

Designing and Implementing Effective Call Centers and Help Desks

Alan S. Horowitz

Introduction

When Alexander Graham Bell telephoned his assistant, Thomas Watson, in 1876, he made history's first phone call. His purpose: to communicate. Period. Today, the telephone has moved far beyond anything Bell ever imagined and, among its many uses, has become an important management tool for the modern corporation. When placed in the context of an effectively run call center, the telephone provides numerous benefits. These include improved customer service, a better understanding of one's customers and what they want, and the ability to allow a company to reach out and penetrate new markets.

This program, "Designing and Implementing Effective Call Centers and Help Desks," covers the important technologies related to call centers and guides you through the steps needed to organize a call center and help desk that will pay off for you – and your customers. By the end of our presentation, you will have learned about the technology that will help you have a call center that's efficient, able to improve your service to your customers and capable of generating valuable information about your customers,

We have studied a large number of articles, white papers, books and other sources to bring you the latest and most complete information. In addition, we have interviewed two recognized experts in the field. You'll be hearing today from Lawrence Byrd, who has the notable title of CRM Evangelist at Avaya, the major call center vendor which was once part of Lucent. The second expert we interviewed for you is Brad Cleveland, president of the Incoming Calls Management Institute in Annapolis, Maryland, publisher of *Call Center Management Review* and co-author of the book, *Call Center Management On Fast Forward*.

Our narrator today will be XXX.

Agenda

Today, we will look at: Benefits of call centers and their costs, and then provide you with a step-by-step game plan that covers: establishing your team, establishing your goals, whether or not to outsource, your technology strategy and how it ties to your goals, automatic call distributors, networking, interactive voice response and buying the technology. We'll also include a case study of a virtual call center set up by Jet Blue Airways. But first, let's look at a real-world example of how technology influenced a call center.

Cable television company, Cox Communications, has 22 contact centers nationwide which handle 40 million customer contacts a year. Cox installed Aspect Customer Self-Service software, which gives customers the option of performing such functions as

checking their own account balances and paying their bills. Aspect reports that by automating these services, Cox saves about \$750,000 a month. Cox also integrated Aspect's Contact Server with Kana's eRM, which is an e-mail solution. This provides the ability to route and queue e-mails, just like telephone calls, to the specialist with the right skills to answer the customer inquiry. Handling 50,000 customer interactions a year by e-mail instead of telephone saves Cox Communications \$120,000 a month, says Aspect.

The Role Of Technology

Non-IT managers often focus on how they can save money. Saving money is good, but making it the primary focus of a call center plan will likely result in a facility that's never able to be fully productive. Call centers need to be viewed also as a means for making money. Lawrence, has been studying this.

He says people need to look at two fundamental things – to save money and make money. Saving money is typically upper-most in people's minds. It is accomplished on the operational level. Managers will ask: How can I do more with fewer people and less cost? In point of fact, many of the technologies of the call center, including the ACD or automatic call distributor, interactive voice response, CTI or computer telephony integration and workflow routing, when applied in the right mix, help save you money.

But that's only part of what technology can do for you in your call center. It can help you also make money. How? By helping you get more out of your customers. This is a tool that helps you learn what your customers want and helps you retain your customers longer. These benefits are driven by a customer-strategic level of thinking on your part. On the strategic level, the core technology relates to providing management with a single view of the customer. CRM applications and systems bring the data together in this way. Data warehousing is part of management's strategic-level technology toolkit. Middleware, which deals with how to access and analyze the data you have, is also an important technology at this level.

Costs

Costs of call centers vary enormously. Variables affecting costs and return on investment include the call center's size, purpose, maturity, skill and experience of management, technology, training, customer service representatives and product pricing.

As reported in *Call Center* magazine, the research firm, Gartner, calculated the following costs of handling different customer interactions: a phone call averages \$5.50 and ranges from \$2.00 to \$12.00; interactive voice response averages 45 cents, and ranges from 25 cents to \$1.00; e-mail averages \$5.00, and ranges from \$2.50 to \$40.00; Web self help averages 24 cents, and ranges from 5 to 50 cents; and Web collaboration with chat capability averages \$7.00 and ranges from \$1.50 to \$12.00.

Purdue University looked at call centers in a variety of industries, and factored in such statistics as each industry's average call length. the time agents have to spend after the

call on record keeping and the frequency the issue was handled in one call versus more than one. It found the cost per call was: for airlines, \$2.74; banks, \$3.94; software companies, \$10.82; utilities, \$5.98; government, \$8.36; health care, \$5.10; retail, \$6.14; and telephone, \$7.00.

