A NORMATIVE THEORY OF ATTENTION

Is selective attention always beneficial? Attentional selectivity, problem knowledge, and organizational performance

"Not everything can be attended to at once. Too many signals are received. Too many things are relevant to a decision. Because of those limitations, theories of decision making are often better described as theories of attention and search than theories of choice. They are concerned with the way in which scarce attention is allocated." (March 1994: p.124)

Research Gap: Performance implications of selective attention patterns remain poorly understood (e.g., Ocasio, and Wohlgemut, 2010; Ocasio, 2011).

A firm’s attentional strategy (=selectivity and focus)

How (and when) does selectivity in attention may affect organizational performance?

On which choices should an organization focus its attention?

Central Argument: Attention may have positive or negative performance implications depending upon the attentional strategy of the firm and the complexity and dynamism of the choice problem the organization faces.

Standard NK Performance Landscape Model (Levinthal 1997)

- Mapping between a firm’s choices and performance (N=Number of choices, K=Interdependence among choices)
- Attention in the NK model:
  - affects along which dimensions organizations search locally.
  - is reflected in the probability that a particular choice is selected in the local search process.
  - may reflect “problem knowledge”
- Problem Knowledge
  - Understanding which choices are at the core or periphery
  - “Coreness means connectedness” (Hannan et al.1996)

Static Choice Problems

Dynamic and Complex Choice Problems

Underlying Mechanisms:

- Here, performance is not simply a function of the extent of exploration
- The allocation of attention only affects on which dimensions the firm focuses its search and how strong this focus is (but not the search breadth)
- Searching along peripheral choices lead to continuous improvements but, at the same time, preclude subsequent changes of core choices (→competence trap)
- Searching along core choices renders all prior adaptations of peripheral choices worthless
- The complexity and dynamism of a choice problem determine the base rate risk of ending up in a competence trap

Dark Side of Attention

Local Search=Exploitation?

What are a firm’s core elements?

Problem Knowledge vs Solution Knowledge

Even if a strong focus of attention to core choice is beneficial, if it is too strong, there are negative effects.

Searching along peripheral choices → exploitation

Only the out-degree matters (i.e. influence on other choices); the in-degree has no effect (i.e. dependence)

The value of understanding the structure of the problem vs. the value of having a more less complete/correct solution to the problem.

ATTENTION MATTERS!

In particular if its allocation reflects problem knowledge