

DESTINATION **excellence** INC.

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## Optimizing Customer Care Operations

### Trunking's Impact on Customer Abandon Rate Behavior

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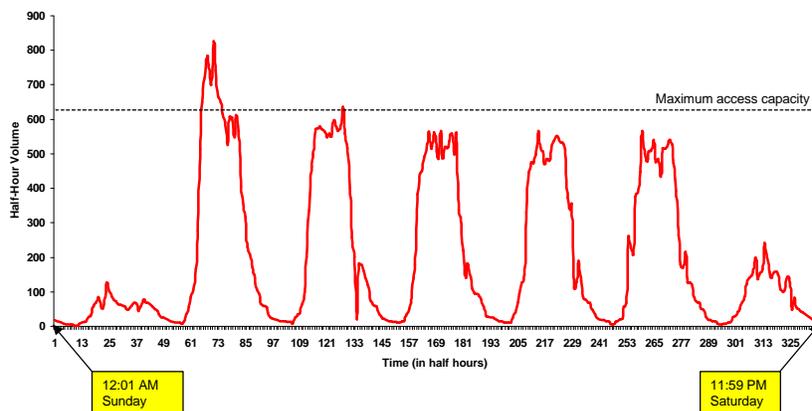


## INTRODUCTION

An area that is often overlooked in the contact center is the engineering of access trunks into the center. Generally, access trunks are installed initially and, without an indication of an issue, are often left alone. The thinking being, that trunking issues will show up in some report or that customer input will highlight the issue. The problems with this approach are:

1. Internal reports are not sensitive to the number of calls blocked, but only to the time that the access lines are busy. ACDs normally provide a percent busy report, which tells contact groups what percentage of time the trunks are busy. The problem is that this metric focuses on time, not on the number of customers being impacted. Obviously, calls are blocked during busy periods (e.g., Monday from 9:00 AM to 12:00 PM), but there is no way to determine how many customer calls were blocked. The percentage of time will then seem small because it includes time when the contact center is not accepting calls or call volume is low (e.g., 3:00 AM on a Sunday morning) and treats all hours as equal. However, even with a small percentage busy figure, the number of customers can be significant.

### Typical Contact Center Call Pattern



Source: Destination Excellence, 2005.

2. Call blocking is a better metric because it is based on the number of customer calls attempted into the center. Call blocking is generally designated by a grade of service (e.g., p.01 1% of calls blocked, P.03 3% of calls blocked, etc.), which can only be measured in the network. Herein lies the problem. As a general rule, telecommunications providers do not monitor blocked calls for clients *unless specifically requested*. So, if a contact center is not aware to verify their access trunking, there is no mechanism to notify them of issues proactively.
3. In today's world, customers have become accustomed to fast busies from the network, or are unaware as to what a fast busy means, and are unlikely to complain about having to redial. And, the number of blocked calls can be relatively small (say 5%) and impact contact centers.

For example, assume 24x7 contact center's five busiest hours comprise 10.4% of its weekly call volume (based on the chart above). During this time, 30% to 40% of the calls would be blocked



(due to high retry rates when fast busies are encountered) during this time, and a few more outside this time, 4% to 5% of calls can be blocked. Most customers will not complain for the following reasons (1) most know that they are calling during a busy period and will call back, (2) most assume the problem is with the network provider and not the call center and (3) with the increased use of cell phones, a fast busy often indicates cell network limitations. And, most companies won't pick this up as an issue on their customer surveys because (1) the number is relatively small (~5%) and (2) as just stated, most customers don't know that this is a problem with access trunking controlled by the contact center.

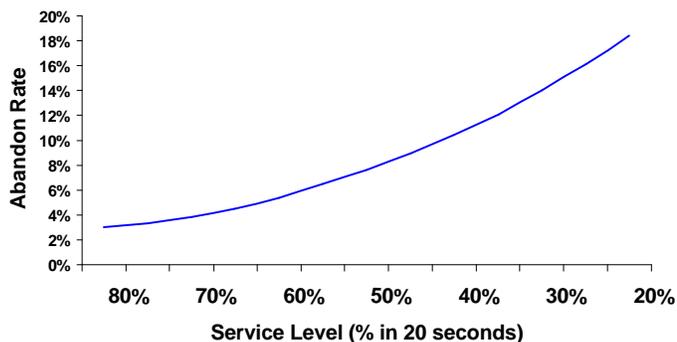
So, what impact does access engineering have on contact center performance? This white paper will address that issue. And, as a reminder, customer behavior is impacted whether there aren't enough trunks, or if trunks are made busy by the contact center (not that anyone would do *that*).