The publication *Consulting-Specifying Engineer* gives the following cost breakdown for starting a call center that's 40,000 to 60,000 square feet in size: operational labor accounts for 60 to 80 percent of the total building and operating costs, network costs run 20 to 30 percent, technology is under 10 percent and construction accounts for 6 to 8 percent.

In terms of total costs, they vary dramatically by size and other factors. One major call center operator claims a 500 seat call center costs about \$7 million to build.

Technology: The Basic Building Block

Call centers and help desks are not dependent on bricks and mortar so much as on technology. Technology is the basic building block on which your facility will succeed or fail.

The Automatic Call Distributor

The most important piece of technology is the ACD (automatic call distributor) which is a programmable device that has been called the heart-and-soul of the modern call center. ACDs are versatile pieces of equipment which can juggle more balls at once than any group of performers at Barnum & Bailey's Circus.

Among their basic functions is the routing of calls. Going beyond routing calls to the next available agent, they can route calls based on parameters you set, such as directing certain types of calls to certain agents based on the agents' skills. They can hold onto calls, or queue them as until there's an agent available. By playing announcements, and even predicting how long the caller will have to wait or how many callers are in the queue in front of them, ACDs play an important role in holding onto callers rather than having them hang up. ACDs can engage in priority routing, too. Say the caller is a top customer or has paid extra for better service, the ACD can put such a caller at the front of the queue or route him to specially trained agents. The ACD makes such decisions from a variety of information sources, such as auto attendants, where the ACD says, "press one for such-and-such, two for something else." Some use automatic number identification to identify who is calling and route that call to a specific agent or ACD menu.

Advanced ACDs can do on-the-fly blending of agent duties. Here, an agent might be answering incoming calls, but if things slow down, the ACD can feed phone numbers to the agent so he or she can start making out-going calls. The ACD can also provide interactive voice response, network routing and quality monitoring, and CRM and application integration. Their capabilities include generating reports so you can monitor call center activity, as well as the performance of your agents.

ACDs come in various types. Some are parts of PBXs, which have the benefit of offering one system able to handle a wide range of functions. There are also standalone ACDs, which generally have more capacity than those which are part of PBXs. Key system ACDs are geared more towards the small call center.

Note, you don't want to be beholden to one vendor so be sure whatever you buy can be integrated with third-party, best-of-breed components.

What to consider: If you want a high degree of functionality, look for computer-telephony integration. This is required if, for example, you want to route calls based on priority or the skills of the representatives. You might even consider more advanced features, such as multimedia queueing, which incorporates Web-based and other types of call backs. To do this, the ACD must interact with an information source, which is where the computer and telephone integrate.

The ACD also needs the ability to integrate with additional applications. These include: voice response, help desk and CRM software. Don't forget scalability. Just about all ACDs are scalable, but within limits. They are limited in terms of traffic, processors, memory, and line and trunk ports. Design your system with an eye on projected intermediate-term growth.

You want ACD management software (which may be purchased from a third-party vendor) that offers a wide variety of functions, such as workforce management tools which forecast load, moving calls and personnel around on the fly, detailed reporting and monitoring for quality. If you have off-site representatives, be sure the software can accommodate and manage them.

There are lots of ACD vendors including Aspect, Nortel Networks, Rockwell and Avaya.

Networking Technology

After you have identified the ACD you want, it's time to focus on networking technology. The network connects the caller and the call center. Be sure you have network technology able to connect multiple sites if you currently have several sites, or are thinking of doing so in the foreseeable future. Network services include call routing, which is also done by the ACD, and reporting capabilities. Reports include number of callers who get busy signals, call volumes, trunk utilization and total traffic, which is volume multiplied by holding times. As with most technologies, network solutions generally provide similar functionalities no matter who is the vendor. Some of the network vendors are Apropos Technology, Hewlett Packard, Lucent and Cisco, 3Com.

IVR

Not every call center will want interactive voice response or IVR, but this is increasingly a popular technology. It seems destined to become ever more popular because it has been shown to increase caller usage of automated solutions, rather than having callers leave the system and seek a human agent. IVR can be as simple as a auto attendant. Or it can involve interactivity, where caller, using a telephone keypad, inputs or retrieve

information, such as those used by airlines to provide information about takeoff and landing times. Increasingly, IVR is being enhanced with voice recognition technology that allows the caller to speak directions rather than having to use the keypad. IVR systems generally are handled by PCs running Unix or Windows NT. IVR vendors include American Telesource, Microlog Corp. and Network Programs.

