

IMPROVING MANAGERIAL DECISION MAKING THROUGH INDIVIDUAL BEHAVIOURAL FACTORS MANAGEMENT

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Abstract. Recently decision making is analyzed in the context of uncertainty, thus, successful decision making more often is related with personality of decision maker and other decision making participants. In rural sector, where small organizations – farms dominate, farmer as managerial decision maker is the most important person. Welfare of farm as well as welfare of people working on the farm depends on farmer's as decision maker's capabilities to make right decisions, to adapt successfully in changing environment. Therefore, it is very important to understand, what behavioural factors of farmer as a manager can influence decision making. The problem "what individual behavioural factors and how they affect decision maker" is analyzed in this paper. The aim of the paper is to determine individual behavioural factors of managerial decision making and discuss their management. Analysis of scientific literature and content analysis are used for identification of factors. The authors' contribution to this paper is the analysis of behavioural factors in a context of their impact on decision making. Individual behavioural factors are analyzed in subcategories as negative, positive and both negative and positive impact making factors. At the end of the paper proposals and recommendations for behavioural factors management is presented.

Key words: decision making, behavioural factors, management.

JEL code: D23, L29, M10.

Introduction

According to the report of the 17th session of the United Nations Commission on Sustainable Development (2009), a healthy and dynamic agricultural sector is an important foundation of rural development, generating strong linkages to other economic sectors. It is necessary to strengthen the human capabilities of the rural people improving access rural people to information, education, learning resources, knowledge and training to support sustainable development planning and decision making. Decision making gets topical for rural sector and can help develop rural communities through strengthening management of rural organizations.

In scientific and academic literature, decision making as an object of research is not new. Analysis of management literature reveals that in discussing decision making, it is common to focus on one or more of these aspects (Harrison F. E., 1999; Harrison F. E., Pelletier M.A., 2000; Cooke S., Slack N., 1991; Jennings D., Wattam S., 1998; Nutt P.C., Wilson D.C., 2010 etc.): the decision making process; the decision itself; the decision maker; the decision making context.

Often researchers analyse decision making in context of uncertainty (Mowles C., 2015; Catalani M.S., Clerico G.F., 2012; Gigerenzer G., 2010 etc.), successful decision making more often is related with personality of decision maker and other decision making participants, their capabilities to adapt successfully in changing environment.

For rural sector, where small organizations – farms dominate, farmer as management decision maker is the most important person. Welfare of farm as well as welfare of people working at the farm depends on farmer's as decision maker's capabilities to make right decisions. It is very important to understand what behavioural factors of farmer as a manager can influence decision making as well having in mind that the same behavioural factors can be topical for other decision making participants. The common managerial decision making principles can be applied in organizations of rural sector, because these organizations as well have managers who make decisions, subordinates – other participants of decision making process.

Though behavioural factors are discussed in scientific and academic literature, there is a lack of wider summarized study on individual behaviour factors. Mostly discussions are focused

on separate personality features and factors influencing it but there is little discussed the entire list of individual factors, how they influence decision making process and how managers should manage them, if their management is possible in general. Based on these shortcomings scientific problem is identified: what individual behavioural factors and how they affect decision maker?

The object of the paper – individual behavioural factors of managerial decision making.

The aim of the paper is to determine individual behavioural factors of managerial decision making and discuss their management.

These objectives are set to achieve the aim:

- 1) to define individual behavioural factors of managerial decision making;
- 2) to explain how individual behavioural factors affect decision making;
- 3) to discuss individual behavioural factors management in order to reduce their negative and maximize their positive impact.

The methods of research: analysis of scientific literature, content analysis.

Theoretical background

The greatest contribution to development of behavioural theories was made by H. Simon, creating bounded rationality theory (Sechi D., 2010). He first noticed that people are only partly rational, what may lead to irrational decisions. Bounded rationality is one of the widest analyzed factors (Janis I., Mann L., 1977). As a result of bounded rationality, people are influenced by satisficing factor (Cooke S., Slack N., 1991). Later on interest on behavioural factors increased and theoretical area of decision making got widely explored from many perspectives. Escalation of commitment was analyzed by Hi, X., Mittal, V. (2007); Mullins, J. W. (2007); Lunenberg, F. C. (2010). A considerable amount of literature has been published on intuition issue (Isenberg, D., 1984;

Jelgava, LLU ESAF, 21-22 April 2016, pp. 72-73 Lee, D. et al., 1999; Khatri, N., Alvin, Nh. H., 2000; Robbins, S. P. et al., 2009; Matzler, K. et al. 2014). Dror, I. E. et al. (1998); Sanz de Acedo Lizarraga M. L. et al. (2007); Chen Y., Sun Y. (2003) widely discussed about age influence on decision making. A number of research have reported about gender role on decision making (Crow S. M. et al., 1991; Hawkins K., Power Ch. B., 1999; Venkatesh V. et al., 2000; Gill S. et al., 1987; Wood J. T., 2013; Sanz de Acedo Lizarraga M. L. et al., 2007. Emotions were analyzed by Weber, E., Johnson E. J. (2009); Damasio A. (2006); Tran V. (2004); Lakomski G., Evers. C. V. (2010); Bachkirov, A. A. (2015); Brundin, E., Gustafsson, V. (2013). Emotional intelligence is comprehensively analyzed by Hess, J. D., Bacigalupo, A. C. (2011); Huy, Q. N. (1999).

