

USING A DECISION-MAKING PROCESS MODEL IN STRATEGIC MANAGEMENT

Oriana-Helena NEGULESCU¹

Abstract: *The decision-making process represents an ongoing activity of managers. Contrary to the common one, the strategic decision is being made in a longer time and on a detailed basis. The managers can use models of decision-making in their activity to be more effective. This paper presents a briefing on the development of the concept of management decision and it illustrates summarized three models of decision-making process. The author's contribution to the paper is a conceptualization of the decision making process and a new, more complex model of decision-making called CDP Model, based on literature review and own observations and experience. The model takes into account the decision-making process as a system and is a useful tool to managers in any field.*

Keywords: strategic management, decision making process, decision making process models, CDP model

JEL Classification: M190, M100, D810

1. Introduction

The main activity of a manager consists in making decisions. It is well known that the decision in management is the process of choosing between two or more alternatives to accomplish one's purpose. The managers are making scheduled routine decisions which arise from the organization's policy and strategic decisions, unscheduled, unique, stemming from the organization's strategy interrelated to environmental factors. The most of the management decisions are taken under the influence of external and internal environmental constraints. As the environment is constantly changing and the

¹ *Transilvania University of Brasov, Doctoral School, Romania, email:bellatrix360@yahoo.fr*

information is not always complete and available, management decisions can be made in certain, uncertain and risky conditions. Decisions made in uncertain and risky conditions (Rutherford-Silvers J., 2008; Dragomir, C., 2012; Stefanescu, R., 2013) are characteristic to complex, unstructured and unplanned problems, features of strategic management.

Making a decision implies the following of a set of principles which support the idea of adopting a philosophy in management (Petrescu, I., 2012) and the appropriate behavior at the workplace, called ethical decision, which considers that any manager must take into account three elements of morality in the decision-making process: moral recognition, moral evaluation and moral intention and action (Baumhart, 1961). These principles refer to a type of behavior which promotes adherence to its own control and transparency and vigilance against those who violate the principles of business ethics (taking bribes, secret negotiations etc.) (Casali, G.L., 2007, Pimentel, J.R.C. et al., 2010; Savur, S., 2013; Vardaman, J.M., et al., 2014).

Applying management decisions in organizations has brought new dimensions in management theory, respectively taking into consideration creativity and innovation, organizational change, organizational learning, organizational culture development theory and others. Integrating innovation (Heyne, P. Et al, 2010; Strumsky, D. Et al, 2010; Salge, T.O. & Vera, A. 2012), contributions to the development of the organizational change theory (Queen, M, 2005; Kottler, 2011; Soparnot, R. 2011; Levin, G., 2012), the organizational learning (Smith, P.A.C., 2012), as well as new approaches to organizational culture (Ravasi, D.& Schultz, M., 2006; Modaff, D.P. et al, 2011; Moldoveanu, M. & Franc, V.I., 2011, Makis, C. & Tilcsik, A., 2013) emphasize generic routines as constants of organizational renewal and evolution.

New problems faced by managers lead to new challenges in the decision-making process, such as: the adopted style and the level at which decisions are made, including the delegation.

The decision-making style considers the decider's personality and depends on the way he behaves in the sense of implicating a group in decision or making the decision alone. Among the styles discussed in the literature, there are: emotional, intuitive, collaborative, rational, and cognitive. Some authors consider that 90% of decisions are made intuitively (Klain, 2004) although the truth is partial. The fact is that the intuitive style develops through learning, through accumulation of knowledge and

experience (Matzler et al, 2007; Krulak, 1999) and becomes the so-called *cognitive style*. *Collaborative style* of decision-making involves the group led (Hunk, R. 2009). More complex is the problem the more is the need for collaboration to increasing the effectiveness and value of decision. The decision maker is rational and chooses the level of cooperation taking into account the criteria: understanding the needs, options available, time available, complexity of the problem, responsibility for implementing the decision and decision value/accuracy (TenBrook, K. & De Gregorio, G., 2010). Collaborative style is improved by emotional style whether an optimal proportion between the two extremes is kept and it reflects positively on communication with employees.

