



Consolidated Enterprise Reporting
For
Disparate Systems
And
Cross-Functional
Contact Centers



Enterprise and consolidated reporting

For the purpose of this white paper, enterprise and consolidated reporting in the contact center refers to both standardization of contact center data and cross-functional reporting. The contact center data can be from multiple contact centers operating as different business units technologically. The cross-functional reporting can be from multiple customer contact channels with technology that is usually disparate and/or from stand-alone systems. These systems typically are not integrated for reporting purposes. This paper addresses the why's and how's of enterprise consolidation and cross-functional reporting, and the advantages. The secondary focus covers the difficulties of data standardization and will conclude with a discussion on implementation.

Enterprise consolidation. Tell me why again?

Historically an enterprise view was technologically impractical and not easily achieved, however the perceived benefit of managing these separate business units was easily justified. Questions include:

- What are the demographics of your customer?
- Are your customers regionalized?
- Do you do business within a city, state, country or worldwide?
- What technologies have you invested in already?

Companies knew that the larger a contact center was, the more efficient it became. Legacy technology created a situation where cross training contact center agents was inefficient and in doing so compromised the quality of service. Specialization was manageable and creative routing patterns were often deployed to benefit from both regionalized efficiency/agility and to emulate a larger workforce, making the customer contact patterns more predictable. The end result was often a management nightmare. Independent 'reporting systems' and the enormous amounts of data within would become a tangled fishing line of information. The normally simple task of figuring out the historical patterns of customer contacts became an on-going and difficult challenge, or in some cases an impossibility.

Today, consolidating contact center functionality as well as consolidating reporting is the recognized path to increased customer value and is becoming more practical to implement. Convergence and VoIP technology along with CRM initiatives within enterprises make enterprise consolidation not only possible, but makes the unified reporting of it a necessity. An enterprise strategy with consolidated reporting will reduce costs in a number of ways such as:

- Creating a common interface with the customer (quality and metrics)
- Efficiency in routing of calls
- Resizing of contact centers improvements (you must have 'standardized' data when determining resizing strategy)
- Drastically improving customer satisfaction through fewer transfers and first call resolution



- Shared technology efficiencies (both hard costs & on-going management)
- Corporate training efficiencies
- Talking the same 'language' across your enterprise
- Improved executive oversight

Accomplishing enterprise consolidation can be costly. In some cases an enterprise will standardize by porting all locations to one ACD system. With newer technology it allows for some consolidation of ACD reporting. Some systems promise a more seamless unified view of multiple methods of customer contact. Even when total standardization of a particular technology is mandated, large enterprises often never complete the total system migrations. This can be due to various corporate initiatives that change direction frequently; or potential mergers, acquisitions, or restructuring which can create additional change.

Some companies take it upon themselves to develop centralized databases of information to manage this changing environment. Others utilize the expertise of third party companies that specialize in the consolidation and standardization of contact center(s) information. By utilizing third party contact center technologies to unify reporting, investments in new capital expenditures can be minimized and extend the life of existing contact center technologies while ensuring any new investments in technology are incorporated.

Cross-functional reporting

For the purpose of this white paper, cross-functional reporting refers to summarizing the customer's experience and the agent's performance involving all possible contact channels, including: ACD systems, fax, email response management systems, web technologies (i.e. call back and chat), and quality monitoring systems.

Historically, contact centers have vacillated between emphasizing quality or service levels. Often this relationship was thought of as two opposite spectrums that were at odds with each other. The reality is that quality and service levels go hand in hand and should be managed and reported as such. The ideal management system would be a strategic coupling between the two. Appraising an agent and/or a contact center as a whole involves having timely and accurate information showing relevant metrics on a current status and a historical basis. Creating a combined strategy for quality and service level will positively affect the following:

- Decreased overall cost
- Enhanced efficiency and call handling leading to increased customer satisfaction
- Increased customer retention and value
- Consistent and fair employee appraisal / evaluations leading to better retention of quality employees
- Unified reporting system across multiple platforms resulting in less duplication of effort
- Consolidated data repository creating a more manageable and effective disaster recovery plan



As discussed, enterprise consolidation and cross-functional reporting is often easier said than done. There are newer technologies available today that accomplish unifying the management of these separate technologies. It is practical to use a third party reporting system for consolidation of this type of information, especially when considerable investment has already been made in your contact center technologies.

