

# Journal of International Information Management

---

Volume 8 | Issue 1

Article 8

---

1999

## Managing the information Technology help desk: An international dimension

Vivek Shah

*Southwest Texas State University*

Roy Martin

*Southwest Texas State University*

Follow this and additional works at: <http://scholarworks.lib.csusb.edu/jiim>

 Part of the [Management Information Systems Commons](#)

---

### Recommended Citation

Shah, Vivek and Martin, Roy (1999) "Managing the information Technology help desk: An international dimension," *Journal of International Information Management*: Vol. 8: Iss. 1, Article 8.

Available at: <http://scholarworks.lib.csusb.edu/jiim/vol8/iss1/8>

This Article is brought to you for free and open access by CSUSB ScholarWorks. It has been accepted for inclusion in Journal of International Information Management by an authorized administrator of CSUSB ScholarWorks. For more information, please contact [scholarworks@csusb.edu](mailto:scholarworks@csusb.edu).

# Managing the information Technology help desk: An international dimension

Vivek Shah

Roy Martin

Southwest Texas State University

## ABSTRACT

*Information Technology continues to change at a fast and furious rate that shows no signs of slowing. Support requirements are increasing, while businesses are becoming global and demanding more support for technology. This paper focuses on the issues and challenges faced by organizations in setting and running a help desk for end users in an international environment.*

## INTRODUCTION

Since computers have been used in business to process information, there has always been some type of user support. This service has been known as Help Desk, Technical Support, Information Centers, and others, each reflecting very different types of services. However, what they all have in common is that they were created to provide technical solutions to non-technical people.

User support has begun to splinter away from Information Technology (IT) to become a sub-industry in itself. This is not unexpected since user support has long been thought of as slightly outside the proper IT industry role. This is demonstrated in the difficulty of moving from a support job to a development job, or the tendency of so many companies to keep technical skills on the help desk at a relatively low level. With support being somewhat alienated from other IT functions, there is pressure from those inside to create their own specialists and identity. The similarity and standardization of computer systems, and the speed with which knowledge becomes redundant means that a supporter's technical specialization now is less a barrier to changing jobs than it once was. Technical knowledge can be gained and discarded as needed, as it has to be on a continuing basis, due to the nature of the field.

The need for user support is set to increase dramatically. The amount of computing purchasable per unit of currency has increased at a breakneck pace as Intel, DEC, Motorola, IBM, and others have given us evermore capable and faster processors. The software industry

has kept up with this by creating more proficient and useful products. For the support department, this has meant the need to service even more users of evermore powerful systems. The increase in 'ease-of-use' brought by graphical user interfaces like Microsoft Windows has not and will not decrease the corporate support burden; such improvements' will only change the nature of support. Another dimension of user support over the last decade has been the development of a global workforce and the need for user support of a global nature.

There is, unfortunately, no one magic formula for success in the help desk world - the parameters vary too much from one help desk to another. Each help desk is unique and therefore its focus and objectives are different, particularly in the world of globalization. There are two main audiences for this paper: managers of the help desk and managers of the support business operations currently responsible for the success of the help desk operations. Most help desk managers do not have training or experience for a management role. They are not aware of all the things they need to perform, or how to go about doing them. This situation is particularly prevalent in new and rapidly growing companies, where there is no established precedent from which help desk managers can learn. Even in companies that have had help desk support for some time there is often no formal training material on dealing in a global environment. This paper provides comprehensive and practical discussions on the issues facing help desk management in the global environment and discussing the different approaches they make them to address those issues.

## **FORMS OF SUPPORT**

IT support is to be found in a number of forms, from the simple help desk to the full-blown user support center. These different forms exist in response to the different perceived or actual needs and the resources available. Usually a help desk tends to have an external focus. They generally support customers outside the bounds of the company, and are the conduit for post-sales customer contact with the company. The products and environments supported by a help desk are generally created and sold by the company. The products may interface with the products of other companies, and in some cases a help desk will support some of the other products. Help desks usually provide technical support, research and development support, software support, and many other forms of assistance.

