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3-1-2008

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### Recommended Citation

Young, Joy and Murray, Meg, "An Exploration of the Best Practices for Securing Contractual Helpdesk Services" (2008). *SAIS 2008 Proceedings*. 15.

<http://aisel.aisnet.org/sais2008/15>

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# AN EXPLORATION OF THE BEST PRACTICES FOR SECURING CONTRACTUAL HELPDESK SERVICES

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## ABSTRACT

Contractual Helpdesk Services, which include offering customer service to consumers who have an issue, problem or concern, is a growing industry. For smaller companies outsourcing helpdesk services is becoming more and more popular as there are many technical aspects and high investment costs required to develop the infrastructure needed to support these services. Contracting Helpdesk Services alleviates smaller companies from being concerned with technical issues, doing research on the value proposition of emerging products or services, and in some cases even alleviates the need for hiring additional staff to take customer support calls. This paper explores best practices companies should consider when contracting for the services of a call center environment. The Contractual Helpdesk Service has evolved from just a Business to Consumer model to a Business to Business model via affiliation.

## Keywords

Helpdesk, telephony, contractual helpdesk service, outsourced helpdesk services, call center

## INTRODUCTION

Due to the vast worldwide growth in the need for customer service agents and call centers, the business of offering outsourced helpdesk services is at a record level. Many companies cannot afford to setup new call centers that span multiple site locations. However it can be very beneficial for companies to have a helpdesk resources and customer service agents in areas such as India and China where wages are fairly low. Major corporations such as Hewlett Packard, IBM, and Dell, who maintain large helpdesk facilities around the world, have identified a business opportunity through offering the utilization of their call centers to smaller companies who may be financially unable to extend their current call routing infrastructure. Organizations who offer Contractual Helpdesk Services utilize their pre-established worldwide call routes to provide call routing to other organizations. As this trend continues, organizations who offer Contractual Helpdesk Services, also known as call center outsourcing, will be faced with even greater challenges as they move to one stop customer service providers who offer full solution packages. The new and upcoming group of Contractual Helpdesk Service providers will also need to take into consideration that they are entering an emerging market and therefore to increase their chances of success should use a best practices approach. Of course as time changes, so will the manner of practice. "Contact Center Outsourcing and Services, the evolution of horizontal functions will also challenge contact center outsourcers, as more investors move toward one-stop-shops for multiple services. In addition, technological shifts will be an area of concern for outsourcing vendors, as end-users rapidly adopt new and sophisticated contact channels" ("Survey-Trends...", 2007). The growth in technology makes it imperative for businesses who offer Contractual Helpdesk Services to stay on point with maintaining knowledge about available solution options and to insure they are able to offer their clients the best services possible.

Many organizations choose to utilize Contractual Helpdesk Services, rather than develop in-house solutions, so they can focus on core areas of their business. To implement an in-house service, a business would need a department or, at least, an individual assigned solely to staying abreast of technological advances in telephony hardware and software components as well as staying knowledgeable about routing techniques. A business whose primary focus is not helpdesk services might find this an unnecessary cost and unable to justify this expense as it is not considered a major revenue generator for the company.

On the other hand, there are many reasons why Contractual Helpdesk Services are utilized by many organizations. Seeing that the main reason associated with engaging Contractual Helpdesk Services is cost-driven, it is important that those offering this service maintain a best practices approach. Best practices include offering optimal call center service solutions, knowing how to transfer calls with specialized skills, and implementing best practices for addressing technical problems that may arise.

## Optimal Service Solutions

According to David Tropio, Call Center Consultant for Hewlett Packard, in order to provide the best call center service solution, one has to first determine business requirements. These include such considerations as the number of agents needed, budget limitations and determining the cost of implementation. The cost for support will depend on the location of the call center which should also be considered. For instance, in the United States, the vendor owns the infrastructure, reducing variability in support costs for these vendors. Further, one has to also take into account which is the most efficient solution. In most cases, a vendor supported as well as vendor managed solution is chosen. This is often more cost effective as the vendor knows their system which offsets training costs to the client.