In any organization managers can approach the decision in an organized manner. A group of decision levels commonly used in management is the one that identifies 3 levels of decision: upper level, middle level and lower level (Harrison, F. E. & Pelletier, M.A., 2000). Decision levels as well as the scope of managerial control result from the organizational structure.

2. Models of decision-making

The literature offers a series of new contributions on decision-making process (Petres, J, 1999; Quintus, J.R. & George, J.M., 2005; Nooraie, M. 2008; Wildman, J.L. & Salas, E., 2009; Nobrega, C.G. et al., 2009; Verboncu, I., 2011, Jalal-Karim, A., 2013).

Decision-making process involves the existence of a decision problem which have be understood by the decision-maker and accurately defined to find opportunities to solve it. Several impediments have been identified in the way of a correct definition of the issue which is the subject of decision: paying attention to effects and not to causes, selective perception, defining problems through solutions etc. (Cornescu, V. et al, 2004).

Simple models of decision-making process comprise the steps to follow which guide participants in decision. The stages or steps of decision-making process are different according to authors approach. Among the most used approaches there are: decision-making process in 7 steps, decision-making process in 5 steps, decision-making process of 4 stages or innovative decision-making process, decision-making process in 3 stages and others. The main characteristics of these models are summarized below.

In all models, the first step or stage is identifying the problem or the decision to make. The main feature that distinguishes solving the problem

and the decision-making is the one related to the limits of human rationality. Decision-making does not suppose the people to be entirely rational because emotional elements occur. Solving the problem focuses on the process of thinking and the heuristics, judgment is intuitive and rapidly approaches the specific solution. In many cases, *problem solving* and *decision-making* are interchangeable terms. Since in the process of solving the problem choosing a solution is one of the steps to follow and the decision is made in limited time or under pressure, it makes the problem solving and the decision-making to be integrated. In most of the cases, problems are considered to be decisions to be made and decisions are problems to be solved.

The decision-making process in 7 steps

The decision-making process is spreads out in three stages: defining, identifying and development and seven steps (Figure no. 1.)

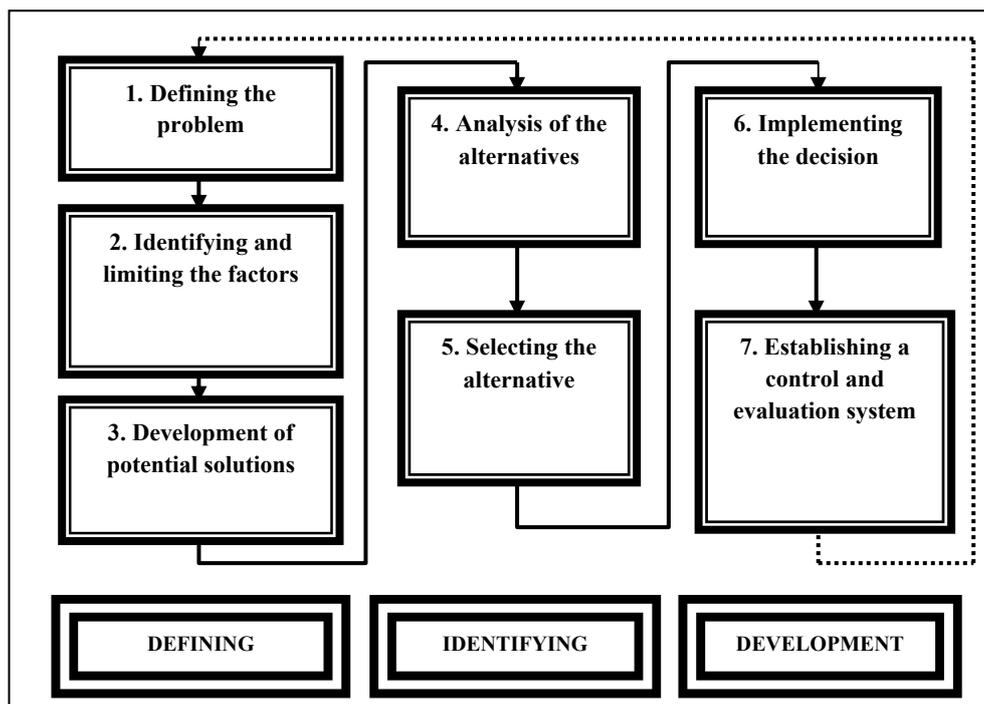


Figure no. 1. Decision-making process in 7 steps

The seven steps followed by the author (Litherland, N., 2013) are: defining the problem, identifying and limiting the factors, development of

