

Contact Center Professionals, Inc.

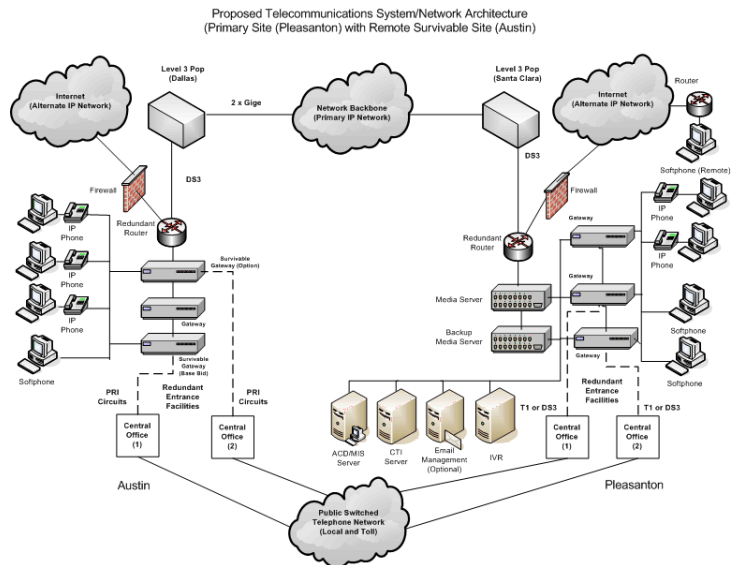
Contact Center Simulation

An Essential Consultant Design Tool

Today's Complex Contact Center Environment

The contact center environment continues to become increasingly complex. In a never-ending effort to balance costly labor resources with growing customer demand, it becomes necessary for management to adopt more complex strategies for routing transactions, managing agent skills, balancing work loads between multiple locations, and more, in order to maximize efficiency and reduce or control rising costs.

As new strategies for improving efficiency are defined, most contact centers have no way to determine in advance whether or not the planned changes will improve efficiency, or whether they could actually make the current environment worse. For these organizations, the only practical option is to test the planned changes on live customers in the contact center before it is possible to know if the new strategies will have the desired effect.



The Value of Contact Center Simulation Tools

Over the past decade, sophisticated simulation tools have been developed that offer significant advantages to individuals charged with the design and ongoing management of contact center environments. Simply stated, a contact center simulation tool is a software application designed to duplicate current and proposed operations. Using actual call volumes, routing strategies, voice menus, agent staffing, etc., contact center simulation is designed to closely approximate any current contact centers and allows the designer to test new strategies, optimize resources, and determine the impact of any proposed change prior to implementation. Simulation tools are designed to accurately predict the result of change before trying them on live customers.

Contact Center Professionals, a leading independent consulting firm specializing in contact center management and technology, has been a pioneer in the use of simulation tools in a consulting practice. With close to ten (10) years of experience using contact center simulation, we are one of the very few consulting firms who have recognized its advantages and incorporated its powerful capabilities into our consulting methodology.

When weighing the benefits offered from various consulting firms, it has been our experience that most prospective clients prefer to work with an organization capable of demonstrating results in advance of accepting consultant recommendations. That's why we have made the investment in this sophisticated software tool and why we have used it successfully in a variety of consulting assignments. It is also why we have invested the time and effort to use it effectively.



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Independent consultants specializing in call center management and technology.

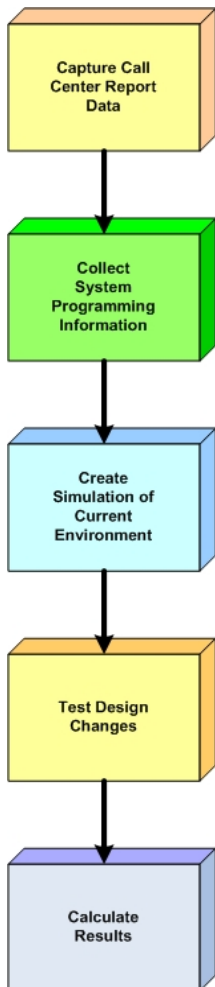
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Call Center Simulation Determine Results in Advance

The Simulation Process—How it Works

The use of contact center simulation software is very straightforward, but does require prior knowledge of Voice Response Units (VRUs), Automatic Call Distributors (ACD) systems, multi-site environments, etc. Our experience working with most major manufacturers of call center/contact center technology makes us ideally suited to conduct such analyses.