A typical help desk answer is a widely known telephone number and it may also use other means of communication, like fax, electronic mail, voice mail or regular mail, but it is essentially a receive-only service, designed to satisfy user needs. The help desk offers a single point of contact, something users consider desirable. At times this function is often repeated across many parts of an organization.

A help desk exists to resolve product-related issues reported by customers of its services and product offerings. The service policies and offerings also define the products supported by the help desk and usually the level of service that support customers can expect on those products. A small help desk organization that supports a limited number of products may have only

one specialized offering, and provide the same level of service to all customers. A large organization may offer multiple levels of support on different products, or combinations of products, and customers may make arrangements for the level of support that best fits their needs.

The help desk is usually not a revenue-generating entity, and will be showing up on the balance sheet as a cost. This makes it more important than ever to ensure that the help desk provides the support that customers need as well as meets the expectations of senior management.

## **USER SUPPORT IN AN INTERNATIONAL ENVIRONMENT**

The effect of low cost computing and networking is the increasing globalization of technical support needs. Technology penetration is increasing in many markets around the world and all these new customers also need technical support. Many technology companies are based in the United States and they are having to learn to deliver technical support to different business customers. In addition to supporting existing products that may have been translated to address the needs of foreign markets, a help desk may also have to support products specifically developed for foreign markets.

There are many examples of companies that have begun to operate user support on an international scale. Quaterdeck, Microsoft, and IBM all have set up this function at various international locations. Two distinct types of international support have emerged: the single center, where all customers make their queries to a single, central point and the multiple center with several support desks in different time zones. Each is an attempt to provide out-of-hours, even 24-hour, coverage as well as supporting users in different time zones. Both are a form of centralization with the single center obviously centralized and the multiple center possibly centralized as far as customers in that time zone are concerned.

One of the main reasons behind any centralization of support is cost. Cost pressures arising from increased competition and lower margins are forcing many help desk organizations to centralize operations in a few support centers. This approach usually saves money by gathering resources in one place or in a minimum number of places and allowing critical mass to be more easily reached with duplication of effort reduced. Further, it is not feasible for the organizations to set up the help desk in every European or Asian country since some of these countries are smaller than many American states.

The dynamics between the cost pressures to centralize and the market pressure to globalize are forcing companies to develop innovative solutions to globalization. Some companies have placed support centers in geographic locations such that at any given time one or two support centers are always open. The centers concentrate their support on local customers, but are also available to handle after-hours support from the other centers. Other companies have only one main support center and a few support personnel in key locations around the world who can access information from the main support center. As telecommunication costs come down, yet other companies are experimenting with one worldwide support center.

## **INTERNATIONALIZATION AND QUALITY**

Personal attention usually provides a better quality of service. Since there are few things less personalized than a centralized telephone inquiry desk, it is easy to conclude that a centralized system will lead to poor quality. This conclusion might not stand up since quality is a subjective concept. Suppose the type of service to be offered meets or exceeds the expectations of the user, then the quality is more than adequate. Service does not have to meet the needs of the user - only the expectations. Secondly, there may be little to be gained over a telephone-only service by adding the personal touch, such as placing experts on the site with the users. Experts on the ground are enormously expensive and the user will eventually have to pay for this service.

In the software industry, internationalization and extreme centralization of user support make a lot of sense. The expectation of the user may be for a low-cost form of support; after all, if they only paid a couple of hundred dollars for the package, they cannot reasonably expect on-the-ground experts providing a premium quality service. Thus a telephone service across international boundaries, such as operated from outside Dublin by Quarterdeck, or from Bermen by Aztech Systems or from Toronto by Corral will do the job as long as the service delivered does not drop below those already conveniently low user expectations.

Internationalization can mean improved quality of support, both for the customers of a manufacturer's help desk and an internal help desk user. Internationalization means that the regional users are put in touch with central support. The economy of scale, brought about by supporting remote countries from the country of manufacture, can mean that the regional user can have support at a level of technical ability that would be way too expensive to provide at an actual geographic regional level. The flow of information is rapid; the user's problem is delivered right to the heart of things, where the user support technicians are, and where the product designers are just down the corridor - and all this for the price of an international telephone call.

