most Commonly Used Standard Software Tools, Europe 1996	33
-7	Adoption of Advanced Telephony Systems, Europe 1996	34
-8	Adoption of Advanced Telephony by Country, Europe 1996	35
-9	Adoption of Knowledge Tools, Europe 1996	36
-10	Adoption of Knowledge Tools by Country, Europe 1996	37
-11	On-Line Services Supporting the Help Desk, Europe 1996	38

V

-1	Most Commonly Purchased Help Desk Services, Europe 1996	41
-2	Intentions to Purchase Help Desk Services, Europe 1996	42
-3	Outsourcing of Second Line Help Desks by Country, Europe 1996	43
-4	Satisfaction with Help Desk Outsourcing by Country	44
-5	Service Supply Profile, Europe 1996	44
-6	Preferred Services Suppliers, Europe 1996	46
-7	IT Functions Integrated with the Help Desk, Europe 1996	47

VI

-1	Relationships Between the IT Help Desk and Suppliers	50
-2	Relative Strengths of Help Desk Service Suppliers	51
-3	Service Supply Profile, Europe 1996	52
-4	Help Desk Operations — Competitive Domains	53

A

-1	Packaged Vs Bespoke Help Desk Software, Benelux 1996	65
-2	Adoption of Advanced Telephony Systems, Benelux 1996	66
-3	Adoption of Knowledge Tools, Benelux 1996	66
-4	On-Line Services Supporting the Help Desk, Benelux 1996	67
-5	Take-Up of Help Desk SLAs, Benelux 1996	67
-6	Preferred Service Suppliers, Benelux 1996	68
-7	IT Functions Integrated with the Help Desk, Benelux 1996	68

B

-1	Packaged Vs Bespoke Help Desk Software, Central Europe 1996	69
-2	Adoption of Advanced Telephony Systems, Central Europe 1996	70
-3	Adoption of Knowledge Tools, Central Europe 1996	70
-4	On-Line Services Supporting the Help Desk, Central Europe 1996	71
-5	Take-Up of Help Desk SLAs, Central Europe 1996	71
-6	Preferred Service Supplier, Central Europe, 1996	72
-7	IT Functions Integrated with the Help Desk, Central Europe 1996	72

C

-1	Packaged Vs Bespoke Help Desk Software, France 1996	73
-2	Adoption of Advanced Telephony Systems, France 1996	74
-3	Adoption of Knowledge Tools, France 1996	74
-4	On-Line Services Supporting the Help Desk, France 1996	75
-5	Take-Up of Help Desk SLAs, France 1996	75
-6	Preferred Service Supplier, France 1996	76
-7	IT Functions Integrated with the Help Desk, France 1996	76

D

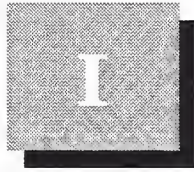
-1	Packaged Vs Bespoke Help Desk Software, UK 1996	77
-2	Adoption of Advanced Telephony Systems, UK 1996	78
-3	Adoption of Knowledge Tools, UK 1996	78
-4	On-Line Services Supporting the Help Desk, UK 1996	79
-5	Take-Up of Help Desk SLAs, UK 1996	79
-6	Preferred Service Supplier, UK 1996	80
-7	IT Functions Integrated with the Help Desk, UK 1996	80

E

-1	Packaged Vs Bespoke Help Desk Software, Scandinavia 1996	81
-2	Adoption of Advanced Telephony Systems, Scandinavia 1996	82
-3	Adoption of Knowledge Tools, Scandinavia 1996	82
-4	On-Line Services Supporting the Help Desk, Scandinavia 1996	83
-5	Take-Up of Help Desk SLAs, Scandinavia 1996	83
-6	Preferred Service Supplier, Scandinavia 1996	84
-7	IT Functions Integrated with the Help Desk, Scandinavia 1996	84

G

-1	Customer Services Market Structure	97
-2	Software Products Market Structure	99
-3	Customer Services Revenue Streams	103



Introduction

A

Objectives and Scope

The purpose of this report is to provide a comprehensive assessment of the market for IT help desk services in Europe today, and to clearly identify:

- The major trends influencing the help desk market today
- The areas of greatest demand for services related to the help desk
- The nature and scope of emerging opportunities for vendors of help desk services.

However, the report contains advice and guidance for *both suppliers and buyers* of help desk services.

For the purposes of this study, *help desk services* can be taken to mean any or all of the following service types:

- Product supply, both software and hardware
- Professional services, including planning and project services and training services
- Systems implementation and integration
- Maintenance and support
- Operational services.

This report is based largely upon a survey of help desk managers in the following territories:

- France
- Central Europe (Germany, Austria, Switzerland)
- UK
- Benelux (Netherlands, Belgium, Luxembourg)
- Scandinavia (Sweden, Norway, Denmark, Finland).

B

Methodology

Twenty in-depth interviews were conducted with help desk managers in each of the above-mentioned territories. The interviewees were largely selected from the member lists of the following industry organisations:

- Help Desk Institute (HDI) in France, Germany and the Nordic region
- Help Desk User Group (HUG) in the UK.

INPUT would like to thank these organisations for their kind co-operation.

The survey covered organisations of varying sizes, from those with fewer than 100 employees to those with in excess of 5,000 employees. The largest grouping was of organisations with between 1,000 and 2,500 employees (27% of the sample).

Exhibit I-1 shows a variety of key statistics of the survey sample. Exhibit I-2 shows the survey sample by industry classification.

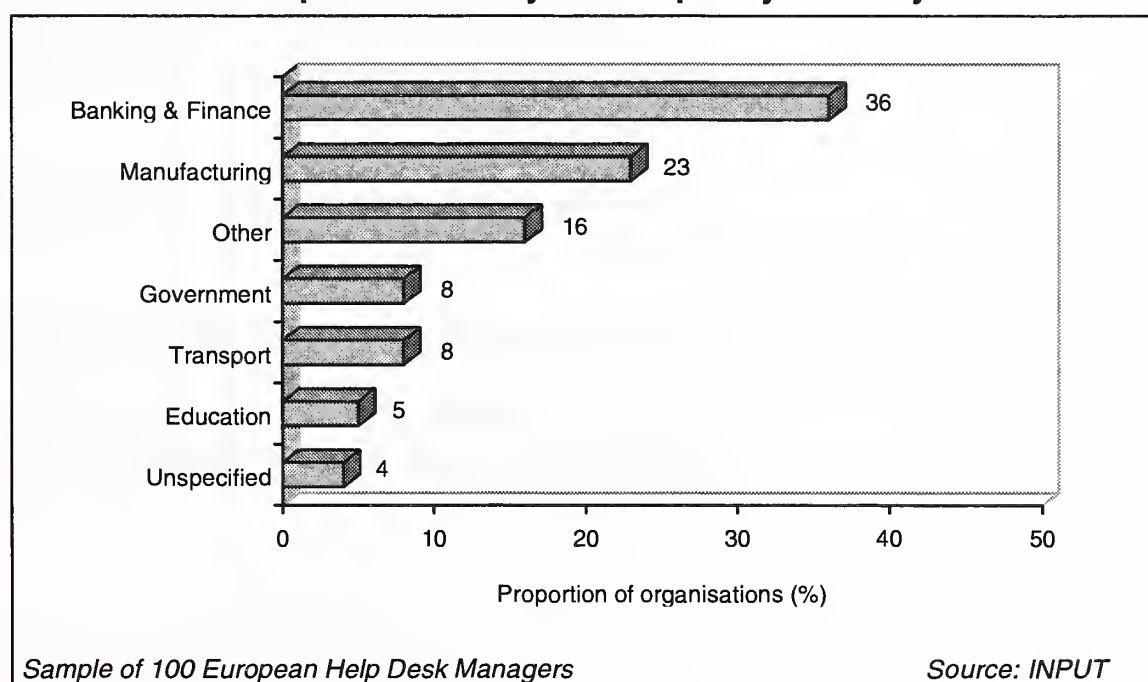
Exhibit I-1

Help Desk Survey — Sample Statistics

No. of	Lowest	Average	Highest
Help Desks	1	3	50
Help Desk Staff	1	14	200
Calls Per Day	5	220	2000
PCs	40	2200	12000
Servers	2	250	2500
LANs	1	30	350

*Sample of 100 European Help Desk Managers**Source: INPUT*

Exhibit I-2

Help Desk Survey — Sample by Industry

C

Report Structure

The remaining chapters of this report are as follows:

- Chapter II is an executive overview which provides a summary of the key findings of the study
- Chapter III describes the major trends in the European help desk services market
- Chapter IV describes the current state of IT help desks across Europe, including the use of technology such as call management tools, telephony, knowledge tools and on-line support services
- Chapter V describes the attitudes and experiences of users who are purchasing help desk services
- Chapter VI describes the competitive environment for help desk services. It explains which types of vendor are active in the help desk market, and contains nine profiles of systems vendors/integrators and outsourcing companies who are currently promoting help desk services
- Appendices A to E contain analyses of the help desk survey by territory
- Appendix F contains the user questionnaire used for the study
- Appendix G defines INPUT's view of the IT customer services market, and provides detailed definitions of service sectors and delivery modes.

D

Related INPUT Reports

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

Strategy and Positioning of Leading IT Support Vendors, Europe 1996

The Impact of the Internet on Software Product Support, Europe 1996

The Future of IT Support — Multivendor Services in Europe, 1995-2000

IT Customer Services Competitive Analysis, Europe 1995

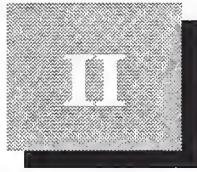
IT Customer Services Market Trends and Forecast — Europe 1995-2000

Delivering Customer Service Through The VAR Channel — Europe 1995

Supporting Client / Server Systems — Europe 1994

Desktop Network Support Opportunities — Europe 1994-1999

(Blank)



Executive Overview

A

Help Desk Services — A \$3bn Market By 2000

A significant recent development in desktop services has been the emergence of a substantial market surrounding the IT help desk.

To date, the great majority of help desk services purchased relate to the design and build phases of the IT lifecycle. This has been driven by strong demand from organisations implementing help desks for the first time or modernising existing help desks.

However, there are now signs that *operational* services are set for significant growth (where the day-to-day operation of the help desk is outsourced to the service supplier). The last two years have seen a surge of interest in using external services organisations to implement, staff and run both internal and external (customer-facing) help desks.

INPUT estimates that as much as \$11 billion is currently spent on help desk services in Europe, less than 5% of which (approximately \$500 million) is spent with third party suppliers. However, INPUT forecasts that this embryonic market will grow to \$3 billion by the year 2000, as shown in Exhibit II-1.

Furthermore, as shown in Exhibit II-2, strong growth is forecast for each of the major European territories.

Exhibit II-1

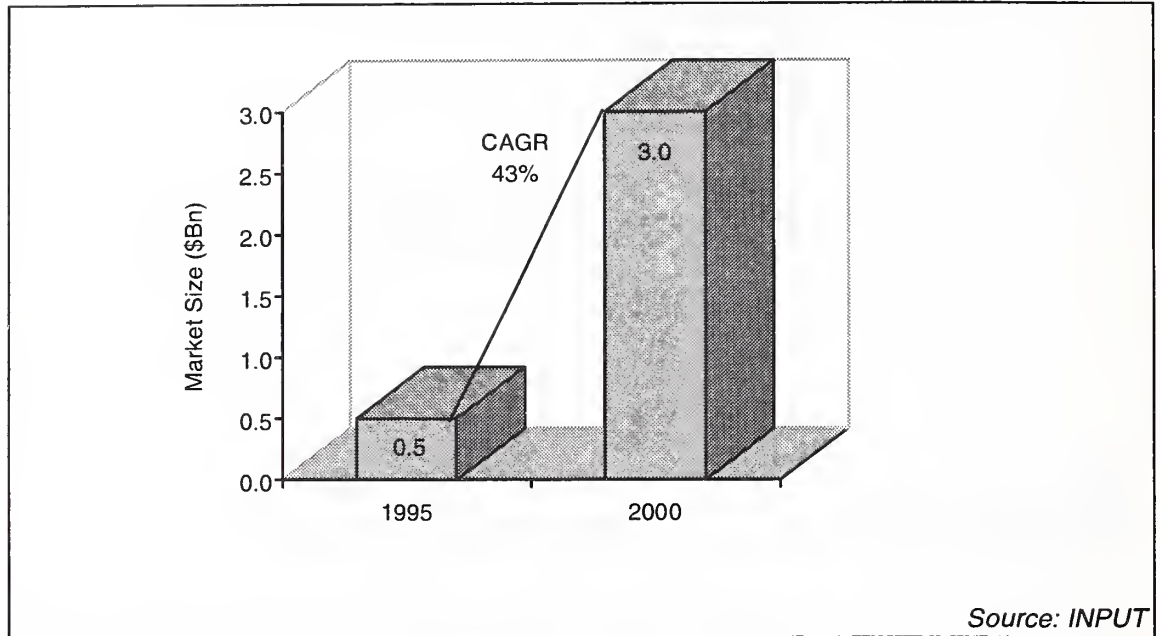
Help Desk Services Market, Europe 1995-2000

Exhibit II-2

Help Desk Services Market by Territory, Europe 1995-2000

Territory	Market Size (\$m)		CAGR (%)
	1995	2000	
UK	120	660	41
Central Europe	90	630	48
Benelux	75	450	43
France	70	340	37
Scandinavia	65	400	44
Rest of Europe	80	520	45
Europe Total	500	3000	43

Source: INPUT

Research carried out for this study reveals that:

- The IT help desk is beginning to adopt a more central and strategic role within organisations
- Many help desks are having major problems keeping pace with technology
- As a consequence, organisations will increasingly turn to service providers for a variety of services, including operations outsourcing
- Many organisations planning to purchase services do not favour one type of vendor over another and are open to persuasion.

The remaining sections of this executive overview expand briefly on these themes and include headline recommendations for both vendors and buyers of help desk services.

B

Phoenix From The Ashes — The New IT Help Desk

Not so long ago, the IT help desk was little more than a passive call logging system. In the relatively stable, uncomplicated days of datacentre computing, IT managers often cynically regarded the help desk as a means of keeping their users at bay.

Today, many organisations have made the transition from datacentre to client/server computing, and are facing a variety of new, often unexpected, challenges. One such challenge is that end users are now much more demanding, and require far more extensive support than ever. Typical client/server installations feature a multitude of software packages and equipment types, operating across complex networks.

The dilemma now faced by many organisations is that, while their computing infrastructure has been modernised, their IT support infrastructure has remained in the dark ages.

The consequences of inadequate support in complex client/server environments can be potentially disastrous. Often, local IT groups within business units act unilaterally, and the central IT department starts to lose control. The cost of providing support across the enterprise can easily escalate out of control.

However, organisations are beginning to realise the consequences of a poor support infrastructure and are looking increasingly to rebuild their internal help desks.

In so doing, organisations are also realising that the modern help desk is far more sophisticated and powerful than its predecessors. When deployed effectively, modern help desk technology not only ensures adequate support cover to end users, it also enables a variety of otherwise disconnected IT functions and processes to be brought together in a very powerful way.

The modern help desk, supported by advanced telephony and knowledge tools can be used to integrate functions such as problem management, systems management (including network management), training and asset management.

Hence, one of the most powerful dynamics in the IT support industry today is the rebirth of the help desk as the focal point for managing the distributed client/server environment.

Exhibit II-3 lists the features and benefits of the modern help desk.

Exhibit II-3

Features and Benefits of the Modern Help Desk

- Single source of support for multivendor systems, software, networks
- More than “how to” support — knowledge bases enable proactive support (alerting) and just in time training
- Integrated call handling and problem management
- Can be integrated with other key IT functions such as systems management, asset management, training
- Focus for controlling IT costs
- A means of regaining control for the IT department
- A focus for monitoring user/customer satisfaction
- Creates a customer service culture for competitive advantage

Source: INPUT

C

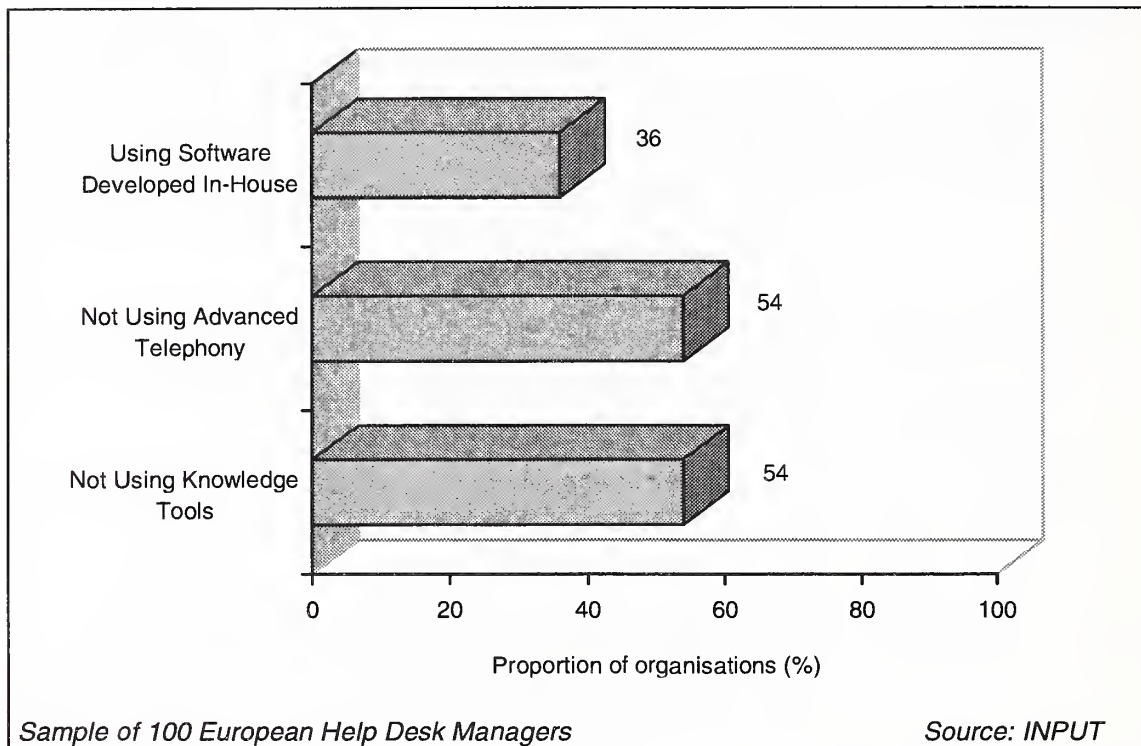
Help Desks Need Help With Technology Now

The survey of help desk managers conducted for this study revealed that simply keeping pace with technology was their biggest challenge. Almost a third of the sample indicated that inconsistency of technology, particularly having to deal with multiple versions of the same software, presented the biggest headache.

Furthermore, Exhibit II-4 shows that help desks are struggling with technology issues in a variety of ways. Specifically:

- Many help desks on the continent of Europe (the UK is the exception) are still using bespoke help desk software
- Most help desks rely on primitive telephony systems
- Relatively few help desks currently use advanced knowledge tools.

Exhibit II-4

Major Help Desk Technology Issues, Europe 1995-2000

INPUT believes that there are substantial opportunities for service providers who can offer client/server help desk expertise, with the tools and methods to back it up. In particular, research indicates that many organisations are planning significant help desk integration activity in the near future. Hence, vendors with systems integration expertise will find themselves particularly in demand.

D

Help Desk Operations Will Be Increasingly Outsourced

Until relatively recently, there has been little enthusiasm for *operational* services; i.e. the day-to-day operation of the help desk has tended *not* to be outsourced. In fact, the IT help desk has consistently proved to be the area least likely to be outsourced. IT managers have thus far considered the help desk to be a core competence, and have resisted any attempts to relinquish control.

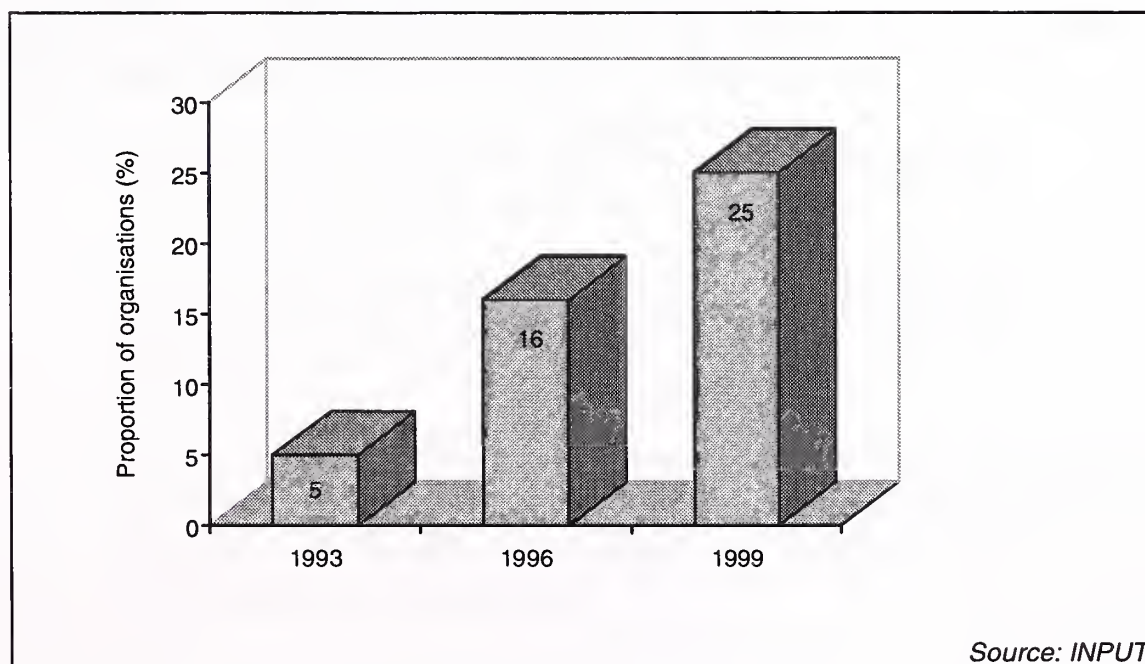
Surveys three years ago and two years ago indicated very low levels of help desk operations outsourcing. However, the most recent survey reveals that currently 16% of IT help desks across Europe have been outsourced to a third party.

This data should be interpreted carefully. Almost certainly, responses related to the outsourcing of *second line* help desks. INPUT believes that much smaller numbers of organisations are currently outsourcing *first line* support. However, these statistics certainly suggest that in the last two years, help desk outsourcing has begun to take off.

Exhibit II-5 shows the proportions of organisations outsourcing second line help desks three years ago and today, and shows a forecast for the proportion outsourcing in three years' time (by 1999).

Exhibit II-5

Proportion of Organisations Outsourcing Second Line Help Desks — 1993, 1996 and 1999



E

Help Desk Managers Open-Minded About Future Service Partners

Many organisations are looking primarily for advice and guidance on how to implement a help desk, or bring their existing help desks up to date. In many cases, this involves the design of new internal processes and the selection of new software tools. For these reasons, professional services firms are in great demand.

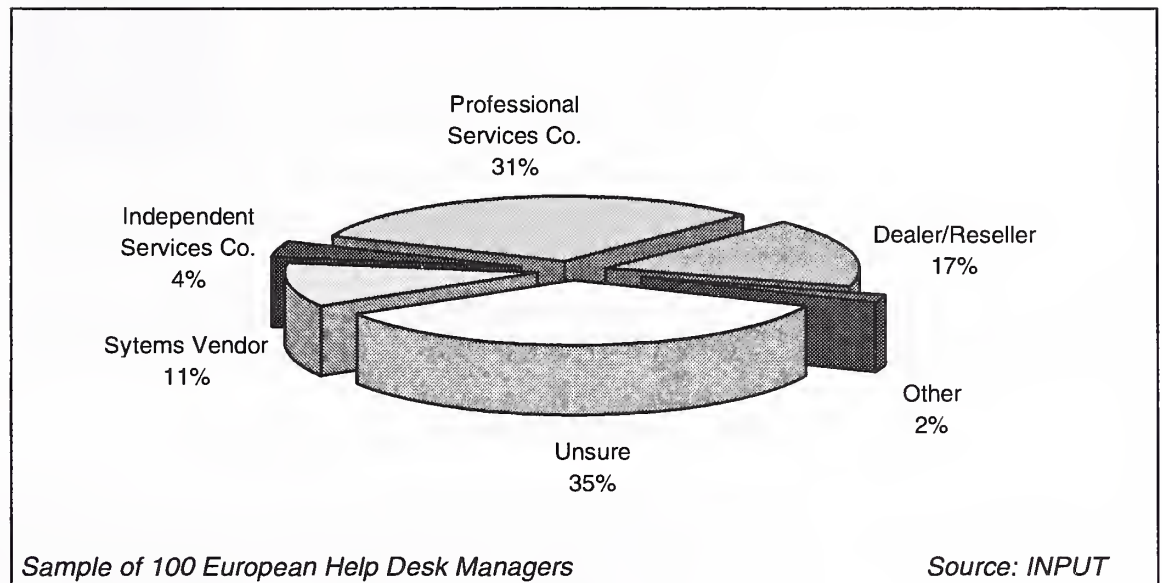
Resellers and VARs are also very active in the market for help desk services. They are not only supplying product into large corporate accounts, but they are also providing implementation and support services. Indeed, resellers are often the first to detect the need for external assistance with internal help desks, and are not slow to react to new business opportunities.

Perhaps surprisingly, the systems vendors have so far been slow in putting together a coherent help desk service offer. Ironically, the systems vendors have the broadest skillset, being able to supply, implement and integrate systems as well as provide consultancy.

Other types of vendors currently offering help desk services include the big outsourcing vendors (e.g. SHL, CGS and EDS) and an increasing number of independent service vendors specialising in high-volume call handling (e.g. Softbank PSC, ActionTrac and Stream International).

However, there is good news for all prospective suppliers of help desk services. As shown in Exhibit II-6, a large proportion of help desk managers do not favour one type of vendor over another. They are open minded about who their future service partners may be and are clearly open to persuasion.

Exhibit II-6

Preferred Service Suppliers, Europe 1996**F****Recommendations For Vendors**

Vendors of help desk services are advised to:

- Develop a portfolio which addresses the entire services lifecycle. Increasingly, organisations are seeking service partners not just for the design and build phases, but for ongoing support, training, integration and operations
- Have a standard solution based upon open, scaleable, customisable technology, but...
- Be flexible to customers' requests for solutions based upon alternative technologies and tools
- Promote help desk integration as a key part of the offer. Where necessary, partner to provide the systems integration skills required
- Clearly convey the value proposition of the offer. Too often, vendors fail to differentiate their service offer from the competition because it tends towards the bland and generic, and does not contain a compelling "buy me" message

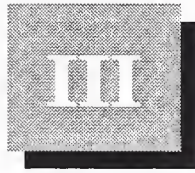
- Quantify the payback on implementing a help desk solution, and convey this message to potential customers
- Emphasise the organic nature of the help desk, and hence the importance of an ongoing relationship. Help desks will continue to encompass new technologies and require integration with other IT and business systems.

G

Recommendations For Buyers

Buyers of help desk services are advised to:

- Take time internally to decide what level of service is required. Look beyond the immediate requirements for, say, assistance with software selection, or implementation. Many vendors can offer a wide range of services which address the full IT lifecycle
- Assess the broader capabilities of the vendor, including their strength in designing, building, supporting, training, integrating and operating the help desk
- Look for a vendor with a demonstrable track record in help desk implementation and associated services. Seek reference sites
- Look at how help desk services are promoted by the vendor. If it is difficult to find a brochure which describes a service to address your needs, you may want to look elsewhere. Is the help desk service part of a wider, coherent desktop services portfolio?
- Look for a vendor who has implemented a successful help desk internally, and is happy to demonstrate its capabilities
- Ask the vendor to quantify the payback on implementing a help desk solution
- Look for a vendor who is committed to service level agreements, and who is capable of reporting back on the SLAs in a form that suits you
- Choose a vendor who can work with you in partnership, as your help desk evolves and changes. The importance of a good ongoing relationship cannot be over-emphasised.



Dynamics of the Help Desk Services Market in Europe

A

The Help Desk Re-Emerges At The Heart Of IT

Client/server computing may be delivering its promise of distributing information around the enterprise, and of empowering the people who most need it. However, the down side is that it's costly and complex to support. For support personnel, and in particular the help desk, the promise of client/server heaven has, in many cases, turned out to be a living hell.

Exhibit III-1 summarises the conditions commonly found in today's typical IT environment.

Exhibit III-1

Today's Chaotic IT Environment

- Disparate, isolated local area networks
- Multiple platforms, applications and standards
- Multivendor equipment, software and networks
- Inadequate wide area network technology
- IT department losing control
- Local IT groups going it alone
- Total cost of IT ownership escalating out of control
- Support infrastructure unable to cope

Source: INPUT

Many large organisations, having made the transition from datacentre to client/server computing, are finding it very difficult to provide adequate support for users of disparate systems, across a wide geographic area. In effect, while these organisations have changed their computing infrastructure, they have failed to keep their support infrastructure in step.

