



Winning in a Nebulous World

Heuristic Analytics can improve your
company's bottom line under
uncertainty

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Senior managers are called to make decisions constantly -- often quickly, in the face of turbulent or rapidly changing situations. And although managers often have access to more data than they have ever had before, mobilizing that data at the right place at the right time to help in decision-making has been difficult. Recent studies [1] done by the IBM Institute of Business Value and MIT Sloan Management Review show that organizations leading in usage of analytics believe they were three times more likely to outperform those just investigating analytics as a business tool. And, not surprisingly, a recent survey done by Accenture [2] found that about 40% of all major business decisions are based on leaders' intuition. If it is so profitable to make decisions based on analytics then why so many decisions are still based on intuition? To solve this puzzle Innovatorium has used a new technique called "Heuristic Analytics". It helps you mobilize the right tool at the right time to improve the quality of decision-making for you and your firm.

As a matter of fact every business decision is based on data even when made by leaders that don't rely on analytical tools. Based on their experience picking the right data and spotting unusual patterns some leaders are better at making optimal decisions using only their intuition. The real question is not whether analytics is superior to the intuition but how to optimize their combined potential.

In the world of business decisions among the models for data uncertainty some of the most powerful and

well recognized are Gomorov's [3] (the data is known, unknown, or unknowable) and Courtney's [4] (the four levels of uncertainty).

If data is entirely known (first level of uncertainty) then by using Descriptive Analytics companies could better understand their cost structure plus sources of revenue and optimize every aspect of their business decisions. Data is so stable that by looking at the history we can not only understand the past but also predict the future. The history repeats itself.

If data is dominated by the unknown (second or third level of uncertainty) then Predictive Analytics is the optimal approach to predict the future. We have to consider what if scenarios and extrapolate the past to predict the future. Data is not stable enough to make us believe the history will repeat but we still expect the future to rhyme with it.

It is undeniable that under these circumstances when done right the traditional analytics can optimize or significantly improve the results of business decisions.

However in every business very important data is at least for some time dominated by unknowable (true uncertainty) and no traditional tool can tackle the complexity of even relatively straightforward cases. Although data is very unpredictable we could forecast in the future patterns of the past, a self-similarity reminding the fractals. Businesses love unknowable because it could bring enormous profits without much competition but are concerned about the dangers it may conceal.

Based on the latest insights from psychology and some of the most advanced mathematical algorithms Innovatorium has been building models to predict the future, looking in the past for seeds that may survive and prosper. The new technique, Heuristic Analytics is based on algorithms working the way your mind does thin-slicing information, rejecting noise, and finding relevant patterns thus enhancing more than inhibiting intuition. It needs less data, is faster, connects more intuitively with its users and gives you support even when you face the unknowable.

You have more data than you ever had before, but how are you mobilizing it to make better decisions when you're under fire? How can you base your next strategy on data from the past if you can't see anything in the future? How often have you wished you could move analytics into your personal toolbox more effectively, and more frequently? How can you use what you already have and without major further investment or change do the scientific equivalent of fast and frugal decisions?

If you believe in human intuition, want to explore effects of unknowable on your organization, or are seeking alternatives to your complex analytical problems, contact Innovatorium today.

References

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