Workforce Management Systems

Labor is the largest cost component of a call center, so it should not be a surprise that technology has come to play a role in managing personnel. Called workforce management systems, these are software packages which provide a variety of important functions. Using historical data, they forecast how much staff a center will need at any given time, schedule staff and track what's happening with what the system predicted. Then they generate reports of their results. The primary reason for using a workforce management system is to use employees more efficiently and therefore reduce staffing requirements and cut costs. Aspect, Blue Pumpkin, IEX and Neural Act are some of the many vendors in this market.

Other Technologies

There are many other technologies you might consider, including automatic dialers used by outbound call centers, software that allows management to monitor agents and record calls, voice over IP, which is still developing as a means of turning the Internet into a pipe to carry voice and thereby save money, customer relationship management and technology that allows agents to telecommute from home. There are also systems designed to automatically respond to e-mails and faxes.

The Game Plan

Establishing new call centers and improving existing ones requires a comprehensive game plan. Here's a step-by-step plan.

1. Establish Your Team

Call center costs easily run into six or seven figures. Therefore, your first step needs to be careful, thorough planning. Create a cross functional team that will see the project through from beginning to end. The team should include: the call center manager who will be the person to run the completed center; a project manager; someone from IT with decision making authority; and somebody from marketing who also has decision making authority. One of these or someone else on the team should be a senior-level champion for the project. Beware the internal turf war. Call centers and help desks are particularly prone to this because there are at least a couple of ways turf battles can be created. One is between the business and technology side. That's not unusual in an organization and it certain can happen here. But there's also another possibility, namely a battle royale between IT and the telecommunication department. A strong leader, a game plan with well defined goals, and the inclusion of all potentially warring parties is what's needed to head off destructive turf battles.

Be sure to include on your team those who influence or are influenced by call center technologies. Call centers and help desks should never be islands unto themselves. Integrate yours into the fabric of your organization.

2. Establish Your Goals

What do you want to accomplish with the call center and help desk, what are your goals? Make your goals as specific and concrete as possible. Not: “We want to improve customer service,” but, “We want to improve our customer satisfaction levels by 20 percent.”

Goals to consider include:

1. Increase the ways customers contact and communicate with you. Today, they can call you, but tomorrow you want them to be able to contact you via e-mail you and the Web.
2. Increase the number of interactions you have with your customers by 10 or 20 percent. A printed or online user’s manual is one thing, but having a help desk, too, may boost the number of times you and your customers interact. Why would you want to increase your customers interactions? Because the more customers come in contact with you, the more likely they are to buy from you. Plus, interactions provide opportunities to learn more about who your customers are and what they want.
3. Reduce costs by a specified amount. By automating certain functions, such as order taking and requests for information, you can reduce your personnel count which leads to lower call center costs.
4. Increase number of customers by, say, 8 to 10 percent. Call centers are a tool for increasing your customer count. For instance, via the Web or telephone, they can expand your customer base to geographic markets you don’t currently serve.
5. Improve customer service: Provide your customer service representatives with what are called “screen pops.” These are screens on your reps’ computer monitor that provide a variety of customer information, such as who is the customer, why they are calling, their history with you and their status with you, such as if they have paid extra and are a preferred customer. This technology helps you achieve your goal of improve customer service.
6. Reduce your personnel count by 10 percent. This requires more efficient use of the people you have. An advanced ACD with the ability to blend agent duties is a technology able to help you reach this goal.

Warning: tie your goals to the technology you deploy. Be absolutely certain your technology folks have goals and priorities common with your business people. If the technology doesn’t match the goals and priorities of BOTH groups, it will never be fully effective and may well prove a big waste of money and time.

3. In-house or Outsource?

Before going any further in the game plan, decide if implementing your technology strategy should be done in-house or outsourced. Benefits of outsourcing include: 1. Providing expertise you need but don’t have; 2. Getting you up and running quickly, often in a matter of weeks, not months, as is typically the case with in-house

development; 3. Providing greater flexibility to expand or contract. For instance, if your call center activity spikes up, the outsourcer usually has the resources to handle it, and when things slow down, you don't have to worry about being stuck with facilities and people you now don't need; 4. Management is generally easier, since you now just have to manage your relationship with your outsourcer, rather than running an entire call center; 5. Not having to worry about hiring experienced IT technicians, which can be tough, even in a weak economy. This that becomes your outsourcer's concerns; 6. Conserving capital by not having to buy technology and real estate.