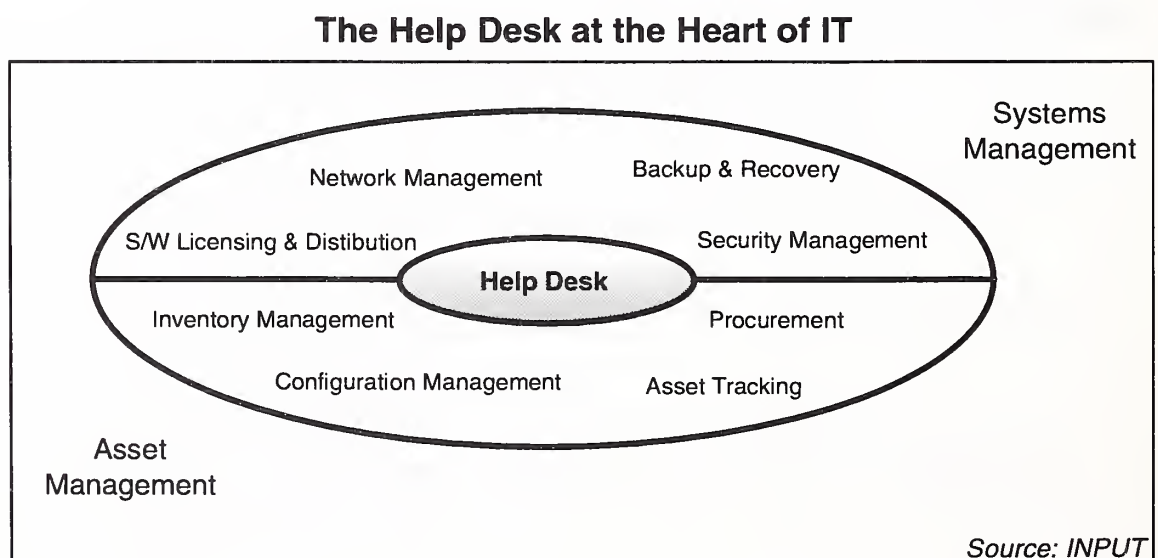
Often, help desk systems and staff from the legacy environment are simply transposed into the client/server environment and expected to cope. It is no surprise that, when faced with a multitude of software packages, operating across complex networks, these help desks become severely over-stretched.

And yet it is ironic that, when deployed effectively, modern help desk technology not only ensures adequate support cover to end-users of client/server IT, it also enables a variety of otherwise disconnected IT functions and processes to be brought together in a very powerful way.

The modern help desk, supported by advanced telephony and knowledge tools can be used to integrate functions such as problem management, systems management (including network management), training and asset management. In a very real sense, all roads lead to the help desk.

Exhibit III-2 illustrates the way in which the help desk sits at the heart of many other key IT functions.

Exhibit III-2



Hence, one of the most powerful dynamics in the IT support industry today is the rebirth of the help desk as the focal point for managing the distributed client/server environment.

At least, the IT help desk has the *potential* to occupy such a position. Whether European organisations actually implement this strategic view of the help desk (or *support centre*) will depend on the usual mix of corporate political, cultural and financial factors. However, this new vision for the corporate help desk is currently the hottest trend in the US support industry, and INPUT believes that this is a sign of things to come here in Europe.

B

Market For Help Desk Tools Starting To Consolidate

To date, the most significant help desk market has been for the supply of software tools. The past five years has seen demand for standard tools grow strongly and, with it, the number of ISVs offering help desk tools has increased dramatically.

Today there are as many as 200 vendors of help desk tools, a position which the market will find difficult to sustain for much longer. The choice of products is now bewildering, yet many of them offer little more than simple call tracking and text retrieval functionality.

The market for help desk tools will consolidate rapidly. According to the Help Desk Institute (HDI), half of the vendors will be out of business within the next 18 months.

The survivors will be those companies with sufficient finances to fund substantial ongoing research and development activity. This will be necessary both to extend the functionality of help desk tools and to integrate them with system management, asset management, sales and marketing support, and financial software.

Only a handful of leading-brand help desk tools will be available by the end of the century. These will have the following characteristics:

- Object-oriented coding
- Well-defined application programming interface
- A choice of popular SQL databases
- Support for multiple server platforms

- Sophisticated problem resolution beyond simple call tracking
- Telephony integration
- Internet support
- Plug-and-play capability
- Genuine software product support from the vendor.

Early signs of market consolidation are already in evidence. Astea International recently purchased Bendata, McAfee has acquired Vycor and, at the time of printing, Silvion was set to purchase Raxco's help desk and asset management products.

C

The Growing Trend Towards Operational Support

The great majority of help desk services purchased relate to the design and build phases of the IT lifecycle. This has been driven by the strong demand from organisations implementing help desks for the first time or modernising existing help desks.

In the survey conducted for this study, almost two-thirds of help desk managers indicated that they have purchased consultancy services, training and software services in the past. Furthermore, of those organisations which currently do *not* buy-in services or subcontract any part of their help desk function, a significant proportion intend to buy in services in the near future. For example, the survey revealed that:

- 37% of organisations intend to buy in training services
- 28% intend to make software purchases
- 28% intend to hire help desk consultants
- 17% plan to supplement their staff with staff from a third party service provider.

However, until relatively recently, there has been little enthusiasm for *operational* services; i.e. the day-to-day operation of the help desk has tended *not* to be outsourced. In fact, the IT help desk has consistently proved to be the area least likely to be outsourced. IT managers have thus far considered the help desk to be a core competence, and have resisted any attempts to relinquish control.

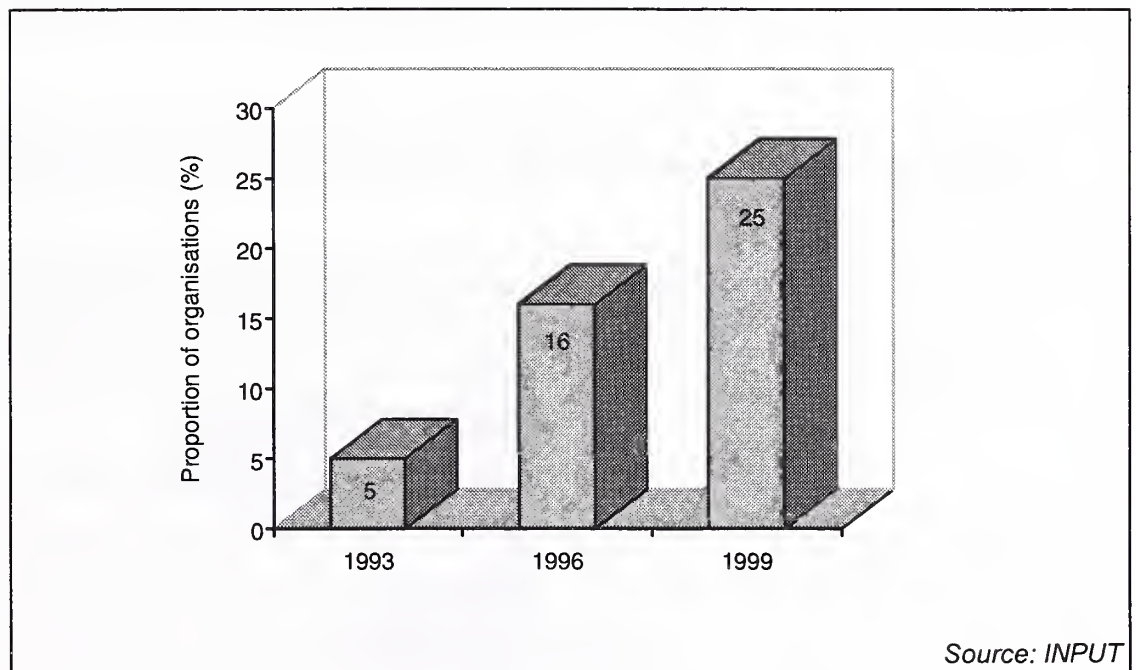
Surveys three years ago and two years ago indicated very low levels of help desk operations outsourcing. However, the most recent survey reveals that currently 16% of IT help desks across Europe have been outsourced to a third party.

This data should be interpreted carefully. Almost certainly, responses related to the outsourcing of *second line* help desks. INPUT believes that much smaller numbers of organisations are currently outsourcing *first line* support. However, these statistics certainly suggest that in the last two years, help desk outsourcing has begun to take off.

Exhibit III-3 shows the proportions of organisations outsourcing second line help desks three years ago and today, and shows a forecast for the proportion outsourcing in three years' time (by 1999).

Exhibit III-3

Proportion of Organisations Outsourcing Second Line Help Desks — 1993, 1996 and 1999



The most recent statistics, including the regional variations across Europe, are described in more detail in Chapter V.

D**Help Desks Link Up To The Internet**

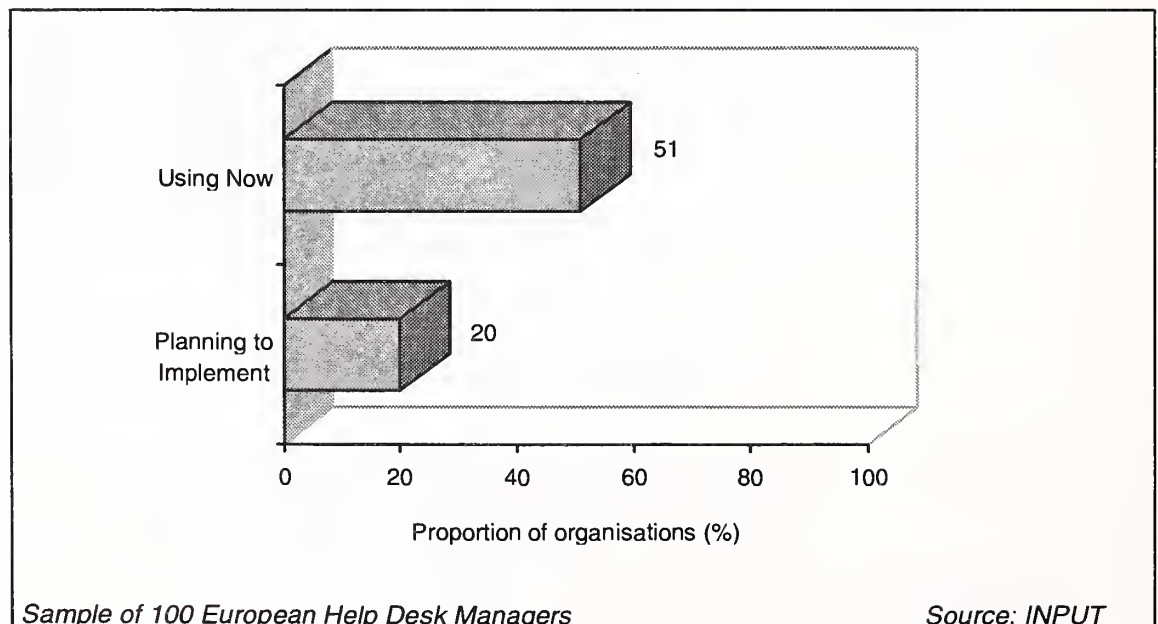
The most modern help desks are using an increasing variety of complementary support tools. In addition to the usual problem management tools, help desks employ fax, email, voicemail, voice response, CD-ROM and various other aids.

Used together effectively, these tools help automate the help desk by enabling better screening and problem routing, while helping to optimise the efficiency of help desk personnel.

Today, there is much speculation about the role to be played by the Internet and the World Wide Web (WWW) in providing IT support. However, while the fine detail may yet be unclear, what is certain is that the Internet and WWW will be used increasingly as a source of first line support within organisations. INPUT's report *The Impact of the Internet on Software Product Support, Europe 1996* explores this subject in more detail.

As shown in Exhibit III-4, half of all help desks already use the Internet, and many more plan to implement it in the near future.

Exhibit III-4

Proportion of Help Desks Using the Internet, Europe 1996

Until recently, none of the leading help desk tools included an interface to the Internet and WWW. The first vendor to introduce a Web link was Remedy, in mid-1995. With Remedy's Action Request Web system, users can submit problem tickets, query the database for solutions and check the status of existing requests directly.

One year on, many more help desk tools are incorporating Internet access as a standard product feature. Three very recent examples are Software Artistry's SA-Expert Web, Quintus Corp.'s WebQ, and Vycor's Vycor Web.

For end-users, the benefits of the Internet and WWW are that they allow access to extensive first line problem resolution, including answers to Frequently Asked Questions (FAQ). The benefits for the help desk are also clear: avoidance of trivial and previously solved questions enables human resources to be put to better use, and hence helps to maximise help desk productivity.

Chapter IV, section G, describes the extent to which electronic support tools are being used by help desks across Europe.

E

Advances In Telephony And Knowledge Tools Will Drive The Market

Much of the attention given to help desk tools has tended to focus on *call management* software. However, call management is only one of three fundamental components of a modern help desk system. The other components are advanced *telephony* and one or more *knowledge tools*.

1. Computer Telephony Integration Taking Off

Advanced telephony is increasingly vital, both in terms of streamlining the interface with the caller (user or customer) and in order to maximise the efficiency of the help desk operation.

The technology which holds the greatest potential for delivering these benefits is Computer Telephony Integration (CTI). Essentially, CTI represents the convergence of telephony and business information and enables statistical analysis of calls, plus many operational features such as caller line identification, customer information retrieval, predictive dialling and intelligent scripting.

CTI represents a significant step forward in terms of sophistication from previous, more limited, systems such as Voice Mail and Interactive Voice Response (IVR).

The CTI market is still in its infancy, but is set to become a major market over the next few years. With fewer than 100 CTI systems in Europe in 1992, the installed base is forecast to be in the region of 40,000 by the end of the decade. And the IT help desk or support centre will be the boom market for CTI.

By delivering greatly improved call handling, and ease of integration with systems such as Automated Call Distribution (ACD) and IVR, the benefits of CTI are strongly applicable to the help desk environment, though all levels of service operation will benefit from CTI.

Obstacles in the way of CTI growth have included the proprietary nature of many PBX private telephone switches and lack of network bandwidth. However, now that high bandwidth networks are becoming more commonplace, and standard application programming interfaces are being made available by companies like Microsoft and Novell, CTI is beginning to emerge as a major business technology.

Chapter IV, section E, describes the current state of telephony in use by help desks across Europe today.

2. Knowledge Tools Hold the Key

No matter how sophisticated the telephony and call management tools may be, a help desk is ultimately only as good as the information it has access to. In this respect, knowledge tools hold the key to a truly effective help desk system.

The survey revealed that the most common knowledge tools in use today are simple *rule-based systems*, otherwise known as “decision trees”. A third of help desks use such systems, which are mostly prepared by product support teams in-house.

Increasing numbers of help desks (currently one in five) use *text retrieval* mechanisms such as hypertext. Help desk staff typically search by key word or fuzzy matching to find relevant information for problem solving.

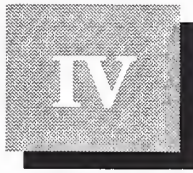
However, Case-Based Reasoning (CBR) is the most important knowledge technology to emerge in recent years. While only 13% of the survey sample claimed to be using CBR currently, the signs are that CBR will become the *de facto* standard knowledge tool for help desks.

With CBR, an organisation creates an extensive library of cases, or problem descriptions, which can be retrieved subsequently on a question

and answer basis. The power of CBR is maximised when case bases are distributed electronically around an organisation, giving multiple help desks simultaneous access to the latest problem resolution data.

Chapter IV, section F, contains information regarding the take-up of knowledge tools by help desks across Europe.

(Blank)



The Current State of IT Help Desks

A

Help Desks Struggle to Cope in Client/Server Environment

The survey conducted for this study revealed several eye-opening facts about the current state of IT help desks across Europe today. Despite industry talk about the sophistication of help desk technology and the far-reaching capabilities of the modern help desk, survey evidence suggests that most organisations' IT help desks are still fairly primitive.

In particular, it is apparent that, while organisations have been busy converting their computing infrastructure to a client/server model, they have failed to make the necessary upgrades to their support infrastructure.

Often, help desk systems and staff from the legacy environment have simply been transposed into the client/server environment and expected to cope. It is no surprise that, when faced with a multitude of software packages, operating across complex networks, these help desks become severely over-stretched.

This chapter describes how:

- Only half of organisations claim to have implemented help desk SLAs
- Keeping pace with technology is the biggest problem for help desks
- Many help desks on the continent of Europe (the UK is the exception) are still using bespoke help desk software

- Most help desks rely on primitive telephony systems
- Relatively few help desks currently use advanced knowledge tools
- On-line support tools, in particular email and the Internet, are being used increasingly by help desks across Europe.

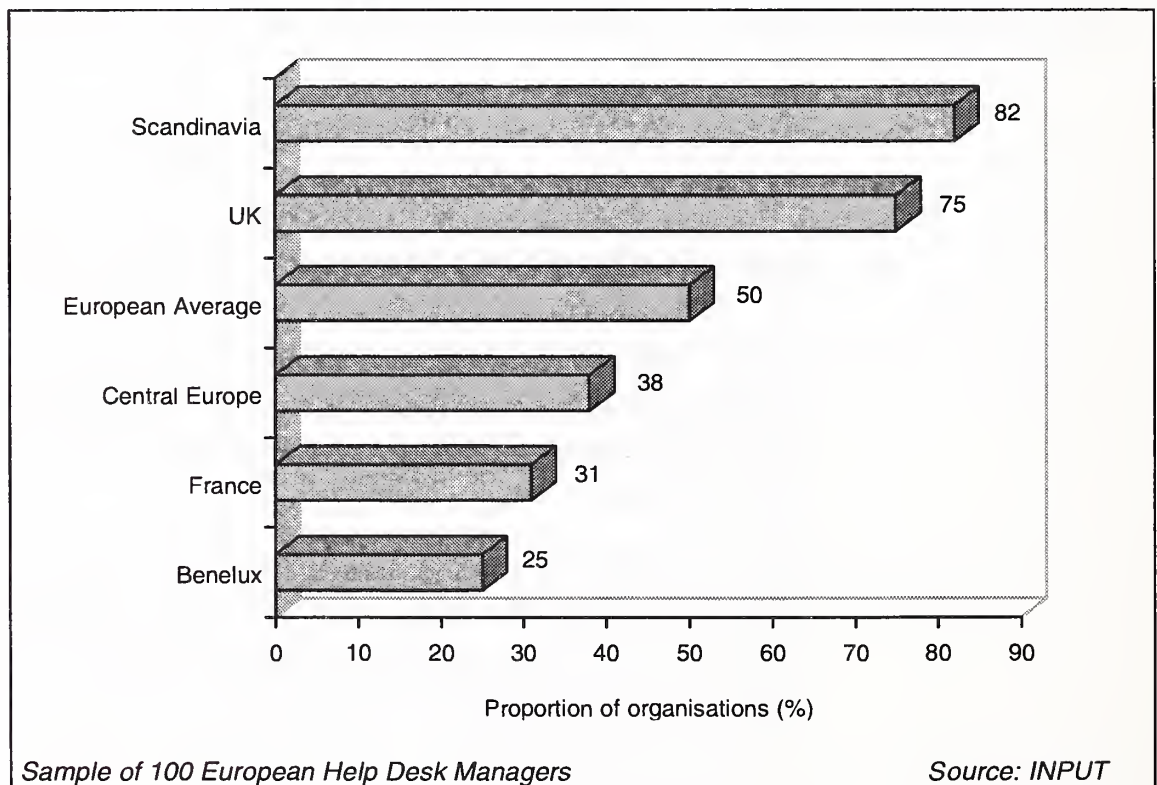
B

Only 50% of Help Desks Have Implemented SLAs

INPUT's survey of help desk managers revealed that only 50% of help desks have implemented service level agreements (SLAs) to date (see Exhibit IV-1).

Exhibit IV-1

Take-Up of Help Desk SLAs, Europe 1996



Given that SLAs have been the norm in terms of service measurement for several years, it is surprising to find that so few organisations have applied them to the help desk, the heart of IT support.

There are, however, significant regional differences. Scandinavian and UK organisations lead the way in terms of adoption of SLAs, with Central Europe (Germany, Austria and Switzerland) and France falling below the

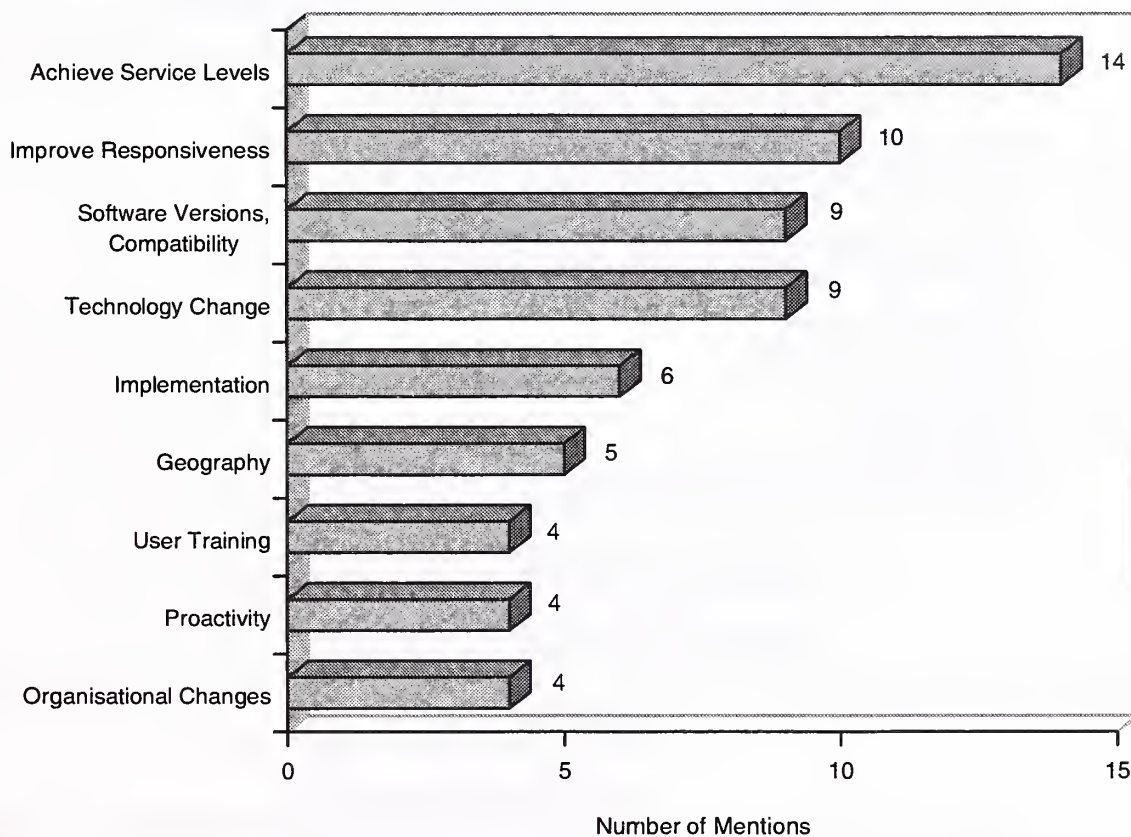
European average. Surprisingly, only 25% of respondents in Benelux claim to have implemented help desk SLAs to date.

The relatively low take-up of SLAs in certain countries highlights the fact that help desk managers are currently struggling to deliver a basic service to their users.

This message is further enforced by the finding that 14% of help desk managers, in answer to an unprompted question, indicated that simply achieving service levels was their single biggest challenge. See Exhibit IV-2.

Exhibit IV-2

Biggest Challenges Facing Help Desks (Unprompted), Europe 1996



Sample of 100 European Help Desk Managers

Source: INPUT

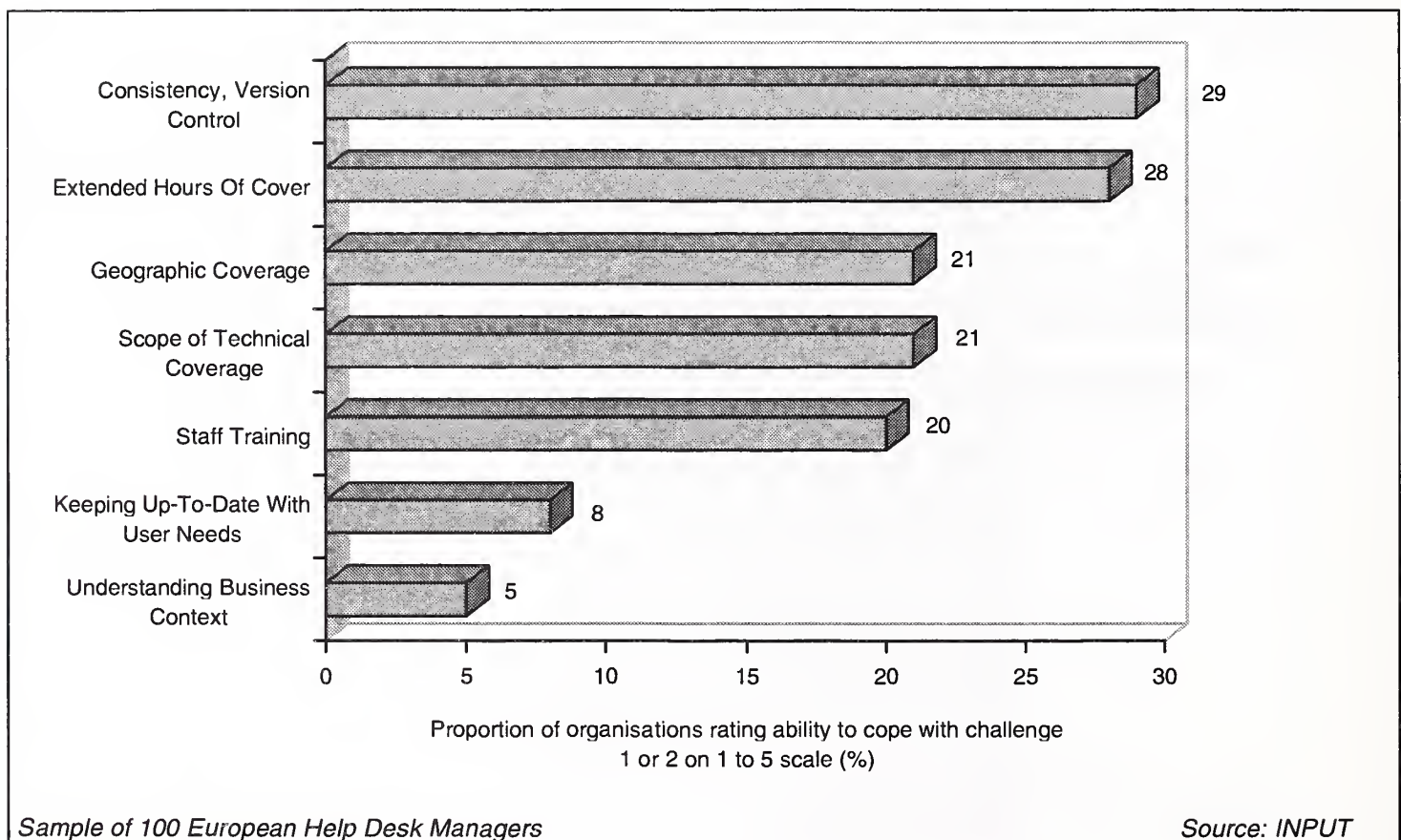
C

Keeping Pace With Technology Poses Major Problem For Help Desks

Help desk managers were prompted to indicate which of a variety of potential challenges they were least able to cope with (see Exhibit IV-3). Almost a third of the sample indicated that inconsistency of technology, particularly having to deal with multiple versions of the same software, presented the biggest headache.

Exhibit IV-3

Biggest Challenges Facing Help Desks (Prompted), Europe 1996



Issues related to support coverage also featured prominently as major challenges. Help desk managers clearly feel stretched when it comes to providing:

- Assistance outside normal office hours
- Wide geographic coverage, e.g. supporting remote branch offices
- Breadth of technical expertise, i.e. knowledge of diverse systems.

By contrast, help desk managers maintain that they are firmly in control in terms of understanding business issues and keeping up to date with their users' needs.

INPUT believes that there are substantial opportunities for service providers who can make the right appeal to IT Directors. Many large organisations, having made the transition from datacentre to client/server computing, are finding it very difficult to provide adequate support for users of disparate systems, across a wide geographic area. In effect, while these organisations have changed their computing infrastructure, they have failed to keep their support infrastructure in step.

Vendors who can offer client/server help desk expertise, with the tools and methods to back it up, will find themselves increasingly in demand.

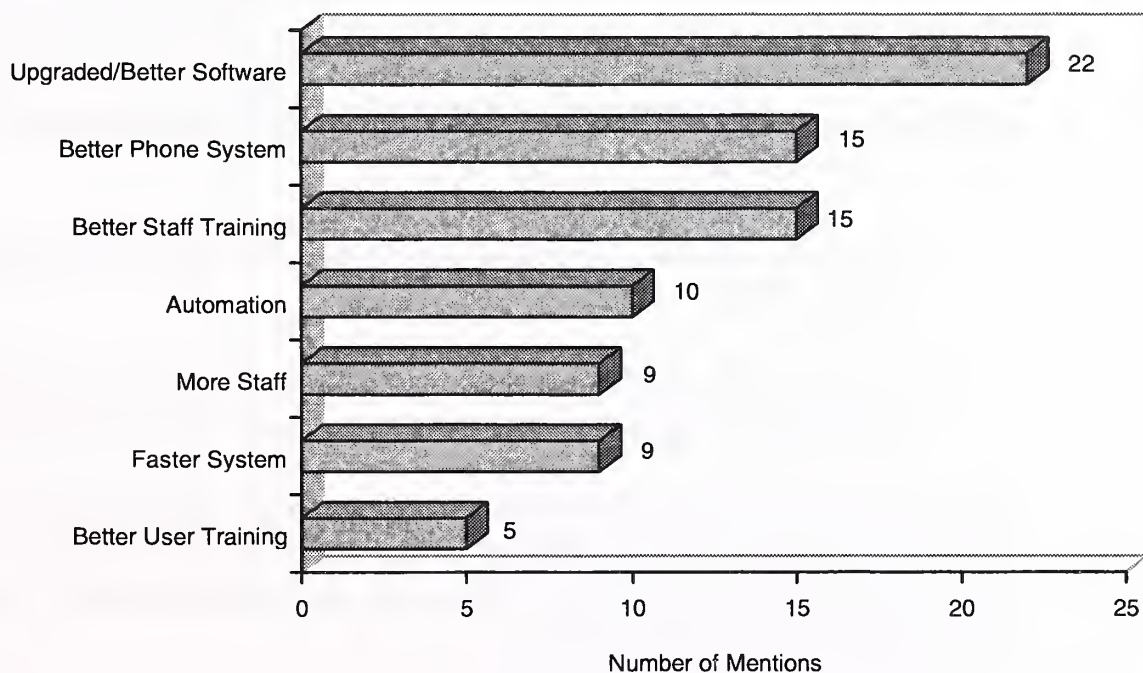
D

Much of Europe Still Using Bespoke Help Desk Systems

When asked in which ways the functionality of their help desk systems could be improved, help desk managers mentioned a variety of things. However, the most mentioned requirement was for upgraded or better help desk software. See Exhibit IV-4.