Generalizing theoretical aspects of behavioural decision making the main provisions are as follows:

- people are irrational by their nature and that irrationality is an obstacle to make logical, objective decisions;
- managerial decisions are taken in organizations created by people, every person has its own irrationality;
- managers are never absolutely rational and logic, so they make decisions that are most appropriate to their beliefs and interests.

According to this, managerial decision making is influenced by both manager's and other managerial decision making participants behaviour. Each person is personality, with its own characteristics, features each person makes different, individual influence on managerial decisions. This kind of influence is inevitable. Personality uniqueness of manager and other managerial decision making process participants, their behavioural peculiarities can be defined as individual behaviour factors (Bakanauskiene I., Kyguoliene A., 2013). Individual behaviour factors lead to decision's uniqueness and variety,

this way inspiring to analyze them upon the influence on decision making context.

Methodological background for identification of individual behavioural factors

Achieving to define behavioural factors affecting managerial decision making, the authors have analyzed secondary data, which covered 142 scientific literature sources in scientific journals, reference books. Content analysis was used as a method for categorisation behavioural factors. Though according to Robson C. (2011), it becomes less important to distinguish differences between quantitative and qualitative methods, both quantitative and qualitative content analysis were used in this research. Quantitative analysis refers to visible, countable elements in different texts, thematic content analysis allows evaluate what content and definitions appear in texts and how often they repeat. Qualitative content analysis allowed to make interpretation of the behavioural factors in decision making context, because research covered both management and organizational behaviour literature sources.

As a result of scientific literature analysis, list of individual behavioural factors have been made. Analysing text the authors identified statements how factors relate to decision making. Each of

Jelgava, LLU ESAF, 21-22 April 2016, pp. 72-74 the factor was considered in a way how it affected decision making, so 3 subcategories have been defined: behavioural factors which made positive impact on decision making, negative impact or factors which could make both positive and negative impact depending on different circumstances. Subcategories were grouped into categories depending on a level they appeared. In this paper just one category – individual behavioural factors is covered revealing their main features.

Individual behavioural factors of decision making

The results of content analysis revealed the most often repeated individual behaviour factors: intuition, bounded rationality, satisficing, escalation of commitment, personal features, age, gender, emotional intelligence, emotions. Repeatability of each factor in analyzed literature is given in Table 1. Mostly individual behaviour factors are reflected as negative factors, though according to Hammond, J. S. et al. (2002), for example, good decision maker takes into account feelings, opinions, beliefs and advice, what points to positive impact of behavioural factors. Subcategories of these factors in a context of their impact on decision making process were created and presented below.

Table 1

Individual behaviour factors

Category	Subcategory	Behavioural factors	Repeatability in analyzed literature
Individual behaviour factors	Factors which make positive impact on decision making	<ul style="list-style-type: none"> • Intuition 	35/142, 24.6%
	Factors which make negative impact on decision making	<ul style="list-style-type: none"> • Bounded rationality • Satisficing • Escalation of commitment 	44/142, 30.9% 31/142, 21.8% 22/142, 15.5%
	Factors which can make both positive and negative impact on decision making	<ul style="list-style-type: none"> • Personal features • Age • Gender • Emotional intelligence • Emotions 	24/142, 16.9% 18/142, 12.7% 16/142, 11.3% 9/142, 6.3% 28/142, 19.7%

Source: authors' construction based on the research

As it could be seen from Table 1, intuition is considered to be the only factor which mostly makes positive impact on decision making. It is often stated that managers, who have intuition make successful decisions (Lee D., Newman P., Price R., 1999). Successful managers who make decisions according to intuition, don't need much information, they do not analyze situation deeply, they achieve good results even if they don't behave according to ration model, they can skip some jobs or even stages from rational decision making model (Isenberg D., 1984). Analysis revealed that intuition is essential when there is no time, when decisions are taken in undefined, dynamic environment for taking strategic, global decisions (Khatri N., Alvin Ng. H., 2000). According to Robbins S. P. et al. (2009); Matzler, K. et al. (2014) rational decision making has to be combined with intuition and without it, decision making can be rather ineffective.