potential solutions, analysis of the alternatives, selecting the best alternative, implementing the decision and establishing a control and evaluation system. This process represents the most commonly one used by the managers.

The decision-making process in 5 steps

The decision-making process in five steps (Doyle, J., 2012), presented in Figure no. 2, is also used in the managerial practice and implies: identifying the decision to make, examining the options, gathering information, decision-making and implementing the decision.

In order to identify the decision to be made the decision-maker has to write all thoughts about the decision to be made and to draw it in different ways until the decision is exactly expressed to fit the wish. Identifying the decision is assisted with answering the questions: Which? What? and How? or it may have an answer to the question: What if?

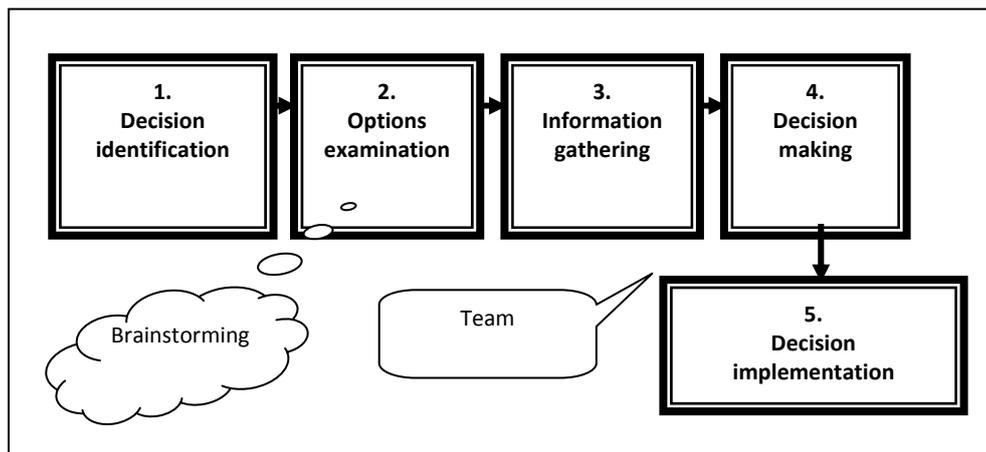


Figure no.2. Decision-making process in 5 steps

Options examination: various versions and options are formulated and considered and possible options, any assumptions and missing information are written down. Brainstorming is a technique that implies the group and helps the decision maker in deciding steadily.

Gathering information: missing information may be gathered on the internet, at the library or other sources (analysis of market maturity,

marketing studies, studies on competition, analysis of growth opportunities, cost analysis etc.).

Decision making: the gathered information is included in the evaluation options (step 2). The decision maker should feel happy after the decision made and if the decision is team-made then the decision maker should get the group support for it to be successful.

Decision implementation: information gathered and additional arguments collected during the decision formulating are used for creating an implementation plan. Steps to follow, their order, roles and responsibilities for a steady basis are determined.

Decision-making process in 3 steps

Another author (Chestnut, D., 2013) considers that the decision-making process includes three stages: identification, building decision components and implementation, which are shortly presented in Figure no. 3.

