



## **Future Oriented Analytics:**

Traditionally business analytics have focused on the past in the form of reports summarizing what has happened.

Newer analytics such as data mining not only provide deeper business insight into what has happened in terms of what is driving growth, attrition, loyalty etc. but also provide much needed visibility into the future. Using predictive modeling techniques one can identify factors that drive customer loyalty and churn (in the telecom and financial areas for example) and arrive at future oriented customer segmentation that show where customers are going to go instead of where they have been. Using survival analysis based forecasting one can achieve unprecedented accuracy for long range forecasts for the customer portfolio that allows pro-active management of net adds and other KPIs. Increasingly there attention to the entire customer lifecycle and life time value, especially future life time value of a customer instead of just a head count or aggregate revenue statistics. What is interesting is that often such a macro focus or attention at the yield management level is initiated at a high level where the overall picture and trade-off are clearer instead of the at operational level where tactical goals such as customer adds (e.g. in the telecom area) can subsume one's attention.

For instance in the telecom area, it is well known that customer attrition happens either due to customers going to another provider or just due to a sharp decrease in usage due to the purchase of an additional phone. If we know accurately how many customers per day, per week and per month are going to leave or exhibit a drop in usage over the next 6 months to a year then one can proactively plan for net adds that achieve a target for the customer base and aggregate usage. Such a long range accurate forecast is possible today by innovations that have extended traditional survival analysis to the business domain. This results in effective use of capital for acquisition and retention instead of the hit and miss and fine tuning at the end of each quarter.

There is another important area where intelligent analytics can help manage the enterprise. Increasingly there is a wealth of reports that all need to be browsed in order to locate the few areas where something interesting is happening. Using intelligent monitoring of reports and KPIs, one can automatically determine and highlight only those aspects of the report where something unusual is happening. Statistically important deviations from the norm are automatically flagged and brought to attention, which can then be reviewed manually to see if they can be explained reasonably or require further investigations.

This approach can also be used to review and compare financial metrics to norms that isolate suspicious activity.

These newer data mining and related analytic techniques can be applied across different verticals and can play a critical role in synthesizing new strategic directions that lead to a competitive advantage.