Exhibit IV-4

Need For Improved Help Desk Functionality (Unprompted), Europe 1996



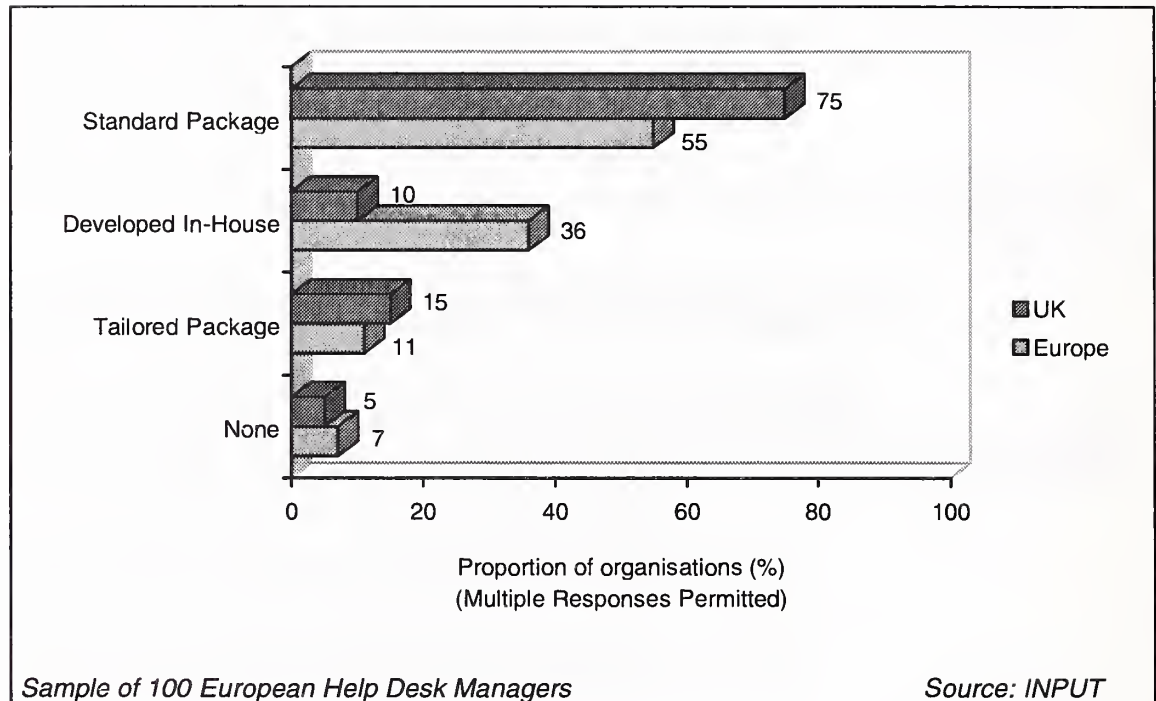
Sample of 100 European Help Desk Managers

Source: INPUT

In the light of this response, it is perhaps not surprising to find that over a third of organisations operate their help desks using software developed in-house. See Exhibit IV-5.

Exhibit IV-5

Packaged Vs Bespoke Help Desk Software, Europe 1996



As shown in the exhibit, the UK picture is significantly different from the European average. Three quarters of UK help desks are built around a standard call management package, compared with a European average of 55%. Only one in ten UK help desks utilises software developed in-house. Other interesting regional differences are:

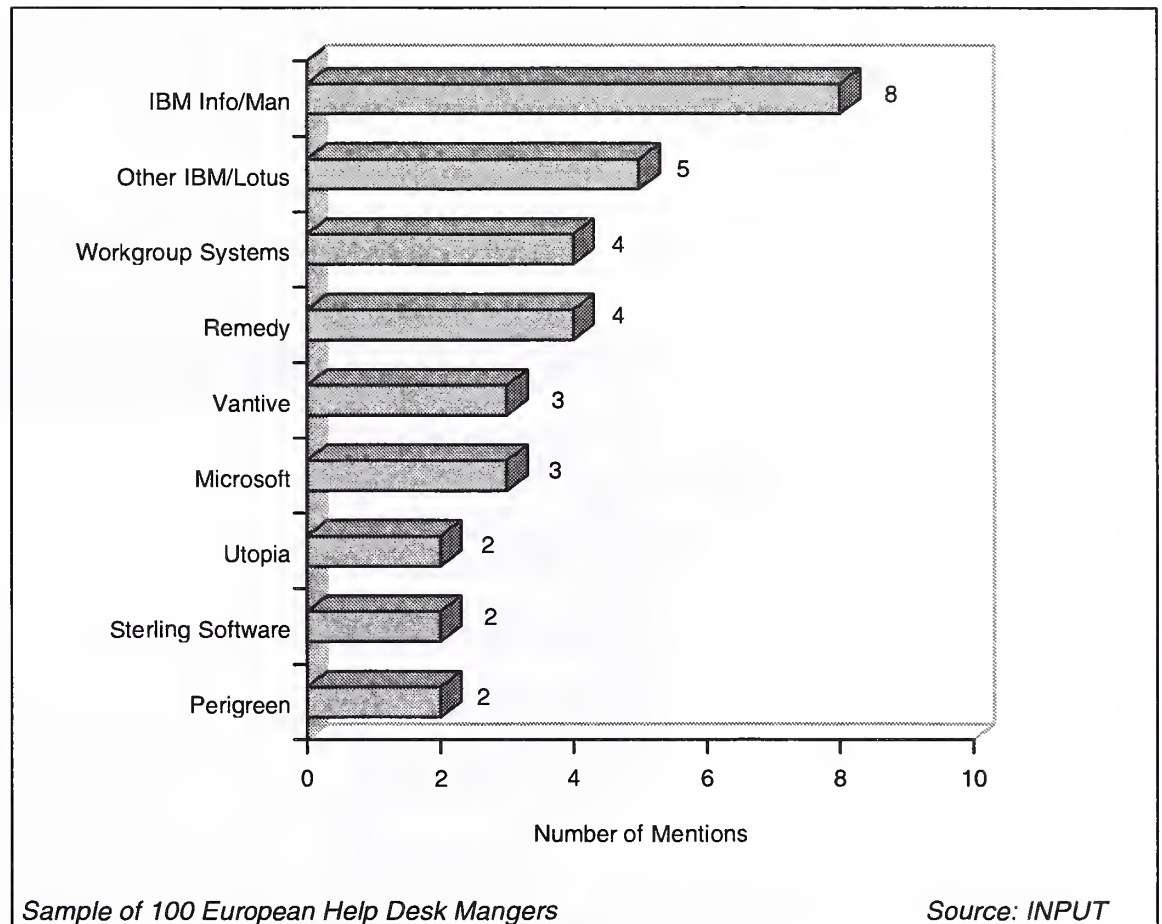
- France, which has the highest incidence of in-house developed systems (56%)
- France and Central Europe, where 19% of organisations tailor standard packages (compared with the European average of 11%).

Interviewees were asked to indicate which standard packages their help desks use. Respondents named many different packages, indicative of the over-supply which characterises the help desk tools market (see Chapter IV, section B for commentary).

However, Exhibit IV-6 shows the vendors of help desk tools which received more than a single mention. It is interesting to note that some of the more familiar names such as Astea, Bendata, Clarify, Inference and Scopus so not appear.

Exhibit IV-6

Most Commonly Used Standard Software Tools, Europe 1996



E

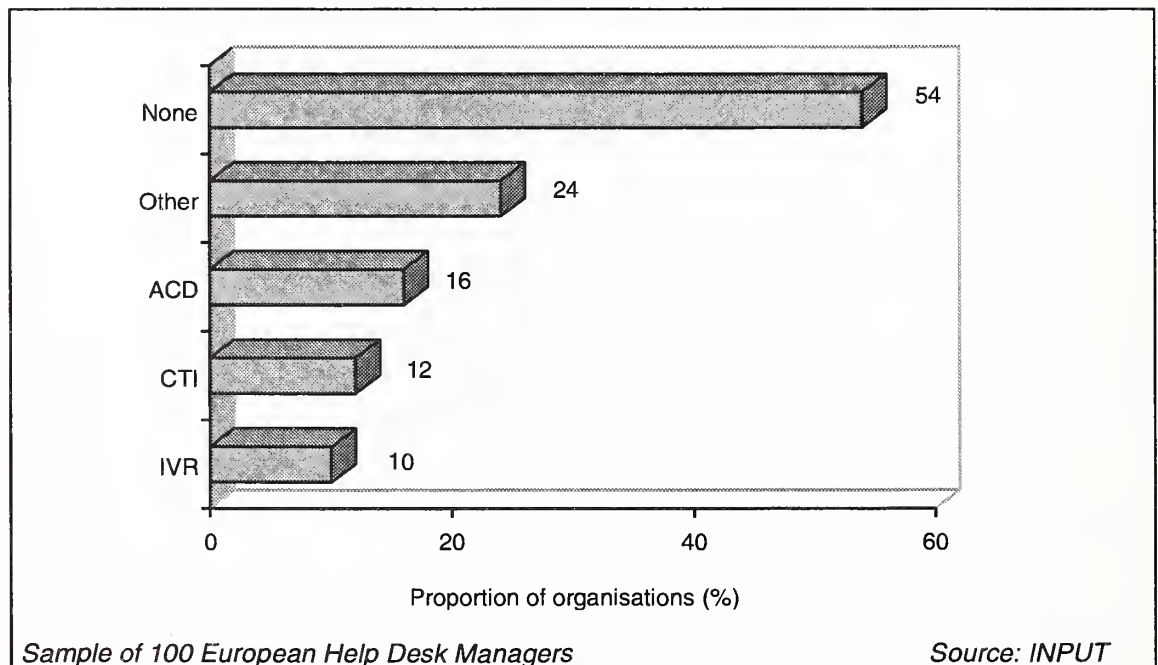
Most Help Desks Rely on Primitive Telephony Systems

As shown in Exhibit IV-4, 15% of help desk managers indicated, without prompting, that the effectiveness of their help desks is hindered by an inadequate telephone system.

The fact is, as shown emphatically by Exhibit IV-7, the majority of European organisations have yet to implement any form of advanced telephony.

Exhibit IV-7

Adoption of Advanced Telephony Systems, Europe 1996



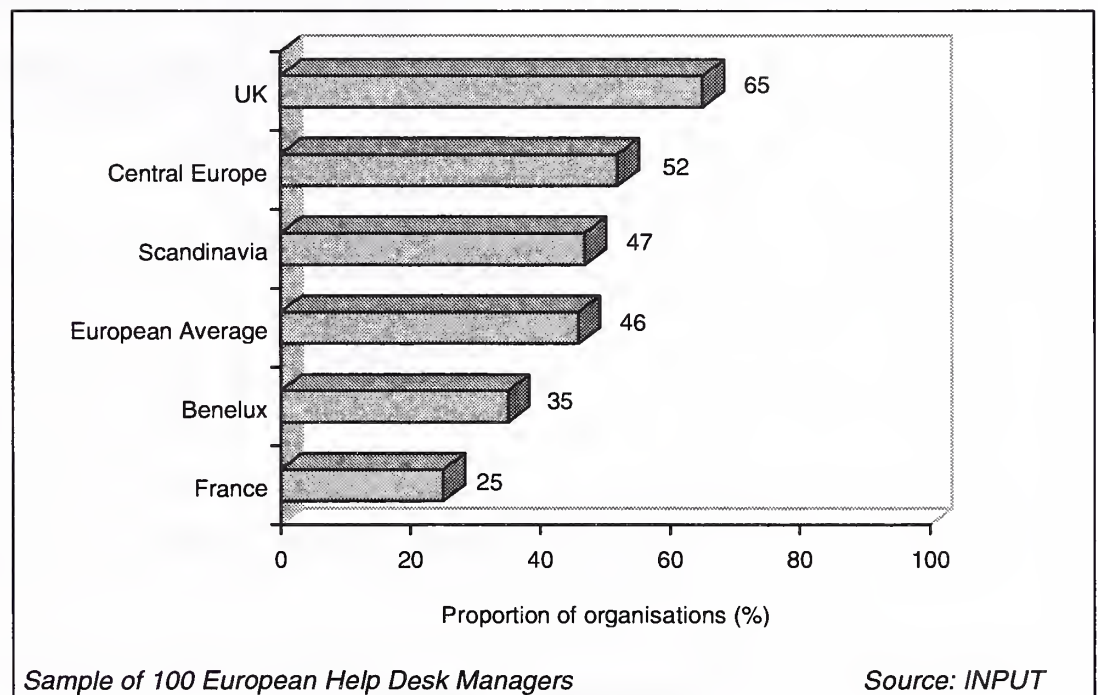
Advanced telephony is increasingly vital to modern help desk operations, both in terms of streamlining the interface with the caller (user or customer) and in order to maximise the efficiency of the help desk itself. Clearly, most IT help desks around Europe have a long way to go in terms of their use of telephony. The survey revealed that:

- Well over half of European help desks do not use any form of advanced telephony
- The highest take-up rate is in the UK, where 65% of organisations have implemented some form of advanced telephony; the lowest take-up rate is in France, where the figure is 25% (see Exhibit IV-8)

- At least one in six help desks uses an Automated Call Distribution (ACD) system
- Only one in ten help desks uses Interactive Voice Response (IVR)
- In excess of one in ten help desks uses a Computer Telephony Integration (CTI) system. Surprisingly, only 5% of the UK sample claimed to be using CTI; by contrast, the highest incidence of CTI is in Scandinavia, where almost a quarter of help desks have implemented it
- Almost a quarter of help desks use some other form of automated call routing system.

Exhibit IV-8

Adoption of Advanced Telephony by Country, Europe 1996



F

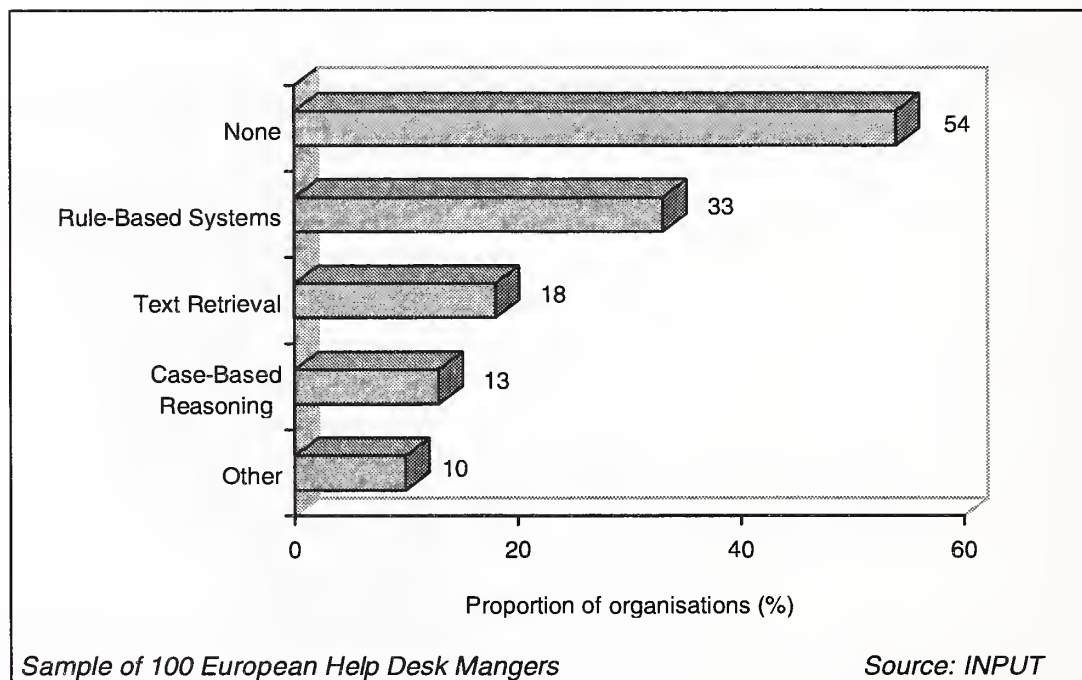
Few Help Desks Have Implemented Knowledge Tools

No matter how sophisticated the telephony and call management tools may be, a help desk is ultimately only as good as the information it has access to. In this respect, knowledge tools hold the key to a truly effective help desk system.

However, as shown in Exhibit IV-9, over half of European organisations have yet to implement any knowledge tools at all.

Exhibit IV-9

Adoption of Knowledge Tools, Europe 1996

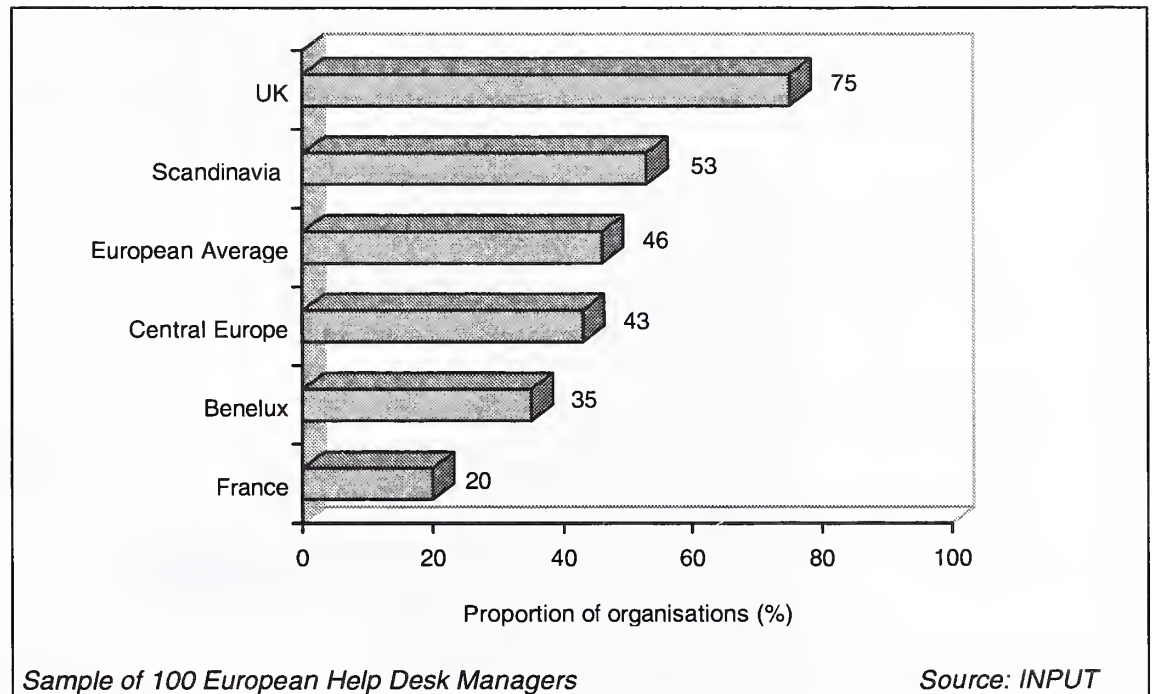


The survey also revealed that:

- The highest take-up rate is in the UK, where 75% of organisations have implemented some form of knowledge tools; the lowest take-up rate is in France, where the figure is 20% (see Exhibit IV-10)
- Rule-based systems are the most common, with a third of European help desks using decision trees or other rule-based systems. The highest incidence of rule-based systems is the UK, where 65% of help desks use them; the lowest incidence is France, with just 13%
- Just under one in five help desks uses a text-retrieval system

- Just one in eight organisations has implemented Case Based Reasoning (CBR). The best take-up rates were recorded in Central Europe (19%) and Scandinavia (18%).

Exhibit IV-10

Adoption of Knowledge Tools by Country, Europe 1996

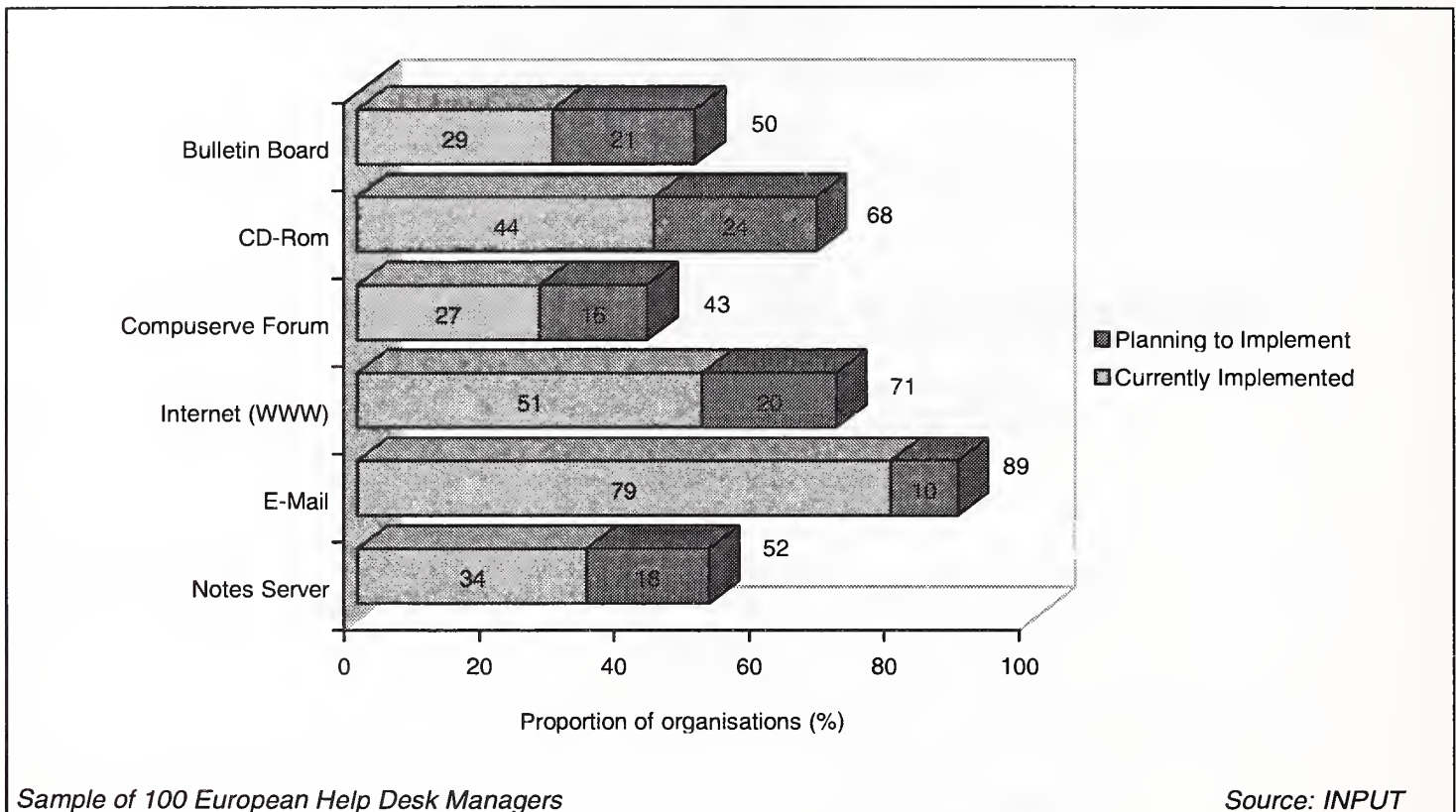
G

Help Desks Using On-Line Support Tools Increasingly

The survey revealed that help desks are employing a variety of on-line tools and services to support their activities. See Exhibit IV-11.

Exhibit IV-11

On-Line Services Supporting The Help Desk, Europe 1996

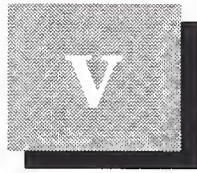


It is interesting to note that:

- Email has been adopted widely. Almost 80% of help desks use email currently and, with a further 10% planning to adopt it in the near future, the use of email is clearly becoming universal
- The Internet (including the World Wide Web) is being used by half of all help desks, and a further 20% plan to use it soon. It was surprising to find that in the UK only 20% of help desks currently use the Internet, the lowest incidence of all the countries surveyed. By contrast, three quarters of organisations in Central Europe claim to use the Internet in support of the help desk (the highest incidence recorded)

- A much higher proportion of help desks in France use, and plan to use, CD-ROM than in other countries. Three quarters of the French sample currently use CD-ROM, compared with the European average of 44%
- Significantly more UK help desks plan to use bulletin boards in future than help desks in other countries. Three quarters of UK help desks will be using bulletin boards in the next 1 to 2 years compared with an average 50% in the rest of Europe.

(Blank)



Purchasing Help Desk Services — The User Perspective

A

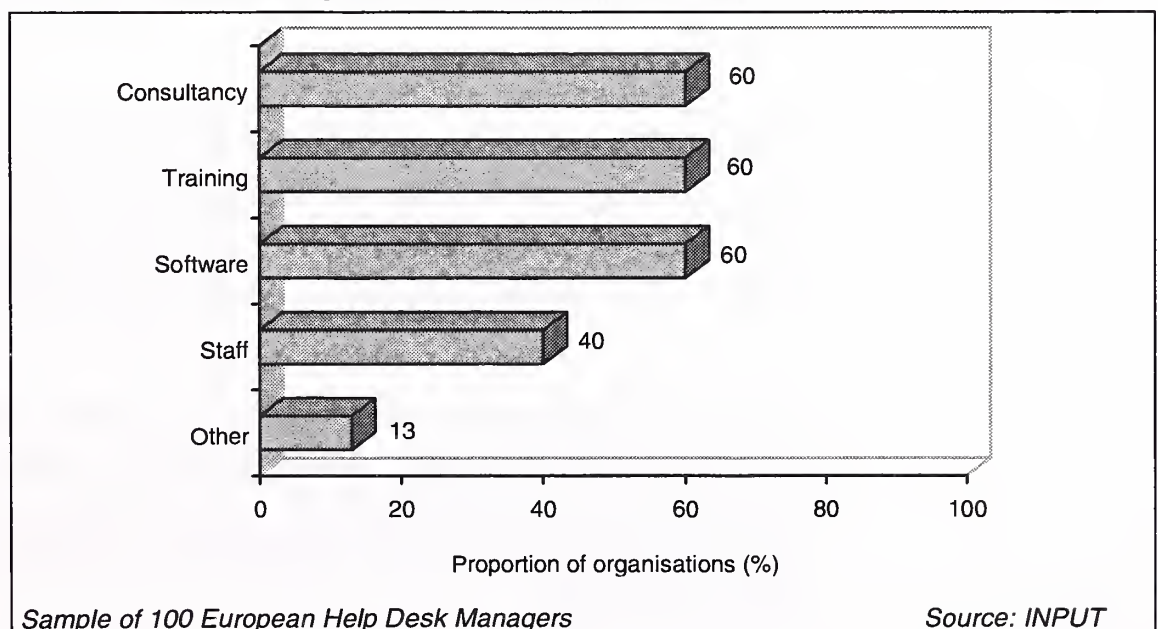
Software, Consultancy, Training in Demand

To date, most of the help desk services purchased by IT departments have been related to the design and implementation of the help desk. There has been strong demand from organisations implementing help desks for the first time or modernising existing help desks.

As shown in Exhibit V-1, almost two-thirds of help desk managers indicated that they have purchased consultancy services, training and software services in the past.

Exhibit V-1

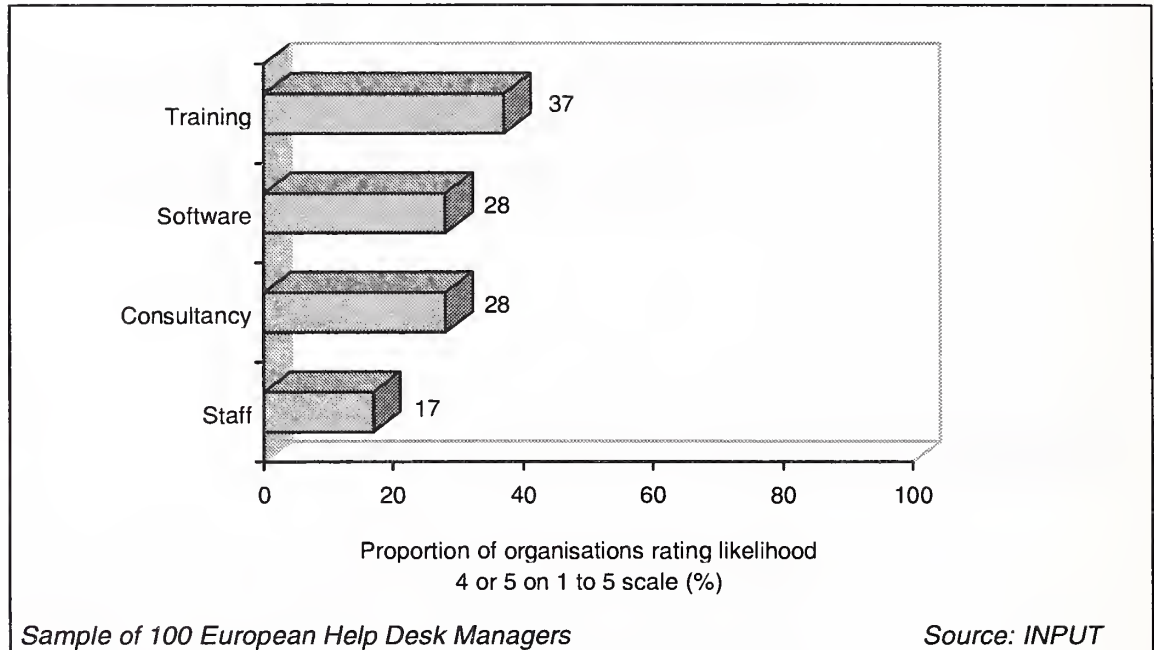
Most Commonly Purchased Help Desk Services, Europe 1996



Furthermore, of those organisations which currently do *not* buy in services or subcontract any part of their help desk function, a significant proportion intend to buy in services in the near future. See Exhibit V-2.

