

Contact Center Improvement Through Better Analytics



A Frost & Sullivan White Paper

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INTRODUCTION

The Word “Analytics” Has Become Devalued Through Misuse

Analytics is a powerful addition to a business’ toolkit in making sense of what it is doing and how it should interact with its customers. However, analytics in contact centers is confusing because the term has been devalued through misuse. To many contact center professionals, “analytics” is synonymous with “speech analytics,” which is unfortunate because the two are not the same. Speech analytics is a tool that performs analysis on just one type of data (unstructured voice recordings). This is useful, but falls far short of the complete analytic picture that a center needs to make smart decisions.

Many other people confuse analytics with advanced reporting. But, this too, misses the point. Properly done, analytics draws information from diverse sources in order to reveal significant patterns that were not previously visible. Reports can tell you what happened. Analytics, by contrast, strives to tell you why things happen.

Underlying Data Becomes More Complex

Some of this confusion stems from the fact that contact centers are swimming in data, much of which is captured in the form of static reports. All of the core technologies used in a center deliver their own sets of information: call data from switches and automatic call distributors (ACDs); worker performance data from quality monitoring and workforce management systems; and customer data from Customer Relationship Management (CRM) systems. These are just a few of the sources that create an enormous reservoir of information.

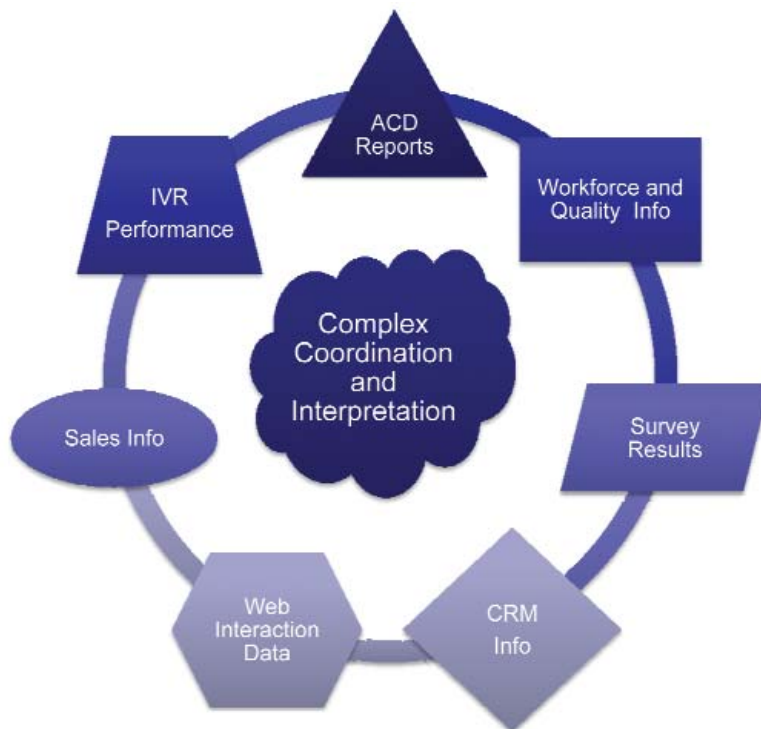
Most of these systems are independently operated, which means their data resides in separate silos. Reports that tell you about call volume are not usually related to reports that tell you about agent call handling prowess. In general, contact centers are very proficient at logging their activities and gathering their data. However, they have not often been asked to coordinate the separate information and interpret the data streams (figure 1).

Analytics provides the tools and methodology to take the various data streams, combine them, and interpret their value for the business. It creates a process for improvement that puts better reports into the hands of people who can act on them. “Better” reports include more benchmark numbers and more compound metrics that express contact center activity in terms of outcomes and business goals.

Standing in the way of this important process, though, is that in recent years the informational environment has grown more complex. In many centers, the arduous task of collecting all the strands of data has overshadowed the need for rigor in assuring accuracy. When this happens, contact center practitioners have a tendency to make mistakes in their assessment of problem areas or to overlook incomplete data in their interpretations of problems.

Reports tell you what happened. Analytics tells you why things happen.

Figure 1



WHAT MAKES ANALYTICS SO DIFFICULT?

There are several reasons why it has been difficult for centers to effectively practice analytics. Most of the difficulty stems from a combination of the rising environmental complexity, and the historically haphazard nature of data collection and formatting.