Another area of concern is determining how many agents will be taking calls and how many site locations are desired. "...customers couldn't care less if [one has] one or many locations or if [there are] phone switches or IVR systems from a variety of manufacturers. All they care about is making sure they speak with agents who can help them" (Fleischer, 2001). Determining site locations is based on how well sites are able to support each other. For example, there are cases when more than one site will support the same type of calls as another site; there are also instances where the same application has different menu options routed to different site locations. An application for the purposes described here is mapped to an 800, 888, 866, or 877 number. An application includes all of the menu options for that number, the routing configuration, including exit points, and take back and transfer codes, if needed. Sites that support each other include additional options in how calls are routed. Tim Toone, Senior IT Business Consultant at Hewlett Packard, states that a rule of thumb is to only provide a 4x4 menu such that no more than four options are offered and no more than four submenu options are included.

Even if multi-sites are not utilized, a business decision has to be made in regards to routing via call center agents and whether calls are routed to call center agents with certain skills, or whether all agents take the same type of calls. This will determine how many options will be placed on the application menus and in many cases determines how many agents will actually be needed. Skills, also referred to as a hunt group or a characteristic that can be linked to an individual or a group of individuals, dictates where to route the call via a vector or the specific steps that must be taken to link a call to a skill. A Virtual Dialed Number or VDN determines what calls are linked to a vector. A VDN may have several vectors. All of these components must be taken into consideration before a cost breakdown analysis can be made. This analysis specifies the cost of any necessary equipment, software, training, per minute costs per call, and the costs for additional phones. David Tropio states that a typical contract with about 25 agents typically cost about \$10 million all inclusive, garnering a net income for the solution provider of about \$4.6 million. Given the high costs, Toledo recommends that "Before a call center rushes into a decision on call routing technology, a few rules apply: 1. Look at the forest, not the trees. 2. Manage the total system and measure results. 3. Look for simplicity and robustness. 4. Be aware that locking into one source may lock you out. 5. Realize that "the next available agent" is not always the best available answer" (1996).

## Transporting Calls with Specialized Skills

Transporting calls refers to how calls are routed. Various routing options are available and should be chosen based on business requirements and budgetary constraints. Routing options include skills based routing, next available agent routing, percentage based routing and more complex methods implemented dynamically. Additional considerations must be also be made if the call center is not located in the US. In order to route calls internationally, an international toll free number must be obtained because some countries cannot call an 800 number in the US. However, an international toll free number is a very costly option.

For larger organizations who offer multiple products and services, skill based routing is a necessity. In a call center environment skill based routing, also known as SBR, will allow a call to be routed to an agent that is trained to respond to that type of call. In SBR, customer requirements are evaluated based on such traits as language preference, product type, or even customer buying behavior. With this option, an interactive voice response system can ask customers to identify themselves through screen pops, a telephony software application that allows the agent to see the type of call and also information about the caller prior to answering the call. The system then uses this information to check the database and uses the contents of the customer profile to route the call. This technology "...allows a company to be proactive in meeting customer requirements and expectations, to increase service levels while decreasing wait time, and to use real-time statistics to aid in routing the call - all of which can lead to increased profitability" ( L'Ecuyer, 2003). "Skills-based routing provides an automated mechanism for routing calls to find the best available match between the needs of the customer and various proveniences of available agents. To ensure a better customer experience no more than five skills should be available at each site location. Skills-based routing is an ideal solution for providing callers with a quality experience in an automated manner" ("Special TMC labs review...", 2000).

In many ways, the opposite of SBR would be static routing where any available agent takes the call. This is basically a next available agent approach. Static routing typically does not include any form of skill based routing nor does it include any controlled allocations for routing. Basically it is used for call centers that have an application loaded or an option, when chosen, that routes to a location where every agent is skilled to take the call. Static routing is more concerned about load distribution and emptying queues in order to connect callers to agents as soon as possible. With this option customers can "... be identified through a DNIS (the number they dialed) an ANI or CLID (the number they called from)". This is of course the least costly option for a business. However cost savings may be offset by extra training costs needed to insure that the customer experience is not reduced ( L'Ecuyer, 2003).