Exhibit V-2

Intentions to Purchase Help Desk Services, Europe 1996



B

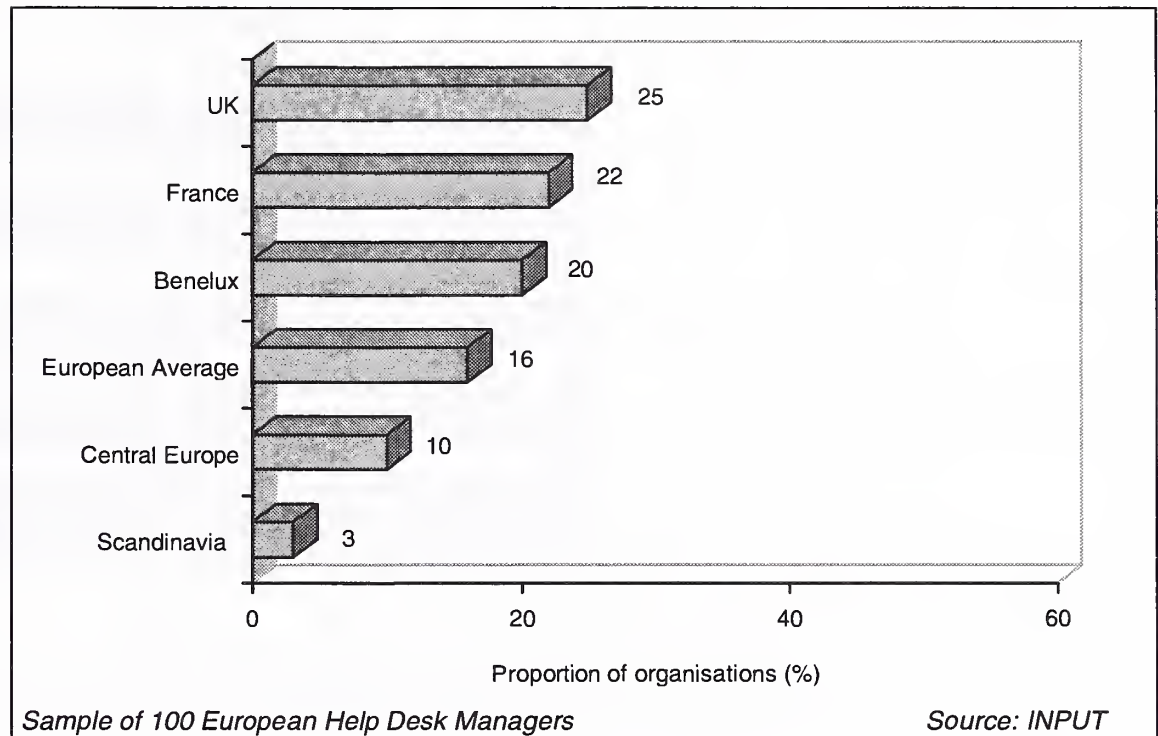
Second Level Help Desk Operations Increasingly Outsourced

Clearly, there is an established trend of IT departments purchasing individual help desk services and, as shown above, this trend looks set to continue.

However, until relatively recently, the day-to-day operation of the help desk has tended not to be outsourced. Surveys three years ago and two years ago indicated very low levels of help desk operations outsourcing. However, the most recent survey reveals that currently 16% of IT help desks across Europe have been outsourced to a third party. See Exhibit V-3.

Almost certainly, these findings relate to the outsourcing of *second line* help desks. INPUT believes that much smaller numbers of organisations are currently outsourcing *first line* support. However, these statistics certainly suggest that in the last two years, help desk outsourcing has begun to take off.

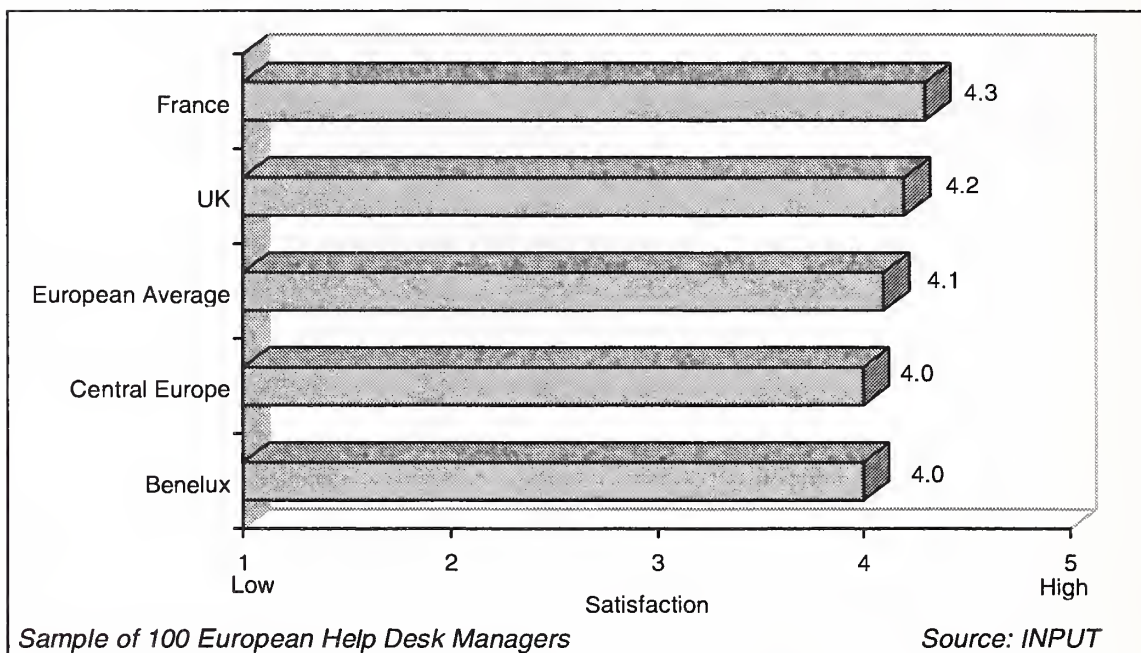
Exhibit V-3

Outsourcing of Second Line Help Desks by Country, Europe 1996

Furthermore, organisations that have outsourced their help desk operations are very satisfied with the experience. Exhibit V-4 shows that, on a 1 to 5 scale of satisfaction, respondents consistently scored 4 and above, irrespective of geography.

Exhibit V-4

Satisfaction with Help Desk Outsourcing by Country, Europe 1996



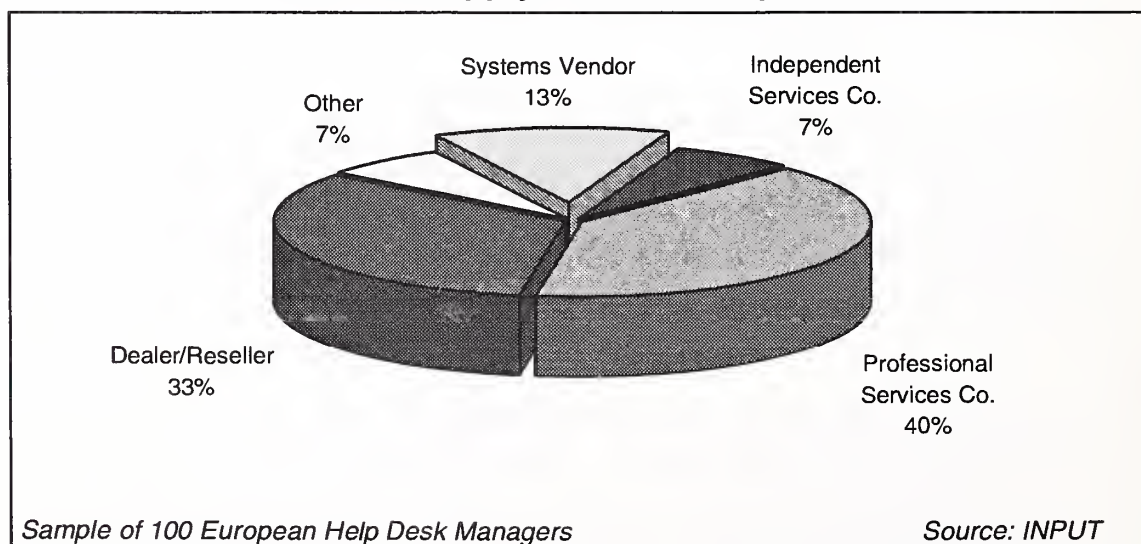
C

Professional Services Firms and VARs Currently Preferred

Exhibit V-5 shows who is currently supplying services to the help desks which featured in the user survey for this study.

Exhibit V-5

Service Supply Profile, Europe 1996



This supplier profile can be interpreted as follows:

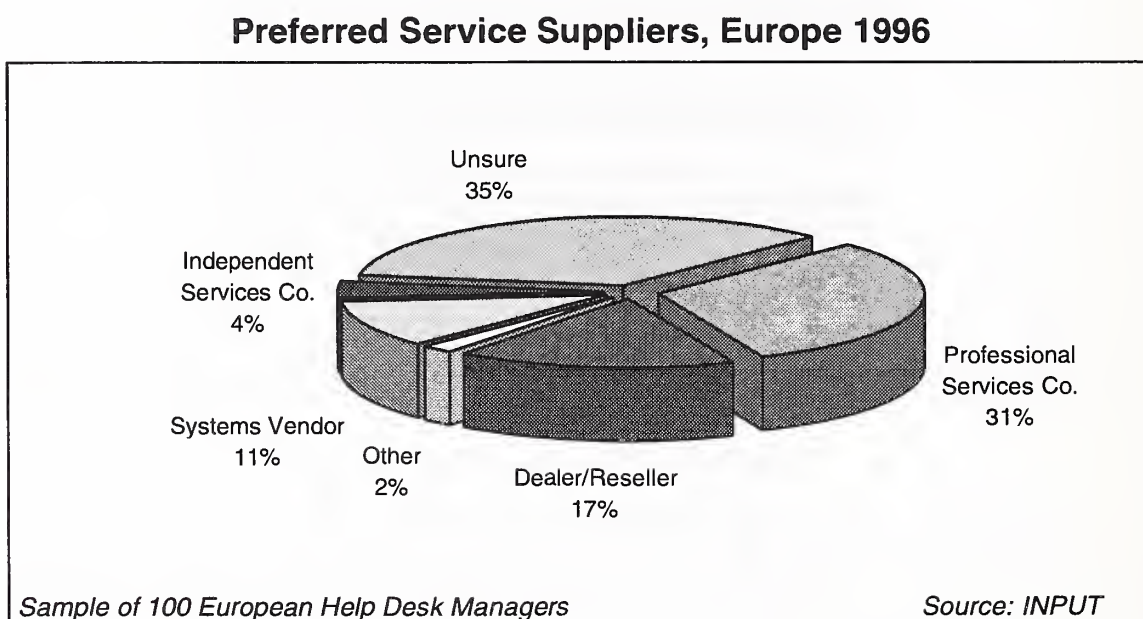
- Many organisations are looking primarily for advice and guidance on how to implement a help desk, or bring their existing help desks up to date. In many cases, this involves the design of new internal processes and the selection of new software tools. For these reasons, professional services firms (40% share) are in greatest demand
- Resellers and VARs (33% share) are not only supplying product into large corporate accounts, but they are also providing implementation and support services. Resellers are often the first to detect the need for external assistance with internal help desks, and are not slow to react to new business opportunities
- Systems vendors (13% share) have so far been slow in putting together a coherent help desk service offer. Ironically, the systems vendors have the broadest skillset, being able to supply, implement and integrate systems as well as provide consultancy.

Section A of Chapter VI provides further commentary on the competitive environment for help desk services.

D**Help Desk Managers Open-Minded About Future Service Partners**

Irrespective of the shape of the supplier profile at present (Exhibit V-5), there is good news for all prospective suppliers of help desk services. As shown in Exhibit V-6, a large proportion of help desk managers do not favour one type of vendor over another.

Exhibit V-6

**E****Integration Plans Point to Significant Vendor Opportunities**

Reference has been made elsewhere in this report to the sophistication of modern help desk technology, and in particular to the potential for integrating various IT functions and processes via the help desk itself. Supported by advanced telephony and knowledge tools, today's help desk can be used to integrate functions such as problem management, systems management (including network management), training and asset management.

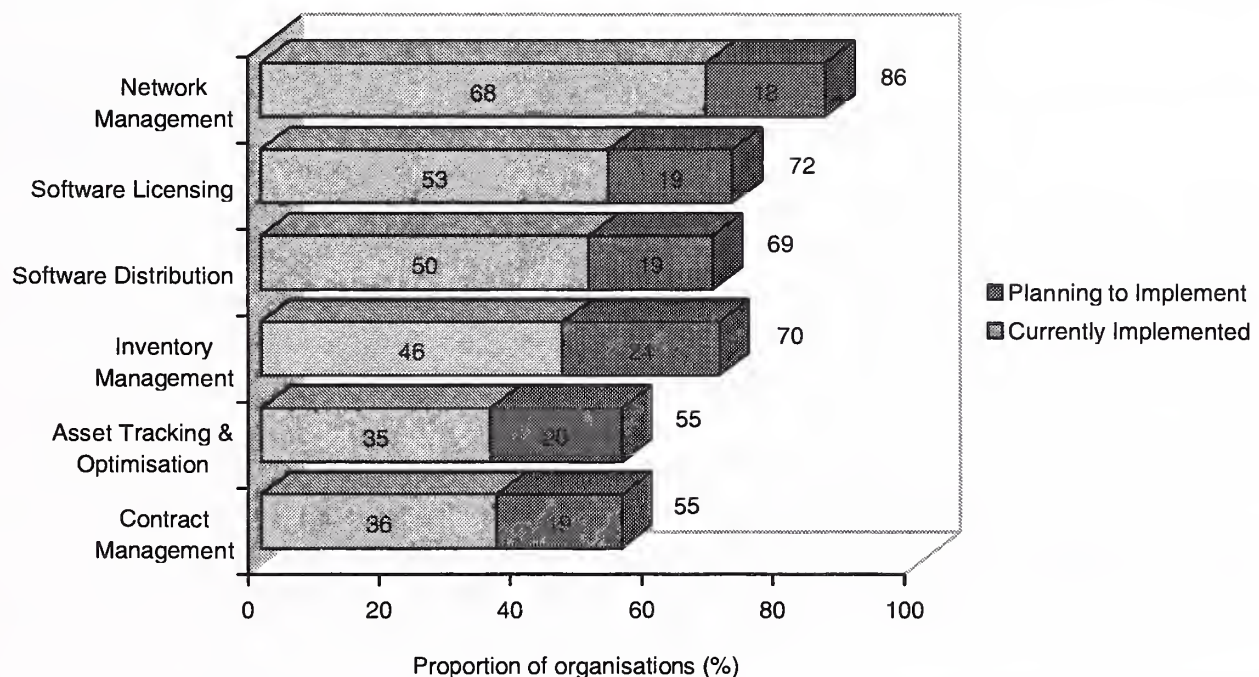
The evidence of the survey suggests that help desk integration is already well advanced in some areas. Exhibit V-7 shows that systems management functions in particular have already been linked into the IT help desk; for example:

- Two thirds of help desks have integrated network management to some extent
- Approximately half of help desks have integrated software licensing and distribution.

Organisations appear to have been slower to integrate asset management functions with the IT help desk. However, up to a quarter of help desks have plans to fully integrate asset management with the help desk within the next 1 to 2 years.

Exhibit V-7

IT Functions Integrated with the Help Desk, Europe 1996

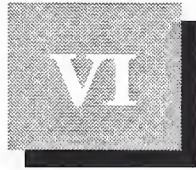


Sample of 100 European Help Desk Managers

Source: INPUT

With so many organisations planning significant integration activity in the near future, the opportunities for vendors with systems integration capability look very good indeed.

(Blank)



Vendor Initiatives in Help Desk Services

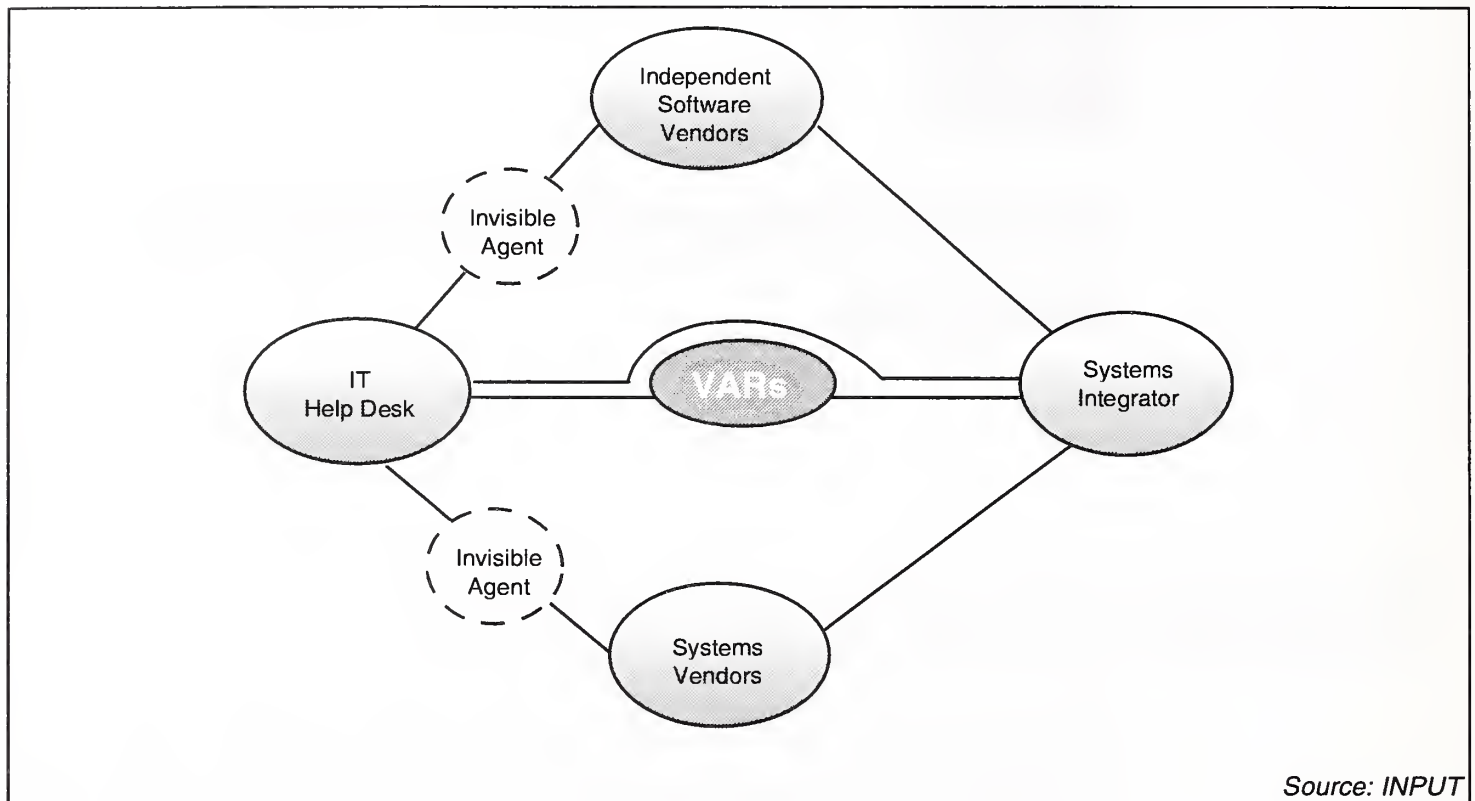
A The Competitive Landscape For Help Desk Services

There are typically many types of product and service supplier to IT departments, and most are now beginning to target the IT help desk specifically. Systems vendors, VARs and resellers, professional services firms, independent maintenance organisations and outsourcers are all actively pursuing the help desk market with a variety of service offerings.

Of course, the above-mentioned vendor categories are not always discrete or mutually exclusive. For example, a single vendor may act in the capacity of consultant, product supplier and systems integrator. However, Exhibit VI-1 is a schematic showing the relationships between various types of supplier and the IT help desk.

Exhibit VI-1

Relationships Between the IT Help Desk and Suppliers



Source: INPUT

For simplicity, help desk services can be categorised as follows:

- Product supply, both software and hardware
- Professional services, including planning and project services and training services
- Systems implementation and integration
- Maintenance and support
- Operational services.

To date, the great majority of services delivered have been related to the implementation of help desks, both the physical implementation and associated professional services. However, there is a growing trend towards the delivery of operational services; i.e. where the operation of the help desk is outsourced to the service provider. Increasingly, second line help desks are being outsourced in this way, though, as yet, there is relatively little outsourcing of first line help desks. This is discussed in more detail in Chapter III.

Exhibit VI-2 shows the relative capabilities of various types of vendor by service type.

Exhibit VI-2

Relative Strengths of Help Desk Service Suppliers

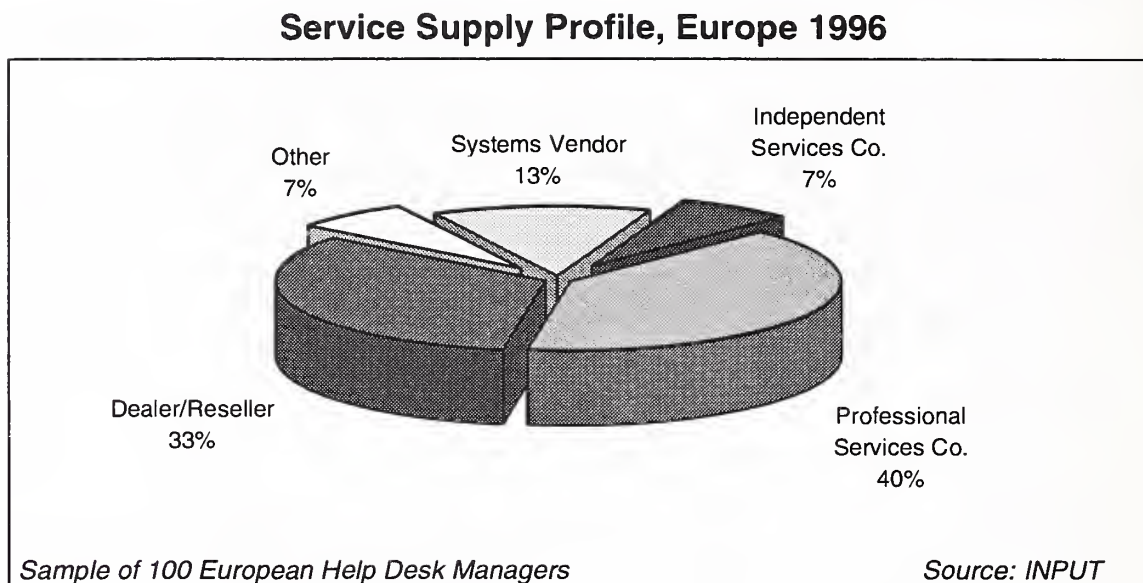
Service	Vendor Type					
	ISV	System Vendor, Integrator	Outsourcer	ISO	Professional Services Firm	Reseller, VAR
Product Supply	*	***	**	**	*	***
Consult (e.g. Plan, Design)	*	***	***	**	***	**
Implement	*	***	**	***	***	***
Integrate	*	***	***	**	***	**
Train	**	***	**	*	***	**
Maintain	**	***	*	***	*	**
Operate	-	***	***	**	**	*

Source: INPUT

Footnotes: *Capability star rating: 1 = low, 2 = medium, 3 = high*
ISV = Independent Software Vendor
ISO = Independent Services Organisation (incl. IMOs / TPMs)
VAR = Value-Added Reseller

Exhibit VI-3 shows who is currently supplying services to the help desks which featured in the user survey for this study.

Exhibit VI-3



This supplier profile can be interpreted as follows:

- Many organisations are looking primarily for advice and guidance on how to implement a help desk, or bring their existing help desks up to date. In many cases, this involves the design of new internal processes and the selection of new software tools. For these reasons, professional services firms (40% share) are in greatest demand
- Resellers and VARs (33% share) are not only supplying product into large corporate accounts, but they are also providing implementation and support services. Resellers are often the first to detect the need for external assistance with internal help desks, and are not slow to react to new business opportunities
- Systems vendors (13% share) have so far been slow in putting together a coherent help desk service offer. Ironically, the systems vendors have the broadest skillset, being able to supply, implement and integrate systems as well as provide consultancy.

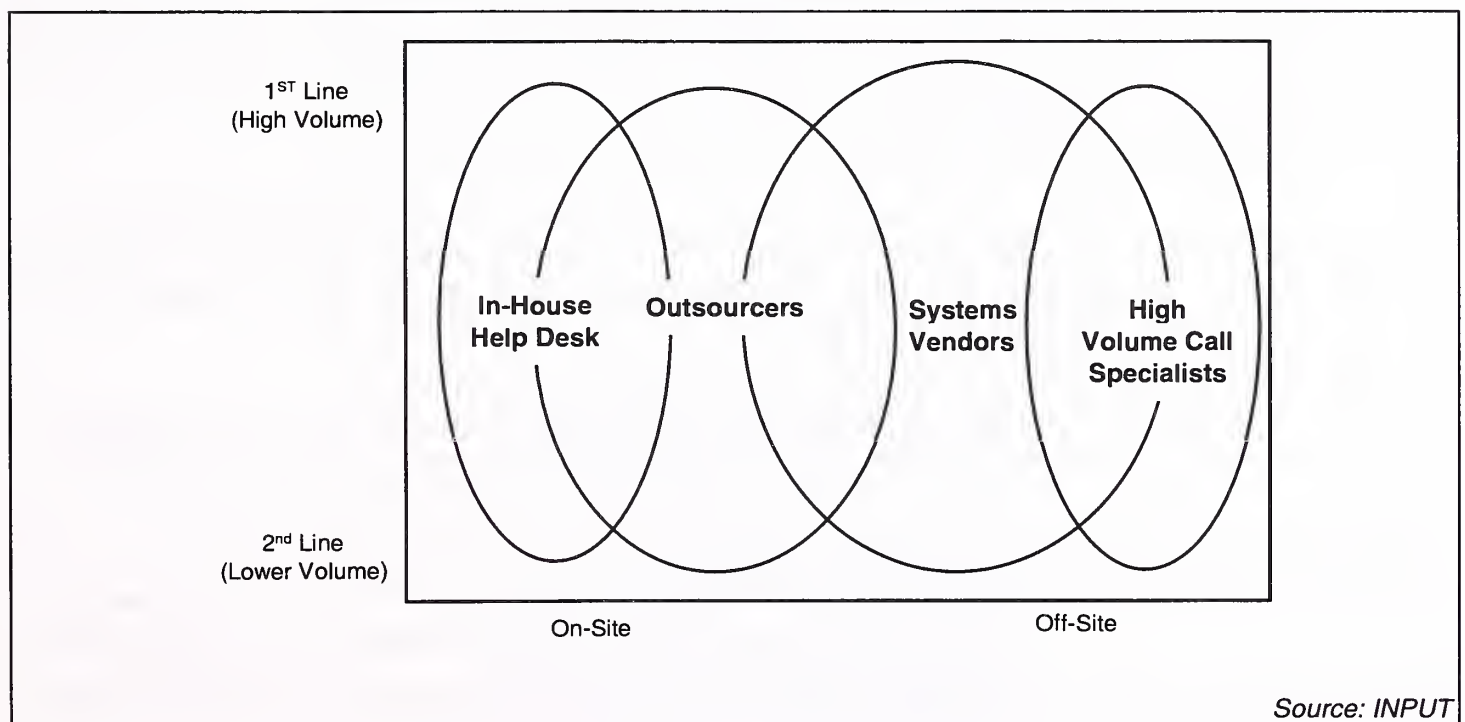
Furthermore, it is important to note the following competitive trends which are not revealed explicitly by the supply profile in Exhibit VI-3:

- Many of the big outsourcing vendors are now positioning the help desk at the heart of their client/server strategy. To date, these vendors have tended to focus on datacentre operations, but are now targeting the distributed client/server environment. Vendors such as SHL Systemhouse (see section I below) believe that the help desk will be the key to unlock this market
- Operational help desk services are often provided by invisible agents acting on behalf of a product vendor. For example, when an IT help desk escalates a call to Microsoft, it will probably be handled by one of Microsoft's ASC partners (Digital, H-P, NCR, Unisys, Olivetti and ICL Sorbus)
- Smaller, independent service vendors specialising in high-volume call handling have entered the marketplace relatively recently. Companies such as Softbank PSC, ActionTrac and Stream International act as invisible agents for IT and non-IT companies alike. For example, Softbank PSC provides a help desk service on behalf of Microsoft, Netscape and AST.

