Executive complaints call centers were used to drive back to preventive changes and new innovations. This is further back than "root causes," in view of the need to optimize preventive solutions. The effort required no more energy—instead harnessing the customers'. And a little science.

Opinions on the extent of the issue varied from slight to severe. The first step was therefore to chart performance and keep it within ranges, and provide real-time updates to all involved. This also galvanized the effort. An unreasonably ambitious goal was soon overtaken, and the bar of impossibility for the organization was lowered.

Predictive modeling found variables identifying who the complainers were, but little about how to prevent complaints. Except one: immediately reducing them by about a dozen per week. All on large issues of C-level interest and angst.

A five simultaneous design set was prepared during discovery sessions with each department. This approach recognized that while the problems could start anywhere, the preventions would be in all call centers. The approach pulled solutions through the call centers even though the problems were rooted further back and across all departments.

By The Numbers:

100
INTERVENTIONS

1.27×10^{30}
COMBINATIONS

Off The Radar

REDUCED EXECUTIVE COMPLAINTS

The design was set up to accommodate up to 100 interventions with mutual-orthogonality built in through randomization. Events that festered for a while then eventually exploded into an executive complaint could originate several weeks back, due to delay. The design set was therefore set up to be "pulled" though the departments, in such a way as to look back over recent weeks tagging to every rep that had touched it. Reps were re-assured this exercise was not to find fault, but to know what preventive tactics worked with statistically pre-designed hindsight. The 100 interventions evaluated 2^{100} management policies which is a number beyond human comprehension (1.27×10^{30}).

In terms of quantifiable improvement:
Management actions monitored/fueled by the galvanizing control scheme reduced executive complaints by about 3 in 4. Executive priority moved to more pressing matters including predictive modeling. The predictive data was clear that the virtual elimination of complaints was possible, by deploying the 5-design set.

WHY WORK WITH NOBI? The enormous statistical design needs strong theory and experience to execute without added workload/resources for the organization. The galvanizing control scheme appeared easy when used but needed time series modeling to find a working stationarity as a basis. Non-parametrics, the pull-strategy, the data "look back" and the five simultaneous designs are advanced statistical work. The early data mining requested was for a "root cause" analysis of complaints and to this was added a request by the scientist for data on non-complainers for discriminant analysis. The scientist has to know how to respond to IT challenges that there is not a problem with non-complainers and explain why it is precisely that we need them. Answers lie in the anomalies.