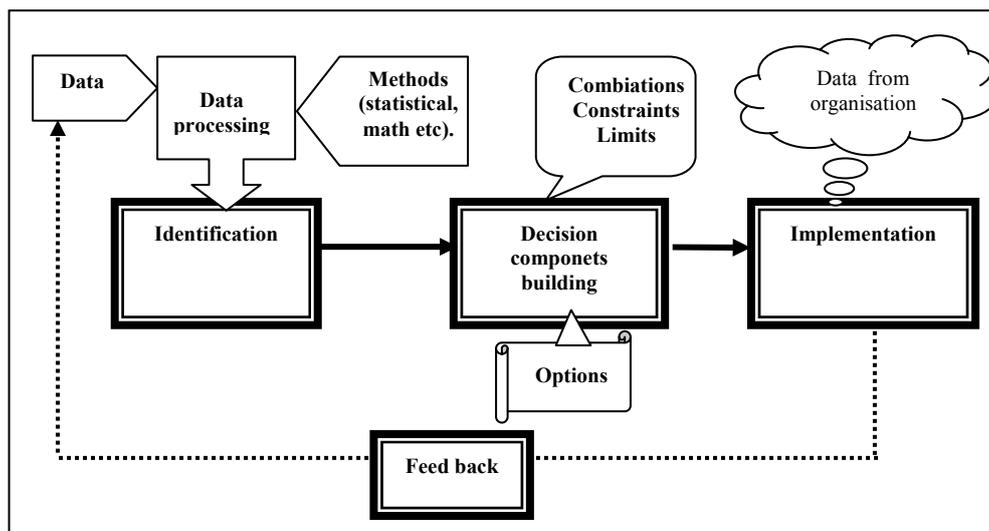


Figure no. 3. Decision-making process in 3 steps

Identification: managers gather data within the organization; they apply mathematical and statistical methods on data gathered and use the results to sustain the decision choice.

Building components: when presenting an alternative, the decision-maker evaluates a result for each possible decision until he or she takes into consideration all possible combinations, constraints and limitations. Then statistical and mathematical equations are applied to the problem. The result is to be a list of deciding options to which successful probabilities are associated.

Implementation: in order to implement decision, a support system may be used for collecting and analyzing data inside the organization and offering useful information to managers.

3. Decisional process based on innovation conceptualization

Different decisional process models analysis allows the conceptualization of the process, where the innovation takes a distinctive role (Figure no. 4). The innovation based on decision-making process allows the creativity stimulation.

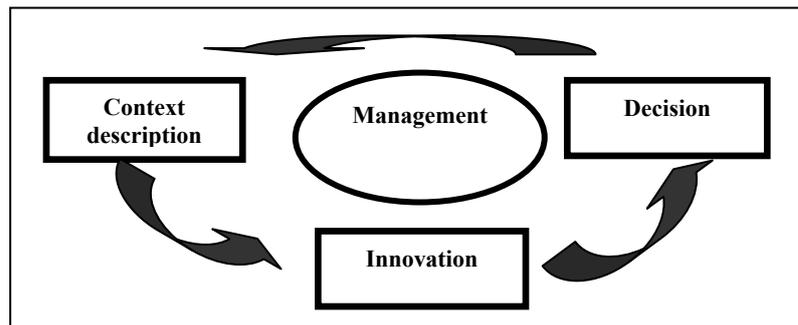


Figure no.4. The innovative decision-making process

The process components are the followings: context description, innovation, decision and management. In this process specific techniques such as brainstorming, Delphi method and others are used to stimulate the creativity.

Context description: information is gathered and conditions, restrictions and criteria for decision making are determined.

Innovation: options are determined and substantiated with an innovative process.

Decision: version that best meets the conditions, restrictions and criteria determined is chosen.

Management: it involves the management of gathering information and of defining the context in which decisions are made, innovation management in determining decision alternatives, decision-making management and decision-making results management.

4. Complex decision-making process

The managers in the organizations may choose any of the process models summarized above. According to gathered analysis models and to own observations and experience, we consider that a more complex model might be useful to managers and might be adapted to any situation. We called the model CDP (Complex Decisional Process) as is synthesized in Figure no. 5.

