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Call Centers in the Small-to-Medium Business (SMB)

Telecom White Paper Presented By: Toshiba Telecommunication Systems, Inc.

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Call Distribution

In the midst of all the hype, it is easy to forget that the purpose of a call center is to allow your customers to talk to your employees in the most efficient and pleasant manner for both. Ideally, every customer would speak to the appropriate employee immediately. However, it is unrealistic to staff for the highest demand period: you would be paying for idle employees during the low-demand periods.

Two central ideas deal with this problem: the *queue* and the *distribution algorithm*. The *queue* is the virtual line in which your customers wait for an available agent during busy periods. The *distribution algorithm* is the method by which the call is delivered to your employees. While both are important, there is a tendency to invest more energy in the distribution algorithm because it affects the internal workings of the call center, the efficient distribution of the load, workplace management, etcetera. However, the queue is what your customer experiences first and it can define the entire call and, perhaps, the relationship.

Queuing

The faintly British sound of “queuing” cannot disguise the fact that you are asking your customers to wait in line and very few people enjoy waiting in line. The curious exceptions are those lunatics who bring food, entertainment and arctic weather gear to camp out for event tickets, a stuffed toy or the latest game controller. If these are not your customers, you will need to manage the waiting experience. There is very little you can do with a customer who is already irate at the service before reaching your employees.

Reality

The first and most obvious consideration is wait-time: the shorter the better. Increased staffing is the simplest answer but that may not be economically feasible. This is further complicated by the irregularity in traffic patterns. For decades, telephone traffic graphs showed a classic “camel” pattern with peaks at mid-morning and mid-afternoon. In a national or global business, that pattern may be smoothed out by time zones. Consumer products may generate more calls out of business hours.

One of the first things you should learn when building a new call center is the expected calling pattern. Your current telephone system may be able to give you traffic reports or inbound call accounting records that you can analyze. Lacking this, you may have to rely on general patterns for your industry or on guesswork. If you are estimating, make sure that you choose a call center product that is easily and quickly scalable.

Be creative with staffing. The number of agents required at busy hour does not necessarily equal the number of full-time, dedicated staff. Part-time employees, regular employees who receive overflow calls, and telecommuters can all help absorb the surges in activity. These solutions are discussed further in the Reporting and The Dispersed Call Center sections below.

Perception

"Boredom results from being attentive to the passage of time itself."
William James

Having reduced the wait-time to an acceptable level, you now need to consider the customer's waiting experience. We have all heard the familiar "…your call is important..." message followed by music or promotional announcements. These techniques are designed to minimize the irritation that can build up in a waiting customer. The psychology of waiting in line has identified some key areas you will need to address.

People want action. They need to know that their presence has been acknowledged by the provider and they want to be engaged. This is why restaurants may give waiting customers menus; it reduces the sense of wasted time. This is the purpose of the initial greeting. It may give the caller the opportunity to further identify himself and the purpose of the call. This is very effective but it can be irritating to be asked for all the same information once the caller is connected to an agent. The input can be captured and presented to the agent on his workstation screen and with some custom development can be integrated with your customer database to provide an even more personal level of service.

People need attention while waiting. You can observe this in a doctor's waiting room where people will repeatedly go to the receptionist desk to make sure they have not been forgotten. This is the purpose of recurring announcements. Recurring announcements that announce changing wait conditions are even better; these are known as Intelligent Announcements. Repeating the same announcement periodically may increase rather than decrease anxiety.

People prefer a known wait-time to an indefinite wait time. If you can tell your customer that you will serve him within 5 minutes, you can reset his anxiety timer. He may hang up if he thinks the time is excessive, but, more likely, he will note the time and not worry about it again until that threshold has been reached. Be cautious, he will be doubly irritated by any time that exceeds the promise.

People like options. Modern call centers allow the customer a measure of control over his experience. The most common mechanism is to announce the expected wait time and give the caller the option to leave a message and expect a call back. Traditionally, the call back would occur when the agent had an opportunity to check messages which would be after the queue was emptied, perhaps hours later. Newer call centers can offer the caller the option to be called back when his place in queue occurs. If the caller chooses the call back option, he is prompted for his call back number and asked to describe the reason for his call. The ACD holds his place in queue and, when it is ready to be answered by an agent, the ACD places the call. If the caller does not choose the call back option, he remains on the telephone waiting for the next available agent.

