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FORUM VIEWS

INSIDE

BETTER PERFORMANCE WITH THE DECISION INTELLIGENCE CUBE

Dr. Roger Moser
Chairman, **SatSure**
Senior Lecturer
Macquarie University
(Sydney, New South Wales, Australia)

Decisions: The obvious yet mostly neglected performance indicator

In today's fast-paced und often highly uncertain business environment, making effective decisions is crucial for leaders and their companies to stay competitive. More than a decade ago, a study by Bain among 800 international companies showed that the quality of decisions of executives and their companies' financial results correlate at a 95per cent confidence level for every country, industry and company size they studied.[1] What is interesting for any investor is that the top-quintile companies with respect to the quality of their decision-making generated on average total shareholder returns nearly 6 percentage points higher than those of other companies.

Consequently, financial investors are well-advised that when they analyze the reorganization plans of CEOs and their companies, they put much more focus on whether these plans enable optimal decision-making processes rather than their impact on classic organizational structures along products or markets. Since Bain's original study, more research has confirmed that any organizational structure or reorganization can be completely dysfunctional if it is not aligned with the required decision-making processes on operational, tactical and strategic levels. But how can you assess a company's professional approach to decision-making?

Decision Intelligence: The new boy/girl in town

Solid decision-making is a complex process influenced by various factors, including high-quality information, human biases, different opinions, and the need for consensus among decision-makers. Organizations are increasingly turning to the concept of Decision Intelligence (DI) to navigate these challenges and improve decision outcomes.

In short, Decision Intelligence is a holistic approach to decision-making that combines human judgment, big data analysis, and technological advancements. Companies like Google, IBM, Deloitte, Cognizant or SatSure recognize the significance of DI and have incorporated it into their operations and the solutions for their clients. SatSure, for example, leverages 'Decision Intelligence from Space' to support banks in India along the entire agriculture loan cycle for farmers or the planning and financing of infrastructure projects.

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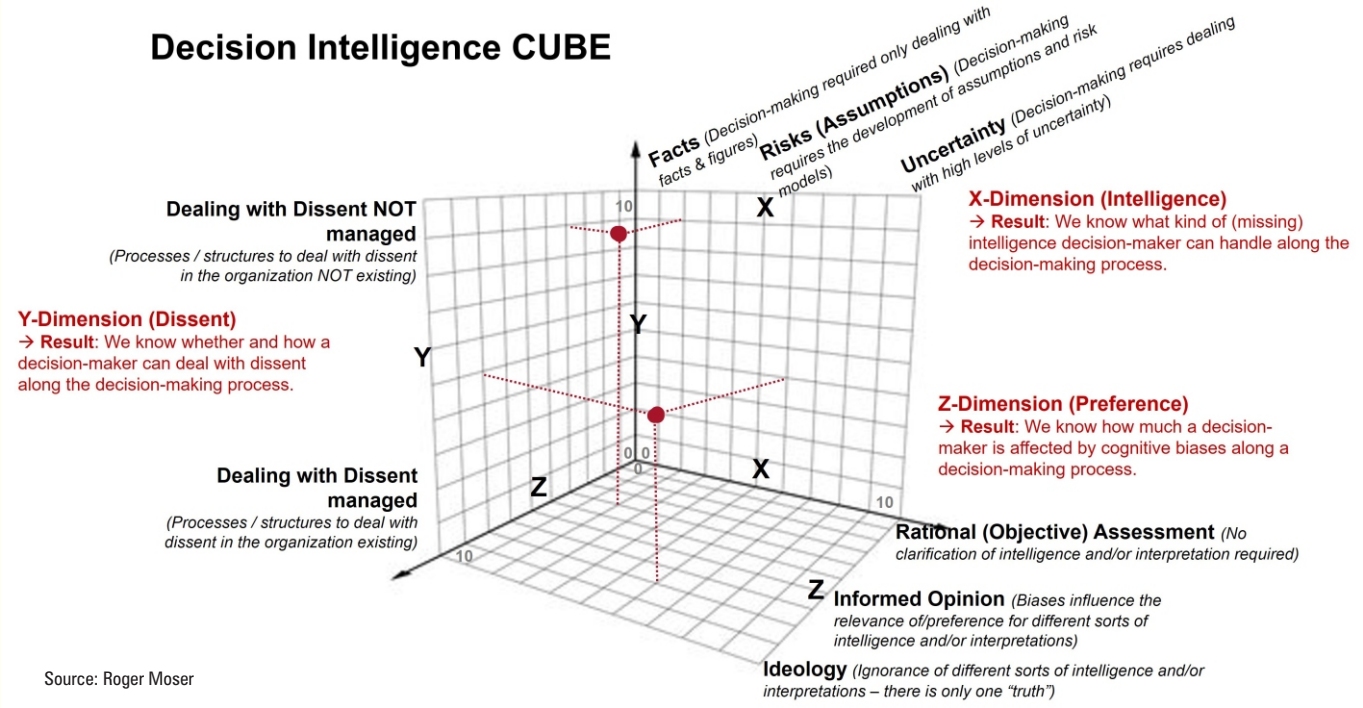
In addition, Gartner Group[2] has recently identified Decision Intelligence to be at the Innovation Trigger of the Hype Cycle for Emerging Technologies in Finance. For Gartner, DI is a practical discipline used to improve decision-making by explicitly understanding and engineering how decisions are made, and how outcomes are evaluated, managed and improved via feedback.