## ACCESS TRUNKING AND OVERALL ABANDON RATE PERFORMANCE

Seasoned contact center managers carry with them an intuitive feel for the relationship between service level and abandon rate. Every one of them can tell you what their abandon rate should be given their service level. The two are tied together. The chart to the right provides an example of this relationship for a typical contact center. It is represented by a parabolic curve where the abandon rate increases more rapidly than service level, particularly for lower service levels.

**Service Level v Abandon Rate Relationship**

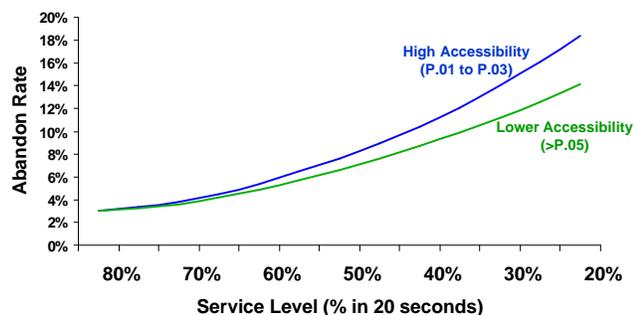


Source: Destination Excellence, 2005.

Yet, there are times when a contact center does not perform against the typical service level v abandon rate performance curve. This may occur over time (as contact volumes increase) or during particular times of the year (due to season peaks in volumes). It is during these times that the typical relationship between service level and abandon rate performance becomes disconnected. (For purposes of this white paper, we will designate 5% as the start of inadequate access trunks, but the number could be higher.)

The disconnect between service level and abandon rate can be seen when the abandon rate is less than what it should be normally. In other words, when service level drops to 50%, the expected abandon rate is close to 8%. If access trunking is insufficient, abandon rate may be 7%. While this difference does not appear significant, the disparity increases as the service level drops. For example, if service level drops to 20%, it is most likely that abandon calls would be in the 19-20% range (you know that service levels are bad when you have trouble determining what number is abandon rate and what number is service level just by looking at the numbers). When trunking is inadequate, the abandon rate could be in the 14% to 15% range, or about five points below the normal abandon rate.

**Trunking Impact on Abandon Rate**



Source: Destination Excellence, 2005.

While these numbers do not appear overly significant, they do create two issues. First, when a company operates multiple contact groups that are answering customer calls, and those groups are compared, the group with inadequate access actually looks better (lower abandon rate at the same service level). This may effect compensation, and does not provide an incentive for people to fix the issue (if the issue makes you perform better, where is the motivation to fix it?).

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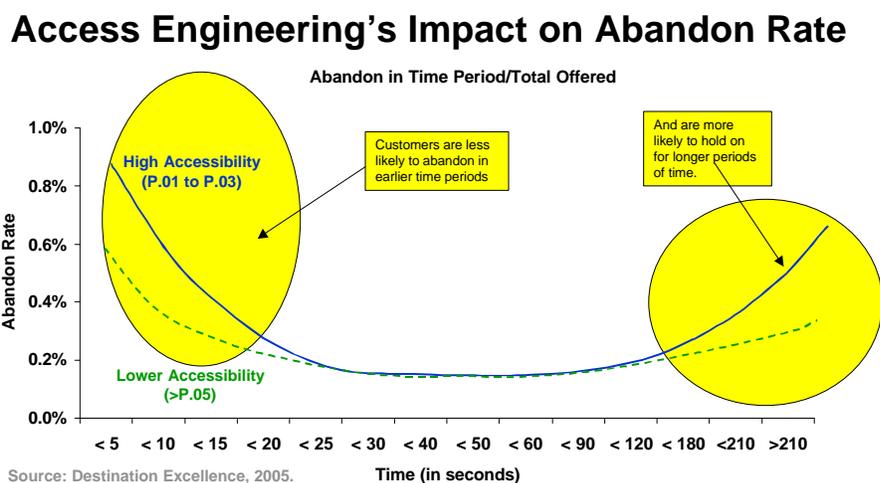
The second issue is that improperly engineered access lines change customer behavior, which may make results look better in the short run, but may have negative consequences in the long run.