Exhibit VI-4 maps out the areas in which different types of vendors are offering operational help desk services.

Exhibit VI-4

Help Desk Operations — Competitive Domains



Note that:

- The big outsourcers such as EDS are still largely operating on-site, though some (e.g. SHL) have begun to realise economies of scale by moving their help desk operations off-site. Only approximately 20% of outsourcing services are delivered from off-site
- The strength of the systems vendors has been in the provision of second line support, mostly off-site. However, a number of systems vendors have a strong culture of operating on-site. A few systems vendors are now active in the provision of high-volume first line support from remote call centres; for example, the Microsoft ASC partners (Digital, H-P, NCR, Unisys, Olivetti and ICL Sorbus).

Sections B to J contain profiles of systems vendors/integrators and outsourcing companies who are currently promoting help desk services as an important part of their service portfolio. Note that the selection of these vendors does not imply market leadership, and the profiles themselves are presented in alphabetical order.

B

Bull's Service Desk

The *Service Desk* is the central component of Bull UK's Desktop Services portfolio. The Service Desk sits at the centre of a group of related desktop services; the other services are DESKPlan, Deskstart, DESKcare and DESKmanage.

The Service Desk is promoted not just as a call handling and problem management service, but also as a tool for the effective measurement and management of the desktop environment. Service Desk comprises the following services:

- Service Management. Bull provides an on-site service manager whose role is not only to ensure that SLAs are met, but also to guide and advise the customer on service improvements
- Help Desk, providing technical back-up to the IT department or direct to end-users. This is mostly provided on-site, though Bull is looking to migrate this to an off-site service as economies of scale are realised

- Order Desk, through which Bull and non-Bull desktop systems can be ordered and delivered to agreed timescales
- Life Cycle Management, a hardware and software asset control service
- Training services, including computer based training (CBT), clinics and planned courses
- Networking, to provide related network consultancy, design, build and implementation services.

Though currently available in the UK only, Bull is planning to roll out a desktop services programme based around the Service Desk across Europe in the near future.

C

CGS Focuses on the Support of Core Business Applications

Cap Gemini Sogeti is one of the leading outsourcing vendors in Europe and has, in particular, achieved considerable success through Hoskyns in the UK and its association with debis Systemhaus in Germany.

The company is now devoting significant resources to the help desk support component of its desktop services offer. Cap Gemini Sogeti has standardised on the tools used to support its help desks across its centres in France, Benelux and the UK. The help desk service, offered for both first and second line support, is marketed under the name Cap Téléservice in France.

However, CGS is not concentrating on offering a general purpose help desk to support the common desktop software products from organisations such as Microsoft. Instead, the company is focusing on providing support for core business applications, a service that complements the company's application management offering.

For example, Cap Sesa Hoskyns is currently supporting the key business system for a chain of opticians providing support via help desk services to each of their 400 outlets.

CGS perceives that this type of opportunity will exhibit significant growth over the next few years.

D**Digital Promotes Multivendor Client/Server Expertise**

Digital's help desk program offers:

- Premium support for today's emerging "hot" client/server software computing environments like groupware, email and asset management technologies
- Flexible, simplified pricing and packaging. Three levels of services are offered to enable customers selectively to outsource their help desk operations, from end-user to help desk professional, to IT/systems managers.

Digital boasts that its program is designed to increase an end user's overall productivity while reducing the costs associated with moving into and properly supporting new multivendor, client/server technologies. In addition, these services (sold by Digital and its business partners) allow customers to choose a solution to match both their support needs and their business model: per incident, call pack or annual contract.

Digital's help desk offerings allow customers to choose the level of services to meet their needs, ranging from back-up support for help desk professionals to a fully customised offering tailored for specific environments and business objectives.

Digital offers broad multivendor expertise. Help desk support is available for a diverse range of technologies and computing environments. Digital can support desktop applications, network operating systems, client/server software, asset management software, and custom groupware applications.

Its help desk support covers:

- More than 200 desktop applications, including Microsoft Office, Lotus SmartSuite, and WordPerfect
- The most popular operating systems, including MS-DOS, Windows, Mac OS, OS/2, and Windows 95
- Leading network operating system software, including Microsoft's BackOffice and NT, Novell's NetWare, Digital's PATHWORKS, and Banyan's VINES

- Enterprise-wide asset management applications, including Microsoft's System Management Server
- Groupware solutions, including Lotus Notes, and Novell Groupwise.

Digital offers to provide outsourced help desks for user organisations as well as its high volume offerings covering the support of products sourced from organisations with which it partners.

Digital has recognised the opportunities that the help desk services market offers and has positioned itself to acquire any type of help desk business.

E

EDS Invests Heavily in Help Desk Automation

EDS Client/Server Group is responsible for EDS help desk services. EDS has developed a reputation for being somewhat mainframe oriented; however, like SHL, it now offers multivendor capabilities for managing client/server environments.

EDS' Customer Service Technologies (CST) provides integrated customer service solutions through The Complete Call Center. CST focuses on improving, reengineering, and managing customer service centers by providing technology integration, operations and management support, staffing, and a physical environment.

Collectively, this service responds to millions of calls each year and has strategic relationships in place with leaders in the voice/data technology industry to provide cost-effective solutions.

EDS continues to acquire most of its help desk services revenue as part of larger outsourcing contracts that involve mainframe management.

F

IBM's Integrated Help Desk

IBM's Integrated Help Desk (IHD) is a complete suite of customised offerings for managing calls and problems within the client/server environment. This offering provides multiple capabilities, including integrated voice and data. IHD solutions work with multivendor host problem/network management products, phone systems, and system management tools.

Services include help desk assessment, planning, design, integration, installation, education, and support.

IHD is a coordinated approach to the whole problem management environment. It combines LAN server technology for call collection and tracking with communication interfaces to email, voice and data systems, as well as links to host-based problem management systems.

An OS/2 application provides tailored prompt screens, which can be customised to access a knowledge-based expert system and related problem database. With easier problem determination and a wealth of back-up information, the right solution can be found more quickly. And as problems can be identified more accurately, electronic problem reporting is more consistent, highlighting problem trends as well as outstanding problems.

Additionally, IBM offers outsourcing services for the PC environment. Its Personal Systems Help Desk provides 24x7x365 support to users and PC systems through direct telephone access to PC specialists with a wide understanding of integrated multivendor systems.

Like Digital, IBM has also positioned itself to acquire any type of help desk business.

G**ICL Sorbus Offers Full Range Of Help Desk Services**

ICL Sorbus has been more active in the help desk market than most systems vendors. With access to advanced service management technology, and significant expertise in most help desk disciplines, including knowledge engineering, ICL Sorbus can offer a complete range of services from design and implementation to day-to-day operations.

For example, ICL Sorbus was able to design and implement a bespoke help desk for the high street PC retailer Escom within just three weeks. This help desk is currently running at 3,000 calls per day.

The complete range of help desk services offered by ICL Sorbus is as follows:

- Consultancy services, designed to support customers that wish to operate their own help desks. Specific consultancy services include Evaluation, Requirements Analysis, Product Selection, Process Definition and Implementation
- Training, which covers both extensive product training on all the leading office suites and network products, plus IT support staff training. The latter category covers customer interface skills, help desk supervision and management and service management courses leading to accreditation
- Tools Integration and Development, a service which enables the help desk to be integrated with other parts of the IT support infrastructure. Integration activities cover asset databases, knowledge tools, systems management, network management and just in time training tools
- Customer Help Desk Support, whereby ICL Sorbus will provide a range of second and third line telephone advice and guidance services to complement and augment the customer's own resources
- Help Desk Provision, whereby help desk operations can be outsourced partially or completely to ICL Sorbus. This service is delivered either on-site or via one of ICL's Customer Support Centres

- OEM and Warranty Support. ICL Sorbus offers help desk services to vendors and manufacturers in support of customer warranty agreements. For example, ICL Sorbus currently supports Microsoft Windows 95, Office and consumer products, and Escom PCs.

H

Olivetti's ITHelp — The Latest Addition To Desktop Services Family

Olivetti recently announced the launch of an expanded help desk support offering known as ITHelp. This is the latest addition to Olivetti's family of desktop services, other members of which include AssessIT, ValueIT, ProcureIT and FinanceIT. It will provide users with a single point of contact for all IT-related queries.

The ITHelp service capitalises on Olivetti's help desk system which provides global support on an extensive range of software, communications and network products. In addition, dedicated support analysts can provide bespoke support on customer-specific applications and systems as required.

Where Olivetti takes over the customer's existing help desk facility, calls are received directly from the end users. ITHelp does not limit the content of calls taken and the end user is encouraged to call the help desk for all software and hardware queries as well as information requests.

The Olivetti help desk service is organised on three levels:

- First level staff field calls from users and act as the primary point of contact to the help desk. Their role is to resolve problems as quickly as possible (with the help of problem solving tools, case bases and text databases) and close the call. If they cannot resolve the problem it is escalated to the second level
- The second level comprises various competence centres, each responsible for a specific domain. If the problem cannot be solved at this level, it is escalated to the third level
- The third level has links to third party IT suppliers such as Microsoft and Oracle. Support alliances are maintained with all major hardware and software manufacturers.

However, as far as the user is concerned, ownership of the call is retained by the first level.

ITHelp provides a level of help desk coverage to suit each customer's requirements, and defines it in a detailed service level agreement. ITHelp options include:

- Analysis of calls and resultant consultancy
- Customised call handling, e.g. use of company name
- Problem simulation or mirror configuration
- On-site intervention for trouble shooting
- Telediagnosis.

I

SHL's Enterprise Help Desk

SHL's help desk services are offered as part of their Networked Systems Management offering which has been developed to manage client/server environments and to provide the levels of reliability and security required to support mission critical applications.

SHL's latest offer is the Enterprise Help Desk (EHD), into which networked systems management is fully integrated. Services are provided from a centralised networked operating centre, staffed by network and communications specialists equipped with the tools that enable them to manage many of the technical services remotely.

The services provided are fault management, performance management, configuration management, security management, software distribution, data recovery and accounting management.

Support is provided for all critical system elements, from the WAN interconnect to the end-user device. This includes:

- Hardware devices: hubs, routers, bridges, concentrators, servers, workstations, and other end user devices
- System software: Windows, Novell, UNIX (HP UX, AIX, SUNOS), OS/2, NTAS, etc.
- Shrink-wrapped products: Lotus 123, WordPerfect, Mail, etc.

Three tiers of service are provided:

- Tier 1, Stand Alone Support: basic services for users equipped with stand alone PCs
- Tier 2, Non-Mission Critical Support: comprehensive services for users connected to workgroup LANs
- Tier 3, Mission-Critical Support: advanced services for LANs used as a delivery platform for mission-critical applications.

J

SunService's Help Desk System Implementation Service

SunService's Help Desk System Implementation Service is aimed at Sun customers wishing to implement a help desk capability. A SunService team works with the customer's staff to determine specific requirements and design a custom implementation plan. Then, using the Sun HelpDesk Tools, the team implements the design.

The tools integrate the call management function with Sun's knowledge database, and with the customer's internal knowledge database. A working model is developed so the system design can be verified prior to final installation. The final installation is completed and then documented for the customer's reference.

The customer's help desk support staff is also coached on the working of the Sun HelpDesk Tools as implemented.

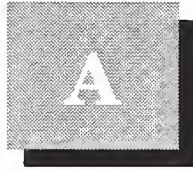
The HelpDesk Tools meet Sun customers' need for a UNIX-based solution that integrates tracking and escalation tools with an extensive knowledge database for internal help desk operations. The Sun HelpDesk Tools are a single integrated solution that includes:

- Sun CallTracker, advanced software to handle the wide range of automated help desk activities such as submission, assignment, notification, escalation, closure and reporting
- SunSolve engine, a powerful search and retrieval system with an extensive technical database for knowledge management

- SunCourier, a communication tool for help desk support staff to submit service requests for escalation to vendors like Sun.

The Sun Help Desk System Implementation Service is positioned for support and help desk groups that need to automate their organisation to achieve the benefits of call management and integrated knowledge bases.

(Blank)



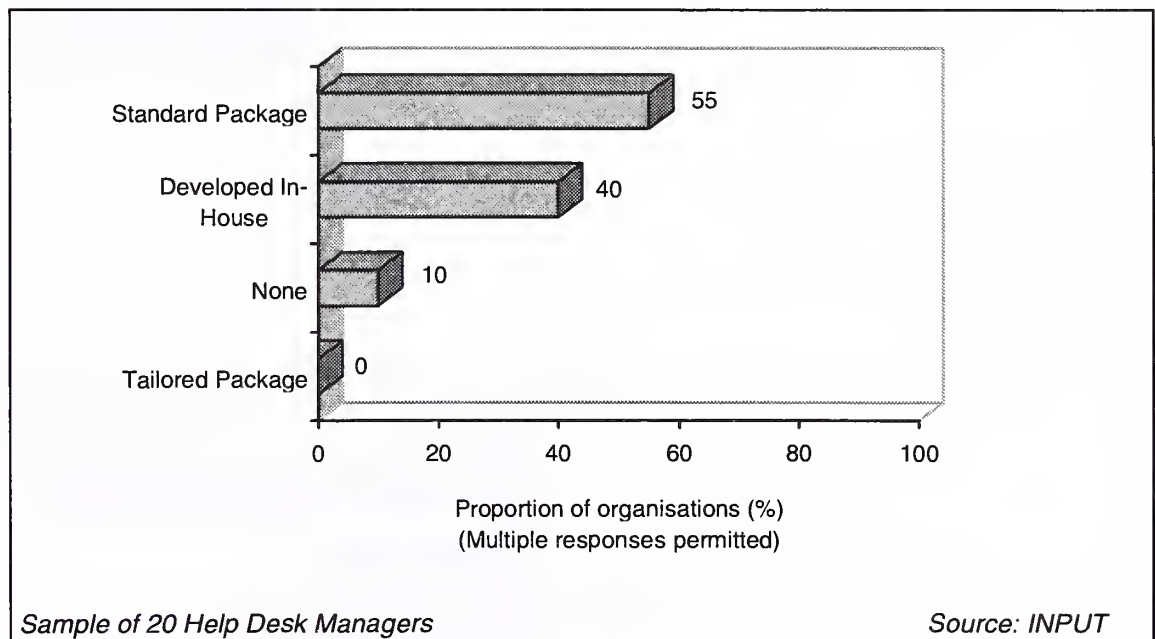
Help Desk Survey — Benelux

A

Call Management Software

Exhibit A-1

Packaged Vs Bespoke Help Desk Software, Benelux 1996



B**Telephony**

Exhibit A-2

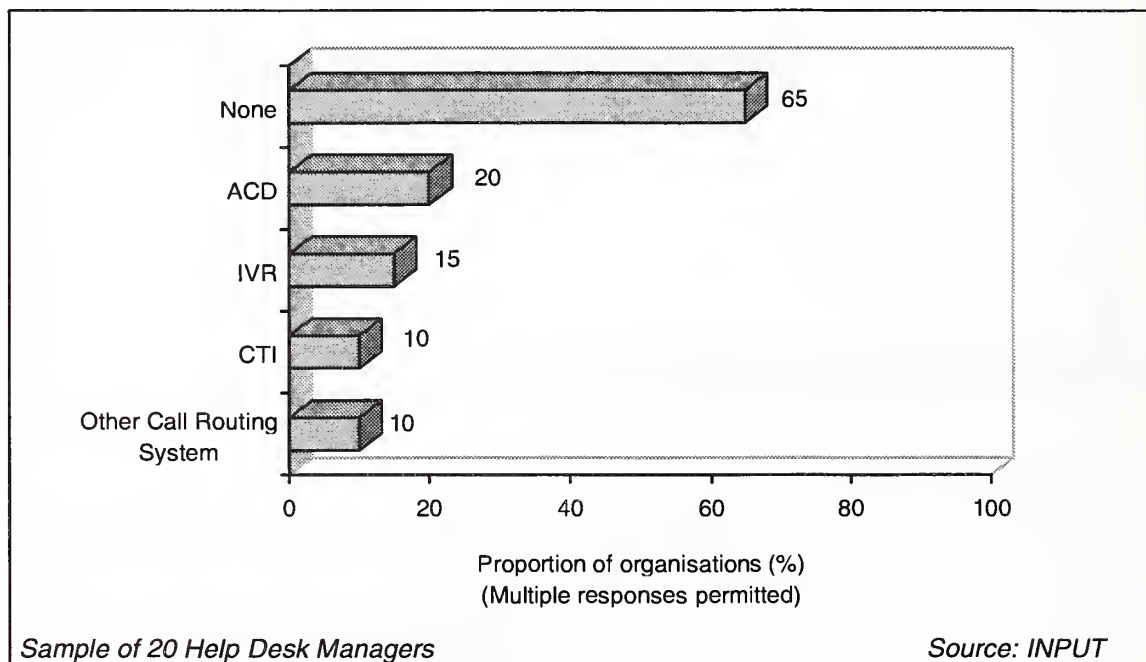
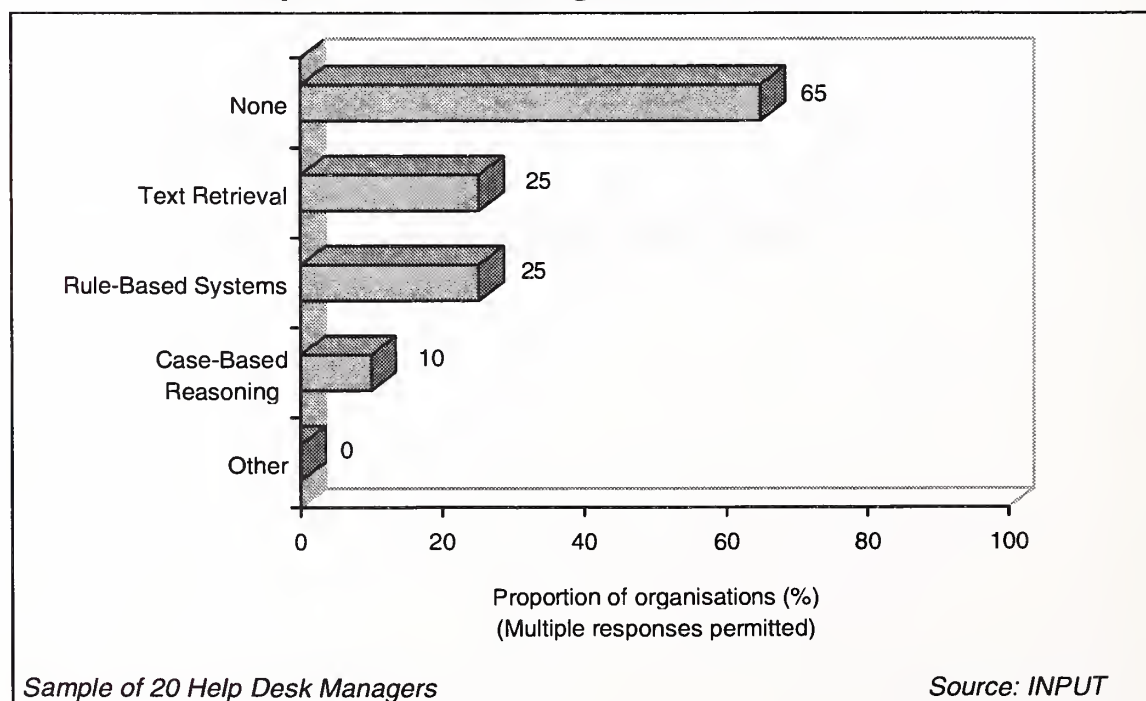
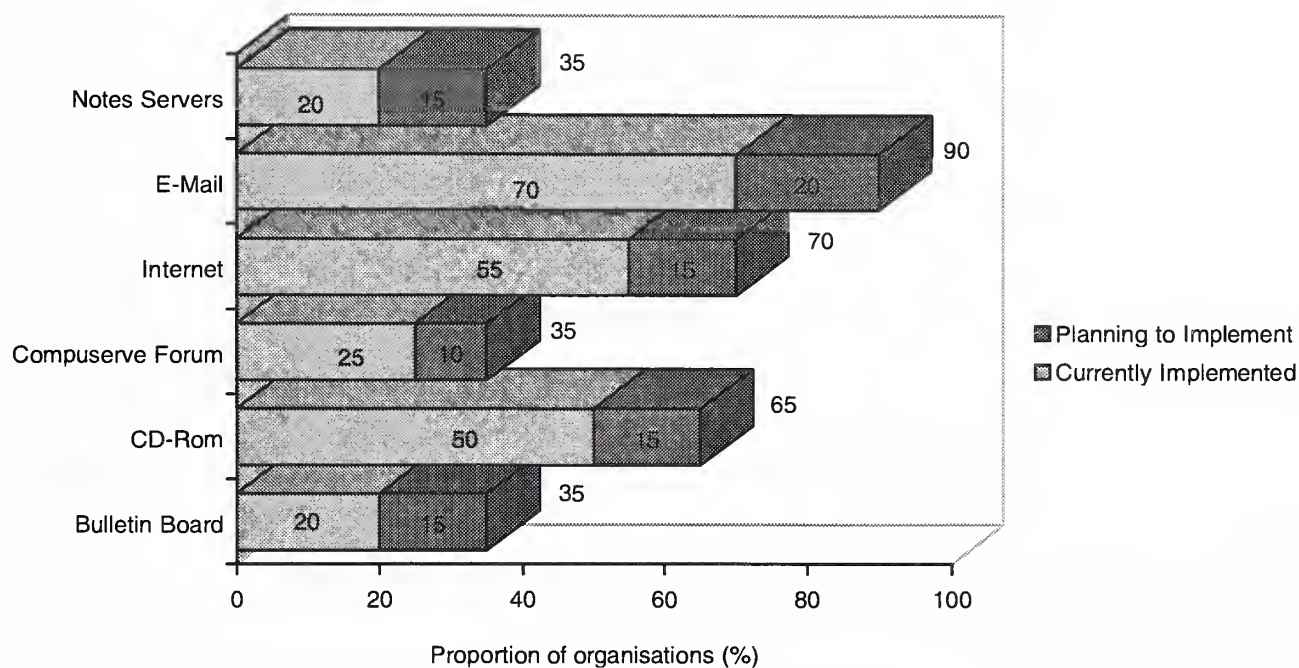
Adoption of Advanced Telephony Systems, Benelux 1996**C****Knowledge Tools**

Exhibit A-3

Adoption of Knowledge Tools, Benelux 1996

D**On-Line Support Tools**

Exhibit A-4

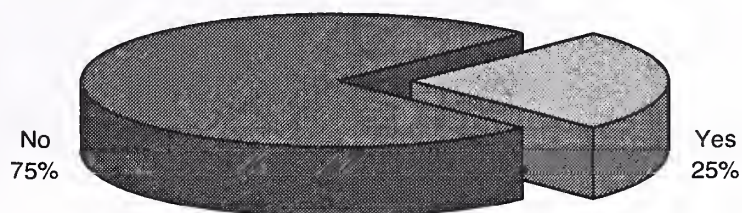
On-Line Services Supporting the Help Desk, Benelux 1996