Understanding the decision-making approach of a company from a holistic perspective: The Decision Intelligence Cube

The Decision Intelligence Cube (DI-Cube) is a work-in-progress concept that we at SatSure have developed when helping executives and companies to analyze their decision-making behaviour, attitude, and structures (Exhibit 1). The DI-Cube consists of three dimensions to understand a company's decision-making from a holistic view:

Exhibit 1: Decision Intelligence CUBE



Source: Roger Moser

X-Axis (INTELLIGENCE Dimension):

When analyzing an executive's or an organization's decision-making behaviour and structures, we first assess how facts are gathered, assumptions are developed, and uncertainty is dealt with. In our experience, many companies are today well organized to gather facts & figures but have no consistent approach to develop and test assumptions, let alone established intelligence acquisition processes when dealing with uncertainty. Based on this assessment, we then identify opportunities to improve a company's intelligence-gathering processes when preparing decisions.

Possible Assessment Questions:

- Are our decision-makers framework-proficient enough to select the right frameworks and models?
- Do we invest in the right technologies to gather and process intelligence?
- How do we develop assumptions about future developments, and can we identify those developments that genuinely affect our company's business model?
- Are we able to think in alternative business context scenarios?
- Do we have principles in place when we face true uncertainty?

Y-Axis (DISSENT Dimension):

Once we understand how executives or organizations gather the intelligence they need, the next important dimension is how they deal with DISSENT among executives along the decision-making process. Dissent can happen with respect to different conclusions from the intelligence gathered or what kind of facts or assumptions are essential to decide in the first place.

The y-axis of the DI-CUBE is probably the most underestimated aspect of successful decision-making. Based on my experience working with executives and several research projects, I believe that this aspect is currently the most underrated factor of good decision-making at companies because you can neither just buy a piece of software and automate it nor do executives often invest the time it requires to deal with it.

Possible Assessment Questions:

- Are structures & processes in place that allow for identifying dissent among stakeholders regarding relevant facts and assumptions / the interpretation of the intelligence gathered? Are they effective?
- Are structures & processes in place to deal with dissent and increase the level of consensus among the relevant stakeholders of a decision? Are they effective?
- Are principles established that help decision-makers to decide when to 'ignore' disagreement among the stakeholders of a decision? Are they accepted?

Z-Axis (PREFERENCE Dimension):

Finally, the z-axis is probably the most difficult to evaluate and change. It covers assessing how executives or organizations prioritize the relevant facts and essential assumptions to base their decisions on and how they deal with dissent within or outside the organization.

What does this mean? Well, there are some decisions where you don't require any dissent assessment because the required facts & figures or assumptions that matter are well accepted by all major stakeholders (e.g., criteria to evaluate a customer along a KYC process etc.). These kinds of decisions can be made based on rational assessments with no cognitive preferences (biases).