## ACCESS ENGINEERING AND ITS IMPACT ON CUSTOMER BEHAVIOR

When access lines are adequately engineered, a "U" shaped pattern of customer abandon behavior emerges. A number of customers abandon within the first 5 seconds, when they hear the delay announcement. Customers progressively abandon at lower rates, which then levels off for a couple of minutes. Using the last time interval of < X seconds (we will use 210 in our sample case), the abandon rate increases again, in large part to the open-ended time period.

When access lines are inadequately engineered, a similarly "U" shaped pattern emerges, but with each end depressed somewhat. The following chart provides an example of the impact of low accessibility trunking on the abandon pattern of customers (note that this chart is wholly consistent with the charts in the previous section with the data coming from the same source).



With lower accessibility, customers have a more difficult time reaching the contact center. Given customers realize the likelihood of encountering this difficulty again if they hang up and call back at a later time (even though they may not understand the reason), callers are less likely to abandon calls. Customers behave instinctively and are willing to hold onto the line rather than face the issue again.

While it is a good thing that abandon rate decreases, the question must be asked, "What is the long-term impact on customer behavior?" If the short-term behavior is that customers will hang on longer and abandon less, will customers continue to do this, or will they have an alternative?

The answer to this question depends on the type of company you operate. For example, if you are a monopoly and customers don't have a choice where to call, then they will obviously continue to call. You may get some calls from regulators if the problem gets too bad, but maintaining a reasonable level of access engineering (say P.05) will avoid that issue as well.

If you are a competitive company, then the answer is not as rosy. Customers will, over time, get fed up with the poor level of service (even if they don't necessarily know it is your issue) and begin to call your competitors. Because of this, competitive companies will need to operate at higher levels of engineered access service than monopolistic groups.



## ESTABLISHING APPROPRIATE TRUNKING

Access line engineering is generally referred to as the engineered grade of service. The engineered grade of service uses Erlang B (as opposed to Erlang C, which is used for staffing) to determine how many access lines are required. The key determinant controlled by the user is the targeted grade of service, with handle times and call volumes used as input into the calculation.

So, the key issue in engineering your access lines is to determine the grade of service that you wish to provide. The following is a recommended guideline for companies to follow in engineering their access lines.

Type of Company	Grade of Service	Definition
Highly competitive industry with strong profit/sale	P.01	1% of monthly calls blocked
Competitive company	P.01 to P.03	1 - 3% of monthly calls blocked
Monopoly/regulated group	P.03 to P.05	3 - 5% of monthly calls blocked

The time period that the grade of service is targeted (e.g., weekly, monthly, annually) will depend on the seasonality of call volumes and your overall goal. For example, the first group of companies (highly competitive, strong profit/sale) may want to establish P.01 as a monthly goal (where the annual performance may be significantly better), particularly if the high volume months are associated with high revenues. Likewise, a monopoly may want to use a P.05 annual goal knowing that peak months will result in higher blockage rates. As with other areas in the contact center, companies will need to balance cost, profit and customer satisfaction to locate their ideal engineering standards for access lines.

As a final note here, companies who are moving from inadequate trunking to appropriate trunking must remain aware of the impact re-engineering will have on staffing. If access lines are causing customers to change their calling patterns (in other words, they are unable to get in during certain periods of time on given days), an intra-day call patterns will need to be adjusted to anticipate the increase in staff that is now required during times of high blockage. Depending on how under-engineered your access lines were, however, there may not be a need for additional staff.

For example, if a company is running at a P.05 grade of service, they are most likely blocking calls during specific times during Monday, Tuesday and possibly Wednesday. This company should review their intra-day call patterns during similar non-blocking days (e.g., Thursday and Friday) and compare those to the blocking days. The days blocking days should then be adjusted to follow a similar pattern. Since the retry rate on blocked calls is very high, a good starting assumption would be that the total call volume for the day would be the same, but the intra-day distribution would be different. Staffing would then be adjusted during those days to fit the new arrival pattern. After the new access lines are installed, further analysis and adjustments can be made to fine-tune schedules to meet the actual call arrival patterns.