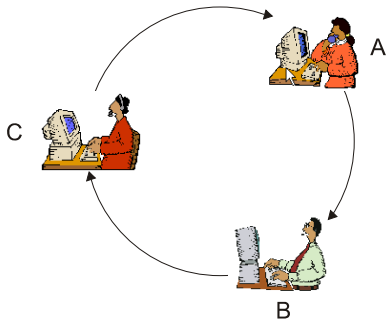
Distribution Algorithms

The *distribution algorithm* is the logic by which calls are distributed to call center agents. The first goal is to make the best use of the agents' time. After all, they are on the clock and it would be wasteful to have them sit around idle. It would be unwise to have them sitting around idle while customers are waiting to talk to them. Four of the most popular algorithms are: Linear, Round Robin, Most Idle, and Balanced Call Count.

Linear: Agents are always presented calls in the same order starting with Agent A. If Agent A is busy, then Agent B gets the next call. If both Agents A and B are busy or unavailable then Agent C gets the call. If all agents are busy, the call will be held in a queue and delivered to the first available agent, using the same algorithm.

This is the simplest but, potentially, the least equitable. This method makes it likely that Agent A will take a disproportionate share of the calls and that calls will rarely reach the last person in the list. This may be your preferred method if your latter agents have another job responsibility and should be infrequently reached with call center business.

Round Robin: Agents are presented calls in a circular order starting with Agent A. Agent B gets the second call, Agent C the third call, and Agent A gets the forth call starting the cycle over. This provides a more equitable distribution than the linear algorithm.



Longest Idle: The agent who has been idle the longest gets the next call. This is the most equitable and efficient means of distributing the calls. This may be important if you are compensating your employees based on the number of calls taken or on sales commission where the agent is motivated to take more rather than fewer calls.

Balanced Call Count: The idle agent who has answered the fewest gets the next call. Balanced Call Count compensates for variations in the length of a call. If an agent finishes up a lengthy call with a difficult customer, the Balanced Call Count can compensate for lost opportunities. This may be preferred by commissioned agents who want to make sure that they get their fair share of the sales.

Prioritization

Not all agents or customers are created equal. Agents may possess specialized knowledge, language skills or inter-personal skills that make them better able to handle

certain calls. Repeat customers may have earned the right to preferential treatment by a special group or even a preferred agent. You want the best agents to answer the most important callers as quickly as possible. Individual agents or groups of agents may be prioritized.

Multiple Group Membership. An agent may wear more than one hat. He may be knowledgeable on a specific product, adept at handling irate customers, and fluent in a second language. You do not want to have that employee log on and off all the various groups in which those skills are important. You want him to simply announce his presence by logging on once and have the call center assign him to all the places in which he is most useful. That agent can also be assigned priorities in the groups to which he is assigned.

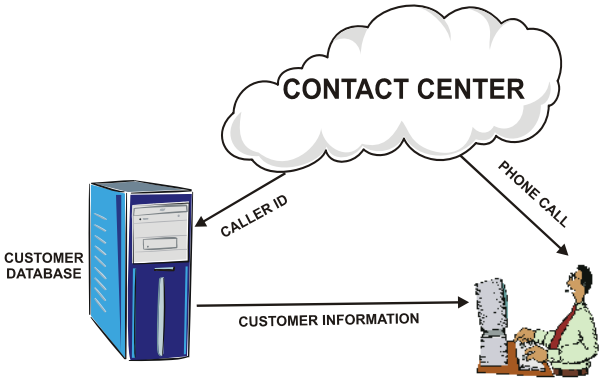
Skills-based Routing. This takes advantage of Multiple Group Membership to create the greatest likelihood that the most appropriate agent will answer your customer and provide the highest level of service. If the best agent is unavailable, the remaining agents can field the call. This also eliminates the need to staff exclusively for these special treatments.

Preferred Agent. You can capture customer information and use it to make the best effort to deliver the call to a specific agent. This agent can develop a rapport with your customer over time and eliminate the need for the customer to explain himself to a new agent every time. This personal touch can put you ahead of your competition.

Call Priority. If you are operating a single queue, you can ask the customer the nature of the call: 1 for Normal, 2 for Urgent, etcetera. You can then put that call to the head of the queue for special treatment. You will need to phrase things in such a way that not everybody puts themselves to the head of the line.