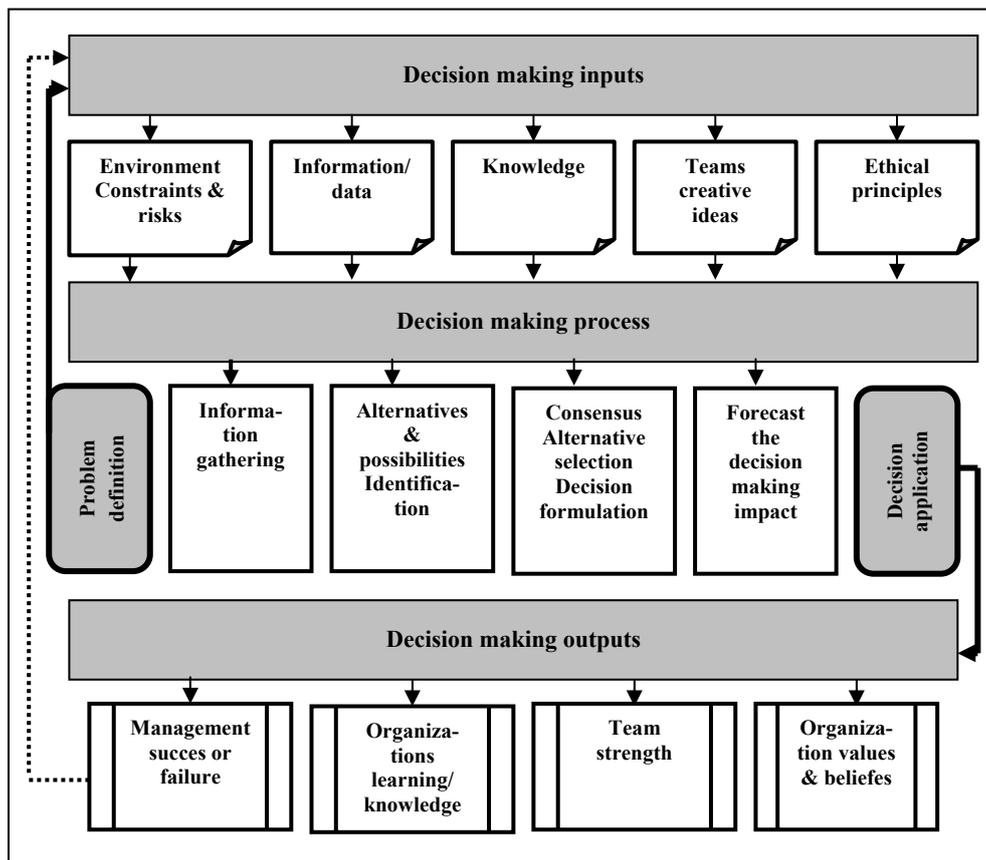


Figure no.5. The Model of Decision-making Process (CDP model)

The proposed model takes into account the three stages of a cybernetic system adapted to decision-making managerial issues: inputs, processes and outputs.

The inputs are: environmental factors, information and/or data, knowledge, team's creative ideas and ethical principles. Environmental factors influence the decisions. Constraints in the external environment, internal risks and limits, especially those related to resources are taken into account. Information gathered or had in possession, as well as historical data, current or forecasted ones of the organization and of the external environment represent the starting point in developing decision alternatives in accordance with organization's internal possibilities.

The organization, teams and manager's accumulated knowledge complete the context and the ethical principles had in view refines it.

The decision process includes: defining the problem, gathering information, identifying the alternatives, finding consensus and selecting the alternative, foreseeing consequences of the decision and implementing it.

Defining the problem coincides most of the time with the decision making although there are a series of debates and arguments regarding the difference between solving a problem and decision-making process (FEMA, 2005). The clear description of the problem facilitates the other steps of the process. Gathering information suppose selecting those information and data which match the best with the problem described and which are taken from the system inputs. Proceeding to identify alternatives is made on the basis of data and information collected. Selecting the most suitable situation analyzed among the alternatives identified is made by involving team members. The communication with team members leads not only to a consensus but to reduce the stress and decision-making timing. Here is useful the 80/20 rule which means obtaining 80% outputs with 20% inputs. Before applying the decision it is analyzed in terms of the consequences implied on organization and its environment and of the risks of success or failure of the decision

The outputs of the system can be: the management success or failure, the organization's knowledge in the organizational learning process, the team reinforcement, the organization's values and beliefs. The process is repeated by changing the option if the decision fails. But never mind whether management is successful or not in decision-making, organization has to gain by acquiring new knowledge, by closing relationships within the team and by developing its values.