One of the most widely discussed technologies in the computer support industry is knowledge-based systems. In an industry challenged with the "do more with less" burden, many organizations are using knowledge-based systems in conjunction with the Internet to increase first call resolution rates, improve overall performance, increase efficiency and reduce their bottom line costs. This technology is being increasingly utilized by multinational corporations like GE, AT&T, HP, Nestle, and Honeywell Bull who want common systems across all of their various sites.

Automating a support desk is an involved, time-consuming, and sometimes expensive process. Support and problem resolution systems must be selected and the knowledge base must be built or bought and then managed on an ongoing basis. After the automated system has its initial base of information, second and third level support groups must continually write the solutions to less common problems and enter them into the knowledge base so that they are accessible to first level support staff. Once properly in place on an automated phone line or on the Internet on a home page, the payoff starts. With a common knowledge base, responses are consistent in all locations and support costs are reduced through common training. The maintenance cost burden is decreased by having standard systems at all sites around the country or around the world.

Some of the most common users are providing customers with access to the help desk's basic information, such as hours of operation, service offerings, training offerings and schedules, frequently asked questions and answers, release notes, product and company information, and even employment opportunities. Most experienced organizations are providing their customers with direct access to the product support knowledge base and are hosting real-time discussion forums, where customers are able to interact directly with developers. These options help customers answer some of their basic questions themselves and provide them with extended service hours. Both objectives of increasing and leveraging the technical support knowledge and resources, and providing enhanced levels of customer service are achieved.

## INTERNATIONALIZATION AND ALIENATION

Centralization will always have some problems producing a good telephone service. Often the greater the centralization of support, the more alienation of service from the user it is supposed to serve since users are further away from the support. When the support is aimed at a product rather than the actual user, this alienation is taken as perceived. Support desk personnel do not need to have a closeness or affinity with the user as long as the desk can support the user's queries. Alienation is an inherent part of the relationship between a geographically supported help desk and an end user.

Another issue in the international, centralized help desk environment is the problem of what to do if the help desk is unable to solve a problem. For example, diagnosis could be impossible without visual contact or the user cannot implement the solution the help desk describes. If the problem is related to hardware, usually this can be solved by local hardware replacement but, for software problems, remote support is always more difficult, international or otherwise. The user is effectively on his or her own, with a computer that steadfastly refuses to do what is expected, and a problem that steadfastly refuses to be a simple hardware failure. This form of alienation is as perennial as support itself and where the support is international, it is taken to extremes.

Other forms of alienation are cultural. Help desks, like other businesses, require effective communication to operate efficiently and meet their objectives. International help desks require effective communication at a number of different levels. A help desk organization must communicate with its work force, customers, suppliers, and host government officials. Effective communication among people from the same culture is difficult enough. However, when attempting to communicate with people who do not speak English and who have difficult attitudes, ideas, assumptions, perceptions, and ways of doing things, one's chances for miscommunication increase. The polite humor of the English can sound patronizing to a German. What an American hears as blunt and aggressive is reassuring self-confidence to a Scandinavian. Mediterranean calmness can come across as vagueness or ignorance to the English, and so on. These barriers to communication cannot be broken down by crash courses in languages or accents. They can only come from an understanding of the culture of the language.

There is no doubt that where the product only is to be supported, alienation can help. It keeps users at a distance and expects users to gain some expertise by themselves. The support issues get narrower, so easier to deal with, and easier support means cheaper staff and potentially more rapid reaction to change. On the other end, it can also mean a lack of flexibility and if the query cannot be fixed by standard answers, it may have difficulty finding any solution at all.

The other end of the scale is to support not the product, but the user's use of the product. This is extremely difficult to do from a centralized help desk and virtually impossible to do across international boundaries because such support tends to be more face-to-face. Thus, support people have to move around to different user sites to solve the problem. These conditions suggest that product support can be provided effectively across international borders but client support is not feasible.