Screen Pops

A Screen Pop is a display of the caller's history and account information, which is "popped" up on the agent's PC screen before he answers the call. The caller is identified by Caller ID provided by the telephone company or by tones entered by the caller. Sophisticated systems can even interpret spoken information. Whatever the source, the identifying information is used to query a database which returns the relevant information about the customer. This allows you to provide a higher level of service to your existing customers as well as to save time processing the customer's request.



This integration with the customer database has been one of the most eagerly pursued features of the call center. For years, it was only available through custom integration with mainframe databases. Over the last ten years, the technology has matured to allow personal computers networked to Windows-based servers to provide screen pops for the small-to-medium enterprise.

One of the most common of these technologies is TAPI (Telephony Application Programming Interface). Developed by Microsoft and a standard component of the Windows operating system, it supports interaction between a telephone system and individual computers as well as servers. Within each connection type, TAPI defines standards for simple call control and for manipulating call content. TAPI-compliance should be a standard component of any call center or phone control products you deploy.

Like any other standard, individual implementations can vary. You should thoroughly investigate the interaction of your customer database with any call center product before purchasing.

Intercommunication

In the midst of all the calls ringing and queuing, screens popping and agents talking, you still have a need for supervisors, agents and other employees to communicate with each other without disrupting the call center activity.

> *Chat*. To best serve your customer, agents may need information from co-workers or supervisors who may also be engaged in calls. An on-screen chat utility allows them to communicate silently without disrupting the call in progress. The customer will prefer this to being put on hold while the answer is researched. Chat can be more than an in-house instant message system. Chat sessions can be logged,

multiple parties can be engaged and supervisors can be alerted automatically to problems within the chat system.

Help. From time to time, even the best agent will need the boss' help with a difficult question or a difficult customer. You want the agent to be able to summon that help silently. Help may come in the form of the supervisor standing at the agent's shoulder, but it is more likely that the supervisor will remain at his desk, listen in on the call to make a judgment, and either enter the call or provide separate assistance to the agent through a mechanism like Chat.

Monitoring. The supervisor can take the initiative to listen in on agents' calls. This can be done to observe the service being provided or as a part of training. Usually, you want to monitor without the customer or the agent being aware of it so that their behavior does not change. You want to be able to alert the agent to your presence when it is appropriate. Finally, the supervisor may want to inject himself into the conversation and, after solving the problem, exit from the conversation or take over from the agent entirely.

Call Recording

There are several reasons for recording and storing conversations in your call center. A supervisor can use a recorded conversation to correct an agent or as a training example. You may face liability issues that require you to save the customer's instructions in his actual voice: interactions such as stock trades and medical inquiries. You may want to accumulate an agent's conversations over time in order to construct an employee evaluation.

Whatever the reasons for recording, there are several essential requirements to consider.

Storage and Retrieval. Over time, call recording can produce thousands of individual recordings. You need an efficient mechanism to store, retrieve and archive them. You will need to be able to identify calls by timestamp, receiving party, calling party, account codes, subject matter and other parameters. The storage and retrieval mechanism should be client or browser-based for access across your network.

Industry Standards. Recordings should be available in industry-standard formats such as WAV so that they may be shared by other applications. You may need to email a recording to someone outside your business or attach one to a Customer Relationship Management (CRM) database. Proprietary file formats will make the files inaccessible to some potential users.

Independent Operation. The call recording mechanism should be able to operate outside the call center environment. You should not be required to be a logged-in agent or supervisor to access this function. A simple, graphical interface should show you the state of the calling environment and allow you to initiate the calling/monitoring.

Flexibility. You want to be able to set your recording options as finely as possible. You may want to record all activity for an agent or a group. You may want to record

everything coming from a particular customer identified by his Caller ID. You will want to give phone users who are not normally recorded the ability to record on demand if they find themselves in the midst of exceptional calls. The more parameters to choose from the better.

Caution: there are a number of legal issues surrounding the listening in and recording telephone conversations. Many of them vary from state to state. Thoroughly investigate before implementing your recording solution.

Management Reporting

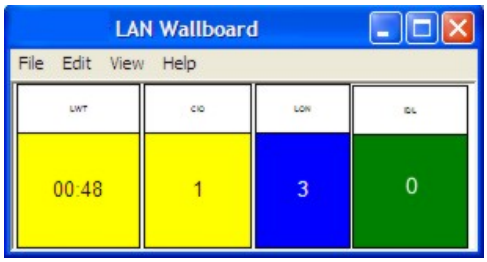
Once you have implemented all of these technologies, you will want to know how well they are working. An effective reporting package will let you supervise the day-to-day operations, see the performance history of groups and individual agents, and forecast for staffing and other requirements. This allows management to make informed business decisions and supervisors can become more proactive. You will be able to anticipate issues and resolve them before they affect the performance of your call center.

