DATA AND DECISION MAKING

Analytical applications provide a chance to see through the convoluted, shifting data spaghetti and glean out the most pertinent information from it. The starting point always has to be 'what do we need to find out' backed by a strong 'why' and then move to 'How can we achieve this?'

Sometimes, we fail to understand the intrinsic difference between data, information, and knowledge. Data is unprocessed content. Information is a higher abstraction which provides additional meaning to the data. Knowledge is application of the underlying information or data - It's about true understanding of 'what lies beneath'. The important thing to note is that more data doesn't mean more knowledge. Even more information doesn't equal more knowledge. In fact, just the opposite may be true.

Good decision making doesn't just need ALL the data that is available. In fact, good decision making demands limited but relevant data, what is known as KPIs - key performance indicators. E.g. KPI for recruitment team is recruitment increase percentage. It can be derived by number of new recruits this year over previous year. You might capture a whole lot of other information about the new recruits, but most of it is peripheral to the success of the recruitment team. A doctor doesn't need to record all your physiological variables to correctly diagnose a problem. Just 3-4 key indicators are enough to tell him if someone is having a heart attack. However, as we humans believe that more information one can acquire to make a decision, the better. This is known as information bias. Extra information cannot affect our decision – what is not worth knowing is not worth knowing. It is critical to limit the content of any design support system - be it a warehouse, or operational data store.

Also, some of the really good decision making is intuitive. With just handful of information and unconscious rapid cognition, we can arrive at an accurate judgement very quickly. It is what Malcolm Gladwell calls thin-slicing in his fascinating book, Blink. It is a powerful, sophisticated tool for taking quick decisions with minimum information. In fact, in the face of mountains of data, this ability no longer functions. Intuition, by definition is fragile and short-lived, and too much information can often paralyse it

WHAT TRUE ANALYSIS DEMANDS

Real, meaningful analysis needs time and distance. There is no benefit in seeing all the variables right this second to be able to make a decision about the 'next XYZ strategy'. Over a period of time, the data will be sufficiently stable to be able to give a reliable picture of current business trends and decide on how to tackle the future ones. Distance refers to the fact that one doesn't need granular, detailed data for analysis. One needs to zoom out slightly to see it in a broader context. Summarized data rolled up at reasonable levels spliced across relevant dimensions will provide a more substantive, vivid depiction of the overall performance and help sharper, quicker decision making.

It's a fallacy that ALL the answers are there in the data we capture. A school might be deemed to have exceptional teaching model based on the performance of the students at Grade 10 tests. However, this conclusion doesn't take into consideration the fact that the school has a rigorous test based admission process, ensuring only the best students get admitted to the school. No **school maintains un-admitted** students on their rolls. This is called survivorship bias or problem of silent evidence.

The other trouble is inability to predict cataclysmic events like earthquakes, terrorist attacks, fires or for that matter, a recession. Such is the disruptive force of these events that the forecasting and predictive models just

don’t stand up to scrutiny. This, at a time when you expect such tools to guide you the most. The need is to look beyond the obvious.

Massive data stores give us a sense of being all-knowing. We think we can just immerse into them and come out enlightened. The truth is not that simple. In reality, the tools are as good as the data they contain and the people that use them.