### CHOOSING LOCATIONS

If companies do not have to put staff on the road, the actual location they choose does not matter. What is important at this point are the following three factors:

- The local population, in terms of their abilities, education, and availability, and salary expectations;
- Local telecommunication structure, in terms of the cost and accessibility for international communications; and
- Local government, in terms of their tendencies towards discouragement or assistance of immigrating international companies.

In Ireland, Quaterdeck found an educated and available workforce with language ability; both major factors in their decision to establish a product support group in Ireland. Other product-oriented companies have moved to central Europe for economical reasons. Despite a local culture and different language, Germany freely accepts English as the language of IT. Germany is also attractive as an international base because of the size and wealth of the home market, plus the proximity of other German-speaking markets (Austria, Switzerland, parts of eastern Europe) as well as the emerging economy of the east. To sell to these markets, the support desk has sprung up as an arm of the product distribution function. In Asia, many companies have set up help desks in Singapore and India because of the availability of an educated work force and lower salary expectations.

Another locations factor is that countries are very protective of their indigenous cultures. This is an emotional and political movement which has been gaining momentum. Corporations may believe that they have the expertise in the home office to show the international offices how to conduct their businesses. However, it does not follow that what works in the U.S. or Germany will work exactly the same way in France or India.

The international help desk may also be rendered irrelevant by local rules such as some countries insisting on a certain percentage of local employment or corruption in the form of government pay-offs. Corrupt governments are extremes but local employment may become necessary not just out of financial considerations, but out of practical necessity. The help desk just may not be able to come to terms with the local culture, methods of working, expectations, or language, and putting in a team to work may be the only way to support local users. In the end, however, it comes down to what the local user community wants from its support service and how much it is willing to pay for it.

## CONCLUSION

It is no surprise to anyone in the help desk business that user support is getting more complex and challenging. User support has become an industry itself, with its own needs and specializations. As the number of end users has become global, so has the demand for help desk services. Organizations will have to adapt to different cultures and to the different needs of user support in an extremely global market place. There are many considerations before setting up the international help desk and what organizations do not want to do is to install a user support service which consistently annoys the client base.

As the cost of computing goes down and more computers are networked, there will be an increase need of user support at the global level. Advances in technology will continue to offer new and improved ways for help desk organizations to provide quality, comprehensive, multi-vendor support in a cost-effective manner in an international environment.

## REFERENCES

- Bell, J. (1998, April). Tracking the call. *Technology Training*, 34-36.
- Burton, N. (1997). *How to manage the I.T. helpdesk*. Oxford, England: Butterworth-Heinemann.
- Caldwell, B. (1996, October 7). Unisys announces global desktop support. *Informationweek*, 600, 30.
- Czegel, B. (1994). *Running an effective help desk: Planning, implementing, marketing, automating, improving, outsourcing*. New York, New York: John Wiley & Sons, Inc.
- Ferraro, G. P. (1996, May-June). The need for linguistic proficiency in global business. *Business Horizons*, 39-47.
- Gurpe, F. H. (1997, Spring). Outsourcing the help desk function. *Information Systems Management*, 15-22.



- Martinsons, M.G. & Westwood, R. I. (1997). Management information systems in the Chinese business culture: An explanatory theory. *Information & Management*, 32, 215-228.
- Saviano, J. P. (1997, June 1). the global village is diverse. *CIO*, 10(16), 92.
- Watson, R. T., Kelly, G. G., Galliers, R. D. & Brancheau, J. C. (1997, Spring). Key issues in informaiton systems management: An international perspective. *Journal of Management Information Systems*, 13(4), 91-115.
- Wilson, R. (1991). *the art of computer technical support*. Berkeley, California: Peachpit Press.
- Yellen, R. E. (1997, Spring). End user computing in a global environment. *Journal of End User Computing*, 9(2), 33-34.
- Zarley, C. & Jerry, R. (1997, September 8). Going global. *Computer Reseller News*, 753, 1.