Available Data is Incomplete, Inaccurate, and Not Formatted

Even though the amount of data collected by the center is huge, that does not mean it is complete or helpful. Every system that produces useful data produces it as a by-product of its own unique functions, without regard to how a future analyst will use it in concert with other forms of data. While that data may be complete and accurate for the original purpose, it may prove to be incomplete or even misleading when put to another purpose. For example, the transition from system to system often puts data through second or third hand filters, which massage it in ways that distort meaning and change formats. When you pull data through secondary systems, it's often impossible to go back to the original sources and fill in missing pieces later. Data gets separated from the context of the interaction itself, and once that context is lost, it is impossible to re-create.

For example, the identity of the customer is often not included on every contact datum, or reasons for the contact may not have been recorded for every interaction. While this is not a problem during the interaction itself, especially for short or routine calls, it is an important missing piece when you are looking for bigger-picture issues after the fact. In

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many cases, there may be multiple reasons for a contact and all of them may not be tracked or apparent. There may be linkages between contacts by the same customer, but if the customer record is missing for some or all of the calls, then the linkages won't be visible.

Other missing pieces cause similar disconnects. If the timing data is not present for each element of an interaction, it is difficult to determine how long each segment of an interaction took. This can be critical in understanding how customers navigate from self-service to agent service via an interactive voice response (IVR), for example. Or, if accurate history data isn't kept, then the analysis might miss important connections between related interactions that involve the same customer, the same product, or the same agent.

One of the biggest obstacles in the way of effective analytics is the increasing multichannel nature of many interactions. Different technologies are used to collect information about e-mails, voice calls, and newer communication channels such as SMS and Web chat. As a result, the data is often managed by IT or other non-contact center groups, making it harder to coordinate and analyze. Not all channels are viewed equally from a data collection or management standpoint.

Adjunct Information Is Not Related to the Interaction

Another difficulty is making the correct assumptions about what is related to an interaction and what is not. It is important to screen out superfluous data that are irrelevant to understanding the interaction. Extraneous data points can make it harder to focus on what is important and paint an overly complex picture of what is actually happening between customers and agents.

Also, in many cases, the detailed contact records that exist for customer information are not linked to other relevant sources of knowledge. In many centers, data silos prevent contact records from connecting to important data points like actual voice recordings, e-mail logs, survey responses, or other related information that provides vital clues to interaction success or failure, which gives valuable context for understanding each interaction and the state of the customer service environment.

Information is Collected from Multiple Disparate Sources

Difficulties almost always arise when information from multiple independent sources is combined. By definition, analytics is a system that gathers data from dispersed sources to unearth relevant patterns. The key sources include telephony systems, customer databases, workforce tracking databases, transaction processing systems, raw voice, and screen capture archives.

In theory, each of these unique data sources is captured for a single, separate purpose. Telephony data, for example, is used for understanding call volumes and routing patterns. Raw voice is used to ensure the quality of the agent's performance or simply kept for legal, or compliance reasons. Every data set has its own reason to be collected.

Silos prevent connections between voice recordings, e-mails, surveys, and other data with vital clues to the interaction context.

Therefore, each one has its own narrow view of one part of the contact center interaction. Telephony data is focused on the success of specific devices, workforce systems are looking at the success of agents, and customer databases are analyzed for information about customers. Each silo of data is useful for understanding a piece of the whole picture, related to customers, agents, or devices, producing three different versions of the “truth” that will not be in sync. Examined separately, they may be correct as far as they describe specific domains, but they don't provide a holistic view of the interaction.

Without the single version of the truth across all three areas, answers about overall performance and resource allocation can only be based on narrow slices of the interpreted data.

Analysis of Existing Data is Complex

Often, companies rely on a traditional method of analyzing data from different sources called the Extract, Transform, and Load (ETL) process. This time-consuming and expensive mechanism requires resources to be devoted to cleansing the data, which makes it unsuited for the lightning-fast response time contact centers demand.

