

Delivering high value in Service and Support

An industry briefing on current and future trends,
emerging practices and key technologies

by

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Executive summary

The value proposition for help desks is changing.

Instead of merely tactically responding to the unforeseen needs of IT end-users, the future is all about helping organisations get a better return for their IT and related investments.

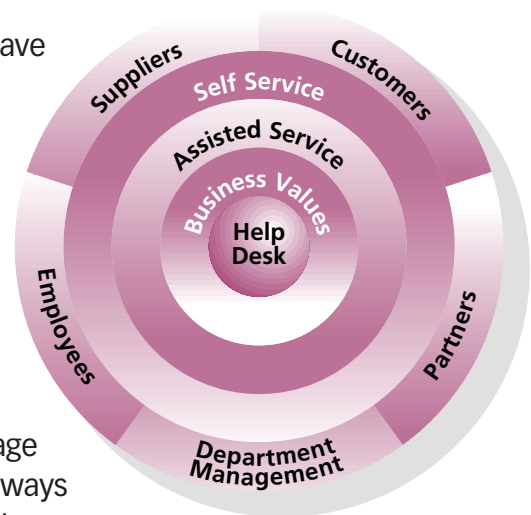
So where are the differences?

This industry briefing looks at the sources of value, and traces the evolution of help desks in terms of delivering such value.

It recognises that very few first-generation help desks were planned – they were a pragmatic response to the evident need for end-user support. But it also acknowledges the rapid development of best-of-breed help desks into an excellent source of information on the performance of both users and technology.

Today, the core functions of help desks have been incorporated into a wide range of business applications, mostly in the Customer Relationship Management and allied fields. But few organisations have taken the courageous decision to make them a central part of their business infrastructure.

This briefing paper explores some of the major challenges facing those who manage help desks. It looks at the impact of new ways of seeking and delivering the service, and assesses a number of emerging issues which will influence their management in the coming years. Its recommendations will equip managers with a clear agenda to consider the implications for their organisations.



1 The deployment of help desks

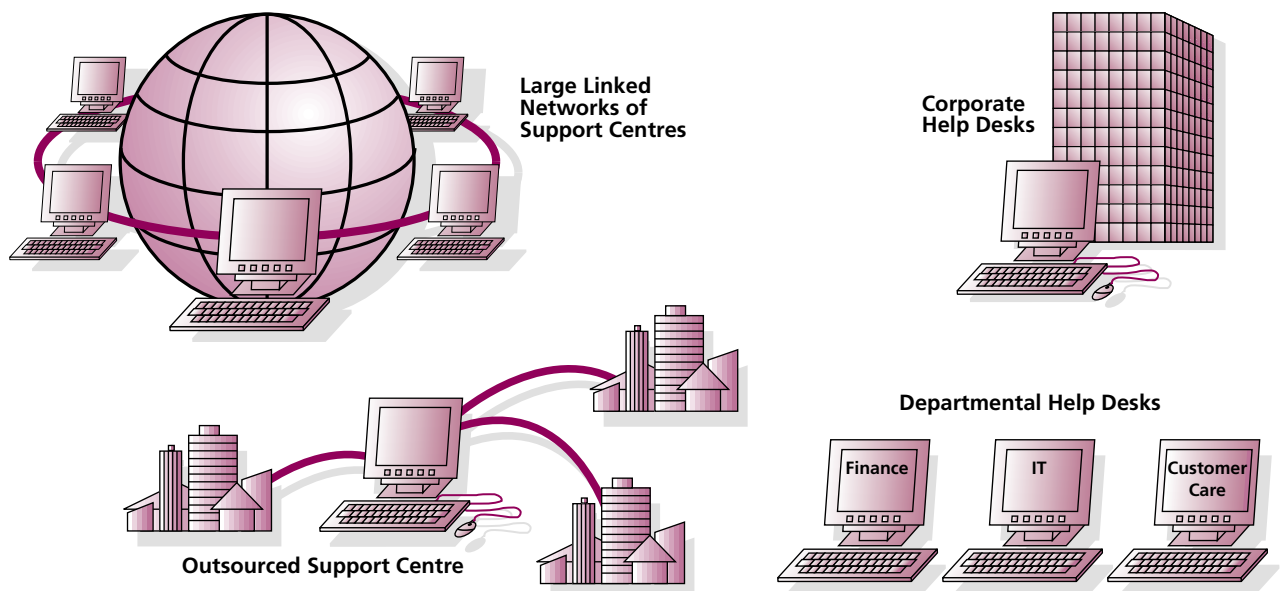
Whether or not the term 'help desk' is used, the concept of a single point of contact for customers to refer questions and seek assistance to solve problems, has become a ubiquitous feature of modern business.

There are an estimated 150,000 to 200,000 help desks in operation throughout the world. This is a sub-set of the wider call centre phenomenon which is estimated to employ 5 million staff worldwide, by 2003 (source: IHA Ltd).

Although the term 'help desk' was originally conceived for IT support, it is now used to describe any call centre or part of a call centre which handles complex problem-solving and associated processes.

They are deployed in a wide variety of ways.

- Large, linked networks of multi-tier support centres spanning geographies and businesses, and supported by expensive, integrated and highly-functional software either purchased or internally developed to meet very specific business requirements.
- Large support centres (or a network of centres) built as generic facilities to provide help desk services for a wide range of clients who have chosen to outsource. In the main they focus on IT support and use expensive system solutions, although these have less functionality customisation but more commercial options.
- Centralised, dedicated corporate help desks consolidating expertise in handling internal and/or external customers and using advanced help desk tools with knowledge and asset management capabilities.
- Departmental help desks specialising in the support of certain types of internal or external customers and focused on very specific business objectives. These will use the most appropriate point solution* available as a toolset and be the repository for unique knowledge whether held electronically or not.



North America faced the problem of mass PC deployments first and used help desks as one means of managing the situation.

Another characteristic of help desks is that they are found in a wide range of organisational contexts.

- Corporate assets – meaning units set up within commercial firms as a better way of handling a process previously carried out less formally and without the benefit of modern help desk technologies.
- Public response facilities – where government departments, public services, utilities and others with a mass customer communications role need to provide a help desk access point.
- Support industry facilities – where the process of providing support of itself has become a specialised business and where help desks are deployed as a core competence in its own right.