Process Overview



Implementing a contact center simulation project involves the following steps:

1. Data Requirements. Current system programming data, such as specific voice menu programming, call routing and overflow, ACD or skill assignments, multi-site routing schemes, calling loads and current agent staffing and schedules, is required. Access to complete data is necessary in order to duplicate the existing environment.
2. Duplication of Current Environment. Using current client programming information, all data is loaded into the simulation tool. Transaction loads, including actual volumes, average talk-time, and average after-call work (wrap-up) are entered in half-hour increments for the period of the simulation. The simulation tool is programmed to route transactions using the same programming methods used in the current systems.
3. Validate Baseline Environment. After loading data from the current environment into the simulation tool, an analysis is conducted to validate that the baseline simulation compares with the current environment. While the random nature of call arrivals prevents an exact duplication of results between the simulated and actual environment, the baseline simulation is evaluated to insure that it falls within an acceptable range of accuracy.
4. Optimize Design Changes. After establishment of the baseline, which represents the current environment, the simulation tool is used to test alternative approaches such as alternative call routing methods, skills-based routing, staffing, network routing, implementation of technology, use of self-service, etc. Each alternative is then analyzed to determine its impact on Service Level performance, costs, staff requirements, etc.
5. Quantify Results. After completion of simulations on alternative approaches, results are quantified and comparisons are made to compare the impact of recommended solutions with the current baseline. If cost information is provided by the client, a cost comparison will also be provided.

Once the simulation data has been loaded, the ability to run a variety of unique simulations is very simple. Programming changes are made to the model and new simulation models are run and compared with the baseline simulation.

Call Center Simulation

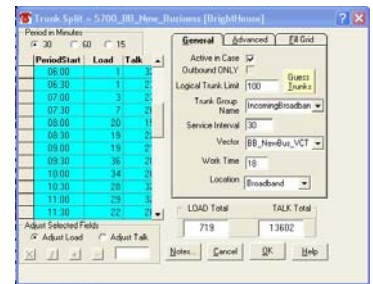
The Best Way to Insure Results

Examples of Simulation Opportunities

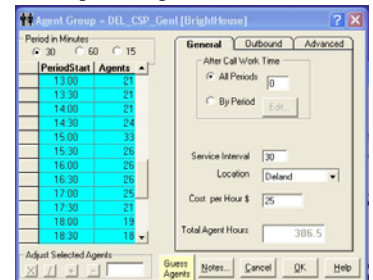
Simulation tools can be used in a variety of ways. Here are some good examples of how a simulation tool can be very useful:

1. **Call Routing Plans.** Are you routing calls in the most efficient way? Simulation allows the designer to test call routing plans using actual call volumes and handle times. Current methods can then be compared with alternate approaches. The results of unique routing plans can then be analyzed from a cost, Service Level and staffing perspective.
2. **Skills-based Routing.** Will skills-based routing help? Determining the right mixture of skill groups and skills-based routing can be a difficult task.
3. **Multi-site Routing.** If calls are being routed between multiple locations, simulation can be used to optimize various routing alternatives to create the most efficient and cost-effective approach.
4. **Site Consolidation.** Simulation tools allow management to closely predict the results of consolidation of site locations.
5. **Disaster Recovery.** Will your disaster recovery plan really work? Unfortunately, most contact centers won't know the answer to this question until a disaster actually occurs. One of the best uses of simulation is to test disaster plans to determine the impact of any combination of system outages.

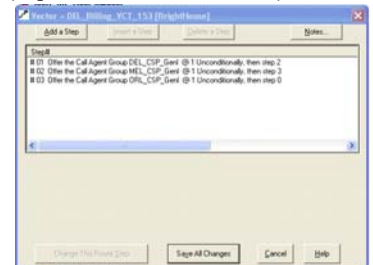
Actual client data is entered into the Simulation tool, including half-hour by half-hour call load.



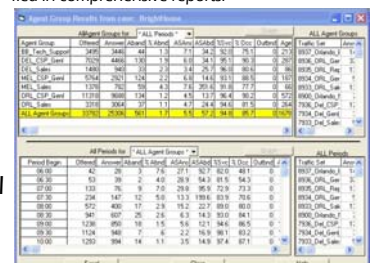
Current agent staffing is modeled.



Current and proposed routing instructions are programmed in the tool to allow comparisons.



Simulation models are run and results are quantified in comprehensive reports.



Other Questions

1. **How accurate is the Simulation Tool?** The simulation tool is very accurate and is capable of closely matching actual client results. It is important to recognize that results will vary somewhat from actual client results. The variation is typically the result of factors such as the random nature of call arrival and the amount of information available on the current system. Even when variations occur, however, the tool is very useful in determining the degree of impact that design changes will have when compared to the current baseline.
2. **Why don't more Consultants use Simulation?** There are several reasons why simulation is not used more universally. First, the simulation tool is relatively expensive, which is a deterrent to some. Second, the simulation tool adds time to consulting projects, which some consultants tend to avoid. It has been our experience, however, that the benefits of simulation are well worth the expense and add substantial credibility to our design efforts and recommendations.