Real-Time

Supervisors. You want a real-time reporting package that will allow your supervisors to monitor the activities of individual agents and the overall performance of groups and distribution algorithms. You should choose a package that tracks key call center indicators, including the number of agents available, longest call waiting, calls answered and average talk time. All of this should be presented in a simple, graphical interface that lets the supervisor know the state of the call center at a glance.

Agents. Your agents need to know about their surroundings, particularly about how many customers are waiting to talk to them and how long they have been waiting. The simplest way to achieve this is with a small, always-on-top display on their PC screens. Limit them to essential information. On-screen displays often use the traffic-light color scheme to alert the agent to make himself available as quickly as possible.

The example below tells the agent that he is one of three agents logged on, that nobody is idle and that there is one call in queue which has been there for 43 seconds.



Historical

Historical can mean 5 minutes or 5 years ago. Sometimes called an MIS Package, historical reporting allows you to see the performance of your call center over time. Some of the things you should look for when evaluating a package are:

Customized Reporting. You should be able to design your own reports to suit your business. Do not get locked into a fixed set of reports that may not be useful.

Exportable Reports. The MIS package should be able to export its reports in a common format such as Excel or Access. This will allow you to combine call center information with other metrics for a more comprehensive picture of your business.

Automatic Delivery. The call center should be able to email copies of its reports on a schedule or on demand. This will allow other people in your organization to remain aware of call center performance. For instance, your sales manager may be very interested in the volume of sales calls arriving and how successfully those calls are being handled. A complete report of yesterday's activities can be in his email when he logs on in the morning.

Forecasting. Ask your call center provider about forecasting and cost analysis tools. These might be add-on, even third-party, modules. Forecasting can be especially valuable for seasonal businesses with large variations in staffing requirements.

Costing. Costing tools can account for direct and indirect costs affecting your call center. Wouldn't it be good to know the precise cost of a single sales call including payroll, commission, call center infrastructure, supervision and phone company facilities? This may come in the form of a costing module or as a result of combining the exported reports with other company data.

The Dispersed Call Center

High-speed Internet access, Voice over IP and the Virtual Private Network (VPN) have converged to make the remote call agent a desirable option. It is now possible to extend the company's call center and data network into even a home office. The voice quality can be the equal of an on-site agent and data speeds permit screen pops and other data functions without perceptible delay. The dispersed call center presents several advantages.

Employee Retention. A good, well-trained call center requires a lot of time and money to develop. If one of your best agents is moving, has to tend to obligations at home or may be leaving for other reasons, you may want to offer the ability to work from home. Home can often be a more productive environment than the office with its water cooler and other distractions.

Follow the Sun. If you run a national business, the call center's business day can run from 8 AM on the east coast to 6 PM in the west: 13 hours. Why staff for odd shifts or pay overtime all in one location when you can have individuals working in every time zone. Your customers will appreciate the more energetic and alert service.

Disaster Recovery. Blizzards, earthquakes and other disasters need not disrupt your operations. If your call agents only need to get to their IP telephones and PCs at home, you remain open for business.

Staffing. Your business may need extra staff for a fraction of the work day. It is difficult to attract reliable help for part-time work, especially if they have to commute 2 hours for a 4-hour paycheck. Allowing such people to log in when their schedules allow and your schedule requires can be an excellent solution for both.
No Commute. Americans spend increasing time commuting to and from work. The smart ones calculate this time, stress and expense into their job searches. Your employees only have so much energy to expend in a day. You are better off if they give that energy to your customers rather than to the freeway.

Real Estate. Cubicles, office space, heating, cooling and furniture all cost you money. The home office is somebody else's expense. Jet Blue is one of the few successes in the airline industry and it based its call center on home agents from the beginning, putting it well ahead of larger rivals like American and Delta.