Some countries adopted the help desk model earlier. North America faced the problem of mass PC deployments first and used help desks as one means of managing the situation. The UK and other English-speaking countries followed suit. Elsewhere – particularly in southern Europe, for example, existing structures for providing IT support proved flexible enough to cope, and the traditional culture of more personal customer service militated against the creation of US-style help desks until much later.

By the year 2000, the help desk model has become firmly established for IT support in most advanced western-style countries, though with different market penetration levels.

For external customer support, there are still comparatively few examples of successful help desk applications outside North America, the UK, Scandinavia and the Netherlands.

Despite the range and variety of help desks, they all share the characteristic of being an investment (approved and implemented in the last 10 years or so) which was prompted by perceptions of value.

These values form the subject of this briefing paper and Section 2 outlines the nature of the value propositions which help desks have sought to meet.

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2 The nature of value in customer support

To understand the value propositions inherent in help desk investments, it is necessary to appreciate aspects of the history of their deployment.

Background

Until the proliferation of desktop PCs in the late 1980s, the centralisation of computing enabled IT service provision and management to be well-controlled and organised through traditional closed-loop IT departments.

When large numbers of relatively untrained and inexperienced staff were given PCs everything changed. Many IT departments were caught completely unprepared. But this was partly because the earliest users were untypical; many were technophile users who had lobbied for a PC before their less-informed colleagues even realised what a PC was!

So the very first PCs to be deployed in corporate America and beyond required remarkably little support. This led to a false sense of security by the IT community, which was rudely shattered when larger-volume deployment began with 286 machines and their successors.

This explanation is essential in order to understand the key characteristic of first-generation help desks – namely that they were built in a big hurry. To this day, many IT support operations carry the legacy of their original creation, in terms of organisational status, staffing models, management structures and even systems investment.

When help desks began to be deployed outside the IT Support paradigm, they often carried with them the legacy of their original business contexts, and only gradually absorbed the culture and style of the non-IT business operations they were meant to support.

The elements of value in IT support

Among the elements of value originally sought in IT help desks are:

Improved uptime

IT systems, particularly when networked are prone to failures resulting either in total lack of functionality or a degraded functionality or performance. Total system failures have always been relatively easy to measure, and their impact can be assessed without too much difficulty. However system degradation and inefficiencies arising from poor system configuration are more difficult to measure and need sensitive diagnostic processes.

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For mission-critical applications, the uptime issue is of paramount importance, and a significant reduction in the risk of failures has an impact on the required investments in standby or disaster recovery facilities. It also needs to be noted that e-commerce applications are increasingly being regarded as mission-critical in the sense that for many dot.com ventures, their application is the sole business raison d'être. As, for example, in other areas such as retailing point-of sale applications, system failure means a direct and immediate loss of revenue.

Better utilisation of resources

In a typical help desk, the cost of fixing a single problem depends partly on the level of skill required. First-line staff can be trained far quicker than more technically proficient Second-line personnel; the real experts who act as third-line staff are often among the most valuable people in an organisation. The cost of resolution at second-level is frequently up to ten times the cost of a similar fix at first level; for third-line resolutions the cost multiplier can be another 10 times (source: Fry Consulting, 1999). Utilisation of staff is therefore an important driver of overall efficiency.

By such means as separating the initial call logging from technical troubleshooting, many early help desks obtained much higher utilisation of their second and third line staff. When, much later, help desk software enabled very rapid call registration and the documentation of Frequently Asked Questions, the emphasis turned to 'first time fix' rates, with further improvements in productivity - this time of semi-skilled personnel

Improved procurement decisions

Buying-decisions for IT equipment and services can have a profound impact upon the return from IT investments, and help desks can play a significant role in improving the quality of such decision-making. For the feedback loop to work effectively, the help desk needs to gather high-quality management information about the incidents arising from every item of hardware, software or professional service. The procurement authorities – be they the line or a purchasing specialist – then need to develop mechanisms to receive and act upon such information.

For this value to be unlocked, help desks had to work at a managerial rather than an operational level; few succeeded in doing this until the second or third generation of software had been installed. The reason for this was that early help desk software had poor management reporting tools and little or no asset management capability.

As help desk software has matured, this important source of value has become more practical, but is yet to be fully realised in many establishments.

End-user customer satisfaction

The driving force for the creation of many a help desk is the need to allay end-users who complained bitterly about the ineffectiveness of an IT department's response to their problems. Unhappy staff and poor morale have serious effects upon companies and help desks were seen as a valid means of providing a better service to personnel – comparable to better training and staff welfare facilities. Indeed many firms looked upon the help desk as providing 'just-in-time' training as software became ill-suited to formal training courses, and

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highly suitable for a *Try-it-yourself-and-phone-me-when-you're-stuck* approach.

Few help desks initially measured satisfaction systematically. The creation of a help desk raises expectations and many were not able to satisfy, mostly because workload forecasting techniques did not enable managers to predict demand well enough to avoid long delays in getting through, or getting results.

Where help desks were successful, end-user satisfaction manifested itself in an increased confidence in referring the issues seen to be most appropriate to them. The agents' time was not wasted with unsuitable issues, and employee time was not spent on wasteful peer-to-peer problem resolution tasks.

External customer service

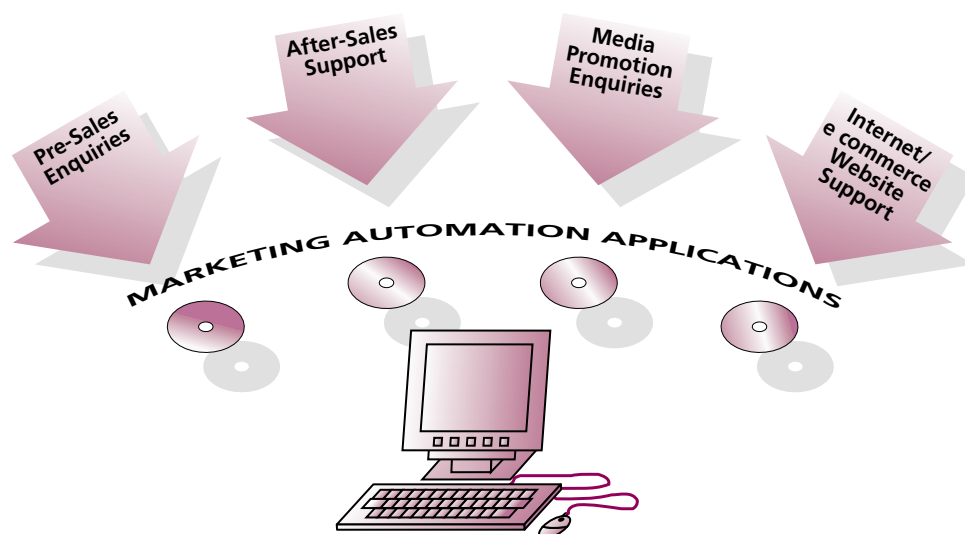
As help desks began to be deployed for external customer service, other sources of value became relevant.