The results of research allowed define bounded rationality, satisficing and escalation of commitment as factors mostly mentioned making negative impact on decision making. Bounded rationality, identified by H. A. Simon (Sechi D., 2010), probably is the most commonly used term related to manager's mistakes, analyzing manager's irrationality in decision making process. It was identified that managers often took decisions in accordance with the amount of information available, according to their preferences what was right what was not, relied on emotions, their subjective experience and knowledge. Bounded rationality is explained in different management styles, when manager gets irrational (Janis I., Mann L., 1977).

Satisficing, understood as individual's desire to survive the feeling of achieved goal as soon as possible (Cooke S., Slack N., 1991), does negative impact on decision making. It was distinguished that in accordance to satisficing manager didn't look at the best option, didn't solve optimization task, alternatives were not compared with each other. Manager only tries to

Jelgava, LLU ESAF, 21-22 April 2016, pp. 72-75 determine if alternatives meet requirements, he chooses the first alternative, which meets or exceeds his requirements or expectations. Decisions get irrational because alternatives are not evaluated equally.

Research revealed that escalation of commitment – the human tendency to continue to follow a failing course of action, was one of the major errors in decision making (Lunenburg, F.C., 2010; Mullins, 2007; Hi & Mittal, 2007). Analysis showed that facing this factor manager didn't change the decision, though it became clear that mistake was done and decision was not suitable, it wouldn't solve the problem, manager protected his beliefs about himself being rational (Lunenburg, F.C., 2010). Manager, who is committed to made decision, will not be inclined to change decision, even it is not correct. Escalation of commitment is the most evident when managerial decision is being implemented.

As it could be seen from Table 1, the biggest part of the factors can have both positive and negative impact on decision making. The authors of this paper consider that personal features, age, gender, emotional intelligence and emotions have an impact on individual behaviour in decision making process through system of values, attitudes, competence level, motivation. There is no single attitude if decision making depends on individual's personal characteristics or a person behaves differently in different situations. More often it is assumed that individuals with different personal characteristics behave different in decision making process.

The results concerning age are not ambiguous. There are differences in decision making depending on age (Dror, I. E. et al., 1998). Individual's competence and experience takes special place in decision making, so age, reflecting competence and experience do positive impact on decision making: the elder person is, the better decisions he makes (Sanz de Acedo Lizarraga M. L. et al., 2007). Chen Y., Sun Y. (2003) argue that age don't impact decision

quality and decision making speed, both young and elder managers can make successful decisions.

There is no common attitude to gender. Men and women have their own advantages in decision making but none of them are obviously better decision makers (Crow S. M. et al., 1991; Hawkins K., Power Ch. B., 1999, Venkatesh V. et al., 2000). Women spend more time to make decision, gather more information, are more influenced by environment (Gill S. et al., 1987), men are more realistic and objective (Wood J. T., 2013). Both men and women thoroughly process information, evaluate alternatives logically, retrieve the relevant decision-related data from their memories, categorize the data if they are very diverse, predict results, evaluate the consequences, solve the problems posed by the situation, and monitor all the decision stages (Sanz de Acedo Lizarraga M. L. et al., 2007).

One of the latest features analyzed in literature is emotional intelligence. According to Hess, J. D., Bacigalupo, A. C. (2011), emotional intelligence skills can assist in enhancing the quality of decision making. In the decision-making process, the acknowledgment of individual emotions is critical in determining not only the motivations behind decisions but also the impact of those decisions on others. Decision makers who understand the emotions of others may utilize that perceptivity to head off potential negative outcomes by addressing those emotional issues in advance of the decision (Huy, Q. N., 1999). Likewise, decision makers who perceive and understand their own emotions will be much more effective in managing those emotions in the decision-making process (Hess, J. D., Bacigalupo, A. C., 2011).

Emotions affect the efficiency of managerial decision making process (Weber, E., Johnson, E. J., 2009). Content analysis showed that if there is no clear rational basis to make a decision, emotions are the main factor affecting decision making (Damasio A., 2006). Positive emotions

Jelgava, LLU ESAF, 21-22 April 2016, pp. 72-76 enhance creativity, labour productivity, encourage evaluate alternatives more deeply, gather more information but they can interfere decision making process by ignoring important information, overestimating positive results of decision, distracting decision makers from the process. Negative emotions can encourage constructivism, objectivity but can reduce creativity (Tran V., 2004).

Content analysis also revealed individual behavioural factors, which were mentioned less often: overconfidence bias, availability bias or novelty effect, confirmation bias, hindsight bias, anchoring bias, wishful thinking. These factors were left behind this paper cause require deeper analysis.

