

# Data Mining Uncovers Keys to Retention, Doubling Customer Life Cycle

## \$12MM Incremental Revenue

Sometimes the answers to your most critical challenges are right at your fingertips. The key to solving those challenges lies in asking the right questions and then utilizing already-existing data to formulate solutions. ProcessArc, a consulting firm specializing in client experience and business transformation, assisted a client who believed they had an issue with customer retention.

“The first task was to validate if they did have a retention problem,” explained Sheila Shaffie, Managing Director of ProcessArc, who spearheaded the efforts with this client, a leading provider of end-user support for software applications. Some of their customers were staying only a few months while others maintained service contracts for several years. To validate the client’s theory and then create and implement solutions to improve retention, Shaffie used the Lean Six Sigma DMAIC framework.



## Learning the Business & Developing Hypothesis

First, ProcessArc learned the client's business from end to end by studying service dashboards and metrics and reviewing historical data, operational processes, client contracts, pricing models, and service delivery channels. The next step was to facilitate a brainstorming session with the client's executives to gather their insights regarding the key drivers of customer retention. This was the point where asking the right questions and facilitating discussion was crucial, Shaffie explains. Formulating specific questions, and then seeking data to help answer those questions, creates the foundation for a good data mining exercise—without the right questions, the result is a useless data churn.

Utilizing the executives' input, a list of hypotheses about the business was generated, which served as the basis for creating a list of 10 to 15 potential drivers for retention. With these hypotheses in hand, ProcessArc worked with the operations staff and formulated a list of data points to compile that would ultimately help to either validate or disprove the hypotheses. The list included 50-60 unique data points across the business. "The client had all the data, but they didn't really know what they should be looking for until we had the hypotheses session to help them focus on their key elements of retention," Shaffie recalls.

## Mining Data for Nuggets of Wisdom

At this point the ProcessArc team began data mining, a technique for making sense of data to find common threads that explains behavior. As the name "mining" suggests, this technique helps uncover "hidden" information in data sets. A statistical analysis model, Survival Analysis, was selected to mine the client's data to uncover the reasons/drivers as to why some customers were loyal to this service provider and why others chose to leave. Shaffie explains that data mining is an iterative exercise consisting of running data, validating it against reality, and gathering more data as the cycle repeats. Eventually, Shaffie says, the statistical analysis comes up with the "golden nuggets" that can help resolve the issues at hand.

Of the 24 variables studied, ultimately six— **effective call resolution, access method to service, solutions provided, relationship manager, service type selected, and customer's industry base**— were deemed as the crucial drivers of retention. Although the client was collecting data around all of these drivers, they did not have metrics in place for monitoring them, and thus were not able to detect trends and potential risks to the business.

## Listening to Customers

Once these six critical elements were identified the Process Arc team contacted both existing customers and those who had left the service provider in order to validate these issues. This process is aptly called listening to the voice of the customer (VOC). Shaffie recalls that the interviews did indeed confirm the hypotheses and the data surrounding them. Essentially, the VOC activities substantiated that retention issues were directly linked to missed customer expectations, needs, and wants. After the root causes were validated through the VOC activities, as well as historical data and process analytics, it was time to develop solutions to address the retention issues.

## Extending Relationships

Several improvement solutions came out of the data mining and VOC exercises. As a result, the client is now developing dashboards and metrics that its relationship managers will use to proactively monitor data and serve as early predictors of potential retention problems. This new monitoring platform creates a continuous improvement mindset and enables the organization to keep its eyes on possible risk in the business. Other key changes include modifications to the pricing model for better customer value as well as updated roles and responsibilities for managing client relationships.

“Because we were able to find the key drivers of customer retention the client is making fundamental changes to how the business is run. Based on our calculations, these changes (when implemented and controlled) will improve the client’s average retention by 2 to 2.5 years, which doubles the average retention,” Shaffie explains.