Customer acquisition and retention rates

Whereas most IT help desks provide a service for a limited population of defined users, in-house, external customer support frequently addresses customers who have the option to go elsewhere for a service.

Either pre-sales enquiry help desks, or those providing after-sales support in such contexts, have an impact upon securing new customers or retaining existing ones. Call centres in the consumer segment of the market are familiar with matrices in this area and can measure precisely the impact of differing marketing campaigns upon their customer data.

In reality, many help desks in this deployment model are an intrinsic part of a major campaign. It may be there to meet demand generated by a press or TV initiative; or, increasingly, to support a new media promotion, or to provide alternative support for an Internet e-commerce Web site. Increasingly, a range of CRM software modules (called generically marketing automation applications) provide good management data geared towards measuring these rates.



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complaints handling – provided they are dealt with efficiently and promptly.

Share of wallet

Customers spend more with product and service providers who use help desk technology to provide a superior service. The cost of generating extra revenue from an existing customer is small compared to the effort required to obtain a new customer. It is therefore useful to try to calculate how much penetration of a customer's budget is being achieved, and increases in this number should be presumed to add value.

'Share of wallet' is however difficult to compute. It implies that the vendor knows, or can guess, how much the customer has available to spend on items which are currently purchased elsewhere. Market research data can provide indicative data on the expenditure patterns of customer-types but this may need to be translated into actual spending bands in order to produce meaningful results.

To succeed in unlocking this source of value, help desks and other CRM applications may need to interwork with, or be integrated into, other core business systems such as Sales Order Processing and financial applications.

Product design and performance feedback

While help desks in the IT support model can provide important data for procurement, the external support model is often more directly geared towards design and performance issues. This is because a help desk can often play a crucial role in early-life marketing and even product testing. Fast-moving consumer goods find it particularly useful to monitor customer reaction, and are able to use help desk and call centre technology to gather sufficient data before fully releasing a new product.

As global markets are commoditised and the economics of establishing separate infrastructures in different countries becomes less attractive, the value of centralised or regional customer support increases. Design authorities have frequently found conflicting feedback from different markets problematic, and management information from a consolidated source can sometimes add value to a difficult scenario.

Where companies employ distribution channels to provide marketing and post-sales coverage, there is a need to service them with high-quality technical and commercial support services. Different workflows and differing levels of expertise and approach are required to support different channels and one of the advantages of help desks is their ability to cope with a range of service levels irrespective of the business context of the application.

Value-propositions for help desks – some conclusions

Clearly, as illustrated above, the range of benefits constituting real business value consequent upon significant investment in help desk technology is enormous. Unlike many other IT applications, help desk software has an astonishing degree of versatility, and the operational processes which characterise help desks are by now accepted in more and more business contexts.

Many organisations are yet to unlock elements of these value-propositions.

Yet, there are changes happening which subtly but certainly affect these value-propositions. Management challenges, only now emerging as real issues, need decisions, investments and actions which few organisations have yet fully grasped.

This paper now examines three of the more important trends which help desk managers and their colleagues will need to heed in the period 2000–2002. It also explores

emerging issues the impact of which is only now beginning to be appreciated.

3 Management challenges

Three areas of major importance to management have been identified – all of which present both opportunities and threats for managers of existing help desks.

They are also relevant to organisations yet to make significant investments in this area, and those who are trying to decide whether or not the technology offers them sufficient value.

1 Determining the most appropriate service profile

The traditional method to design a help desk service is to survey user or customer requirements and seek to meet these needs on a cost-effective basis.

When industry service models are relatively stable, and the impact of technology well understood both by customers and suppliers, this method works well enough. It does not suffice however at times of market turbulence or rapid technological change.

Under such circumstances, an analysis of customer requirements and preferences tends to yield a majority opinion in favour of using tried and tested methods at the expense of innovative services. For example, if bank customers had been asked their opinions of automatic teller machines in the early 1980s, few would have perceived the advantages, and even fewer actively asked for them.

When IBM canvassed the views of their users on future requirements in the early 1980s, the unequivocal demand was for more and bigger mainframes. Although the PC was already being shipped, no-one seemed to be asking for one on everybody's desk!

Technology change and business instability creates many uncertainties and makes planning difficult. The development of the Internet and allied technologies places help desks in a similar situation today, and offers managers many choices in developing the best service profile for the coming five years.

Self-service

Self-service is the most frequently used term to describe a range of practices whereby the user makes access to a Web site or other sources of information to seek to resolve a problem without making direct contact with the help desk.

It recognises that there are tremendous advantages for the user in having access to such facilities. It is usually immediate; it is self-paced; information can be kept up-to-the minute, and it may be accessed simultaneously by a very large number of people.... even out of hours !

Among the attributes of successful self-service Web sites are:

- excellent FAQ's (Frequently Asked Questions) so that users can be assured of a high hit-rate for the most likely issues.

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- easy navigation and a look and feel which is compatible with other facilities made available to the user.
- easy transition to a help desk through a *Call-Me* button or similar.
- avoidance of unnecessary technical jargon.
- an acceptable percentage of likely success in resolving issues.

But this still leaves managers with some interesting issues. Not only do they have to contend with occasional users who have failed to get results from using the Web, they also have the challenge of keeping the data on the self-service site up-to-date and at all times compatible with information used by help desk agents.

But also, the help desk risks losing full visibility of the range and dynamics of the support traffic on a day-by-day basis. To avoid this Managers have to build excellent tracking facilities to monitor usage of the self-service site, and to monitor the navigation-patterns of its users.

Finally, there is the question of cost. Compared with high and continuous staffing expenditure, the costs of setting up and maintaining this alternative delivery vehicle can be modest. Moreover, the growing force of the self-service culture means that this alternative will be expected in most business contexts. Real life experience outside the office influences everyone's expectations and IT literate people all increasingly turn to the Internet for information and help. IT support cannot insulate itself from this trend.