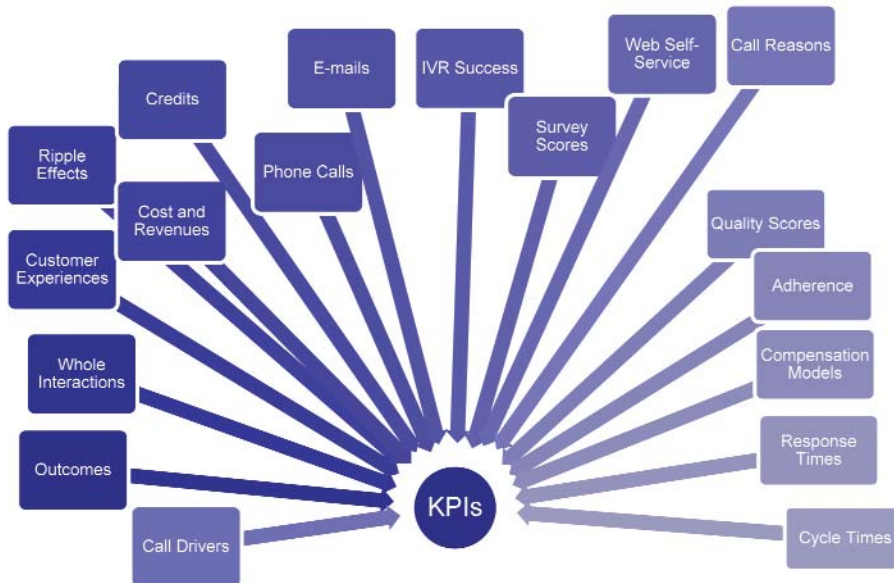
Four Axes of Environmental Complexity

The data environment is not the only one to become more complex and confusing. The actual practice of running contact centers has grown more complex as well:

1. Centers must cooperate with other departments that also have a stake in the outcome of the service delivery process. Marketing needs information on customer behavior and intention; finance needs data to know if resources are allocated effectively; HR needs to understand the agent life cycle so it can hire appropriately;
2. Centers are increasingly built to be fractured operational units: these include multiple centers, virtualized networked centers, and agents who work at home or in satellite offices;
3. Agents have to dip in and out of more applications than ever—during and after contacts; and
4. Customers themselves are more sophisticated, with many more options for gathering information through the Web, social media, and mobile devices.

The net result of all of these trends is that if you want to assemble an accurate but broad-based picture of the interaction landscape, you face challenging new data analysis requirements that go beyond what contact centers handle (figure 2).

Figure 2



IMPROVING CONTACT CENTER EFFICIENCY

Improve the Quality of the Available Data

The first step to making the contact center work more efficiently is to establish an accurate context for all the data that is gathered. It is essential to understand how the “three versions of the truth” all reflect slices of an overall reality. Customers, agents, and devices all capture a unique view of the total experience. The job of analytics should be to relate the customer's experience to the agent's experience and, both of those, to the performance of the automated infrastructure devices.

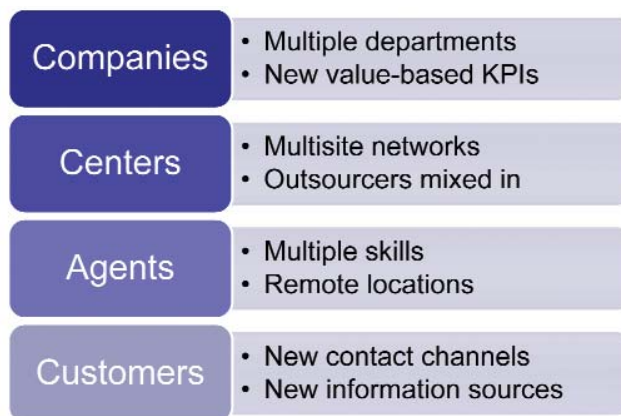
While building this context is essential for successful analytics, it is also valuable for more targeted efforts to enhance agent performance. Better quality data (i.e., data in context) allows managers to track the efficiency of agents, tailoring their skills to particular call types or customers, and even reallocating training to achieve certain goals. Traditional agent metrics, such as average handle time, can deliver much richer insights into actual performance when analyzed closely with measures that describe an alternate version of the truth: the relative value of the customers an agent interacted with, for example, or the complexity of those customers' inquiries.

To contextualize these divergent sources of data and make them work more effectively, users should collect data farther upstream in the process. The traditional ETL analysis examines data "late" in the process—after it has been massaged and homogenized. The "context" that it applies to the interaction is often an artificial one because a downstream process hides the fact that there are missing pieces in the overall view of the interaction. The goal of a contact center analytics process should be to capture data as close to the source as possible, eliminating as many of the holes and inconsistencies as possible.

The goal should be to capture data as close to the source – as far "upstream" – as possible.

Going after the information, while still upstream, also ensures that the data collected will be more rigorously auditable throughout an analysis process. Information that describes each interaction, at the micro layer, will be verifiable and tagged to specific sources as information that rolls up all the interactions into a macro layer, as in the key performance indicators (KPIs) and reports that flow up to the executive level (figure 3).