## DESTINATION EXCELLENCE - YOUR COMPETITIVE ADVANTAGE

*Excellence is more than a word,  
it's a destination.*

*-Destination Excellence Motto*

Many companies today use outside professionals to augment internal resources. Destination Excellence has the advantage of bringing hands on knowledge and experience of customer care operations along with a history of success across industries. Your company will not spend valuable time and funds training us in what needs to be done – our experience has taught us. You will only need to spend a short amount of time with us to describe your operation, your procedures and your objectives. After that, we work proactively with you to achieve your desired results.

More than 75% of our revenues come from repeat clients. Generally, our clients hire us for one project and find our expertise so valuable, they hire us for additional projects. In addition to providing forecasting, staffing and performance services described in this document, Destination Excellence provides the following additional services (please see our web site for more detail):

- **IMPROVING PROFIT MARGINS.** There are two sides to the profit equation, revenues and costs. Destination Excellence can help you improve revenues through service and sales. We can also assist you in controlling costs through disciplined systems and processes, either for internal operations or outsource partnerships. Destination Excellence has developed strategic business modeling for companies in a number of vertical markets: wireless, utilities, travel, financial and e-commerce to name a few.
- **AUDITING AND BENCHMARKING YOUR OPERATIONS AND SERVICES.** Destination Excellence utilizes its proprietary 100-Point Audit tool to help clients benchmark their current operations and performance against the industry. With a database of over 30 audits across a number of industries, Destination Excellence works with clients to provide recommendations and information on the areas where they have attained world-class performance and which areas that require development. Feedback to clients is provided in a way that they can assess their relative performance against other call centers as well.
- **CREATING A CULTURE OF EXCELLENCE AND SUCCESS.** Companies increasingly understand that a culture of service begins with service to the people within the company. It has been shown that companies that create cultures of excellence with their people have higher customer satisfaction and profits. Destination Excellence helps companies to:
  - Define a culture using organizational principles and practices rather than processes and procedures.
  - Create an organizational dynamic using a concentric circle approach rather than the traditional hierarchical approach.
  - Develop a sense of community within an organization to reduce turnover and increase performance.
  - Envelop activities with communication streams to maximize the effect of each individual.
  - Instill a sense of continuity within each individual in the organization to optimize their tenure in the group.
  - Engage individuals in community activities to promote a strong corporate image.
  - Train for specific outcomes with measured goals and objectives to increase the impact of the investment in training.



- **HIRING THE RIGHT PEOPLE AND DEVELOPING THEM FOR SUCCESS.** Hiring the right person is a great beginning. The next step is to train them to achieve their best for themselves and the company in order to create an environment of excellence. Destination Excellence will help your company accomplish the following:
  - Identify the best tools to predict the success of people before you hire them.
  - Develop a comprehensive hiring program to maximize the potential success of everyone you hire.
  - Implement a new-hire training program to equip people to perform at their maximum potential.
  - Design ongoing training and communications systems to maintain the enthusiasm of your people throughout their career.
  
- **ASSESSING AND INSTALLING SYSTEMS AND TECHNOLOGY.** Destination Excellence has hands-on experience in call center systems. Telecommunications services, ACDs, Manpower Planning Systems, and CRM systems are included in the array of call center technology experience found at Destination Excellence. Destination Excellence provides a three-dimensional analysis of not only the cost of new technologies, but also the return on investment to the call center. Our services also include user specification development, contract negotiation, vendor management and post-installation quality checks.
  
- **SELECTING AND MANAGING OUTSOURCE PARTNERS.** Destination Excellence understands that not all businesses require, or desire, to maintain their own call centers. Successful businesses focus on their own core competencies. Strategic partnerships with excellent outsourcing centers provide a company with professional customer contact, while freeing up valuable internal resources. Destination Excellence has helped companies place outsourced call center and e-center business, as both a partner and intermediary. Utilizing a proprietary 100-point call center audit, Destination Excellence has successfully placed over \$10 million in call center business, and helped to create excellent, metric-driven long-term partnerships.
  
- **MEETING YOUR CUSTOMER CARE NEEDS.** The information provided here is just the tip of what Destination Excellence can do for your customer care group. Other client projects Destination Excellence has worked on include:
  - Turning around failing companies increasing their market value and long-term success.
  - Strategic planning for start-up and ongoing firms.
  - Industry opportunity and market analysis.
  - Financial planning and modeling.
  - Workshop development.
  - Executive education.

Contact Destination Excellence to see how we can help you.

**Contact Destination Excellence toll-free on 877-433-7839, or e-mail us at [info@destex.com](mailto:info@destex.com). You will be glad that you did.**