Other changes in service profiles are caused by the wider range of access options now available. By this is meant the growing use of e-mail, fax, Chat and advanced telephony in many help desks.

e-Mail

e-Mail is rapidly becoming a favourite method of sending routine questions to help desks. It has the advantages of time and speed for the user, but is not suitable for questions which require an immediate answer. (For such requirements, the *Chat* facility is more appropriate).

For help desks which work at capacity or near-capacity at peak times, the encouragement of e-mail has been useful in helping to spread the load and enable questions to be addressed during the quieter times of the day. However, the ability to respond well to an e-mail requires different skills – and an investment in training. It also can mean entering into a convoluted dialogue with a user – involving a succession of e-mails!

Even so, the method has attractions for both users and help desks, and is likely to continue to increase in popularity in the medium term. Large-scale call centres are now investing in mass e-mail-handling software to perform auto-response, auto-categorisation and auto-forwarding tasks. Help desks may not yet have the volume for such investment, but there will be a growing need for such facilities if demand continues and if they can be successfully integrated with knowledge databases,

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Web sites and call management software.

Telephone

The Telephone remains the main access medium, and according to Datamonitor, will account for 72 percent of all inbound contact with call centres in 2003.

However, the widespread application of Interactive Voice Response (IVR) has changed the relationship between the user and the help desk.

In seeking to boost agent productivity by increasing the calls per day, metric, large-scale help desks have sometimes organised themselves into separate departments, each specialising in one part of the process. Unfortunately, the handover from one department to another may mean re-entering the holding queue and adding to the wait-on-hold time for users.

Unsurprisingly, customers are not happy with IVR applications unless they are well implemented and avoid dead-ends, over-complex options, and messages which are repeated too often. Managers implementing this technology have to be careful not to antagonise users.

Mobile devices

Finally the use of mobile devices and personal digital assistants will, in some cases offer remote workers even more choices in the means of accessing help.

Mobile phones using the Wireless Application Protocol (WAP) may be used by help desk users to discover whether a reported problem has been fixed. Or announcements of planned maintenance, service interruptions or other broadcasts messages can be communicated to mobile staff in this way.

The limitations of WAP lie mostly in the amount of information which can be displayed and the navigation sequences which users can be expected to follow. But with ingenuity and care, it is very likely that forward-thinking help desk managers will find this an attractive option for some industries and some scenarios.

In summary, the plethora of service options means that the creation and development of a help desk requires a new emphasis on planning so that the operational processes are flexible and can meet the challenge of multi-channel delivery.

2 Setting customer expectations for operational delivery

In a recent study of over 500 help desk managers in the UK, three-quarters claimed that improving customer satisfaction was their major goal in the next 12 to 18 months (source: CSM 2000 Benchmarking Report). A similar proportion claimed to be taking steps to measure customer satisfaction in one way or another. These methods include formal written surveys, e-mail questionnaires, telephone follow-ups and even face-to-face interviews.

Many of these are recent initiatives. For much of their history, help desks have paid little attention to customer perceptions and it is a sign of their maturity that management attention

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is at last focusing on this issue.

However, there is a problem. All experienced managers know that customer satisfaction is the product of actual experience compared with the service expectation. And very few help desks consciously set out to influence the expectations of their customer base.

Three issues have emerged as requiring serious thought.

Identifying the 'customer'

There are many roles being played within an internal organisation, as well as in the external context. An IT department running a conventional IT support desk has to satisfy the business director who runs a Line of Business, a departmental manager who is responsible for an operational line unit and a 'buyer' who may have negotiated the Service Level Agreement which the help desk seeks to serve. In addition, there may be hundreds of system users as well as a clutch of senior lead users, team leaders and supervisory staff.

Every one of these different roles has a slightly different requirement of a help desk! For example, while the departmental manager seeks maximum uptime and flexibility from the application, the individual user is most passionately wanting a fast reliable response and a degree of empathy from the agent.

Managers need to be clear about whom they want to satisfy and to what extent. Trade-offs are inevitable and need to be considered carefully.

Setting realistic objectives

For help desks to promise unachievable standards of service is self-defeating.

Credibility with the customer base takes time to be earned and can be squandered very quickly. Where quantifiable targets have been set, care is needed to ensure that they can be met sufficiently frequently as to be believed by the users – and their managers! Special care has to be taken publishing service targets which users can, in an even partial way, measure for themselves. For example, a promise to answer the telephone within 10 seconds is much better understood by a user than a commitment to resolve 80 percent of problems without external escalation. The caller who waits on-hold for over a minute in three successive calls will simply conclude that the help desk's claims are not credible.

Managers must be conscious that service standards are an escalator which tends only to go upwards! Excellent performance of itself fuels expectations and ratchets up demands for ever higher service levels.

This is a particular problem for external customer support centres where competing companies start using after sales services as a marketing weapon. Call centres in Financial Services, Telecommunications and Retail are tempted along this route, but have to tread carefully for fear of setting expectations which cannot be met.

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A skilful tactic is to set a separate expectation level for some types of transaction. Some large-scale call centres, unable to provide a live agent immediately, calculate an estimated queuing time and advise the caller so that he or she can decide whether or not to hold on. Wise suppliers construct the algorithm so as to be most likely to improve upon the estimated delay; excellent expectation management.

Communications methods

The most enduring expectations are not set by individual suppliers or individual managers in a large company. They become absorbed into the business culture of a country or an organisation – as the informal ‘norm’ in which most people believe.

Hence the danger which the poor reputation of an Internal help desk can suffer – where its users have no faith in it, and turn to other remedies even when costlier or of inferior quality. A good reputation, on the other hand is a priceless commodity with substantial benefits.

One way to obtain this cultural expectation is the cultivation of cross-industry standards. While broad-based technical and management standards (such as ITIL*) are slowly being absorbed by the help desk industry, skills certification is new, but has the potential to enhance the role of the help desk analyst and to professionalise the delivery of many help desks.

Excellent service by a well-trained agent communicates expectations better than any brochure or collateral.

