Over the years, I have advocated vigorously for the use of facts and data when analysing and assessing risks, uncertainties and levers. I fully stand by this and will continue advocating for using data as well as I firmly believe there really is no such thing as "qualitative analysis".

Prioritizing uncertainties, risks and levers based on perceptions is dangerous given that human beings are biased in a multiplicity of ways and hence outcomes may be as far from the real world as one can possibly imagine. Furthermore, research shows that there is no telling in which direction a human assessment can be wrong.

An example in point. Many people are really worried about the prospects of a terrorist attack, yet extremely few even know someone who has actually had the experience – on the other hand, few people are truly worried about driving despite the fact that most people have or know people who have been involved in traffic accidents.

To avoid errors emerging from such biases and leading to poor prioritization of risks, uncertainties and levers, and subsequently defining which issues to do what about – we must leverage data and facts to be even reasonably certain to "get it right".

However, we must also leverage insights and knowledge. Without careful reasoning there is a severe risk assessments and analyses will be totally misguiding based on facts that are really not pertinent to the issue at hand.

One "fun" example I used at a presentation to Danish banking people some years ago. Trading company A has a revenue in period 1 of 100 which was not impressive. In period 2 it jumped to 300, in period 3 to 900 and in period 4 to a staggering 2700. Now company A management looked at this and found that if this trend continued for 2 or 3 more periods, they would become very rich, but also that they had to rethink their supply chain. The "fun" comes in when we look behind the data and find that each period is a week, period 1 is the last week of November and Company A is selling Christmas trees. Period 4 will be the last week before Christmas and the likelihood of period 5 showing a bigger revenue than period 4 is non existing. Company A management forgot to insert "intelligence" while reading the data.

Now the banking people smiled and laughed about this story, until I showed them the development of the housing price index in Denmark from 1990 through 2006 which was a curve, which grew at an ever-increasing pace. Then I asked the bankers – "*What did you tell your customers by the end of 2006?*" and got no tangible response back. Then I added 2007 and 2008 data to the chart where the financial crisis led the pricing index to take a severe drop. Again, I asked them, "*What did you tell your customers by the end of 2008?*". The smiles among the audience faded.

Following up, and based on newspaper articles, I gather current bankers are either a new generation or have forgotten all about the financial crisis which incidentally started in the mortgage business, as it seems they advocate buying at "all costs" as prices are "exploding" and "you cannot loose", at least when buying property in major cities. In Denmark at least, they are significantly less forthcoming when we talk rural housing.

Please note. The above story is not aimed to put blame on bankers. I am certain similar examples can be found in most any industry.

When I was in high-school and was taught about statistical correlation, I was also warned about using correlations without thinking it through. The example used by my math-teacher was the myth that storks arrive with the new-born babies. A correlation analysis in Denmark of the number of storks and the birth-rate of children has shown an amazingly high correlation. "*That. Ladies and Gentlemen*" my math-teacher said using the rather formal expression he used when he had particularly important

messages, "*is a coincidence. Storks do NOT come with new-born babies, irrespectively of how great a correlation parameter you may be able to find*".

My point is:

- DO look for data and facts upon which you can make your analysis and define your inclination to do what you think needs to be done about any specific risk, uncertainty or lever.

  Douglas Hubbard has shown in his books "The failure of risk management" and "How to measure anything" that in real life, we do have data to support analytics. Professor Bent Flyvbjerg of Oxford University describes and advocates this as "Reference class forecasting".

Also:

- DO remember to intelligently ensure that the data you use are truly valid indicators related to whatever you analyse.

  The harder it is for you to describe the link between your measured data and the outcome you are focusing on, the more likely it is, that you are using poor data – and poor data can be worse than no data.

Now, you may wonder if human biases will not affect your "linking" efforts, and yes, they may. Hence it is important to have these links described as "technically neutral" as possible. Leverage whatever connections are real:

- Housing prices are unlikely to grow rapidly when interest rates increase – but it does happen. That is called "inflation" a concept many people have almost forgotten.
- Oil prices are unlikely to grow when the GDP growth is declining as demand is highly correlated with "activity" i.e., GDP development. Yet, it can happen if e.g., the OPEC manages to control output sufficiently.
- In times of financial slow-downs some industries like automotive, travel, hospitality, etc. are likely to see decreases in demand whereas others, often based on "small indulgencies" like beer, toys, etc. are likely to grow as people find life unbearable without any indulgencies. The picture shifts in "bull" periods where people buy cars and travel on holidays as "times are good" and the need for the little indulgencies is less eminent.

I am certain you can list many more such linkages, relevant to your business.

Management, risk or otherwise is nowhere near a "minds-off" exercise, and the best performers are those who leverage facts and valid insights to direct decisions to leverage intelligent risk taking.

This does not mean that managers/executives need to be analytical wizards. However, in high performing organisations, they will need to have someone who have very strong analytical skills and business insights to ensure valid and intelligently digested insights are brought to those making decisions. This is where the risk managers/risk advisors come in and earn their keep.

Good luck

Hans Læssøe