

"Analyze This: How Data Mining and Intelligent Applications Converge to Ensure Network Profitability"

Sifting through the moray patterns of network data can be a tedious and unpleasant task—especially if the process to catch fraudulent activity only ends with a simple termination of service. Retribution for such oversight is far from profit enhancing, but the survival instinct to stem losses from revenue assurance is gaining momentum. And fortunately for the service provider realm, the tools by which this analysis is made possible have boiled themselves to pedestrian applications on the PC desktop. No longer is data intelligence a black box of magic, but rather a contemporary approach to solve an age-old problem: *insight*.

Albeit, the service provider community has relegated itself to the Dark Ages of waiting until the concept is proven, but the time for mining subscriber data is broadly being implemented around the globe. When telecom fraud analysts first came on the scene in the late 1980's, their mission to rid the network of hackers and revenue siphoning members rallied a noble cause. The breakdown came quickly though when productivity couldn't be justified against the manual labor that stacked alongside sheer volume. Data analytics—in its latest form—lends an automated and intelligent solution to thwarting misuse of telecom assets that diminish a return of service quality. Not to mention, profitability is important too.

At last month's SPSS Data Mining Summit in Paris, France, CEO Jack Noonan spoke of the future for business intelligence and how such investments are paying real-time dividends to companies across every industry. To hear Noonan evangelize data analytics was a siren's song to telecom—a reality wakeup call in the making. In fact, the largest contingency of attendees and presenters at the event were squarely rooted in the heart of the telecom industry. From Alcatel to Vodafone, the focus was on shrinking losses and building predictable revenue from the network environment. All of this was made possible by advances in proven deployment of data analytics.

While wandering between sessions, we sat down with a representative from ECtel Ltd. of Israel for a hands-on demonstration of their MineView suite of applications for detecting fraud patterns and abnormal call patterns. To behold the simplicity of such analysis and visualize its myriad capabilities is a quantum leap forward in harnessing the core intelligence previously understated by network data. Coupled with SPSS' flagship workbench tool, Clementine, it takes only a matter of minutes to move from zero intelligence about subscriber behavior to mass acceleration of detecting suspicious call activity. That which took months of configuring, implementing, and training can now be accomplished in hours—literally. The trend seems virulent today as SPSS boasts an impressive roster of clients across every major telecom provider in wireless and wireline networks.

But while the core of SPSS is firmly grounded in the statistical sciences arena, the future direction of the company hinges upon making data analytics work for the everyday manager. Noonan believes that his company will bring statistical accuracy and meaningful insight to nearly everyone involved with day-to-day business operations. Taking away the white coat academics and mind-boggling equations of statistics can be a daunting goal, but the

obvious demand for data intelligence has reached critical momentum in a marketplace where knowledge can be a strategic weapon. Actionable and conclusive interpretations not only help service providers grow lean, but grow period.

Cast aside the doubts and nay Sayers of business intelligence in the past. As the telecommunications industry morphs into a market of converged services and platforms, the ability to achieve real-time conclusions and foresight will be the watershed objective for so many. In fact, it is more about surviving through insight to the subscriber than anything else.