Where publications matter are in advising managers of the nature and scope of the services being offered; many are surprisingly unaware of the nature of the services for which they pay. Among other proven methods are inviting all new, and existing staff, to visit the help desk or support centre and meet the people whose job it is to provide support

In summary, every help desk needs to determine what expectations to set and plan a method of communicating which supports, rather than undermines, the agreed standards.

3 Leveraging knowledge in customer support

It has become fashionable for every consultant and every vendor to claim that knowledge management is a key element in customer support. The actual number of proven achievements in this area is rather fewer, partly because of a lack of precision in the discussion and a confusion of concepts.

In essence, *knowledge* is at the top of a three-tier hierarchy of concepts. *Data* are the individual bits and bytes of known detail; *information* is what it becomes when structured in a particular way, and *knowledge* is the outcome when experience, insight and context is added

*ITIL stands for Information Technology Infrastructure Library, and the standards documented in its publications.

to it (source: T Davenport & C Prusak, Working Knowledge, 1998).

When IT support and customer support managers talk about *Knowledge Management*, they often have all three concepts in mind. So it may be as well to look at some of the data and information which can become knowledge when used in the right way.

Customer or client identification

This includes key contact details, addresses, purchasing, invoicing and support points as well as marketing demographics and related particulars. Much of this data is traditional for help desks and is now regularly auto-filled through screen-popping CTI applications.

The management challenge is to devise processes whereby this information is regularly updated and maintained. This is a particularly suitable – if unspectacular – application of the self-service principle using the Web.

Requirements

Suppliers gather details of customer requirements in a wide variety of ways, and store it in an even wider array of methods. For example, the requirement for IT support might be captured in a Service Level Agreement, and its implications stored widely in escalation thresholds and penalty trigger-points all over a help desk system. For customer support applications, a supplier might even need to keep the key points from an unstructured, informal conversation held with a salesperson.

These are two opposite ends of a wide spectrum of information which needs to be gathered and updated in order to deliver complex services.

Deliverable product/service

Just as a product supplier is expected to have all the necessary knowledge about the product at his or her fingertips, the help desk has to have access to all the attributes of the service it is delivering. For the IT support desk, this means having access to problem resolution data. These have become known colloquially as 'Knowledgebases', though many of them are in reality poorly-indexed collections of Frequently Asked Questions (FAQs) or keyword indexes to support manuals.

A true knowledgebase uses modern navigation methods to find quickly the answer to multi-attribute questions and might even use advanced model-based or case-based retrieval of specially-built, and constantly-updated archives. It is now possible to buy pre-built third-party problem resolution databases or knowledgebases for widely distributed products.

Transaction history

Information about previous dealings with a particular customer is invaluable. A high proportion of technical issues raised by IT users have some relationship to a previous query; either the symptoms may be similar, or the resolution may be influenced by what happened in a previous call. So it is important to know what

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happened, but not just in coded bytes. This is where excellent help desk agents prove their value. They can capture the flavour of a call, or maybe describe the customer's perception in words which will enable the next call-taker to handle the next problem better. Again this is a mixture of hard data and soft judgement adding value.

Typical ways of presenting this data include tables of the caller's previous calls, or previous calls on a similar problem, or from the same location. These constitute structured information and need the colour and flavour of agent judgement overlaid in order to be most useful.

These items and other types of information such as Asset Registers, remote alerting and diagnostic tools are blended together in advanced help desks to constitute an effective body of knowledge.

Leveraging this knowledge is the job of the agent, though assisted by those who design and maintain the system and its associated processes.

Workflows can be designed so that help desk staff can be assisted to discover the relevant insight into the caller's circumstances at speed and without disrupting the flow of the customer dialogue. In the best applications, the agent is not just presented with all the caller identity details (many of which are irrelevant to the process of problem resolution), but the product for which support may be requested. If IT support is the help desk role, the agent should see – without having to ask the caller – what equipment and software is installed, and ideally, how it is configured and networked to other components and system elements.

If, on the other hand, the help desk provides support, for example for a motor dealer, then equally the agent needs to see the make and model, its service history and maybe the amounts paid for routine servicing in the last two years by the caller. In both cases, a special red flag highlighting a client or customer known to be dissatisfied would be valuable.

What these illustrations highlight is the scope for creativity in designing presentation formats which bring to the help desk just the right information just in time to be used by a well-trained agent in a way that makes it 'knowledge'.

It is probably safe to suggest that 90 percent of real customer knowledge needs a human interface to interpret information and data and add insight to it. However, technology is increasingly able to simulate human processes of information handling; new applications which can 'learn' a customer's preferences, and infer behaviour patterns from previous actions, begin to take us to the much-vaunted but long-delayed era of artificial intelligence.

These tools will first make their appearance as *eCRM* applications using personalisation software and intelligent agent modules. A recent example is the use of a 'graphical sales assistant to make purchasing recommendations to a Web site visitor' based on previously gathered data on the customer.

For most help desks, these developments are some way ahead, but the integration with network support systems – in the case of IT, and integration with back office ERP systems for many customer support help desks, show the scope for leveraging the potential knowledge latent in most organisations.

In summary, successful leveraging of knowledge is the combination of the '*high-touch*' involvement of trained staff with true insight and experience, with the '*high-tech*' delivery of relevant data and information into their hands. The payback comes in reduced problem resolution times, better customer satisfaction and the avoidance of cost where problems can be solved once, and answers distributed and re-used instead of being re-discovered all over

again by other agents.

4 Emerging issues

Managers wishing to keep abreast of trends and advise their organisations on the opportunities for getting the best possible return on help desk investments need to take account of several significant emerging issues.

The use of help desk tools for wider business tasks

Experienced users of help desk technology have started to realise that the better application software lends itself to a much wider range of activities than anyone anticipated. After all, a call logging tool with some knowledge management functionality is not just a means of managing the traffic of IT users needing technical support. It is a methodology for planning an effective response to any situation where an infrastructure needs to be supported by specialist skills which may be in short supply.

This is why help desks can now be used to manage building maintenance and lettings; to track engineering changes and product revision processes; to provide human resources departments with an interface to handle the whole range of personnel issues, and to manage vehicle fleets or inventories of office equipment, stores or even catering operations.

What all these have in common is the need for control and visibility. Help desk processes – using easy-to-use software applications with people-oriented staff who can empathise with callers – are ideal for this purpose. Many organisations are happy to outsource key operational tasks, but may insist on keeping the help desk close to the heart of their business so that quality control and the productivity of the entire commercial cycle can be monitored.