Another form of routing is called percentage based routing or onboard routing. In the standard sense, this is static routing based on percentages. This form of routing was created to allow for multiple locations to take calls to prevent any one location from becoming overloaded. For instance, Call Center A might be assigned to accommodate 50% percent of the calls while Call Center B takes 20% and Call Center C takes the other 30%. Each location receives calls concurrently but only to their percentage allocation. This method of routing is very helpful especially when utilized for backup or disaster recovery purposes. It is also helpful if a site has a limited number of agents but needs additional capabilities during peak times. Percentage based routing can also be implemented dynamically so that percentage allocations can change based on time of day.

Dynamic routing, which is used to ensure calls are routed in a timely fashion, can be configured based on multiple variables including number of agents, number of sites and time-of-day. It can even utilize both skill and percentage based routing. Controlled allocations can be placed on dynamic routing for routing to the Longest Available Agent (LAA) or the Minimum Expected Delay (MED) based on the minimum time the caller will have to wait. With time-of-day allocation, calls might be routed, for example, to Call Center A from 8am – 5pm and to Call Center B from 5:01 pm until 7:59 am. Call Center B may be located in a different time zone accommodating normal working hours for its staff. Call types can also be set up facilitating dynamic routes meaning that calls can be taken at different site locations using the same or different skill numbers. Dynamic routing is the most expensive form of routing but also the most efficient.

Determining which form of routing to use is entirely a business decision. Static routing is the most cost effective but dynamic routing is the most preferred. Contractual helpdesk service providers need to insure clients know the pros and cons of each option and provide them with examples of what the customer experience will be like. This gives clients the information they need to choose the option which is most viable for them.

### **Addressing Technical Problems**

Several issues and concerns may arise in a call center environment involving routing but there are several solutions available which is why planning ahead for a problem is always optimal. One of the main concerns is what will be done if a site goes down. Through backup allocation, a standard has been set that in case of disaster, another call center - preconfigured to take calls – will automatically be assigned to take 100% of the calls. Through skill based and dynamic based routing this configuration can be done with ease. It simply requires that calls be reassigned to a different site.

Technical issues often increase when companies offering call center services do not employ advances in technology such as computer telephony integration (CTI) which are specifically designed to address and resolve technical issues. According to Smith, " CTI is the communications and control link between the telephone and the computer: It allows the two systems to talk to each other. CTI not only delivers voice and data to the desktop simultaneously, the link directs call handling and informs the host computer of every event taking place during every call" (1996). Most call centers utilize software applications, so just as in any IT environment issues may occur with the operating systems, applications, and even the routing processes. CTI aids in contacting technical support if a system interruption occurs and also accounts for costing the transaction. "Through the CTI link, the information is sent to the client's file located on the host computer where it is later processed by the billing department, which sends the customer an invoice" (Smith, 1996).

Outside of application failure, issues with call routing may also occur. "As every call center manager knows, the more ACDs [Automatic Call Distribution which routes calls typically on a first come first serve basis] you install, the more complicated call routing becomes. Networked ACDs can shift callers from one location to another when queues are long and response times slow. Strong workforce management can alleviate this issue. "Call centers can now intelligently determine in real-time which ACD or group of agents is best equipped to handle a unique caller, given the characteristics of the caller, waiting time in queue and how fast calls are being dispatched" (Toledo, 1996). This can be accomplished through utilizing the skill based routing option and controlled allocations of calls.

According to Saul (1999), another solution to technical problems involving the ACD is offering a web based ACD system. “Without a Web-based ACD, customer service on the Internet can become a nightmare, with inboxes full of email and queues backed up with requests for live help...The greatest difference between telephony-based and Internet-based calls lies in the multimedia nature of the Internet.” A major issue related to helpdesk call centers is that agents have to wait for a customer to complete the tasks needed to process the request making the typical ACD lose its efficiency, especially when it is the only source of communication during a support call. The traditional ACD environment assumes that an agent can only help one customer at a time. Web-based ACD’s allow for agents to handle concurrent customer requests due to the ability to be able to “show and tell” information with the customers. Basically with this technology a customer can review web based documentation, while the agent assisting them works with another customer.

As previously stated most call center technical problems can be avoided through workforce management techniques, providing the best solution for the call center environment including routing techniques and utilizing monitoring technology solutions put in place in the event a crisis occurs. Technology constantly changes but determining the best way to avoid technical issues is in knowing and understanding the individual call center environment and offering the best solution for the individual environment.

