COURSE: Decision Making Processes and Models

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COURSE DESCRIPTION

"The capacity of human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behavior in the real world – or even for a reasonable approximation to such objective rationality" (H.A. Simon, *Administrative Behaviour*, 1947).

Thus, this course aims at providing students with appropriate theoretical and methodological bases for analysing the decision making processes within and between complex organizations.

LEARNING OUTCOMES

On the basis above, the exploitation of *problem solving* models and analytical techniques constitutes the core of the course, with its conceptual underpinnings constituted by the milestones of bounded rationality, heuristics and decision making traps. In line with the most up-to-dated international standards, the course also provides students with accurate knowledge about the most promising avenues in decision making research and practice. On this side, for example, the course aims to shed light on questions regarding the relationship between the personality of corporate decision makers and their strategic/managerial/operational choices.

Given the course's content, its approach is also cross-disciplinary, with concepts and tools derived from disciplines such as psychology (e.g. MBTI, Big Five, Locus of Control or narcissism) or neuroscience (e.g. neuro-strategy).

In terms of learning opportunities, the course aims to represent a good mix between theory and practice for its attending students. In particular, the module's topics are explained by using simulations, role-playing games, teaching cases and case presentations delivered by the students.

METHODOLOGY

The course's topics are explained through a mix of theoretical lectures, students' simulations and teaching cases.

ASSESSMENT

Written test (70%) plus group presentations (30%) on Big Data problems.

OUTLINE

In detail, the course covers three main thematic areas:

Thematic Area No. I: Decision Making Processes. Theoretical Underpinnings

• Typologies of decisions in complex organizations

- Controlling the quality of decisions: Decision making traps and heuristics
- Ambiguity and bounded rationality in decision making: Herbert Simon's thought

Thematic Area No. 2: Decisions, Problems, Problem Solving

- Problem's analysis and diagnosis: Tools and methods
- Creativity techniques: Brainstorming, mental maps and lateral thinking
- Decision analysis: Matrices and decision trees

Thematic Area No. 3: Current Avenues in Decision Making Research and Practice

- Self-reinforcing processes in managerial decision making
- The personality factor: How top management teams make decisions
- Behavioural strategy and neuro-strategy

SUGGESTED READINGS

- 1. Abatecola G. (2014), "Untangling Self-Reinforcing Processes in Managerial Decision Making. Co-Evolving Heuristics?", *Management Decision*, 52(2), pp. 934-949.
- 2. Abatecola G., Caputo A., Cristofaro M. (2018), "Reviewing Cognitive Distortions in Managerial Decision Making. Toward an Integrative Co-Evolutionary Framework", *Journal* of Management Development, 37(5), 409-424.
- 3. Abatecola G., Mandarelli G., Poggesi S. (2013), "The Personality Factor: How Top Management Teams Make Decisions. A Literature Review", Journal of Management and Governance, 17(4), 1073-1100.
- 4. Cristofaro, M. (2017a), "Herbert Simon's bounded rationality: its historical evolution in management and cross-fertilizing contribution", *Journal of Management History*, Vol. 23 No. 2, pp. 170-190.
- 5. Hammond J.H., Keeney S.L., Raiffa H. (1998), "The Hidden Traps in Decision Making", *Harvard Business Review*, 76(5), 47-58.
- 6. Kahneman D., Lovallo D., Sibony O. (2011), "The Big Idea: Before You Make that Big Decision", Harvard Business Review, 89(6), 50-60.
- 7. Marr B. (2015), *Big Data. Using Smart Big Data Analytics and Metrics to Make Better Decisions and Improve Performance*, Wiley, Chichester, UK.
- 8. Simon H.A. (1988), "Problem Formulation and Alternative Generation in the Decision Making Process", *Technical Report AIP 43*, Carnegie Mellon University.