Blended call centres using inbound and outbound calling

As with other evolutionary trends, it has become clear that many help desk managers see the original model of inbound calls as somewhat restrictive. In practice, of course, help desk agents have always made outbound calls in the course of solving problems; sometimes in technically-demanding (or underskilled!) environments the ratio of outbound to inbound calls was alarmingly high, as issues needed many calls to further levels of support in order to achieve a resolution.

But these were within a business model where the user or customer made the initial call. Blended call centres make outbound calls at the supplier's initiative, and sometimes introduce this practice to keep agents better occupied at times when inbound traffic is light. In an IT help desk, these calls may now be customer satisfaction follow-up calls – known as 'transaction monitoring'. Or they might be chasing users to verify or update contact or system details otherwise unobtainable.

In external customer service, help desks are occasionally tasked to sell. Part of the

Many organisations are happy to outsource key operational tasks, but may insist on keeping the help desk close to the heart of their business

comprehensive CRM concept is the theory that relationships managed by modern systems can support all three phases of the customer experience – pre-sale, sale and post-sale. However, the skills required of the staff, the functionalities needed in the IT systems and the sophisticated telephony required, limit the scope for this practice. No doubt there are specific business models where these will work, but they may be fewer than is supposed.

Multi-channel support

This is for real. The telephone may yet be the most convenient and frequently used method of communicating for customers – but the other channels are gaining in popularity (see section 1 on page 12: Determining the most appropriate service profile). What it means for a help desk manager is that all the options offered to the customers have to be brought together in one overall visible management perspective. As the use of one channel gains at the expense of another, resources – both human and technical – will have to be redeployed to meet service level targets.

Some companies have developed Web-delivered services as parallel channels often managed by different units in different parts of the organisation. This can be understood when the different culture and working practices of Web development teams are taken into account. It is also argued that to create a Web alternative from within a fully operational but conventional support organisation can be fatally disruptive and harm the delivered service achievement.

Whichever route is adopted, the goal is to ensure that there is congruence between the various channels. This means that they produce similar results in the end – even if the methods are different, and if the service levels at intermediate points differ.

Help desks supporting several support channels have an added degree of complexity, and need to be familiar with technology changes in rather different areas. Because performance improvements in these alternatives tend to happen in step-functions, or their introduction to a particular organisation is phased, one of the main challenges is to keep the various channels in some form of balance. Too dramatic a change in the access profile for any help desk spells disaster, and wise managers will invest in customer communications and marketing initiatives to try to influence this profile.

Multinational and multilevel help desks

A direct consequence of the increased globalisation of business sees a significant growth in help desks having responsibility for customers outside their own domestic market.

There is a very obvious trade-off between providing local support and centralised services. Being physically on the spot was always important when IT support required hands-on visits by support personnel to a PC-user's desktop. But gradually, as this requirement reduced, a remote help desk became acceptable.

The centralising of multinational support is a big cost saving for some companies, especially start-ups and high-growth operations, for it avoids building expensive infrastructures. But finding language skills and the other essential qualities to empathise with callers from different cultures is not easy. Call centres in Ireland, and the Netherlands have tried to make a virtue of the ready availability of multilingual help desk staff, but elsewhere, including

the UK, a shortage of such people is driving up salary levels and increasing staff turnover.

Skills-based routing and other CTI and telephony functionality are most important in a multinational help desk, and there needs to be resilience to cope with the peaks and troughs of demand in a range of languages. Where scripts are used, care must be taken to take account of the nuances of meaning and the different expectations arising from business practice in different countries.

Many help desks have to cope with multilevel support. For example, a first-line activity may handle 80 percent of the problems and questions raised by callers, escalating others to a group of more experienced or specialist technical staff. Originally, IT help desks would refer these issues to system developers or programmers sitting outside the help desk itself. Today, second and third-line support staff often sit within a large help desk, sometimes on rotation from other duties or other departments. Their management is often a challenge, for their career aspirations, their skill-base and departmental loyalties are very different from first-line staff.

Sometimes, multinational and multilevel structures come together. Many pan-European desks, for example provide centralised second-line services but still rely on some local first-line capability. In this instance it is the nature of the multilevel interface which matters. Using the same software can help transfer the data envelope from one level to the next – carrying with it the essential ‘ticking clock’ aspects of the Service Level Agreement – sometimes over time-zones. Also there is the language issue to consider as specialist staff are more often employed for their technical skills than their expertise with language.

Where English is the preferred medium – as, for example in large US-based multinationals, there is a strong case for using Basic English – a 1,000-word vocabulary which everyone decides to use in order to improve comprehension throughout a support chain. Help desk managers in any event need to ensure that the unique terminology used in a particular business is always well understood and used consistently.

Outsourcing

This is not a new phenomenon, but has strong appeal now that many businesses want to focus on their core competence and sub-contract other activities to experts.

Claims of major operational cost-savings were always difficult to support for IT outsourcing because the need to define requirements more precisely and manage change control better merely exposed process failures in the in-house departments. Outsourcing was often a therapy to help businesses plan better!

Outsourcing an IT help desk is often justified because of the difficulties companies have in getting the skill-mix right, and in getting to grips with workload planning and resourcing. Higher call volumes help spread the load, reduce the risk and enable the employment of second-line specialists who would be under-used in smaller environments.

Against this, few outsourcing firms can provide the level of intimate knowledge of a business to provide the highest standard of care required. This is particularly noticeable in external customer support where knowledge of a particular business or customer base is at a premium.

Specialists in outsourcing do, however have much to offer, and they can also provide career structures to help desk and call centre managers who can focus on the processes of support as a business in itself. The development of ‘*pure-play*’ service organisations has

Few outsourcing firms can provide the level of intimate knowledge of a business to provide the highest standard of care required. This is particularly noticeable in external customer support where knowledge of a particular business or customer base is at a premium.

certainly led to commercial innovation and to an improvement in standards of customer care overall. Companies struggling to meet adequate standards now have the choice of outsourcing if it all proves too difficult.

Where the help desk is outsourced, however, it is essential to keep in-house the means to discover whether or not the supplier is performing well enough. One way to do this is either to conduct or commission customer satisfaction surveys from within. Another is to reserve the role of determining and monitoring changing customer requirements.

