

## Abstract

### *Neuro-Strategy®: Decision Making in Uncertain Times*

Strategic decision making is a pervasive human activity. On average a human mind takes about five thousands decisions a day. None of them is simple if we consider the intricacy of steps needed by our brain to carry out any of them. Nonetheless, this complexity can be organized and most importantly interpreted to become a useful depiction that addresses the process from a less daunting position. This is also why human performance in decision making terms has been the subject of active research from several perspectives.

- From a psychological perspective, it is necessary to examine individual decisions in the context of a set of needs, preferences an individual has and values they seek.
- From a cognitive perspective, the decision making process must be regarded as a continuous process integrated in the interaction with the environment and interaction with other individuals.
- From a normative perspective, the analysis of individual decisions is concerned with the logic of decision making and rationality and the invariant choice it leads to.
- At another level, and taking these three perspectives into consideration, it might be regarded as a problem solving activity which is terminated when a satisfactory solution is found.
- Therefore, decision making is a strategic reasoning and emotional process based both on explicit, and tacit, or also so called unconscious assumptions.

Any decision making takes place under uncertainty. **Uncertainty** is a term used in subtly different ways in a number of fields. Yet it always applies to predictions of future events or to the **unknown**. Following Glimscher, full professor of Neural Science, Economics and Psychology at NYU, I consider uncertainty as inherently positive. All biological individuals making decisions need irreducible uncertainty as a source of random options. Uncertainty is what gives meaning to strategy and life at large. Without it, decisions would not exist.

A critical factor in the success – and often survival – of any living organism, and more specifically of human beings, lies in its ability to make effective strategic decisions. In the instance of business organisations, this skill is of increasing significance in today's world, where the nature of these strategic decisions is becoming more uncertain – as currently seen in the turmoil being experienced by the global economy.

In order to properly deal with uncertain systems – whether economic, social, organizational or psychological – desires and intentions of the agents involved in the decisional process need to be surfaced. Unconscious assumptions and values support any decision making. Neuro-Strategy® is a term that I have coined to indicate the

advantages that can be drawn by using interdisciplinary perspectives from the neurosciences to shed light on the way strategy is being formed. It is nothing else but a projective technique based on the fundamental premise that our mind runs on *valuation functions* and offers the means to tap into the constructs that are the building blocks of these functions – thus to also tap into the unconscious assumptions and values. Each of these functions is a *negotiating intermediary* between the outer world and our conscious-un-conscious minds. The intermediary produces abstract concepts like ideas, and also linguistic constructs as well as visual images. The purpose of Neuro-Strategy® consists in projecting what is at the level of awareness and unawareness, synthesising the individual map of desires and strategic intentions, comparing the maps between different agents to sort differences and deep similarities that will produce a collective landscape, to investigate relevance of clusters of constructs with respect to the goal, to make surface the cognitive biases and contradictions that may run counter the pre-established goal and using the approach to aid in creating a sustainable method to prevent generalizations, deletions and distortion of information while addressing strategic decision-making. In sum, although uncertainty is irreducible, what counts in strategic decision-making can be simply stated as a way to generate an understanding of the underlying factors that constitute either uncertainty or certainty.

Over the past 15 years, I have been asked to develop methods that provide enduring and useful means to approach the decisional process not just from an individual, but also from a group and a strategic, organizational perspective. The set of different tools used can be summarized in what follows. I call them the tools of the wise Neuro-Strategist®:

1. **Be a Mirror for Others: Watch what people do to allow them to change.** The first is the simple idea of observation—going into a space and watching what people do when they make a decision.
2. **Images that Speak: Let people tell you what they do not even know they know.** The idea that we think in images is not that recent, yet it is a very powerful approach to tap into the value functions of our mind.
3. **Sources of Insight: Interview people as if you were invisible.** The third tool is interviewing with a laddering process. People discuss those images they have selected and chosen and which are also the artefacts that embody their value functions.
4. **Prepare for an Expedition: Keep in mind your innocence and be ready for good surprises.** I then work on the transcripts of the interviews, add the images and even include digital collages, and prepare cognitive maps that outline the key constructs making up for the value function.

Finally, I would like to conclude by indicating seven key steps in checking whether the procedure of making decisions is aligned with the Neuro-Strategic® method.

- I. Once the goal has been determined, break the process into smaller units of analysis
- II. Adopt a holistic approach to each unit that includes both the conscious reasoning as well as the intentions and desires
- III. Work on the underlying explicit and tacit assumptions to map the constructs
- IV. Use interviewing techniques that decode images and translate them into narratives
- V. Analyze the contradictions and dilemmas that exist amongst the different cognitive constructs
- VI. Reconcile the map by using those clusters of construct more coherent with the established goal
- VII. Use the holistic cognitive map to implement strategies.

Last but not least, for Neuro-Strategy®, the best “picture” looks like “an expert you” enjoying every single moment of the experience.