The proposed model can be developed by adapting it to current or strategic decisions; no matter if the objectives and the activities are planned or not.

4. Conclusions

The managers' decision-making process has developed over time not only due to the complexity of the problems they are facing, but also to the contribution of theorists and practitioners in enriching specific literature.

Achieving the organization's goals in a complex and volatile environment where managers are forced to make faster decisions and to change them as fast, decision-making models are useful. Therefore, in the decision-making process, managers can choose between several models the one which best suits to the decision-making problem.

The literature, creativity and data bases are conclusive factors in the decision-making process. The paper presents briefly a few examples. In addition, the decision making process conceptualization and the CDP Model represent some contributions to their development.

References

- Baumhart, R.C. (1961) How Ethical are Businessmen?, *Harvard Business Review*, 39 (4), pp. 6–8.
- Casali, G.L. (2007) A quest for ethical decision making: searching for holy grail and finding the sacred trinity in ethical decision making by managers, *Social Responsibility Journal*, Volume: 3, Issue: 3.
- Chestnut, D., *Theory Management on Decision Making*, Retrieved November, 20, 2013 from http://www.ehow.com/facts_6962551_theory-management-decision-making.html.
- Cornescu, V., Marinescu, P., Curteanu, D., Toma, S. (2004) *Management: de la teorie la practică*, Editura Universității din București.
- Doyle, J., (2012) Retrieved November, 19 from http://www.ehow.com/info_8386556_5step-decisionmaking-process.html.
- Dragomir, C. (2012) Causes generating risks in business management, *Review of General Management*, Volume 12, Issue 2, pp. 160-166.
- Federal Emergency Management Agency (FEMA) (November 2005) *Decision Making and Problem Solving*, Independent Study, USA.
- Hank, R. (2009) *Collaborative Leadership: Developing Effective Partnerships for Communities and Schools*, Corwin Press, USA.

- Harrison, F.E., Pelletier, M.A. (2000) Levels of strategic decision success, *Management Decision*, Vol. 38, Issue 2, pp.107 – 118.
- Heyne, P., Boettke, P. J., Prychitko, D. L. (2010) *The Economic Way of Thinking*, Prentice Hall, 12th ed., pp. 163, 317–318.
- Jalal-Karim, A. (2013) Evaluating the impact of information security on enhancing the business decision-making process, *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 9, Iss: 1, pp.55 – 64.
- Klain, G. (2004) *The Power of Intuition. How to Use Your Gut Feelings to Make Better Decisions at Work*, Crown Business, NY.
- Krulak, C. (1999) Cultivating Intuitive Decision-making, *Marine Corps Gazette*, retrieved April 6, 2010, from http://www.au.af.mil/au/awc/awcgate/usmc/cultivating_intuitive_d-m.htm.
- Kotter, J. (2011) Change Management vs. Change Leadership - What's the Difference?, 12 July, *Forbes* online.
- Levin, G. (2012) *Embrace and Exploit Change as a Program Manager: Guidelines for Success*, Project Management Institute.
- Litherland, N. retrieved February, 2, 2013 from http://www.ehow.com/how-does_5280248_decisionmaking-process-managers.html.
- Marquis, C., Tilsik, A. (2013) Imprinting: Toward A Multilevel Theory, *Academy of Management Annals*, pp.193–243.
- Matzler, K., Ballom, F., Mooradlan, T. (2007) Intuitive Decision Making, *MIT Sloan Management Review*, Retrieved April 6, 2010, from <http://sloanreview.mit.edu/the-magazine/files/pdfs/49108SxW.pdf>.
- Modaff, D.P., DeWine, S., Butler, J. (2011) *Organizational communication: Foundations, challenges, and misunderstandings*, 2nd Ed., Boston: Pearson Education, chapters 1-6.
- Moldoveanu, M., Franc, V.I. (2011) The impact of the economic crisis on culture, *Review of General Management*, Volume 14, Issue 2, p.15-35.
- Nooraie, M. (2008) Decision magnitude of impact and strategic decision-making process output: The mediating impact of rationality of the decision-making process, *Management Decision*, Vol. 46 Iss: 4, pp.640 – 655.
- Nobrega, R.A.A., O'Hara, C.G., Sadasivuni, R., Dumas, J. (2009) Bridging decision-making process and environmental needs in corridor planning, *Management of Environmental Quality: An International Journal*, Vol. 20, Iss: 6, pp.622 – 637.