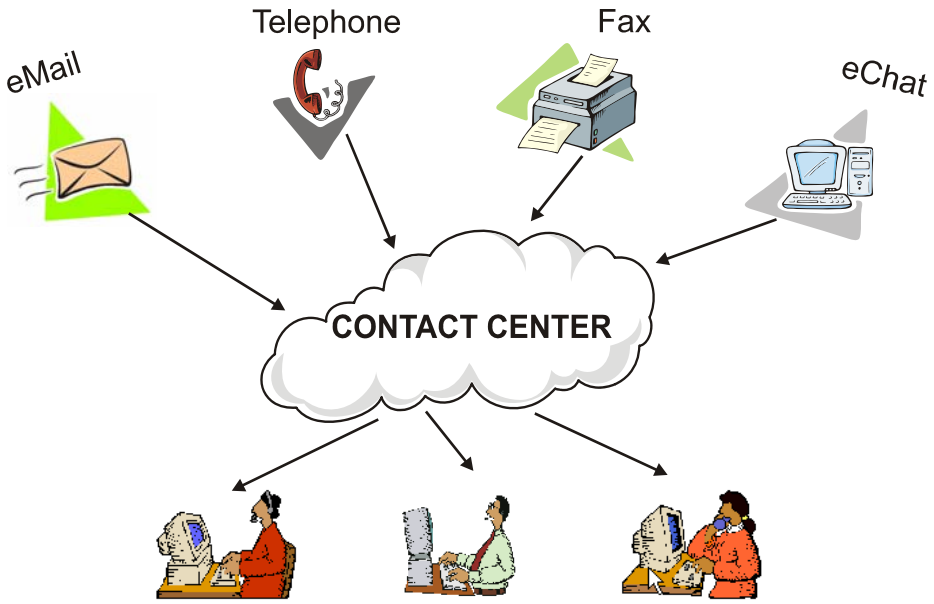
Call Center as Company Culture

Like many other companies, yours may strive for team participation and collaboration. Call center employees often feel themselves apart from the rest of the organization. They sometimes feel that they are in the trenches alone. Others in the organization can make mistakes, but the call center agents have to deal with the frustration and ire of the customers while insulating those responsible. Call centers are notorious for burn-out, absenteeism and high turn-over.

Years ago, I had the pleasure of working with a large software company in Massachusetts that turned this model on its head. Everyone in the company, including the CEO, was a potential call agent. Everyone had a LAN Wallboard on his PC screen. As thresholds were exceeded and the colors on the wallboard went from green to yellow to red, *everyone* was expected to log on and take calls until the calling level dropped. The effects on the business were marvelous. Turnover in the call center declined, call center agents began to feel and act like true, valued members of the team and upper management benefited by the occasional direct contact with their customers.

Beyond the Call Center – the Contact Center

So far we have been talking about a call center that manages voice calls between customers and agents. As new technologies crop up daily, the call center is evolving into the contact center in which voice, email, text messaging, web clicks and other streams all converge in a single response center. Your current call center should be poised to take you into this new world.



Solutions Available from Toshiba

All of the solutions discussed in this white paper are available from a Toshiba Authorized Dealer in your area. To find a Authorized Toshiba Dealer in your area visit: http://www.toshiba.com/taistsd/locator/index.jsp

Business Telephone Systems	Toshiba CIX670, CIX200, CIX100 and CIX40
Call Distribution	OAISYS Automatic Call Distributor
Screen Pops	NetPhone TAPI Integration
Intercommunication	NetPhone Chat, ACD Silent Monitor
Call Recording	OAISYS Tracer
Management Reporting	OAISYS TASKE Contact and Reporter

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A world-renowned leader in technology for more than 130 years, Toshiba delivers the one of the most reliable IP business communication solutions available today. Toshiba America Information Systems (TAIS) brings together the expertise and know-how of the company's Telecommunication Systems, Digital Products, and Storage Device Divisions to deliver technologically advanced, integrated solutions that empower people to be more productive at work and at home. Toshiba is responsible for some of the world's most innovative business communication solutions, from leading-edge VoIP, converged and digital telecommunications products to mobile computing, storage, and network security cameras.

Trust the innovation leader—Toshiba's Telecommunication Systems Division (TSD) has more than 40 years of experience in delivering the industry's one of the most reliable, durable and dependable business communication solutions. Toshiba designs systems with backward and forward migration, allowing enterprises to retain their initial investment, while they move to new technologies. Toshiba's VoIP, converged and digital telephone solutions enable today's enterprises to take full advantage of the tools, devices, and voice and data communications technologies available now and in the future—Empowering enterprises to stay more connected to their customers, vendors and each other.

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