Then there are many decisions where executives are actually paid well to bring their interpretation of facts or conclusions from assumptions to the table to finally make a call. These kinds of decisions are based on the expertise, experience and human creativity of executives (i.e., their cognitive diversity). This is where we want informed opinions to avoid undesired cognitive biases.

> **Decision Intelligence as an approach and the DI-Cube as a framework offer organizations a structured approach to better decision-making, considering various factors such as advanced technologies when gathering intelligence, organizational behaviour when dealing with dissent, and insights from neuroscience when fighting cognitive biases.**

Finally, some decisions are neither based on rational assessments nor informed opinions but on different levels of ideology. This kind of decision-making is very difficult to change because it is strongly connected to the beliefs and (cultural/personal) values of decision-makers. Such an approach can be part of an organization's DNA (e.g., the Catholic church) or the mission statement of a company (e.g., there is a large retailer in Switzerland which doesn't sell alcohol in their shops based on the founder's 'mission statement' - although it would be very profitable, and all competitors are doing it). However, too much ideology can negatively affect an organization's efforts to invest in the gathering of facts or the development of reasonable and solid assumptions as a basis for decision-making (i.e.,it negatively affects the INTELLIGENCE dimension). The same logic applies to such an organization's ability to deal with dissent (i.e.,it negatively affects the DISSENT dimension).

Possible Assessment Questions:

- Is the leadership clear about what level and kind of biases are acceptable to influence their organization's decision-making?
- What kind of structures & processes are in place to prevent unwanted cognitive biases?
- Does the leadership have specific values or beliefs that prevent selected decisions from being questioned by stakeholders? Are these decisions likely to affect the performance of the company?

Good decision-making isn't only about data. It's about dealing with dissent and cognitive biases

Obviously, each of these three dimensions requires a much more detailed assessment than what I have been able to offer here, but my experience shows that these three dimensions cover about 80% of what can go wrong along a well-designed decision process - at the individual or organizational level. Most importantly, the DI-Cube highlights that it is not only the (big) data perspective (INTELLIGENCE dimension) that matters (and where most of the current management or investor attention goes to) but also how executives deal with DISSENT, how they reflect on their IDEOLOGIES and how these dimensions affect the quality of their decision processes.

In sum, Decision Intelligence as an approach and the DI-Cube as a framework offer organizations a structured approach to better decision-making, considering various factors such as advanced technologies when gathering intelligence, organizational behaviour when dealing with dissent, and insights from neuroscience when fighting cognitive biases. While data-driven approaches have been in focus for a while and cognitive biases are often discussed in the context of diversity & inclusion, investors and executives should pay more attention to how organizations create consensus and embrace dissent along the decision process. It empowers organizations to navigate complexity, reduce biases, and make more informed decisions contributing to their long-term growth and financial prosperity.

1. https://www.bain.com/insights/decision-insights-1-score-your-organization/
2. https://www.gartner.com/en/newsroom/press-releases/2022-11-28-gartner-releases-first-hype-cycle-for-emerging-technologies-in-finance

Dr. Roger Moser, a Swiss national living in Australia, serves as faculty at Macquarie University, Australia, University of St.Gallen, Switzerland, and the Indian Institute of Management in Udaipur. Dr. Moser also serves as Chairman of the Board of Directors of SatSure AG - a Decision Intelligence from Space Providerheadquartered in Bangalore. SatSure leverage advances in satellite remote sensing, machine learning, big data analytics and cloud computing to create products and solutions which help enterprises, including Indian banks and infrastructure companies, and their people to make smarter decisions.

He is also a thought leader in Decision Intelligence and coaches executives in improving their impact and performance through a combination of the latest insights from managerial, social, natural and neuro-science. In the past, Dr. Moser established the BMW-Endowed Chair at China-Europe International Business School in Shanghai, China, and the Airbus-Endowed Chair at IIM Bangalore. He also supported other MNCs such as Daimler Trucks in developing their future business models in new market and technology developments. Besides numerous academic publications, he is regularly publishing about Decision Intelligence in his LinkedIn newsletter "Decision Model Innovation".