- Peters, J. (1999) The Managerial Decision-making Process, *Management Decision*, 5th ed., Vol. 37 Issue: 5, pp.57 – 58.
- Petrescu, I. (2012) The need for philosophy in management, *Review of General Management*, Volume 16, Issue 2, pp 5-10.
- Pimental, J.R.C., Kuntz, J.R., Elenkov, D.S. (2010) Ethical decision-making: an integrative model for business practice, *European Business Review*, Volume: 22, Issue: 4.
- Ravasi, D., Schultz, M. (2006) Responding to organizational identity threats: exploring the role of organizational culture, *Academy of Management Journal*, Vol.49, No.3, pp. 433–458.
- Soparnot, R. (2011) The concept of organizational change capacity, *Journal of Organizational Change Management*, Vol. 24, Issue 5, pp. 640 – 661.
- Rutherford-Silvers, J. (2008) The risk management process, tools, and techniques in Risk Management for Meetings and Events, *A volume in Events Management*, pp. 24–52.
- Salge, T.O., Vera, A. (2012) Benefiting from Public Sector Innovation: The Moderating Role of Customer and Learning Orientation, *Public Administration Review*, Vol. 72, Issue 4, pp. 550-560.
- Savur, S. (2013) Theorising Ethical Decision Making Process for Research in Small and Medium Enterprises (SMEs) in Australia, in Michael Schwartz, Howard Harris (ed.) *Ethics, Values and Civil Society (Research in Ethical Issues in Organizations, Volume 9)*, Emerald Group Publishing Limited, pp.137-154.
- Strumsky, D., Lobo, J., Tainter, J. A. (2010). Complexity and the productivity of innovation, *Systems Research and Behavioral Science* 27 (5), p. 496.
- Ștefănescu, R.A., (2013). Risk management in economic crisis. *Review of General Management*, Volume 18, Issue 2, p.90-97.
- TenBrook, K., De Gregorio, G. (2010) *Decision Innovation*, Inc. 2010 eBook - Decision Making Solutions, retrieved March, 14, 2013 from <http://www.ehow.com/how>.
- Queen, M. (2005) Organisational Change Management: A Critical Review, *Journal of Change Management*, Vol. 5, No. 4, pp. 369–380.
- Quintus, J.R., George, J.M. (2005) Emergent Strategies and Their Consequences: A Process Study of Competition and Complex Decision Making, in Gabriel Szulanski, Joe Porac, Yves Doz

- (ed.) *Strategy Process (Advances in Strategic Management, Volume 22)*, pp.387-411.
- Vardaman, J.M., Gondo, M.B., Allen, D.G. (2014) Ethical climate and pro-social rule breaking in the workplace, *Human Resource Management Review*, Volume 24, Issue 1, March 2014, Pages 108–118.
- Verboncu, I. (2011) Managerial methodologization and its impact on the managerial efficiency and effectiveness, *Review of General Management*, Volume 13, Issue 1, pp. 31-39.
- Wildman, J.L., Salas, E. (2009) Making it practical: simulation, naturalistic decision making and complexity in team performance, in Francis J. Yammarino, Fred Dansereau (ed.) *Multi-Level Issues in Organizational Behavior and Leadership (Research in Multi Level Issues, Volume 8)*, Emerald Group Publishing Limited.
- Whittier, N.C., Williams, S., Dewett, T.C. (2006) Evaluating ethical decision-making models: a review and application, *Society and Business Review*, Volume 1, Issue 3.