Sample of 20 Help Desk Managers

Source: INPUT

E**Service Level Agreements**

Exhibit A-5

Take-Up of Help Desk SLAs, Benelux 1996

Sample of 20 Help Desk Managers

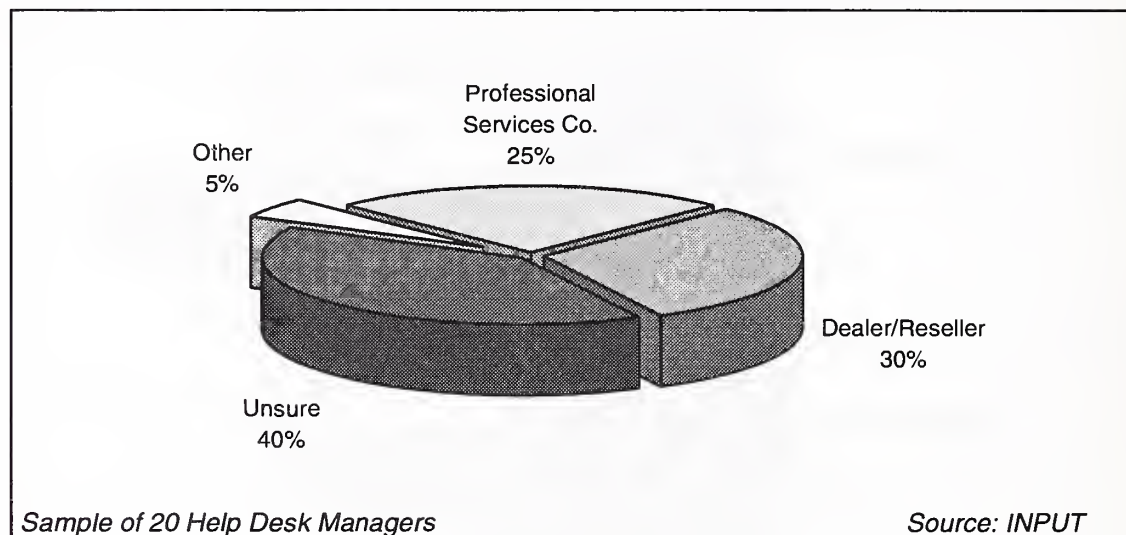
Source: INPUT

F

Preferred Supplier Type

Exhibit A-6

Preferred Service Suppliers, Benelux 1996

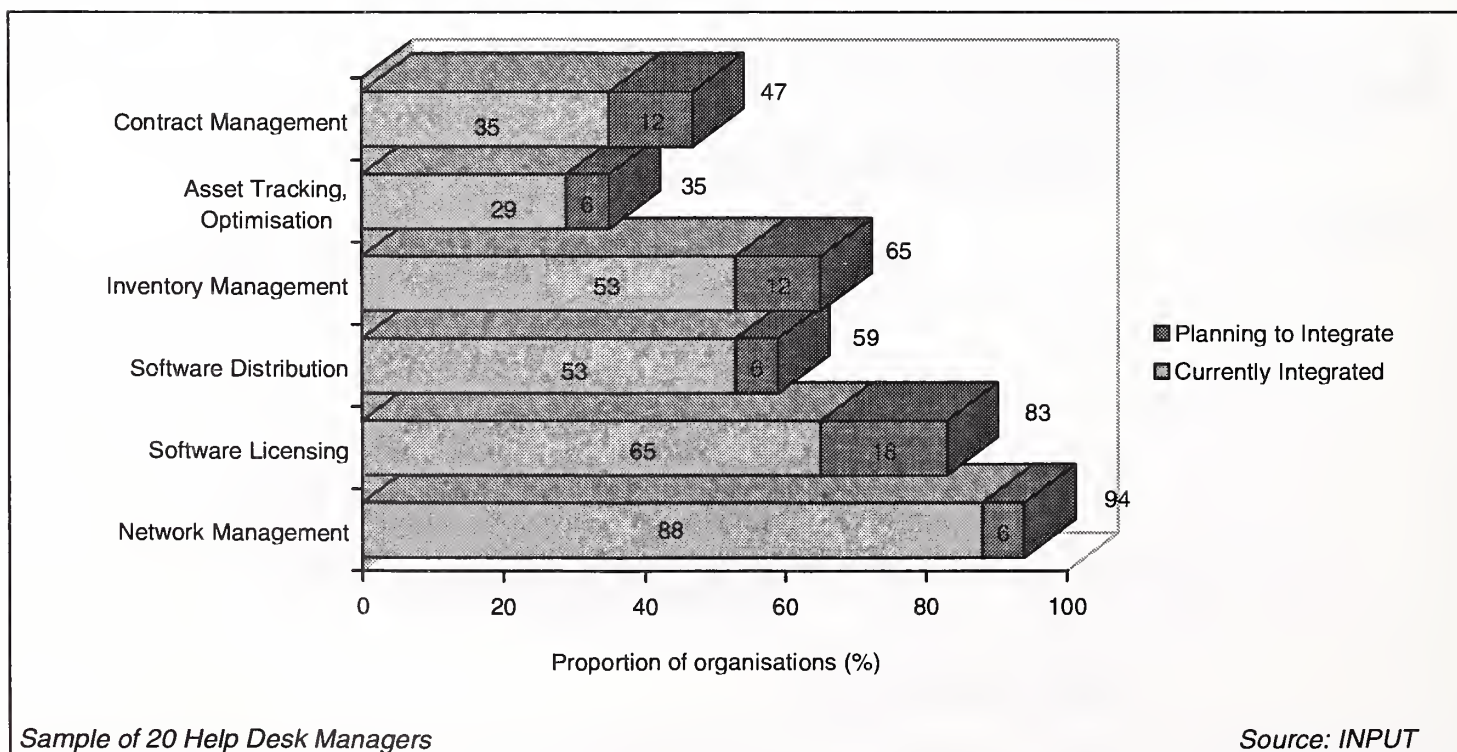


G

Integration Issues

Exhibit A-7

IT Functions Integrated with the Help Desk, Benelux 1996



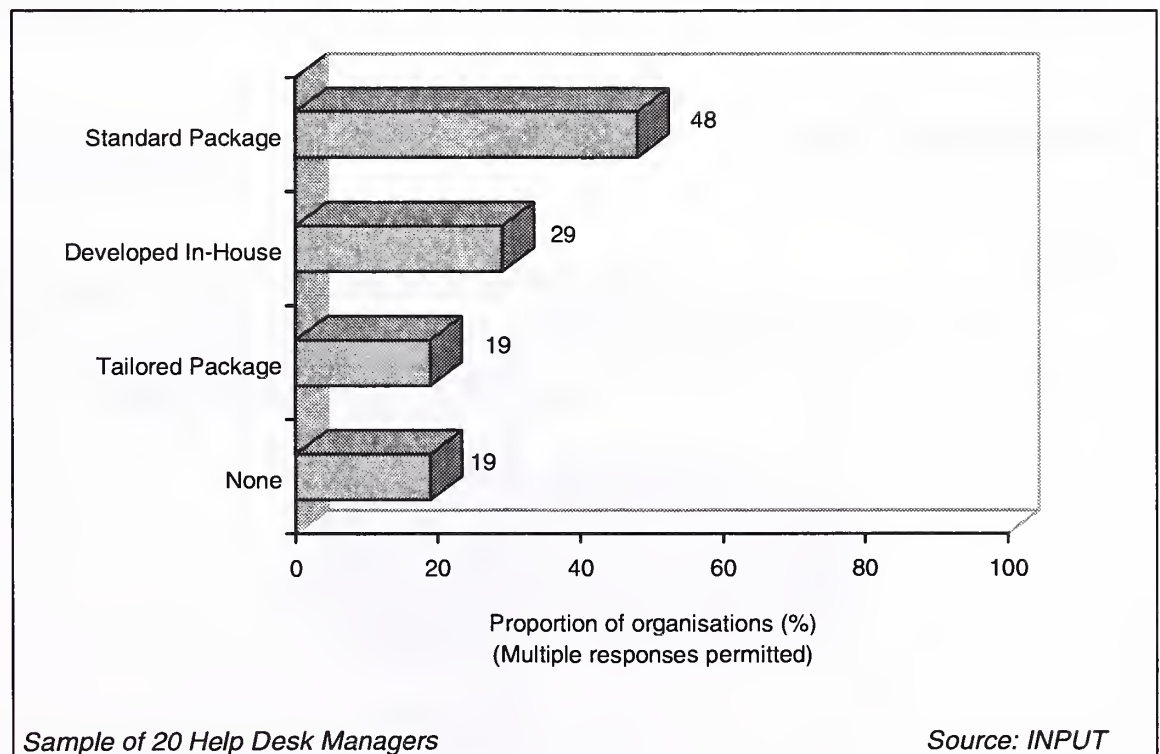
B

Help Desk Survey — Central Europe

A

Call Management Software

Exhibit B-1

Packaged Vs Bespoke Help Desk Software, Central Europe 1996

B**Telephony**

Exhibit B-2

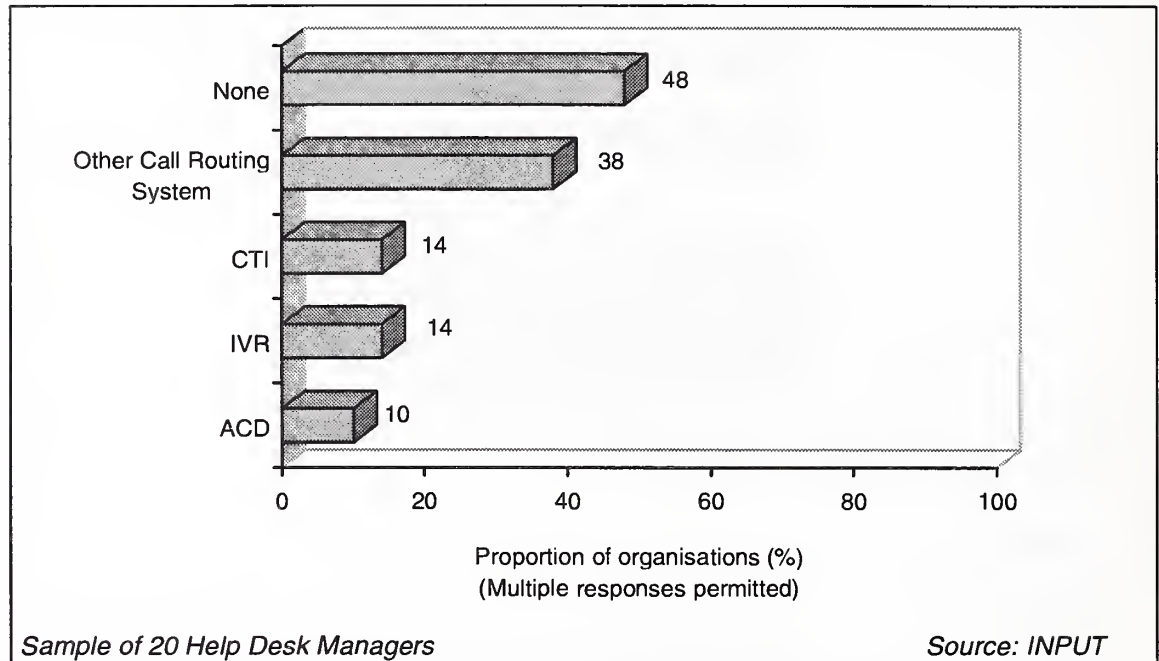
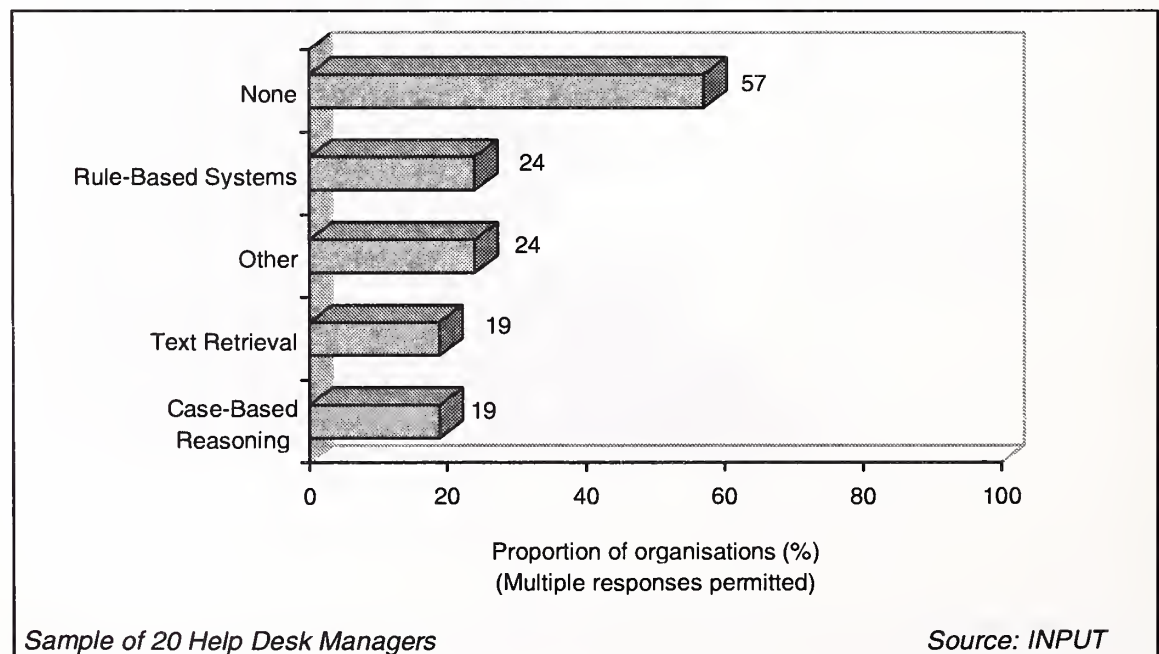
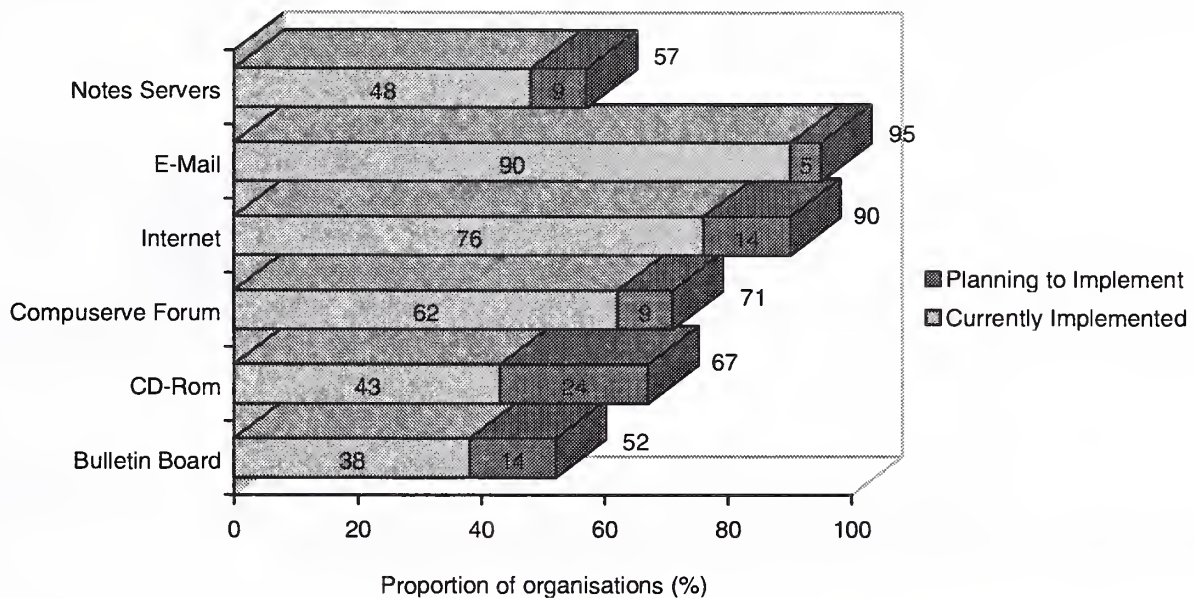
Adoption of Advanced Telephony Systems, Central Europe 1996**C****Knowledge Tools**

Exhibit B-3

Adoption of Knowledge Tools, Central Europe 1996

D**On-Line Support Tools**

Exhibit B-4

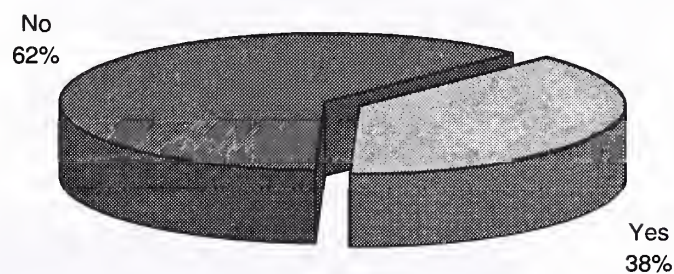
On-Line Services Supporting the Help Desk, Central Europe 1996

Sample of 20 Help Desk Managers

Source: INPUT

E**Service Level Agreements**

Exhibit B-5

Take-Up of Help Desk SLAs, Central Europe 1996

Sample of 20 Help Desk Managers

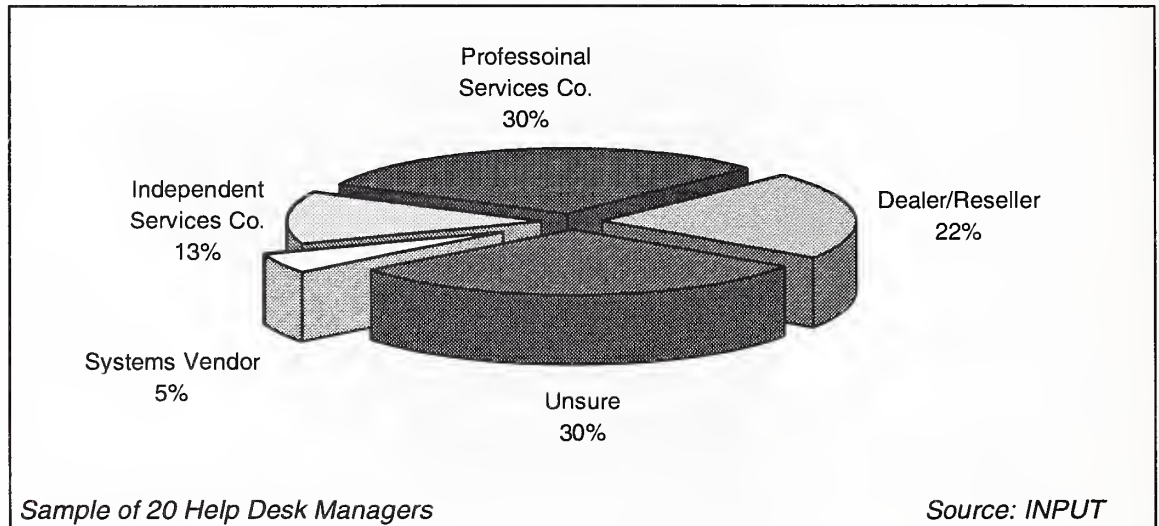
Source: INPUT

F

Preferred Supplier Type

Exhibit B-6

Preferred Service Suppliers, Central Europe 1996

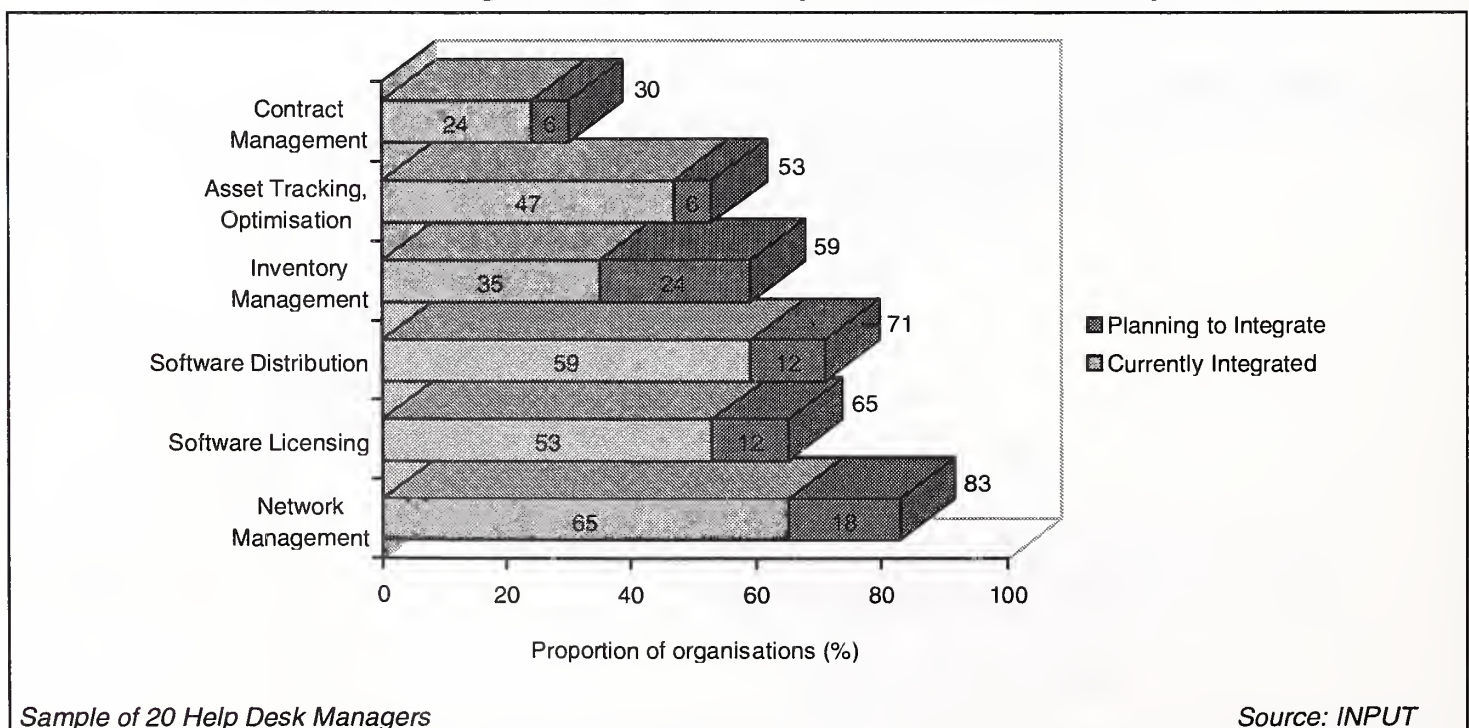


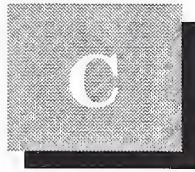
G

Integration Issues

Exhibit B-7

IT Functions Integrated with the Help Desk, Central Europe 1996





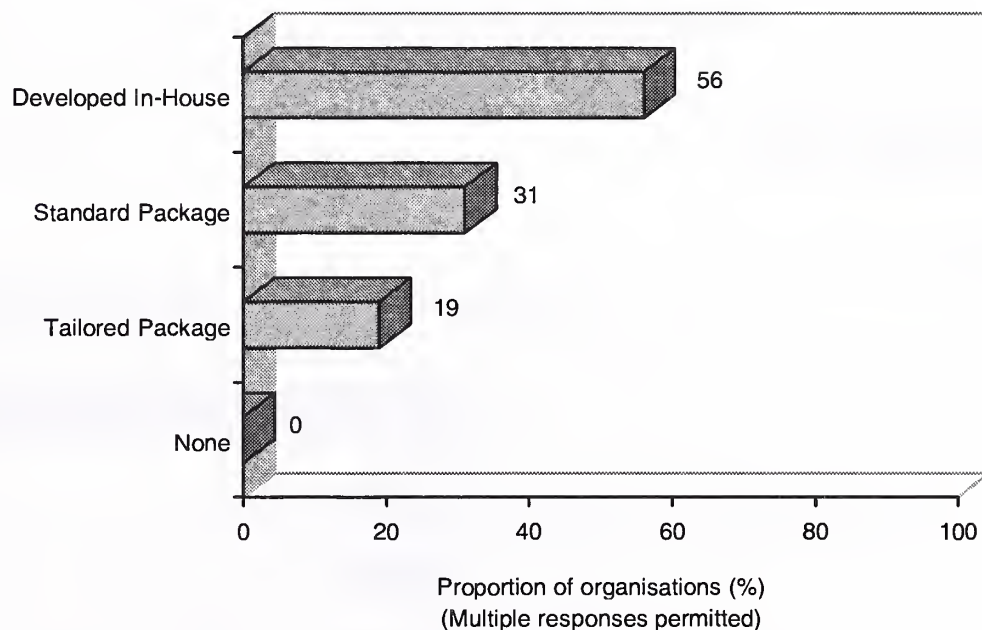
Help Desk Survey — France

A

Call Management Software

Exhibit C-1

Packaged Vs Bespoke Help Desk Software, France 1996



Sample of 20 Help Desk Managers

Source: INPUT

B**Telephony**

Exhibit C-2

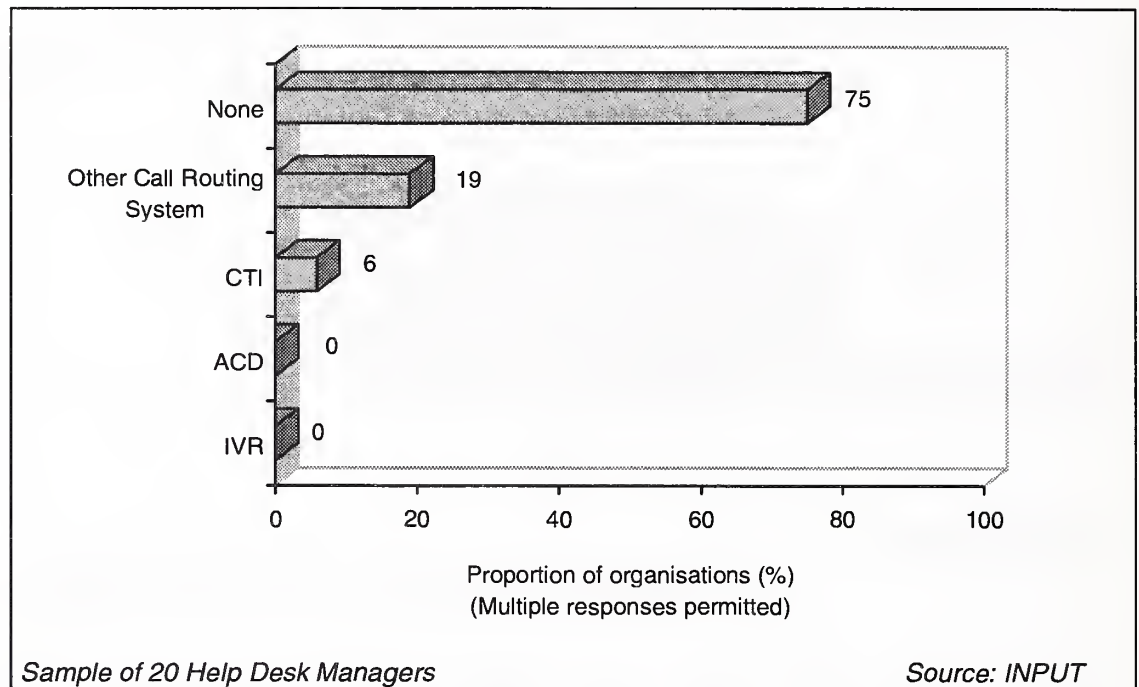
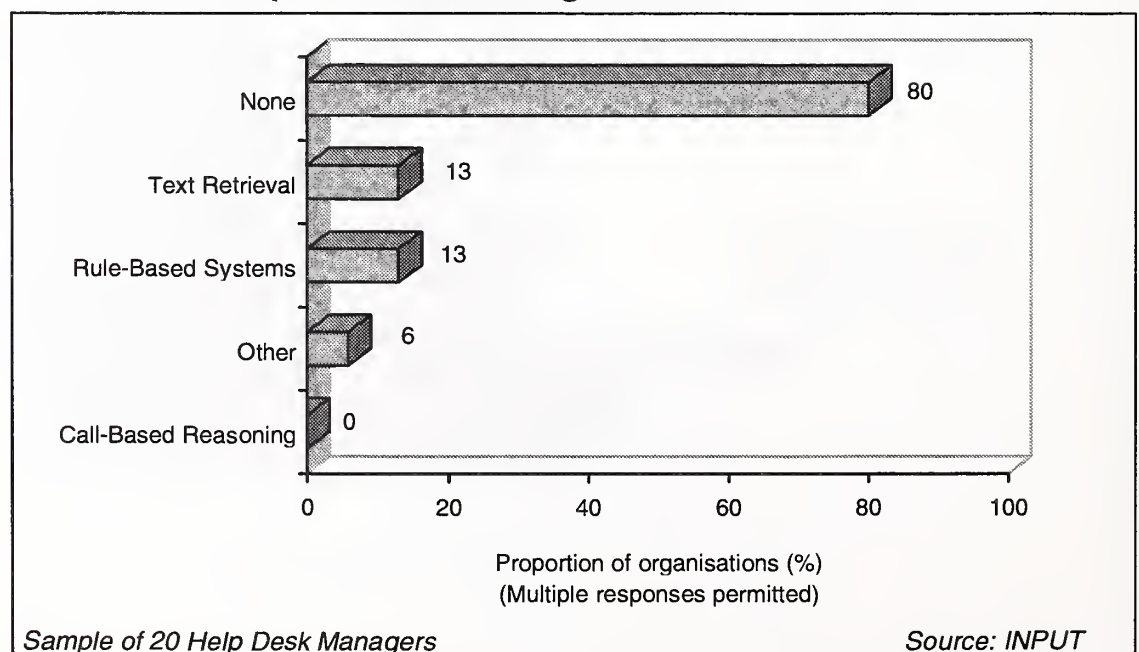
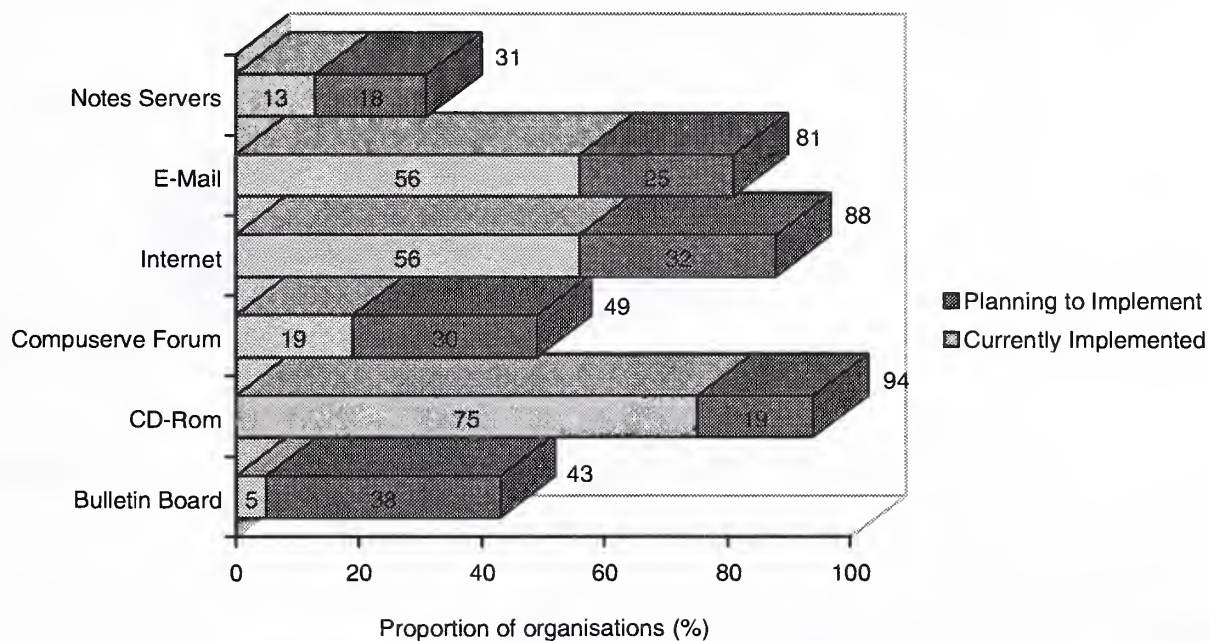
Adoption of Advanced Telephony Systems, France 1996**C****Knowledge Tools**

Exhibit C-3

Adoption of Knowledge Tools, France 1996

D**On-Line Support Tools**

Exhibit C-4

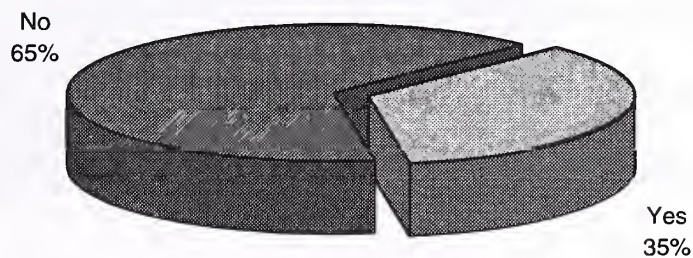
On-Line Services Supporting the Help Desk, France 1996

