



Peer into Your Customer's World

Cross-Channel Behavioral Modeling the Key to Understanding Customers

By Michael Chavez, vice president of marketing at ClickFox

Most organizations know their customers are out there talking about them right now. Every day their customers interact with them through automated voice and speech systems, websites, kiosks and ATMs. Unfortunately, all too often, organizations don't know what these customers are saying to others about those experiences.

Research data from multiple sources supports that customers appreciate automation—but only when it's done correctly. Organizations benefit when virtual systems deliver on their cost and customer satisfaction objectives, providing flexibility, information and convenience to customers that was impossible just a few years ago, while allowing them to reach more customers than would ever be possible with live interactions.

And, organizations continue to strive to deliver on the promise of self-service. Customers are increasingly asked to press, speak, hold, click, enter and scan, in order to transact with most organizations. These automated transactions can often number in the millions per day. As companies offer more and more ways for customers to interact, it becomes a daunting challenge to stay connected – to know *exactly* what is going on when customers are doing business with them, and how self-service is delivering on its promise to customers and to the business.

Data, Data Everywhere

Most organizations have attempted to understand customers' experiences using volumetric data such as hang-ups, page hits and transfers, or through subjective data like random sampling, customer surveys and agent interviews. They have hired consultants and possibly burned up countless hours and dollars to try to make sense of it all. Many have deployed a combination of tools to help understand customer behavior, including:

- **Design documentation:** Design documentation outlines the intended flow of a service application, such as a speech or IVR system, showing how callers *should* get from point "A" to point "B" and what specific options callers are offered.
- **Call or Web Logs:** Log files are generated as a result of a customer's interaction with a specific application. These files are widely available as a byproduct of an organization's IVR or web site. But, often they are not utilized because they are difficult to interpret due to the sheer volume of data and the lack of tools to effectively analyze it to create any customer insight.

- **Agent interviews:** Interviews with customer service agents can be a great way to obtain secondhand information about the customer's experience. They may notice that an increased volume of callers are saying they are having problems paying bills through the IVR system, for example. Obviously, this information can only tell a portion of the customer story for a small segment of the overall customer population.
- **Customer surveys:** Forrester indicated that 95 percent of companies surveyed found them "extremely helpful" or "helpful" in efforts to improve the customer experience. However, like agent interviews, this data is not comprehensive and can be heavily skewed by many factors, including timeliness of survey, the affect of external influences on customers' opinions and the quality and appropriateness of the questions asked.

While information from these sources provides some value, it adds up to a fragmented view of the customers' reality. It's like looking at snapshots of the customer experience, rather than a movie. In other words, it's looking at isolated, frozen pieces of time, rather than the progression of steps in the experience. What exactly is happening in between?

Behavioral Modeling Ties it All Together

Customer behavior intelligence is fundamental to understanding customer behavior within and across service touch points. Among the companies surveyed in a Forrester study, 40 percent said they plan to spend more on customer behavioral research, in hopes of seeing the "big picture". But companies need to understand behavior in each single channel first, beginning with the channel that has the biggest impact on financial outcomes--usually the IVR. For example, information obtained from customer behavior modeling can be used to improve a touch-tone IVR *before* deploying more complicated technologies, like speech recognition. Companies armed with better understanding of current behavior can deploy speech to areas where it will be most effective. If speech applications are already deployed, understanding how customers are *actually* using the speech functionality as compared to the intended experience can help to narrow the gap between the two. Once quality goals are reached for the voice channel, companies can look up and downstream to the web and the agent experience to explore behavior within and across these service offerings.

The Bigger Picture

Organizations need a common strategy involving all service touch points--because the customer's experience in one channel often has an impact on their success in others. Companies today are making significant investments in self-service applications in an attempt to maximize cost efficiency and customer service. When an automated channel does not meet the customer's needs, he often turns to a live agent for help, which drastically increases the cost of serving that customer, and often dramatically lowers the customer's satisfaction.

Customer behavior intelligence should be deployed across all service channels. Organizations who do so would have a clear understanding, for example, of what a customer did after abandoning a confusing web site. Did they try to use the IVR to solve their problem? Or did they press zero immediately to be transferred to a customer service representative?

Here's one example of the insight that can be gained by understanding cross-channel behavior. Using customer behavioral modeling for its IVR system, one well-known wireless service provider found that many of its customers who were choosing the "Other Services" option on the Customer Service menu were not finding what they needed, resulting in a trend of back-and-forth behavior between the two steps. After that experience, many customers were hanging up or dropping off to an agent. But the rest was a mystery. The organization didn't know why they were transferring out and couldn't fix the problem unless they explored what happened to this customer group when they reached another service channel--the call center.

After suspecting that these customers might be trying to inquire about Ring Tones (identified as the most popular selection on the Other Services menu), executives realized this option was buried deep in the menu list. But, before making changes to the script, the organization needed more data to validate their hunch—data that was housed in the CRM desktop since callers were backing out of this menu and eventually transferring to a customer service representative. Executives ran a query comparing the population of customers who exhibited the back-and-forth behavior to the disposition data from the agents' desktop. Using the customer telephone number as the key, the organization found that the calls from this customer group were overwhelmingly about ring tones. By making a very simple change to the IVR script, the organization made a big impact in the effectiveness of its IVR system, and reduced agent call volumes almost immediately.

When one channel is examined, you often uncover behaviors that force you to confront cross-channel questions. Cross-channel behavioral modeling is not the same as multi-channel data correlation. In the example above, multi-channel data correlation would have given the organization the number of people who arrived at the Other Services menu, but would not provide the sequential steps showing the back and forth behavior between menus. Therefore, it would not help the organization determine how and why they dropped off. When the IVR data was married with the CRM data as a single view, they had the complete customer story and were able to act accordingly to fix the problem.

Cross Channel Utopia

The *ideal* scenario is full cross-channel behavioral modeling and analysis—looking at the customers' experience from beginning to end, from the Web to IVR systems to kiosks and CRM databases. However, most organizations just need a place to start. As mentioned earlier, organizations should start with the channel with the biggest impact to their key business objectives and go from there. For many organizations that will be the IVR system.

Gartner reports that 92 percent of customer interactions happen over the phone. Despite the fact that organizations are pushing customers to self serve over the Web, global cell phone subscriber growth is outpacing Internet user growth and customers are three times more likely to call a toll-free number than use a self-service Web application. After implementing customer behavior analysis in the IVR system, for example, the exercise naturally leads to a need for cross-channel insight because you're thinking about how customers flow through the various service channels. It's the movie rather than the snapshot.

Conclusion

Today's self service systems are designed mechanistically—similar to the way a civil engineer might design a freeway system. Through careful analysis, the engineer creates a strategic system of on-ramps and off-ramps, all carefully designed to streamline flow. In the real, organic world, however, all it takes is one event to cause a big impact and throw off the entire system.

Service systems are designed with similar good intentions—but in the messy, human way, which often includes guesswork and speculation. Organizations need a clearer understanding of how customers *actually use* these systems in order to reach the highest degree of effectiveness. The event causing massive customer frustration could have actually occurred two steps before, or two channels before the step where they abandoned the experience. Cross-channel behavior intelligence can help organizations streamline all service channels by helping organizations cater systems to the way humans actually work and behave.

Michael Chavez, Vice President of Marketing

Michael is responsible for all marketing strategy, product marketing and communications at ClickFox, an Atlanta-based software company pioneering Customer Behavior Intelligence. The ClickFox patented technology enables companies to transform existing customer data into true, objective insight by showing customers' step-by-step behavior within self-service systems.