Standardization of data

As with all contact center statistics and particularly ACD information, it is difficult to compare one contact center to another. For example: one contact center's service level may include abandoned call metrics and another contact center's does not. A third contact center may only include abandonment that happens after service level. One ACD manufacturer decides that their talk time should include hold time and the next does not. The reality is that there are a number of different ways to calculate a statistic that at face value seems very straightforward. When consolidating enterprise information it is critical that data standardization occurs.

The best way to accomplish this, in an enterprise with disparate systems, is to break the customer contact experience down into smaller pieces of data. The data then can be later rebuilt for a standard definition of service level, wait time, average handle time, abandonment rate, and other Key Performance Indicators (KPI's) that are critical to managing contact centers. There are companies and products that make it their business to understand the differences in ACD systems and routing scenarios with their often-unique nomenclature for summarizing call flow information.

To emphasize the importance of standardization, the following is an example of the complexity of defining Service Level:

Example A - Service Level Calculations

- A1 – Short Abandons – Mistake calls / Quick Disconnects
- A2 – Informed disconnects – Voice response driven – Calling back later or using the Internet for service, etc.
- A3 – Abandoned before service level
- A4 – Abandoned after service level
- A5 – Total calls offered to the switch
- A6 – Number of calls answered by a Group/Agent before SL threshold(s)
- A7 – Number of calls answered by a Group/Agent after SL threshold(s)
- A8 – Number of Calls Overflowed out

One way to calculate Service Level:
 $(A6 + A3) / ((A5 - A8) - (A1 + A2))$

Another important aspect of data standardization is to reverse engineer data whenever possible, from averages to totals. An example of this would be to not store



average hold times but to store the total amount of time in the hold state. This allows for more than one average hold time to be calculated to the benefit of contact center management.

An individual that is using call trend forecasting and statistical formulas to determine future staffing will want to know the average time spent on hold, on a per call basis. An individual that is trying to understand the 'customer experience' better will want to know how long a customer is put on hold each time they are put on hold. This is an entirely different definition and calculation.

Example B – Hold time for Staffing vs. Customer Experience

- B1 – Total number of calls answered
- B2 – Total amount of time on hold
- B3 – Number of times a customer was put on hold

Formulas:

To the benefit of determining staffing:

$$\text{Average Hold Time} = B2 / B1$$

To the benefit of understanding the customer experience:

$$\text{Average Hold Time} = B2 / B3$$

Delivery of technology

If you have an enterprise environment and understand the benefit of consolidated reporting across all contact centers in your organization, then a natural progression would be to ask, "How do I go about deploying it?" Some enterprises already have initiatives in place for consolidating corporate information. This will provide for better data mining and the understanding of relationships between various aspects of managing your business. Things to consider if looking for a third party solution that specializes in contact center consolidation and the standardizing of data are:

- Browser-based solution for report creation and deployment
- Solution that can handle legacy systems and VoIP systems
- Efficiency and flexibility for ease of use
- Contact center specialization offering, not just data integration
- Professional services for data standardization is paramount

Another option to consider is a browser-based ASP (Application Service Provider) model. This may be very attractive in that there is little to no up front cost and can be implemented quickly. You benefit from the efficiency of a hosted set of report and data servers that are managed by a team of individuals who specialize in that particular product. It ensures that your product always has the latest revision with the latest technology.



System Management Software, Inc. (SMSI), based in St. Paul, MN, was founded in 1989 and is a leading developer of contact center management software applications. The combination of their full line of product offerings, along with multi-switch integrations and cross-functional reporting, enables SMSI to offer a unique set of solutions and services to their customers. SMSI's vision brings related products and services together to provide a complete contact center strategy for customers.

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