Sample of 20 Help Desk Managers

Source: INPUT

E**Service Level Agreements**

Exhibit C-5

Take-Up of Help Desk SLAs, France 1996

Sample of 20 Help Desk Managers

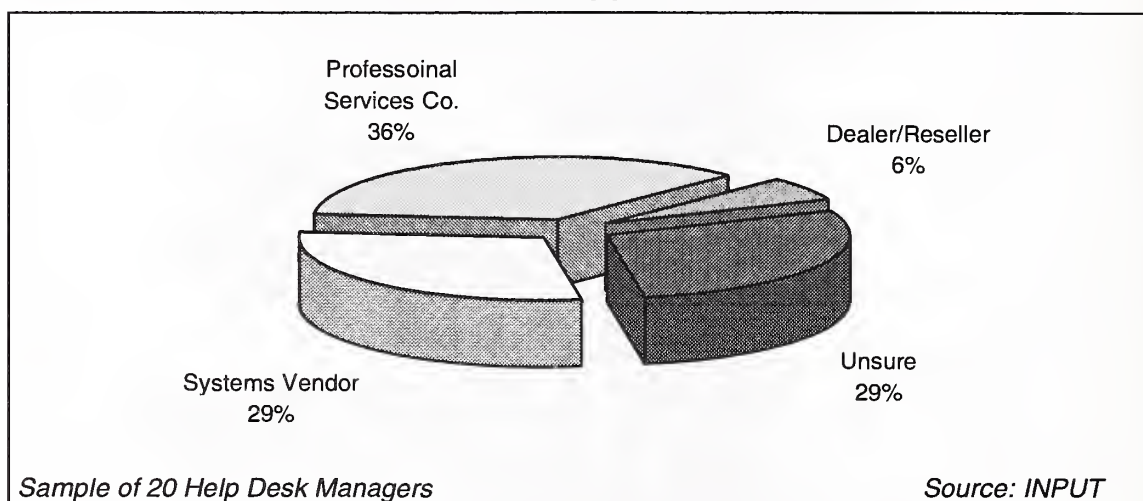
Source: INPUT

F

Preferred Supplier Type

Exhibit C-6

Preferred Service Suppliers, France 1996

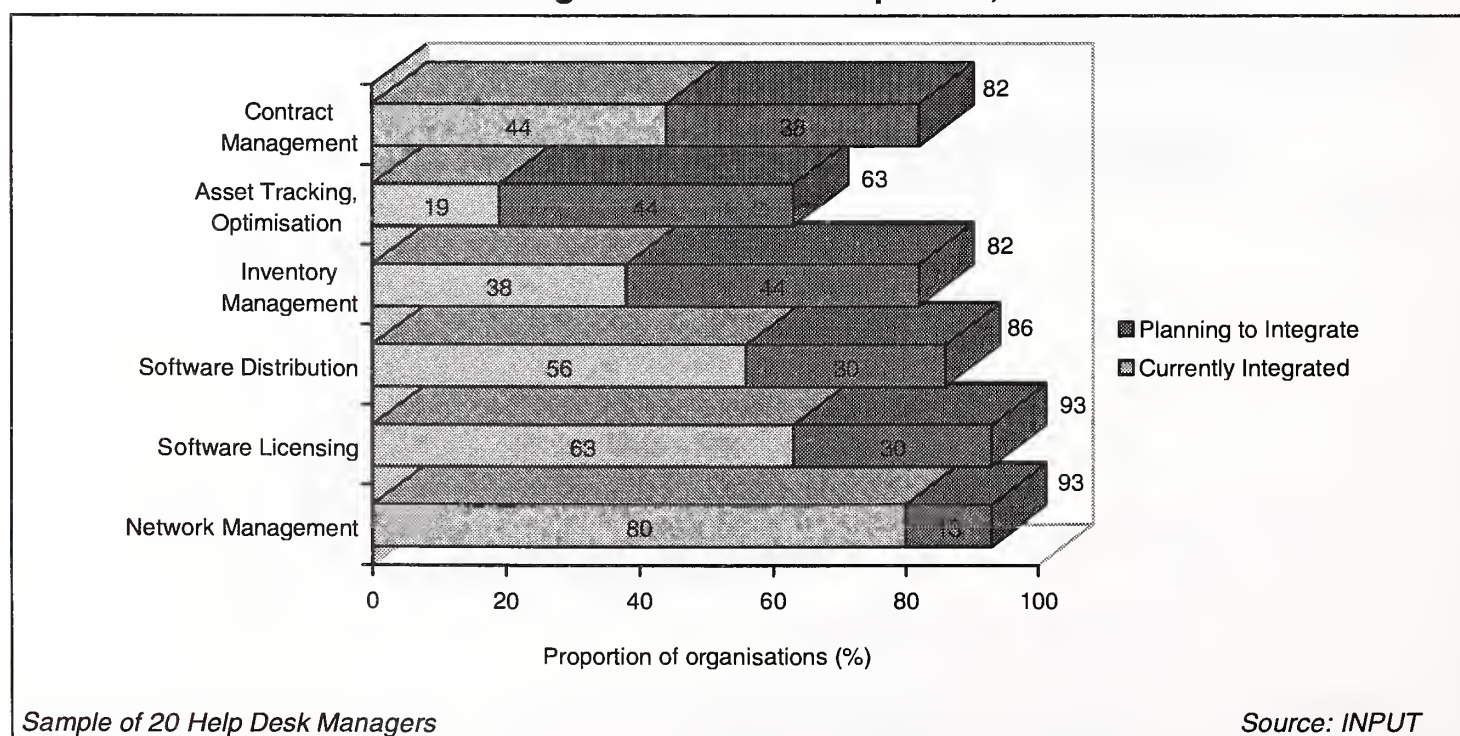


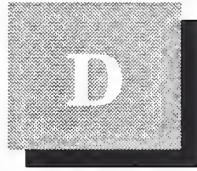
G

Integration Issues

Exhibit C-7

IT Functions Integrated with the Help Desk, France 1996





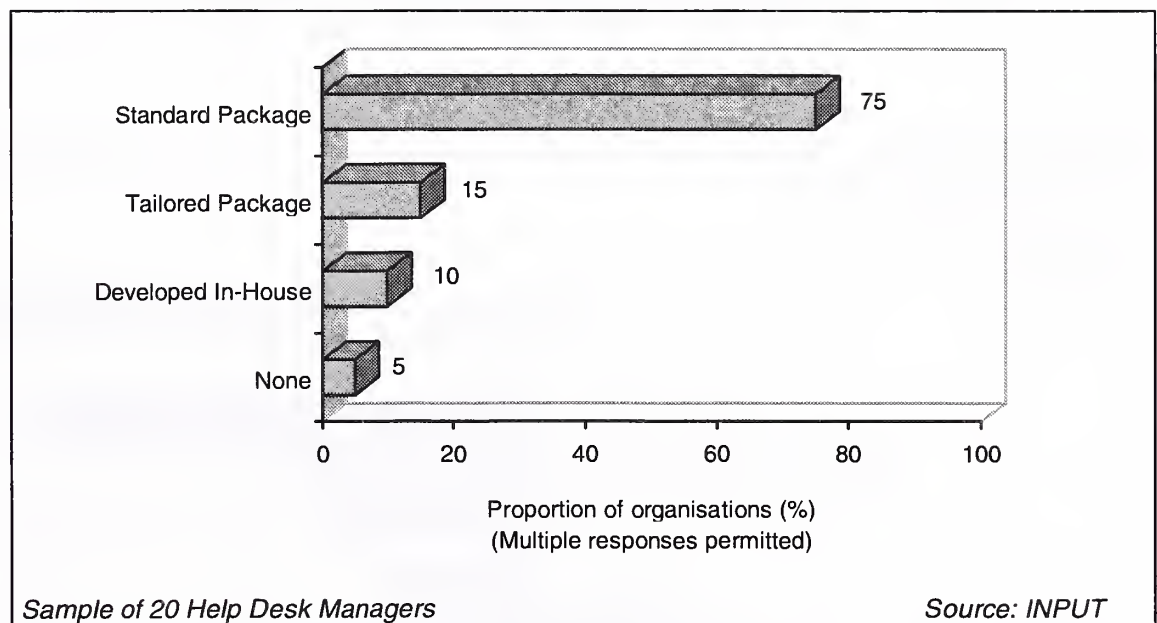
Help Desk Survey — UK

A

Call Management Software

Exhibit D-1

Packaged Vs Bespoke Help Desk Software, UK 1996



B**Telephony**

Exhibit D-2

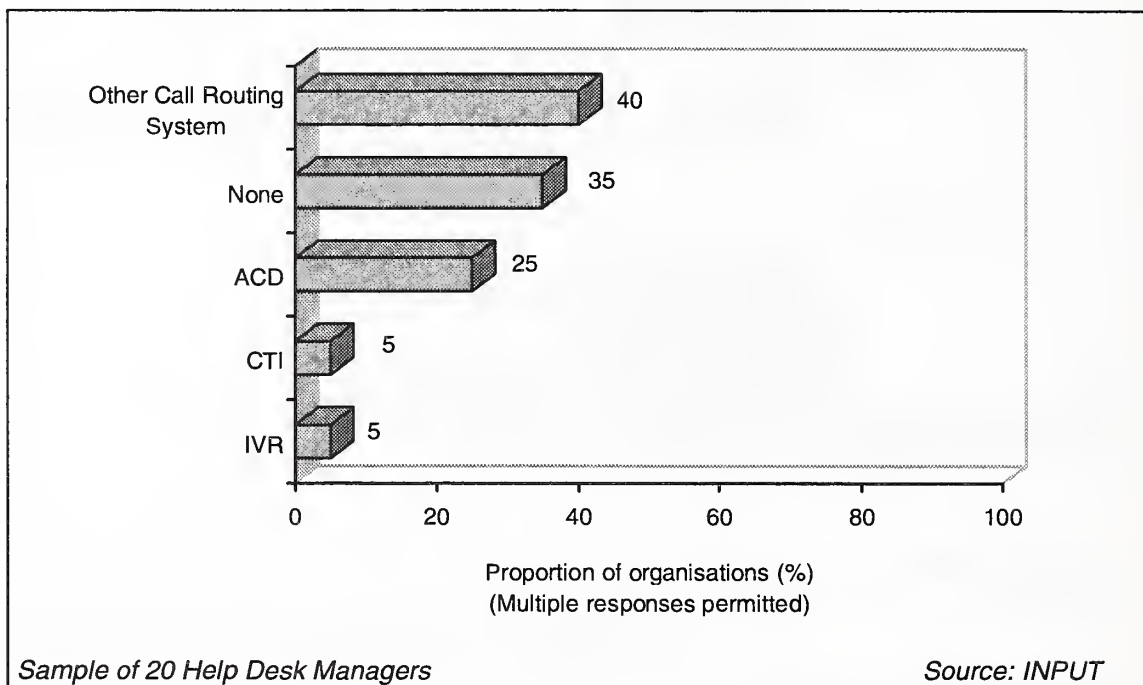
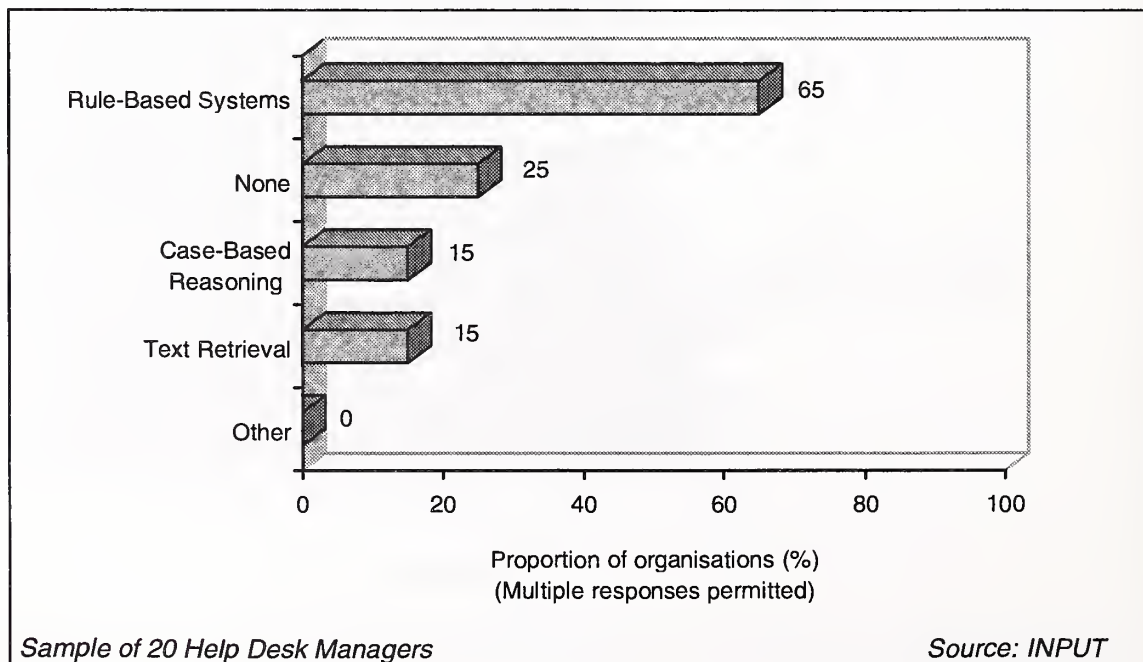
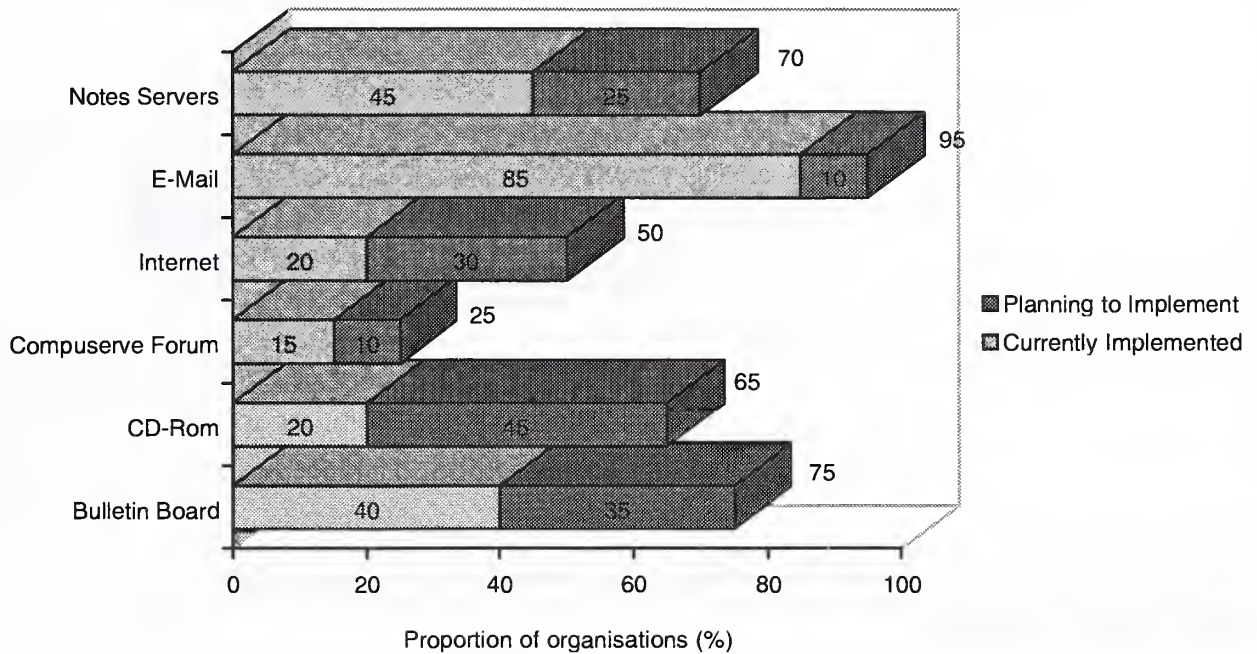
Adoption of Advanced Telephony Systems, UK 1996**C****Knowledge Tools**

Exhibit D-3

Adoption of Knowledge Tools, UK 1996

D**On-Line Support Tools**

Exhibit D-4

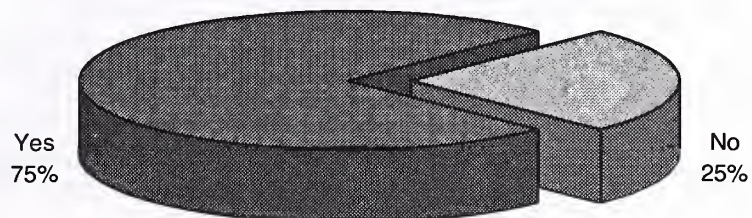
On-Line Services Supporting the Help Desk, UK 1996

Sample of 20 Help Desk Managers

Source: INPUT

E**Service Level Agreements**

Exhibit D-5

Take-Up of Help Desk SLAs, UK 1996

Sample of 20 Help Desk Managers

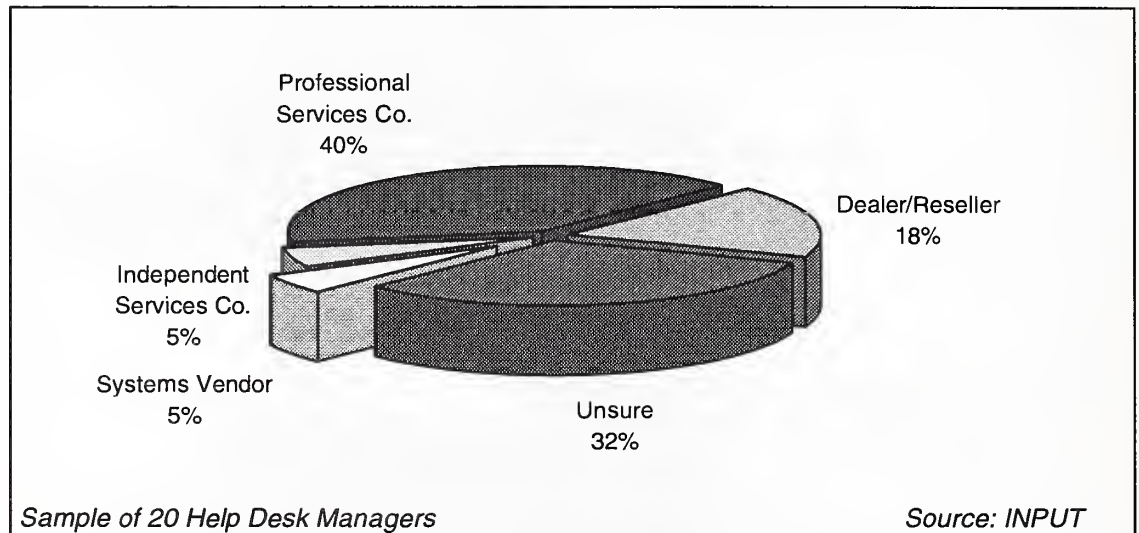
Source: INPUT

F

Preferred Supplier Type

Exhibit D-6

Preferred Service Suppliers, UK 1996

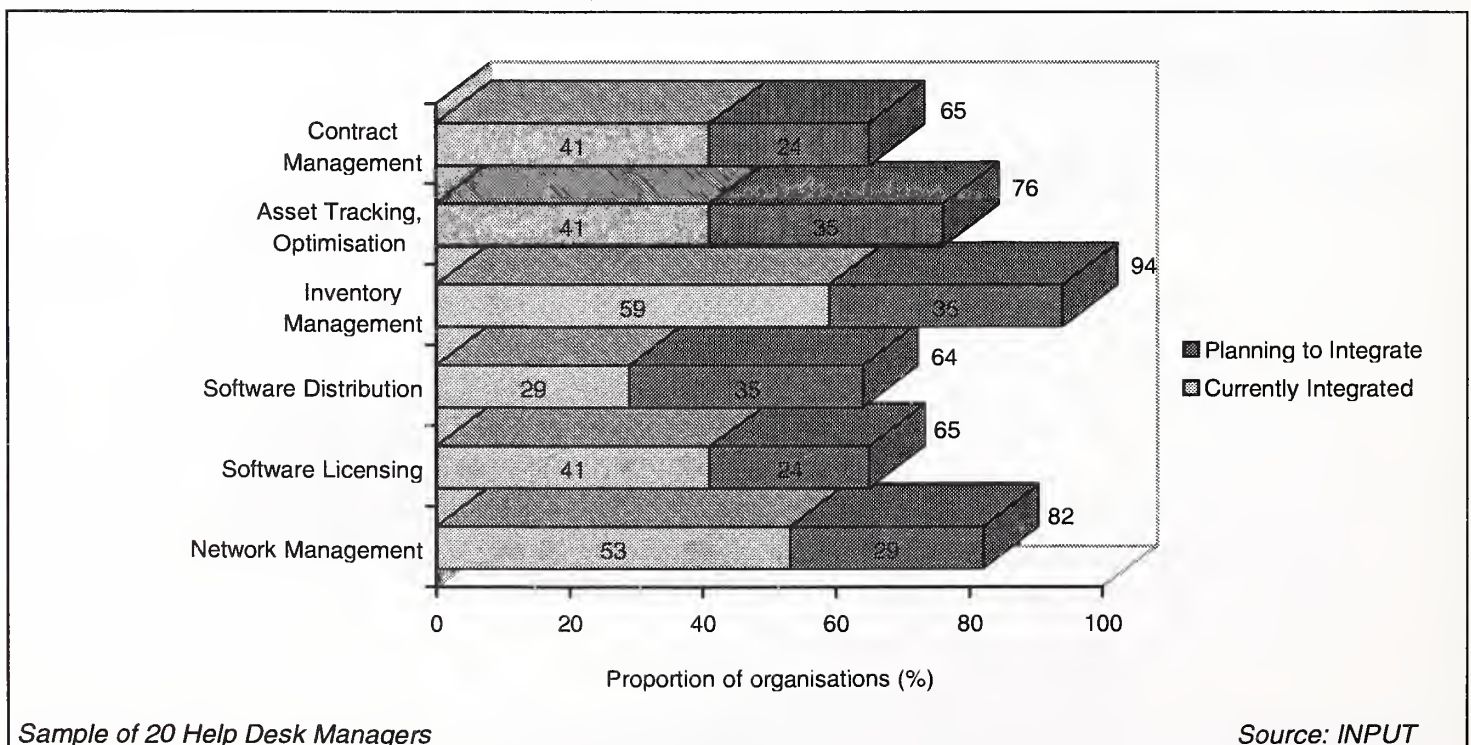


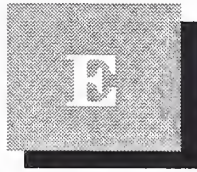
G

Integration Issues

Exhibit D-7

IT Functions Integrated with the Help Desk, UK 1996



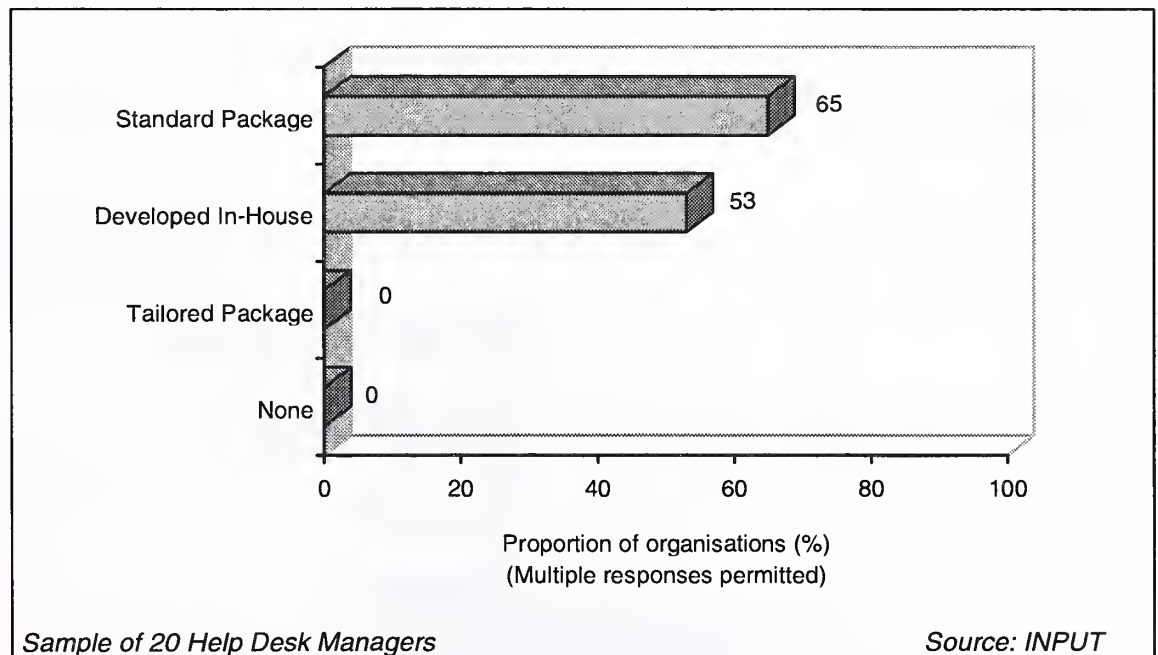


Help Desk Survey — Scandinavia

A Call Management Software

Exhibit E-1

Packaged Vs Bespoke Help Desk Software, Scandinavia 1996



B**Telephony**

Exhibit E-2

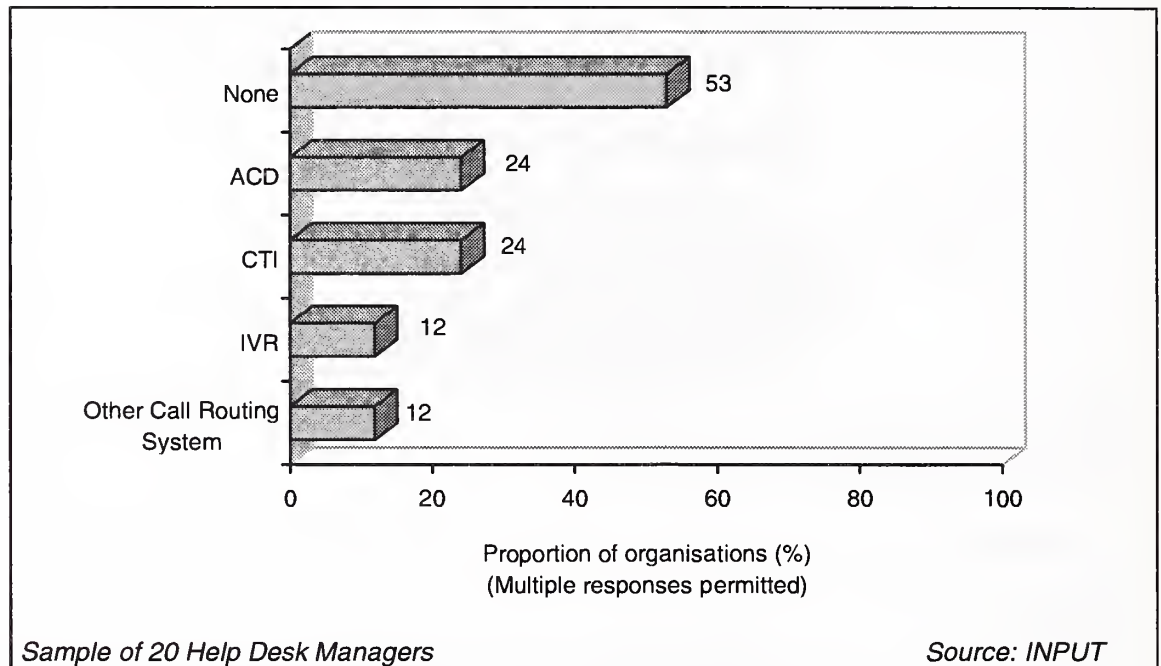
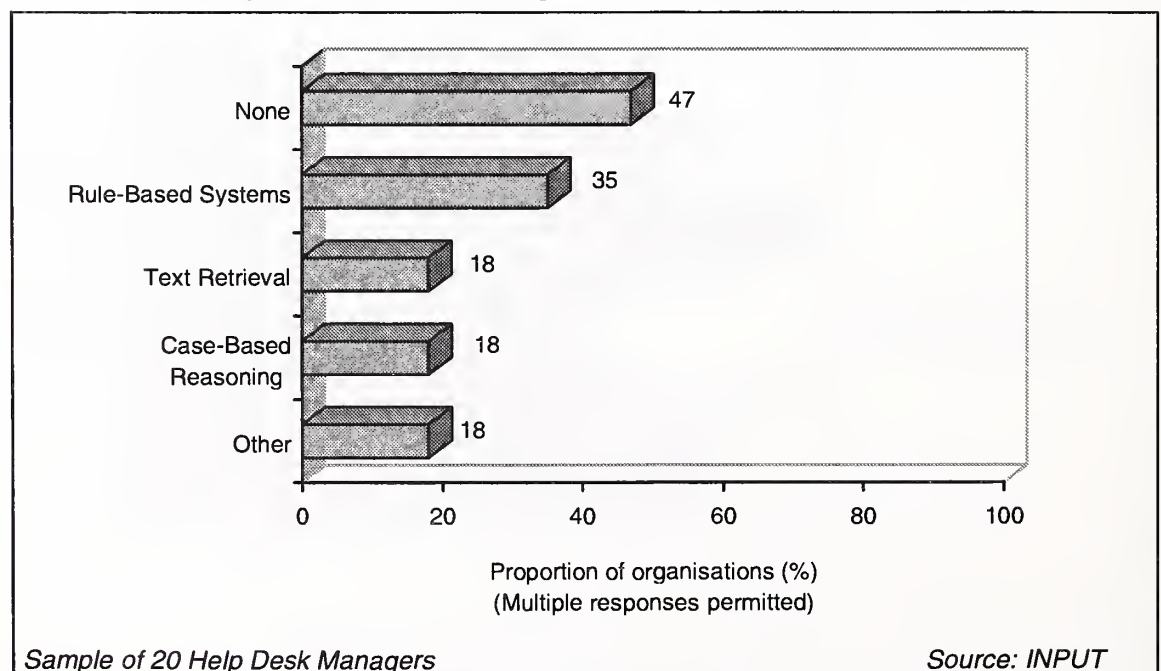
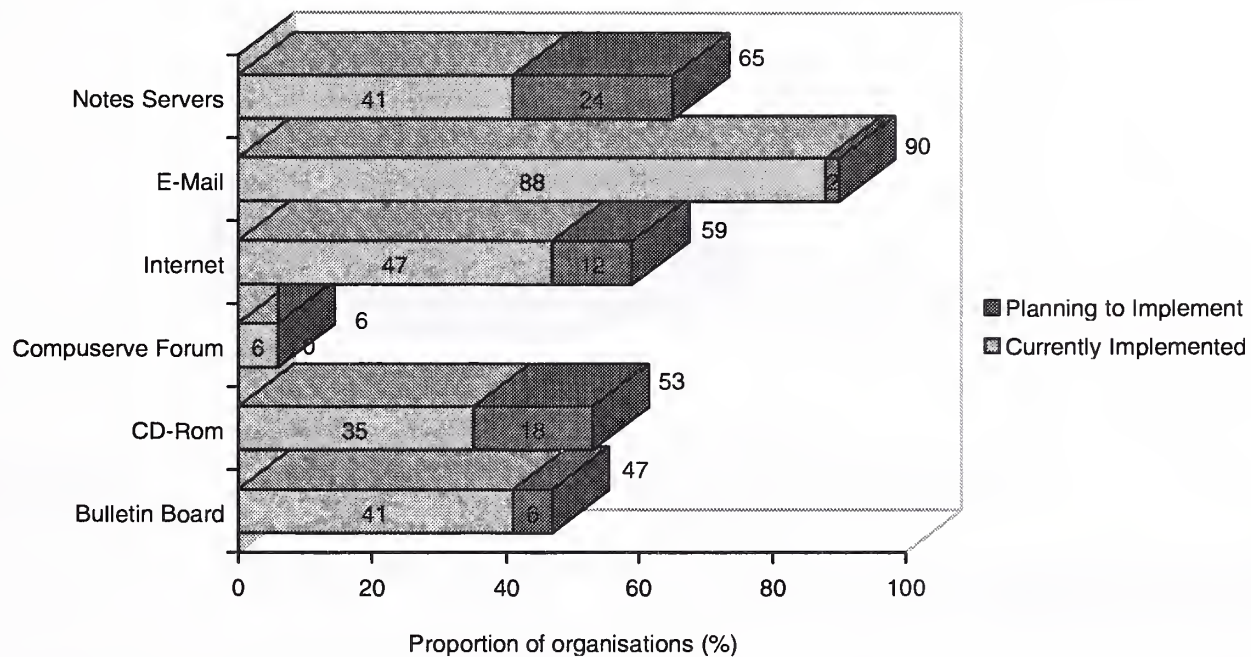
Adoption of Advanced Telephony Systems, Scandinavia 1996**C****Knowledge Tools**