Figure 3



Analytics as Part of a Broader Agent Enablement Strategy

Evidence suggests that analytics is being adopted because contact center executives don't always understand which metrics are relevant in which contexts or how applications in use can work together. Many people are concerned that, despite the high labor costs in their centers, they have not outfitted and equipped their agents with the right tools to improve the customer experience.

Analytics is an important element in understanding workflows that lead to success or failure, and empowers managers to intelligently replace or eliminate practices and improve the overall operation. Managers are beginning to use analytics to learn how to push decision-making down to the first line agent wherever possible, but only if they are equipped with the right tools that allow them to make the correct decisions.

The problem that this poses for operations executives is in trying to quantify the inputs and variables associated with delivering different kinds of information, in different formats, to agents with various skill levels for different types of interactions. This cries out for better quality data in a more integrated form.

Scenarios that Benefit a Broader Analytics Approach

Let's look at some practical examples of how attention to analytics can affect the way a company does business. The first way is in making resource allocation decisions. Labor accounts for the largest portion of a center's ongoing expenses so the pressure is always on managers to have an efficient headcount with the best available skill sets. Looking at labor costs or call volumes in isolation can create unhealthy swings in headcount that affect service levels. But comparing labor, volumes, and interaction outcomes gives managers a smarter picture of which agents are better at handling certain types of calls. With that information, managers can target training to specific groups or direct well-skilled agents to high-priority customers. Instead of pulling all agents off the phones for generalized training, centers can spend less to put only the agents who need a particular skill through targeted training based on solve rates or call reasons.

Second is understanding customer behavior. Analytics—the ability to see the big picture—lets a company extrapolate from many isolated incidents to find patterns that underlie the larger reasons for customer calls. For example, if you understand that calls are geared to a specific product line or function (e.g., delivery issues, or returns/exchanges), then you can build time-saving processes that affect large groups of calls and customers at once. But, to make it work, you have to intelligently combine call volume information with records about call reasons and dispositions. Putting this together helps eliminate unnecessary calls and boosts first call resolution rates. It also provides measures of accountability, such as showing who and what creates calls that reach the center, how much it costs to resolve those calls, or how much profit is at stake when handling them.

Third, and closely related, is self-service. Too many companies open the customer experience with an IVR system and then fail to measure the effect, such as call deflection and agent-time saved. Leading companies are starting to analyze the many pathways that customers choose when they decide to seek service, including IVR and other channels, like the Web and e-mail. When they put all of the data sources into the mix, they often find that a static front-end isn't an efficient way to identify which calls are good (or bad) candidates for self-service. Again, true understanding of what is most effective and efficient requires quality data, gathered close to the source, viewed in conjunction with other views of "the truth."

CONCLUSION

It is important to note that not all analytics are created equal. If the goal is to improve overall contact center efficiency, managers must move beyond tools that look at a single source of data (i.e., speech analytics) and have a broader view of the different data types that are available.

Frost & Sullivan best practices recommend the use of advanced analytics to improve operating efficiency and create insightful, flexible business processes for managing contact centers and customer relations. In addition, it is important to gather quality data as close

to the source as possible to facilitate analytics ease of use. For example, companies should initiate programs to rigorously track the reasons for customer contact and tie those data points to other relevant data about the interaction.

Some analytics tools, including those from Upstream Works, ensure that agents and systems use consistent and valid call reasons for each interaction (even across different interaction modes, such as self-service and chat). Armed with that knowledge, managers can select more appropriate calls for evaluation, coach more efficiently on successful behaviors, and untangle inter-departmental workflows that detract from the customer experience.

Although most people still have a preconceived idea that "analytics" is equal to "voice (or speech) analytics," it is not accurate and does not help improve the contact center industry. Upstream Works focuses on helping centers perform data analytics that go beyond voice analytics and offers a deeper and faster analysis for centers.

Upstream Works' Data Mart, for example, is a purpose-built tool that collects data for analysis directly from the point of interaction (i.e., "upstream" of the ETL process), where it can be used immediately. From this vantage point, you can see clearly into an interaction and its processes, and benefit from a broader organizational view into interaction outcomes. By providing a clearer view into the interaction, Upstream Works helps managers improve efficiency and provides insights to help boost other business-critical metrics as well.

For these reasons, Upstream Works should be on the short list of vendors considered when contact centers are in search of a solution capable of proactively improving their data analytics.

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