A hybrid solution is to outsource only certain aspects of a support service. It is possible, for example to handle first-line enquiries in-house but sub-contract or outsource certain types of call to specialist firms depending upon the nature of the call. The difficulty here is that much depends upon the initial diagnosis of the call or its categorisation, and the term *'finger-pointing'* will be familiar to many help desk managers!

Many, if not all these emerging issues are beginning to occupy the minds of help desk managers and their bosses. The recommendations in Section 5 are aimed at providing a short checklist to ensure that managers have the key issues in mind as they plan for the future.

5 Recommendations

Ten suggestions for forward-thinking managers to unlock the value of help desk investments.

- 1 Constantly review the role and remit of the help desk; create a formal mechanism to consider changes to meet changing business needs.
- 2 Check available service offerings against customer preferences and priorities.
- 3 Introduce attractive self-service alternatives, but ensure the help desk complements, rather than competes against, new services.
- 4 Use marketing techniques to influence your customers' expectations; measure their satisfaction against these expectations.
- 5 Devise processes that ensure your basic customer data is up-to-date; exploit the Internet for this activity where possible.
- 6 Develop a knowledge strategy; discover where the best returns are found for harnessing what you know about customers and their problems.
- 7 Implement best-of-breed help desk software from well-established suppliers, but learn to use it thoroughly; exploit the full functionality, and train staff to take advantage of it.
- 8 Focus on management information, especially for multi-channel support.
- 9 Seek compliance with technical and management standards; encourage staff to take certification training.
- 10 Join industry bodies; attend their conferences and read the trade press to keep up-to-date with developments.

Glossary of terms

Agents: a call centre or help desk employee who handles inbound or outbound calls as well as other customer communications. They are also sometimes called Customer Service Representatives (CSR's) or Desk Support Agents etc.

Agent Burn-out: is used to describe a loss of effectiveness experienced by employees who suffer occupational stress in this role.

Asset management: a range of operating practices and procedures designed to ensure that IT technology equipment, software and other products are properly deployed and that their users obtain the maximum possible benefits from their investment. Not to be confused with financial asset management which is about obtaining a good return on investment (ROI) from a wide range of assets including securities and property as well as IT products.

Auto-response: functionality which enables recipients of e-mails to send acknowledgements or more meaningful replies automatically.

Auto-categorisation: functionality which enables recipients of e-mails to sort them into categories for further action.

Auto-forwarding: functionality which enables recipients of e-mails to send them on to designated persons for attention and response.

Best-of-breed: tools or technologies with a proven reputation of being among the leaders in their product market. This is particularly applied to software vendors with strength in one or more specialist area. Buyers following a Best-of-breed strategy frequently source products or services from different suppliers by selecting the strongest component offering for each area of requirement rather than rely on single-sourced suite products.

Best practice: processes, procedures or tools which have been demonstrated to be particularly successful for organisations which use them.

Call Centre: a facility to handle customer communications - both inbound and outbound – and where technology is used to optimise productivity, enhance customer satisfaction and build customer loyalty. They are increasingly called Communications Centres or Support Centres; other terms include Customer Interaction Centres or Customer Action Centres. Note that they do not necessarily have to be a physical location - hence the development of Virtual Call Centres.

Caller Line Identity (CLI): the ability to recognise an incoming telephone caller, and use this data for a variety of added value applications. This is the facility that enables screen-popping of customer data on a help desk system. It also enables calls to be routed to a particular agent in a call centre.

Call ticket: all the relevant information about a customer or an user's request or problem organised to ensure speedy and accurate response and resolution. Also known as trouble tickets, particularly in the context of IT help desks.

Case-based retrieval (CBR): a method of knowledge management enabling logical navigation of large quantities of diagnostic and problem resolution data by building and updating information in the form of cases.

Chat: a facility for real-time instantaneous text-based dialogue between two or more connected participants over the Internet.

Computer Telephone Integration (CTI): linking telephony technology with computer systems in a way which assists the management and operation of inbound and outbound telephone calls. Although originally focused on facilities for call centres and help desks, CTI is increasingly the driving force for managing the whole range of customer interaction channels including the growing range of alternative voice and data transmission methods and the internet.

Complaints handling: a process to log, investigate and respond to issues raised by customers, employees or members of the public.

Configuration: the way in which IT hardware, software and related networking and other facilities are set and linked together to form a system or network of systems.

Configuration management: is a set of processes and procedures to control the relationships inherent in large scale IT installations and is closely associated with change management which ensures that the full implications of changes to configurations and other working practices are understood and managed to minimise adverse impact.

Customer Relationship Management (CRM): processes and systems for managing business contacts with customers in order to grow and maintain high-quality, long-term and mutually beneficial relationships. The term is most commonly used by application vendors or IT buyers, but it is essentially a philosophy of doing business and covers a massive spectrum. The Aberdeen Group states that CRM has five application areas: Sales Force Automation (SFA), Marketing Automation Customer Service & Support, Field Service management (FSA), and help desk. eCRM means CRM processes which are either web-architected or web-enabled to a significant extent.

Customers – internal & external: any person who comes into contact with delivered products or services and makes use of them. Internal customers are users of products and services delivered from within the organisation where they work. External customers work for different organisations to those who deliver the products or services. When customers have a continuous on-going relationship with their service provider, they are frequently referred to as clients - particularly in professional services.

Customer satisfaction: the perception held by a customer regarding the overall benefit received from products and services. Customer satisfaction measurement is a set of processes and procedures to quantify and understand the level and nature of such perceptions. Methods may include Customer Satisfaction surveys, conducted in a variety of ways including the involvement on occasions of help desks.

Customer service: features, actions and information that enhances a customer's ability to realise the potential value of a core product or service.

Dead-ends: where telephone callers hear a recorded message with no clearly understood option to leave a message themselves or to return to the main navigation menu. One of the most frustrating experiences for customers when IVR (Interactive Voice Response) systems are poorly implemented or users of such systems are inadequately trained or disciplined to use this technology.

Diagnostics: tools and techniques to help determine the cause of problems and to assist in selecting appropriate remedial actions.

e-commerce: trading conducted over the Internet.

e-business: business processes making significant use of the Internet or analogous methods (eg Intranets). Used particularly to describe customer interactions facilitated through the Internet.

e-mail: functionality to enable electronic messages and attachments to be sent and accessed when a named user logs on.

e-marketing: marketing processes making significant use of the Internet or analogous methods (eg Intranets).