There's of course a case for doing things in-house. It includes: 1. Greater control -- the people working on your project are your direct employees and give you their undivided attention; 2. The ability to devote your best reps to your best customers or to the most demanding level of tech support; 3. Designing your center in a way that maximizes its ability to fit to your needs. Outsourcers sometimes take a one-size-fits-all approach, while your in-house crew knows your business and works to tailor the solution to your specific needs; 4. You have a capable crew, and this would be a good use of their skills; 5. You can install the latest technology, which an outsourcer might not be worth the investment to an outsourcer.

As for costs, some say outsourcing is cheaper, others claim an in-house solution has lower costs. You'll have to carefully investigate to see which holds true for your situation.

Some rules of thumb: If you have a well functioning call center and/or help desk now, staying the course probably makes sense. You need a good reason to fix something not broken. If, on the other hand, your call center or help desk isn't efficient or is stretched beyond its limits, outsourcing is worth considering. If you have the staff to update technology on a regular basis, in-house is likely a good choice, but if keeping up with technology is too much of a challenge, consider outsourcing. If you have a one-time project, such as a big sales push, think outsourcing. Outsourcers are good with day-to-day repetitive tasks, and often not so good with implementing bleeding-edge technology or reacting to atypical needs. If your needs are fairly standard, consider outsourcing. If you have unusual needs or require technology that's not widely implemented, such as video, chances are good you're better off keeping your call center function at home.

4. Technology Strategy

After you create your overall plan for your call center, you need to a technology strategy. Here are some examples:

Your goal is to provide your customers with basic call center services. You'll need an ACD or network technology that places your callers in simple queues, such as in the order in which their calls are received. You'll need an ACD that can compile basic metrics, such as the average length of time it takes to answer a call and the percentage of calls successfully completed.

Your goal is to reduce costs: People make up 60 to 80 percent of a call center's total costs. If your goal is to reduce costs, your technology should reduce your need for personnel. This means you want technology that increases your automation capabilities. Example: An ACD from Interactive Intelligence lets you configure your agent usages so it's 100 percent for phone calls, 50 percent text chats and 25 percent e-mails. With this setup, the ACD gives the agent one phone call at a time, or two text chats or four e-mail messages. You can combine the interactions, such as one text chat and two e-mails to give you 100 percent utilization. You might have one agent spending 100 percent of his or her time with phone calls, while having another agent handles phone calls, text chats and e-mails.

Again, your goal is to reduce costs: Install an e-mail response management system. By automating e-mail responses, you reduce human interaction and thereby your staffing requirements. These systems can provide automatic acknowledgment that an e-mail has been received, and more advanced systems can interpret the e-mail message and automatically respond, though accuracy rates are often below 50 percent, reports Brad.

Your goal is improved customer service: For this, maximize customer access to information. You'll need a Web site that provides the information most callers want, for example. You want to give reps better access to customer information. The technology for this includes customer relationship management software, whose contact management aspect provides the rep with detailed information about the customer on the phone, such as previous purchasing history and special needs.

Your goal is to differentiate yourself from the competition. Now you want leading edge technology. This includes e-mail response management systems and multi-media.

Lawrence, what are some of your thoughts regarding some of these technologies?

START LAWRENCE

We're seeing the self service aspect of call centers evolve. IVR was always a part of the traditional call center, but that is expanding. We're extending what we can do with self service by using natural language speech recognition and dialog to encourage more customers to use self service. That's fairly new, but self service is going beyond that to include Web self service. This poses challenges to the IT management. How do I now track what happens? How do I know when automatic response to, say, an e-mail, is appropriate versus deciding when an agent should be involved? These are the kinds of issues IT managers must consider if their technology is to be most effective.

END LAWRENCE

5. Long Distance Costs

You need to know what your long distance carrier is charging you, which can be harder than you might think. Here's one formula experts recommend: Take your current total minutes in each category of call and multiply that by your current cost per minute. This gives you your current total cost now. Then again take your current total minutes in each category and multiply that by the cost per minute which your current or other carrier is

offering. This will tell you what you will pay using the new rate, assuming your call volume remains the same. The difference will tell you if you will save and by how much. Also, if your call volume increases, you should be able to enjoy additional savings.

