bounded rationality

description:

Over his lifetime, the academic scholar and Nobel prize winner, Herbert Simon, explored the boundaries of human decision making in dynamic environments and contributed significantly to management literature, economics, cognitive psychology and artificial intelligence.

He questioned the assumptions behind the rational decision making process in which individuals clearly define the problem, generate and evaluate all alternative solutions and select the best approach before implementing it.

He pointed out that people decide rationally only in a limited number of situations. They make choices according to their interpretation of the situation which is often a simplification. Rationality is “bounded”, e.g. managers seldom have access to all relevant information and must rely on a “strategy of satisfying”, that is to make the best decision on limited information. They choose the first opportunity that seems satisfactory rather than seek the best solution.

Human rationality is limited:
1. information is incomplete, imperfect or even misleading;
2. problems are complex;
3. human information processing is limited;
4. time spent on decision making is limited;
5. decision makers often have conflicting preferences for certain organisational goals.

In addition, organisations, themselves, act as "boundaries". Organisational boundaries allow organisation members to focus and act without the need to (re)think through each action. Information in an organisation is of two kinds:
1. facts that can be verified with data;
2. values that come from the mindsets embedded in the organisation’s culture and common approaches.

Simon saw humans as information processing entities wherein uncertainty comes from a lack of information. A fast changing and complex environment creates more complex problems that, in turn, require organisations and its members to expend greater search efforts.

Depending on the circumstances, i.e. the complexity of the problem, the ambiguity of the decision making process and the number of decision makers, decision makers need to adopt a more behavioural decision making process versus the more rational.

assets:

- bounded rationality
  ProvenModels, editor PM, version 0.1, 32 KB
- decision model contingency framework
  ProvenModels, editor PM, version 0.1, 56 KB
- two decision making processes
  ProvenModels, editor PM, version 0.1, 55 KB

pros:

- Simon’s bounded rationality concept debunked the organisation as a rational construct and introduced behavioural thinking as a central part of organisational decision making. Rationality had been the dominant organisational doctrine after the second war. Centralised bureaucracies proved successful but efficient training and equipping large numbers of soldiers during the war effort. Bounded rationality emphasised generating reasonable alternatives through a fast and creative process rather than selecting one best alternative.
- Simon included internal politics of organisations into the decision making equation. Decision makers often have opposing views on how to achieve goals or even how to define them. The less consensus on organisational goals and values, the more ambiguous the process. In an ambiguous process, more information often lead to even more ambiguity by providing additional points of disagreement.
- The model moved from the notion of universally applicable management principles since decision makers with access to the same information often reach different conclusions. They choose the first opportunity that seems satisfactory rather than seek the best solution.

references:

- Administrative Behavior
- Organizations
- Simple Heuristics That Make Us Smart