End-user: The person who makes use of an IT application's functionality.

External customer service: where customer services are provided to those who work outside the service provider's organisation or to consumers or customers who are members of the general public.

Functionality: characteristics of an IT application or toolset which enable it to perform business or technical operations.

Frequently Asked Questions (FAQ): a set of questions and answers selected by suppliers for publication in easy-access methods. Although used primarily as a self-service tool on supplier Web sites, they can also be found embedded in on-screen help facilities for software or even in hard-copy manuals.

Help desk: a type of call centre designed to act as a single point of contact for all day-to-day queries and problems experienced by customers or users of IT systems, complex products or business processes. An IT help desk acts as a major interface between IT service providers and the rest of an organisation, and may handle administrative and resource scheduling tasks alongside its core activity of technical support and problem management.

Information Technology Infrastructure Library (ITIL): a comprehensive set of published Codes of Practice and Guidelines on the management of information technology originally developed by the UK Central Computing & Telecommunications Authority (CCTA) These source documents are an invaluable resource. (See www.ccta.gov.uk/itil)

In-house services: IT services provided from within the customer's own organisation.

Intelligent agent: advanced use of rule-based telephony modules to elicit answers from callers to obtain sufficient information so as to route certain types of call to particular departments.

Interactive Voice Response (IVR): enables telephone users with a touch-tone phone to input information, obtain a response or initiate a particular action based upon the customer interaction. Originally a clearly identifiable standalone application, it is now integrated into overall CTI and Multi-channel customer interaction solutions.

Knowledge management: processes and systems to generate, capture, organise, distribute and exploit what an organisation knows in order to improve its performance. Help desks and call centres often rely on knowledgebases which can be either pre-built by experts in a particular field (or knowledge domain) or compiled in-house to assist in problem resolution or information retrieval. Very large scale examples or collections of knowledgebases are sometimes referred to as a Knowledge Repository. A Knowledge Engineer is someone experienced or trained in the techniques of designing and developing Knowledge Systems which are specialist applications designed to automate aspects of the knowledge management process.

Mission-critical: an application or aspects of infrastructure upon which a business or public service depends in order to fulfil its core objectives.

Multi-tier support: structuring a customer service offering so that assistance is provided through a hierarchy of units or departments, with unresolved problems or questions escalated to a higher level for resolution. A First-line help desk is the initial reception point for callers. Units further up the hierarchy will be called Second-line or Third-line etc. according to their position in the organisation of service delivery - not according to what precisely they do. Whilst there is therefore no standard definition for the activities of such units, the general rule is that Second-line help desks have technical staff to resolve the vast majority of problems not requiring access to source code. Third-line departments and above have opportunities to consult or deploy development resources where necessary to fix problems. Note that the terms First-level, Second-level and Third-level etc. are also used. A Multilevel help desk is one which provides more than one tier of support from a single facility.

Multi-channel delivery: providing customer service through a variety of methods including voice, e-mail, fax, bulletin boards, Internet sites, intranets etc.

Outsource: to contract with an external provider to supply services previously undertaken internally.

Personal Digital Assistants (PDA): a portable hand-held computing device capable of instant on/off ease-of-use and designed for limited or highly specific applications.

Personalisation: techniques to enable users of the Internet to receive an individually-tailored service. Inspired by the One-to-one marketing concepts whereby new technology is believed to provide the antidote to mass marketing by enabling suppliers to address the specific needs of individuals. Web sites invite customer to volunteer information about themselves through profiling and thereby enable suppliers to address individual preferences. Information and newsletters available from www.personalization.com

Point Solution: systems implemented to achieve the automation of a defined business activity even when the potential to integrate technically with other related activities is possible. Many smaller help desks are point solutions whereas larger call centres are increasingly enterprise-wide solutions involving the integration of many related business activities and functions.

Procurement: processes involved in identifying, purchasing and obtaining delivery of products and services.

Pure play: description of an organisation which is focused on one principal activity.

Screen popping: A CTI technique whereby information stored on a computer system is automatically displayed when triggered by a pre-programmed event such as a telephone call from an identifiable customer.

Self-service: a range of practices whereby users and customers make use of directly-accessible solutions or services in preference to making use of help desks, call centres or other sources of manned support.

Service Level Agreement (SLA): a negotiated agreement between a vendor or service provider and its customers defining the deliverable services, operating procedures and the standards to which the services should be delivered. In large complex organisations, there may be very many SLAs - with comprehensive legalistic provisions covering every aspect of the agreed services. Downstream SLA's cover services provided by the IT department or vendor. Upstream SLA's cover services provided to the IT department or vendor. These are also called Operational Level Agreements (OLA). Service providers clearly should not offer an SLA to their own customers with more demanding commitments than provided for in the relevant OLA upon which escalated aspects of the same service depends.

Skills-based routing: rules-based functionality of CTI which enables voice or data calls to be automatically transferred to call centre agents possessing identifiably relevant skills. This depends upon building and maintaining a skills inventory and structuring a service to optimise the deployment of such skills. Used with language skills, this enables the effective operation of multilingual help desks or call centres.

Support: generic term to describe services required by IT and other complex products or processes to enhance a customer's ability to realise the potential value of a core product or service. In IT, pre-sales support means technical or consultancy assistance to help prospective customers understand the benefits and determine how to deploy a technology solution. Post-Sales support includes many aspects of a customer services solution (including help desk) but often indicates a technician available in person or by telephone to assist in resolving user problems and queries.

Transaction monitoring: A form of customer satisfaction measurement whereby users and customers are asked about their perceptions of a single service encounter or series of linked encounters. Unlike many forms of CS measurement, this method lends itself to the use of standardised and benchmarkable question-sets, and is ideal for help desks and call centres. A UK-based Group is pioneering industry wide use within IT (See www.transactionmonitoring.co.uk)

Uptime and Downtime: the percentage of total available system operating hours when the system has or has not performed to a minimum specified standard. Normally defined in a Service Level Agreement.

Web site: a page or sequence of pages containing information, inviting contact or initiating actions and available through a browser over the Internet.

Wireless Application protocol (WAP): a global standard for developing and delivering applications over wireless communication networks.

Workflow: a sequence of activities linked together to form a coherent business process. The term is used particularly in call centres to describe the passage of a customer's problem or query through the support process. CRM systems make increasing use of workflow engines in order to refine and improve these processes.