Exhibit E-3

Adoption of Knowledge Tools, Scandinavia 1996

D**On-Line Support Tools**

Exhibit E-4

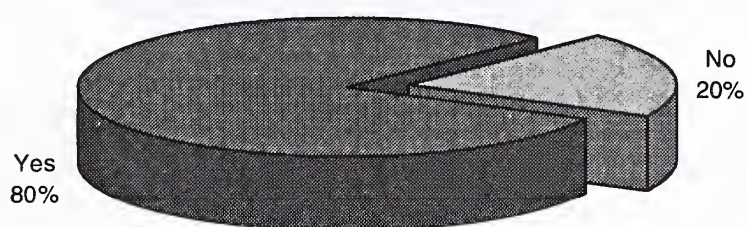
On-Line Services Supporting the Help Desk, Scandinavia 1996

Sample of 20 Help Desk Managers

Source: INPUT

E**Service Level Agreements**

Exhibit E-5

Take-Up of Help Desk SLAs, Scandinavia 1996

Sample of 20 Help Desk Managers

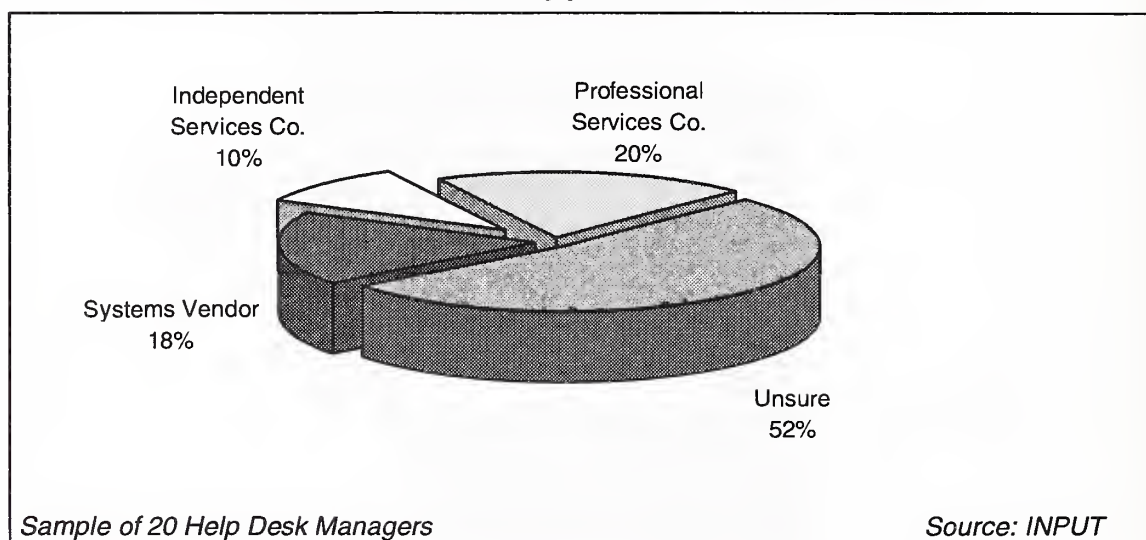
Source: INPUT

F

Preferred Supplier Type

Exhibit E-6

Preferred Service Suppliers, Scandinavia 1996

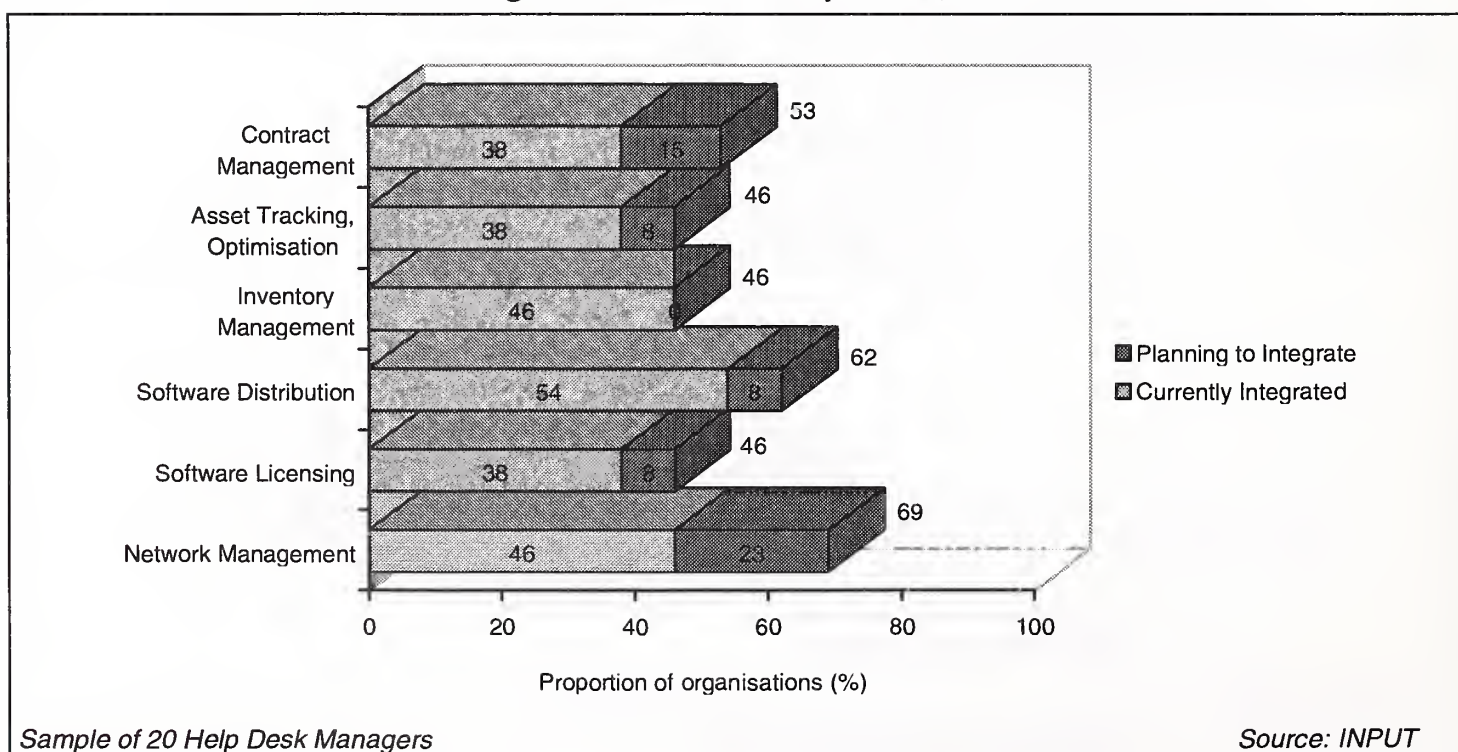


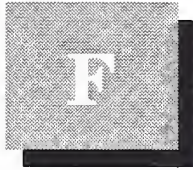
G

Integration Issues

Exhibit E-7

IT Functions Integrated with the Help Desk, Scandinavia 1996





Help Desk Survey — Questionnaire

Help Desk Services User Questionnaire

Questions are categorised as follows:

Question	Category	Content
Q1 to Q6	General	General issues/demographics
Q7 to Q10	Technology	Help desk software, call technology and related support technology
Q11 to Q14	Performance	Help desk performance measures, service levels
Q15 to Q21	Using Help Desk Service Providers	Attitudes towards, and experience of, using help desk service providers
Q22 to Q26	IT Help Desks Only	Questions related to IT help desks only, covering IT/business issues

Please ask for the following details at the start of the interview:

Company Name	_____
Type of Business	_____
Name	_____
Job Title	_____
Annual Turnover of Company	_____
Number of Employees	_____

General

1. What is the main purpose of your help desk? (*please tick*)

a) Support of internal IT users	_____
b) Support of external customers	_____

If a), complete full questionnaire (Q1 to Q26)

If b), ask only questions Q1 to Q21

2. How many of the following does your help desk support?

	<i>Internal IT help desk</i>	<i>Customer- facing help desk</i>
PCs	_____	_____
External customers	_____	_____
Servers	_____	_____
LANs	_____	_____
Internal IT Users	_____	_____

3. How many help desks does your organisation operate?

Internal IT help desks _____

Customer-facing help desks _____

4. How many help desk staff does your organisation employ?

Internal IT help desks _____

Customer-facing help desks _____

5. What is the typical volume of calls handled per day?

Internal IT help desks _____

Customer-facing help desks _____

6. What are the main challenges facing your organisation in providing help desk services?

Technology7. Is your help desk software (*please tick*):

A standard package? _____

Which one? _____

A package tailored to your specific needs? _____

Which one? _____

Developed in-house? _____

8. Which of the following call technologies does your help desk employ?
(Please tick)

ACD (Automated Call Distributor) _____

IVR (Interactive Voice Response) _____

CTI (Computer Telephony Integration) _____

Other (please specify) _____

9. Which of the following automated features does your help desk system have?

Y/N

Text Retrieval _____

Case Based Reasoning _____

Rule-Based System _____

Other (please specify) _____

10. Which of the following electronic support services do you use to supplement the activities of your help desk now, and which do you plan to implement in the next 1-2 years? (Please tick)

Now

1-2 Years

Stand-alone bulletin board system _____

CD-ROM for frequently asked questions, etc. _____

Compuserve Forum _____

Internet Services _____

E-Mail _____

Notes Servers _____

Performance

11. To what extent does your help desk endeavour to do the following
(please rate on a scale of 1 to 5, where 1 = *Definitely Not*, 5 =
Definitely So)

Solve problems at the first call

Act as a message-taking service
(i.e. simply routing the call)

12. How do you believe the functionality of your help desk system could
be improved?

13. Does your organisation have help desk service level agreements in
place (e.g. guaranteed problem resolution times)? Y/N _____

If so, how successful are you in meeting these targets? *Please
quantify where possible*

14. For what proportion of calls do you successfully solve the problem on
the first call?

Using Help Desk Service Providers

15. Is your help desk function outsourced to a third party service provider? Y/N _____

If No, go to Q17

16.

- a) Which of the following help-desk-related services have you bought in from a third party provider? *Please tick*

Consultancy _____

Staff _____

Software _____

Training _____

Other _____

- b) Is your supplier (*please tick*):

A systems vendor _____

An independent services organisation _____

A professional services organisation _____

A dealer or reseller _____

Other (*please specify*) _____

- c) Is the help desk function carried out (*please tick*):

At the third party site _____

At your site using third party personnel _____

At your site using some third party personnel _____

- d) How satisfied are you with the level of service provided? (*Please rate on a scale of 1 to 5, where 1 = very unsatisfied, 5 = very satisfied*)

17. In general, how interested are you in using third parties to assist in providing desktop support services? (*Please rate on 1 to 5 scale, where 1 = not at all interested, 5 = very interested*)

18. Which of the following types of supplier do you favour? (*please tick*):

Systems vendor

Independent services organisation

Professional services organisation

Dealer or reseller

Other (*please specify*)

19. How likely are you to use third parties to assist in providing the following help desk-related services in future? (*Please rate on 1 to 5 scale, where 1 = not at all likely, 5 = very likely*)

Consultancy

Staff

Software

Training

Other

20. How likely are you to subcontract the following levels of help desk support? *(Please rate on 1 to 5 scale, where 1 = not at all likely, 5 = very likely)*

1st Line support (i.e. direct user contact) _____

2nd line support (i.e. technical support function) _____

Both _____

21. To what extent do you believe that subcontracting some or all of your support function will deliver the following benefits? *(Please rate on a scale of 1 to 5, where 1 = Strongly Disagree, 5 = Strongly Agree)*

Better service _____

Lower cost _____

Both _____

IT Help Desks Only

22. How well do you believe your organisation's help desk function copes with each of the following potential challenges? *(Please rate on a scale of 1 to 5, where 1 = not very well, 5 = very well)*

Scope of technical coverage (e.g. covering complex multivendor networks) _____

Keeping up-to-date in terms of user and business needs _____

Training of help desk personnel _____

Wide geographic coverage of users _____

Ability to address technical IT problems _____

Understanding the business context of users' problems _____

Inconsistency of IT infrastructure (e.g. in software version control) _____

Extended hours of cover (e.g. round-the-clock) _____

23. Which of the following are currently integrated with your help desk system, and which do you expect to integrate in the next 1-2 years? (please tick)

	<i>Now</i>	<i>1-2 Years</i>
Network management	_____	_____
Backup & recovery	_____	_____
Software licensing	_____	_____
Software distribution	_____	_____
Security management	_____	_____
Inventory management	_____	_____
Procurement	_____	_____
Asset tracking & optimisation	_____	_____
Contract management	_____	_____
Service management	_____	_____
Configuration management	_____	_____

24. Please indicate which of the following problems are handled by your IT help desks, and if possible indicate the proportion of calls associated with each category:

	Y/N	% of Calls
Standard office packages (e.g. Microsoft Word, Excel)	_____	_____
Database and utility software	_____	_____
In-house developed applications	_____	_____
Network software	_____	_____
Network equipment	_____	_____
Desktop equipment	_____	_____
Other	_____	_____

25. Please indicate the composition of calls to the help desk in the following categories:

	% of Calls
Simple questions related to application use ("how to")	_____
Network fault	_____
Software incompatibility problem	_____
PC hardware problem	_____
Printer problem	_____
Genuine software bug	_____
Other	_____

26. Specifically, how interested are you in using third parties to assist in providing the following desktop support services? *(Please rate on 1 to 5 scale, where 1 = not at all interested, 5 = very interested)*

Support for standard PC applications	_____
Technical support for operating systems, etc.	_____
Support for bespoke applications	_____
Support for in-house developed applications	_____
Support for multivendor desktop equipment	_____
Support for local networks	_____



The Customer Services Market Defined

A

INPUT's View of The Customer Services Market

INPUT's view of the customer services market is illustrated in schematic form in Exhibit G-1. This exhibit illustrates the overall structure of the hardware products or equipment market for systems, and the relationship between customer services and the other segments of the equipment market.

Included within INPUT's definition of customer services are six service sectors:

- Equipment maintenance
- Environmental services
- Systems software support
- Education and training
- Professional services
- Business continuity services.

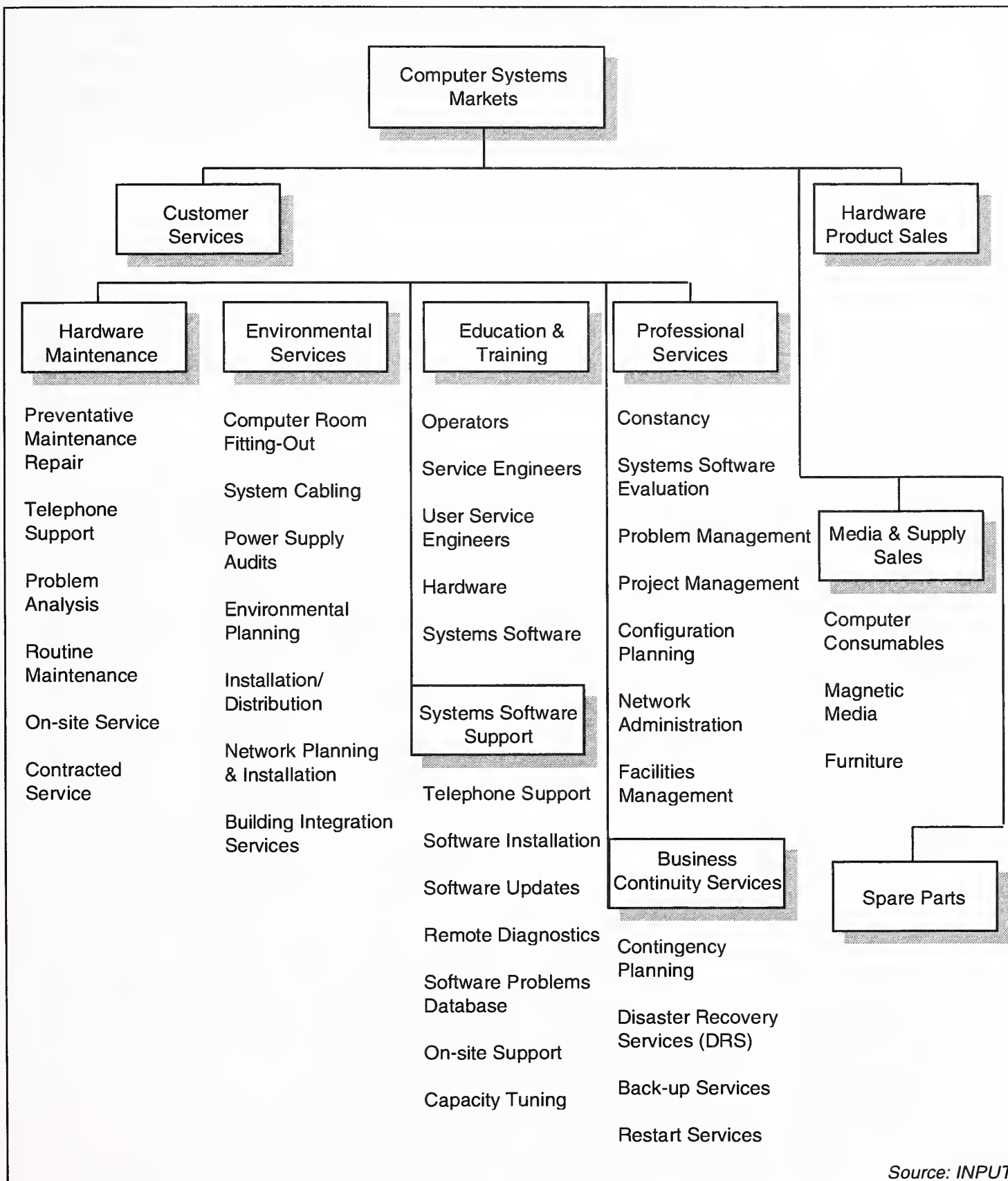
Excluded from INPUT's definition of the customer services market, as essentially product markets, are:

- Sales of spare parts

- Media and supplies sales
- Hardware product sales themselves.

Exhibit G-1 indicates the principal activities undertaken within each of the six service sectors. In each service sector, INPUT's definition of user expenditure includes only those services provided to users by an external organization on a chargeable basis. Services provided by subsidiaries or internal resources are considered unavailable for open tender. They are therefore excluded from the open market but included in the captive market potential.

Exhibit G-1

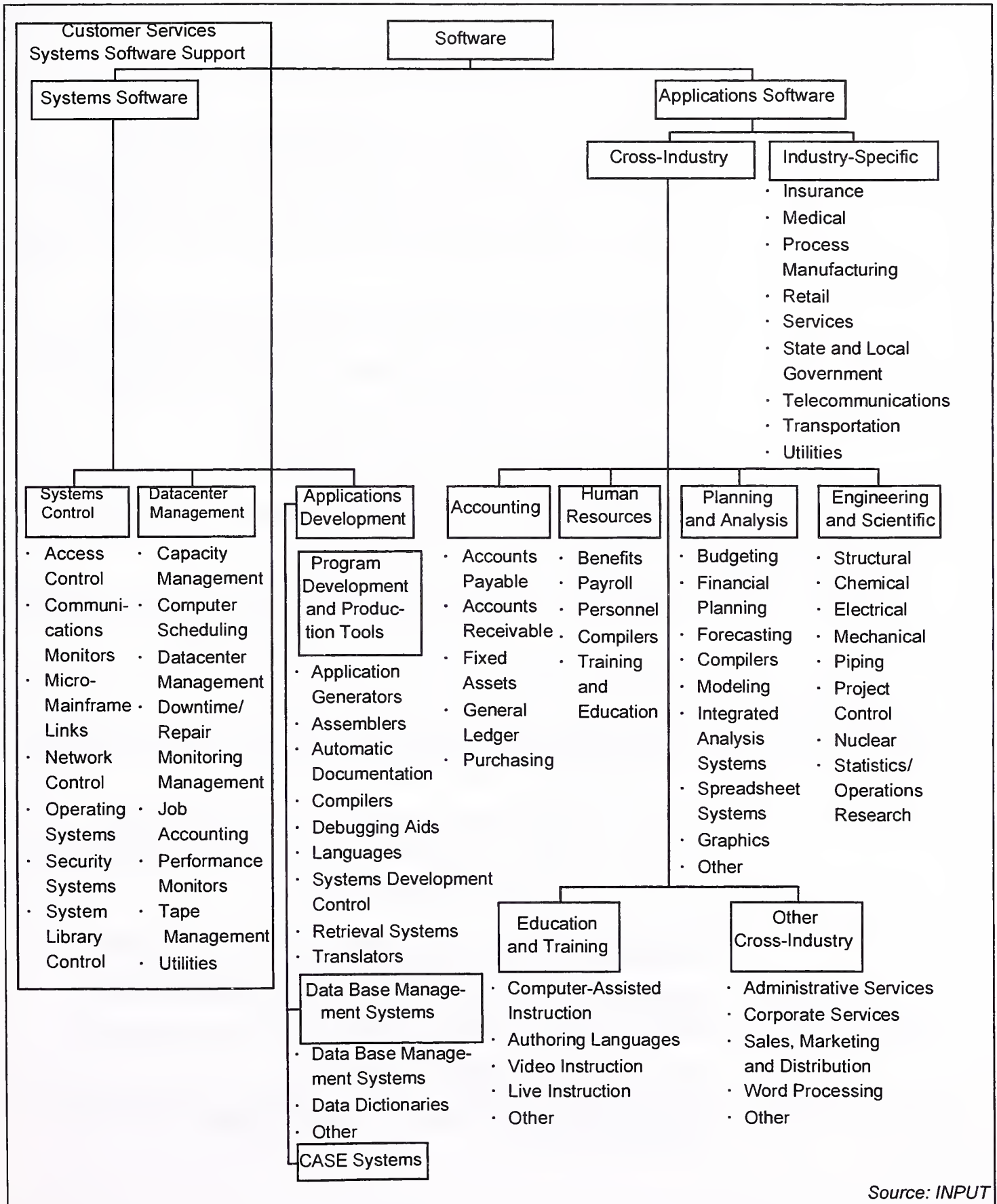
Customer Services Market Structure

Source: INPUT

Software support activities that are included in the customer services market are those activities related to the support of systems software. Exhibit G-2 illustrates INPUT's definition of the software products market. Aspects of software support included in the customer services market are restricted to those areas highlighted in the exhibit with the rectangular box. They relate to system control and data centre management software products.

Exhibit G-2

Software Products Market Structure



Source: INPUT

B

Customer Services Sectors

Customer services sectors are defined by INPUT as follows:

- **Equipment maintenance:** the repair or routine preventive maintenance of computer systems hardware or hardware components. Included are associated support activities such as telephone support, problem analysis and remote diagnostics. Contracts may be for one or more years; alternating repairs may be effected on an ad hoc basis.
- **Environmental services** are defined as all planning and implementation services which affect the environments in which computer platforms are expected to run. For these purposes, environment can mean any of the following:
 - The computer room fixtures and fittings
 - Cabling between computers and other devices in a system or network
 - Physical environment, such as: electrical power, air conditioning, water cooling, smoke or fire detection equipments
 - Network attachments
 - Buildings in which computers or network devices or terminals must reside.

Environmental services normally involve the installation, upgrade, repair or de-installation of some piece of equipment, but may be restricted to planning only.

- **Systems software service/support:** software maintenance activities that relate to systems software (not applications software). Included are associated support activities such as telephone support, problem analysis and software diagnostics.
- **Education and training:** all education and training expenditures for IT industry applications are included within the definition of customer services.

- **Professional services:** within the definition of customer services, this sector of the market refers only to those elements of professional services that are concerned with the support of the systems platform or network and its operating environment, including areas such as:
 - Consultancy
 - Network Administration
 - System Software Evaluation
 - Problems Management
 - Project Management
 - Configuration or Capacity Planning.

To distinguish them from environmental services, these professional services are normally restricted to planning, design or management services, without any installation of platform or ancillary equipment. It is important to acknowledge that these services are only part of the more widely defined professional services marketplace.

- **Business continuity services** include a number of service elements related to keeping a business running in the event of a major incident which temporarily puts its IT platform or network completely out of action. They include:
 - Planning for such a contingency
 - Disaster Recovery Services
 - Back-up services for magnetic or optical media
 - Restart services, covering all activities which contribute to reinstating on a permanent basis the platform or network which as suffered the major incident.

These services can be sold together in any combination or as free-standing services.

C

Customer Services Vendors

INPUT's definitions of the three primary categories of customer services vendor are as follows:

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

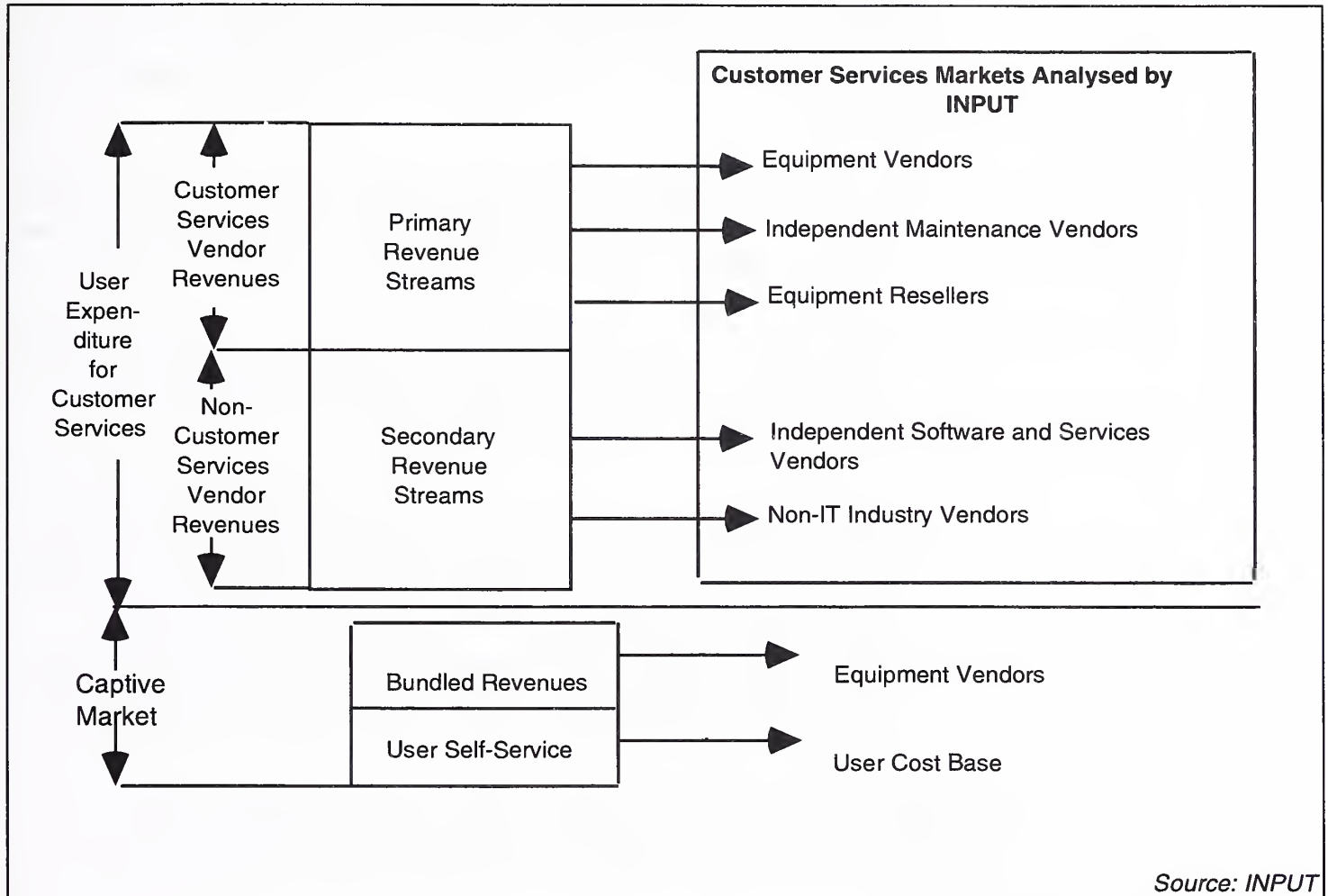
D

Customer Services Revenue Streams

Exhibit G-3 provides a diagrammatic representation of the total customer services market. This model indicates the captive and non-captive revenue components of the total customer services market and the various revenue streams that combine to form the total market.

Exhibit G-3

Customer Services Revenue Streams



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

- **Customer services vendor revenues.** This portion of the customer services market refers to vendors for whom customer services revenues are considered to be a primary revenue stream:
 - Equipment Vendors
 - Independent Maintenance Companies
 - The Dealer/Distributor portion of the indirect equipment resellers market.

- **Non-customer services vendor revenues** refer to user expenditure, for customer services, with vendors for whom customer services revenues are not considered to be a primary stream. This portion of the market results from the following activities:
 - The system integration (SI) and turnkey systems segments of the indirect equipment resellers market. In a minority of cases, these vendors provide service and support for the system platform
 - Software and services vendors whose primary source of revenue results from such items as custom software development will sometimes also provide systems support
 - Non-industry vendors such as building/construction companies or specialist product and building services companies that provide environmental services. Provision of these services is a secondary aspect to the vendor's main line of business; for example, a specialist air conditioning company might service many industry sectors, with systems for a whole range of applications besides computer room air-conditioning.

The captive portion of the customer services market relates to the provision of services for which the user does not pay separately. For example:

- Systems software support charges may be bundled as part of the software license fee rather than paid for separately by the user
- Users who wholly or partly provide their own customer services from the use of in-house resources. In this case the charges for services are accrued as an in-house cost and therefore do not result in external expenditure.

(Blank)