Keep in mind there are several different types of calls you need to factor into this calculation: nearby toll costs or intra-LATA, intrastate, interstate, and if you call internationally, international calls, for which you'll need country-specific information. Other billing variables include toll-free inbound calls, which are often billed differently than outbound ones, and calls made from one of your locations to another on dedicated T-1 lines, which also are billed differently than conventional long distance calls. Rates in the day may be different than night rates. If you get many phone numbers via Directory Assistance, you need to know how you are billed for these calls. Your call center strategy needs to include a careful analysis of your carrier costs.

6. Buying The Technology

Brad, recommends that IT managers change how they buy technology. Historically, purchasing was done by asking for detailed specifications -- we need this many ports, this much processing capability, this much storage -- and sending out these specs as a request for proposal or RFP. Today's environment is complex enough that Brad recommends the RFI or request for information approach. Here, you detail what capabilities you want and send these to the supplier community and let them respond. Tell them, Be as creative as you want to be, tell us how we can get this done. Its more of an interpretive process rather than sending out an RFP and comparing responses line by line.

7. Start Slowly

Don't jump into a major investment commitment without first testing your technology and management structure. Do a pilot test, using a limited amount of technology and people. One way to do this is segmenting your customer base and testing the facility on just one segment, such as those customers who have signed up for premium services. Once you've ironed out the wrinkles, then roll out the entire program.

CASE STUDY: JET BLUE AIRWAYS

One of the country's most successful airlines in recent history is Jet Blue, based at New York's JFK Airport. Jet Blue is low-fare, low-frills operation, flying to a limited number of cities. CEO David Neeleman's business plan for the airline, from the beginning, envisioned a home agent call center, where virtually all the agents would work from their homes. When it came time to purchase the center's technology, it was done with this telecommuting model in mind.

The first piece of equipment purchased, according to Frankie Littleford, vice president of reservations, was the phone switch. We looked for a switch that would could handle 100 percent of our agents working from home and that could accommodate our growth plans, she says. The switch purchased was the G3R switch from Lucent.

The center is located in Salt Lake City, and all agents must be within a toll-free, local call

of the center. At the end of 2001, the center had about 450 agents, one quarter of whom are full-time with the remainder working 25 hours a week. The airline expects to have 750 agents by the of 2001. In addition, the help desk has 55 agents, who work half-time at home and half-time at the call center. Littleford says this telecommuting model offers a number of advantages, including minimizing the amount of office space needed, reducing lost employee hours due to snow and other weather conditions, a happier workforce and higher productivity.

A quality control product called Quality Commitment from Nice Logger, allows supervisors to monitor calls and maintain quality. Open Skies from Navitaire is used by agents for reservations and bookings. Being looked at now is a voice over IP remote agent solution from Avaya called Center View. Communications with agents are done by phone, e-mail and pager.

Jet Blue's technology strategy started from the premise that this would be a center with the agents working from home. The technology purchased was predicated on this premise, with the ACD, the various software packages, and the communication devices including pagers, being chosen with this home-based model in mind.

Conclusion

In conclusion, you need to approach technology in a way that assures it meets your needs. Lawrence notes that the biggest mistake people make in implementing call centers is use a bottom up approach. By that he means, if there are eight or whatever number of technologies, you get caught up in looking at all their little details. If your technology is not attached to a real value-oriented business plan, then you will not succeed in meeting business objectives. Just being more efficient isn't enough. Are you actually enhancing the experience of key customers and producing additional value for your organization?

Brad warns IT managers that, while IT can do a great job of putting systems in place, if the call center isn't well managed, it's not going to work. And worse, IT is going to get blamed. The IT manager, the CIO in particular, has got to make sure the organization is committed. He or she must make sure those managing the call center know what they're doing.

Call centers and help desks have become essential in many industries, from hotels to banks to airlines to software companies. They are expensive to set up and expensive to operate. But they provide several very valuable essentials: a means to enhance your customer service, a window on your customers and who they are, and an efficient way to broaden your market. Technology plays a role in all of these benefits. It helps you monitor your agents and assure high quality, it helps you collect information about your customers and to analyze this information, and through a variety of avenues, such as e-mail, the Web, fax as well as telephone, it reaches out to the broadest of markets. As you implement your call center, never lose sight of your goals and what you need to achieve. Only then can the call center, and the technology you implement, provide the benefits you must have.