In summary, the contractual helpdesk service offering will continue to grow. For many companies, outsourcing helpdesk services provides the most optimal solution. However, entering into these types of agreements should be done with much forethought and planning. Figure 1 represents a pictorial view of the decisions which should be investigated prior to entering into a contractual helpdesk service agreement. Fundamentally all decisions should be predicated on business need and mapped to budgetary realities. Then appropriate service options including routing and backup allocations can be made. Managing a contractual helpdesk service agreement is an ongoing task which requires constant monitoring and evaluation.

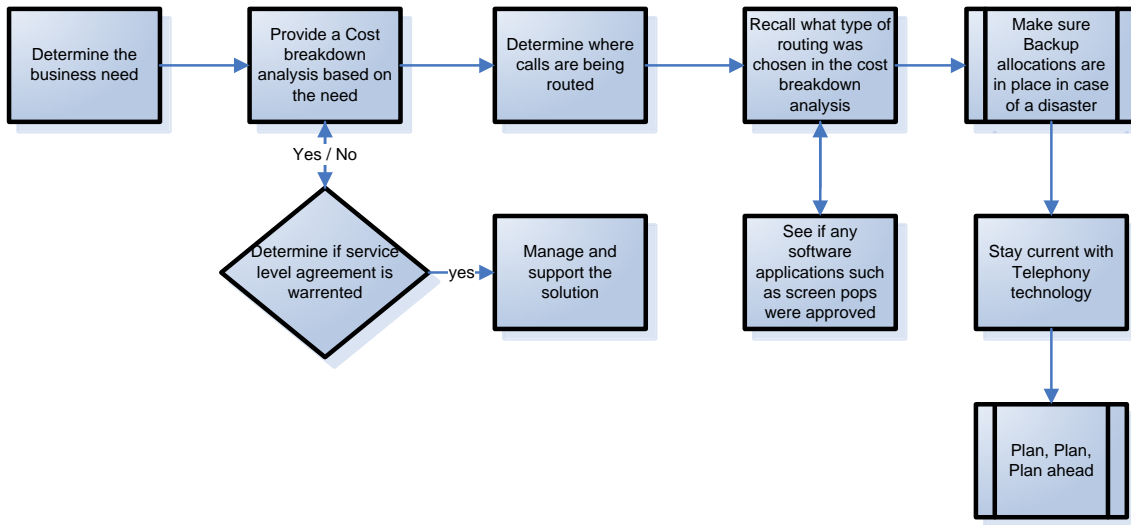


Figure 1. Contractual Helpdesk Service Agreement Decision Flow

**CONCLUSION**

Contractual Helpdesk Services utilized appropriately have the potential to save US companies more than \$300 million per year with improved call center performance as stated by Exony, an interaction software provider, who is known for marketing call reporting software. Exony further notes that organizational outsourcing of call center operations, if appropriately managed, can also provide an annual contract savings of 4.5 percent. “Industry statistics show that 5 percent, or just over 3,000, of North America’s 60,000 contact centers are outsourced. Furthermore, of a total of more than 3.3 million agent positions in the United States and Canada, 10.5 percent, or 354,000, are outsourced” (“Call center savings available”, 2007).

Advances in IP technology have caused outsourcing to expand rapidly. The typical employee just does not generally possess the advanced skills needed to provide routing solutions. Most organizations do not have global call centers. Because call centers have become more customer focused, the complexity of the technology used has increased in order to provide this service. "Call centers used to be considered cost centers; companies now see the potential of turning their contact centers into profit centers. Contact centers are now used much more as strategic elements in running a business" which is why managing these voice application and offering service solutions has become a great return on investment and a huge profitability for large organizations. However to manage these applications and services efficiently and maintain a strong customer base and relationship, one must be aware that as with any technology changes occur very rapidly. All changes and new trends need to be thoroughly learned and evaluated so that the best service solutions can be offered and a satisfied customer acquired" ( L'Ecuyer, 2003). Implementing best practices is what contract helpdesk service vendors and clients must adhere to in order to insure optimal solutions are implemented.

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