Conclusions, proposals, recommendations

1) In this paper, the aim was to determine individual behavioural factors of managerial decision making and discuss their management. Identification of individual behavioural factors itself would not be useful unless they are managed. Management of individual behavioural factors should be understood as manager's abilities to recognize and identify behavioural factors in his own and/or other decision making participant behaviour, to understand how these factors affect decision making, to take actions and choose necessary means in order to reduce negative and maximize positive impact of each of the factors on decision making (Bakanauskiene I., Kyguoliene A., 2013).

2) The research has identified intuition, bounded rationality, satisficing, escalation of commitment, personal features, age, gender, emotional intelligence, emotions as the most often repeated behavioural factors in scientific and academic literature. Knowledge about the content of each factor could help rural managers recognize these factors during decision making process.

3) Content analysis revealed that intuition had mostly positive impact on decision making. Though managers should account on intuition more often and train it. The results of research allowed to define bounded rationality, satisficing and escalation of commitment as factors mostly mentioned making negative impact on decision making. On purpose to reduce negative and maximize positive impact of individual behaviour factors, successful manager needs to increase his and his subordinates competence level. Competence can be increased through finding out what knowledge, skills, abilities and experience are necessary for manager or his subordinates and how it can be gained. Increasing competence is essential for bounded rationality management. Application on rational decision making principles, when manager separates the identification and evaluation of alternatives (Bakanauskiene I., Kyguoliene A., 2013) can help manager manage satisficing. Manager should first of all identify all alternatives and don't stick to the first one which meets requirements. Escalation of commitment is managed by self-consciousness. If mistakes were made, better

Jelgava, LLU ESAF, 21-22 April 2016, pp. 72-77 to change the decision, trying to avoid escalation of commitment. According to research results, personal features, age, gender, emotional intelligence, emotions can have both positive and negative impact, manager should maximize positive influence and manage negative aspects. Motivation is a common mean which can be used to manage individual behaviour (Bakanauskiene I., Kyguoliene A., 2013). Manager should choose among different motivation means, according to situation, personal characteristics of decision making participants, their expectations. Through right motivation manager can change people attitude to work, so he can change subordinates behaviour.

4) Findings of the research extends rural manager's knowledge about individual behavioural factors and their management. The most often repeated factors and their impact are summarized in one paper, so it can be used in practise for rural managers as a short guide. Research results about individual behaviour factors can serve strengthening the human capabilities of rural people to make better decisions what may lead to sustainable development of agriculture.

Bibliography

1. Bachkirov, A. A. (2015). Managerial Decision Making Under Specific Emotions. *Journal of Management Psychology*. Vol. 30, No 7., pp. 861-874.
2. Bakanauskiene, I., Kyguoliene, A. (2013). *Vadybiniai Sprendimai: Priemimas ir Igyvendinimas*. Vytautas Magnus University, p. 240.
3. Brundin, E., Gustafsson, V. (2013). Entrepreneurs' Decision Making Under Different Levels of Uncertainty: the Role of Emotions. *International Journal of Entrepreneurial Behaviour & Research*. Vol. 19, No 6, pp. 568 – 591.
4. Catalani, M. S., Clerico, G. F. (2012). *Decision Making Structures: Dealing with Uncertainty within Organizations*. Springer Science & Business Media, p. 167.
5. Chen, Y., Sun, Y. (2003). Age Differences in Financial Decision Making: Using Simple Heuristics. *Educational Gerontology*, Vol. 28, pp. 627–635.
6. Cooke, S., Slack, N. (1991). *Making Management Decisions*. Prentice Hall (UK), p.329.
7. Crow, S. M., Fok, L. Y., Hartman, S. J., Payne, D. M. (1991). Gender and Values: What Is the Impact on Decision Making? *Sex Roles*, Vol. 25, Issue 3, pp. 255-268.
8. Damasio, A. (2006). *Descartes' Error: Emotion, Reason, and the Human Brain*. Vintage (UK), p. 352.
9. Dror, I. E., Katona, M., Mungur, K. (1998). Age Difference in Decision Making: To Take a Risk or Not? *Gerontology*, Vol. 44, No 2, pp. 67-71.
10. Gigerenzer, G. (2010) *Rationality for Mortals: How People Cope with Uncertainty*. Oxford University Press, p. 256.
11. Gill, S., Stockard, J., Johnson, M., Williams, S. (1987). Measuring Gender Differences: the Expressive Dimension and Critique of Androgyny Scales. *Sex Roles*, Vol. 17, Issue 7, pp. 375-400.
12. Hammond, J. S., Keeney, R. L., Raiffa, H. (2002). *Smart Choices: A Practical Guide to Making Better Decisions*. The Crown Publishing Group, p. 256.
13. Harrison F. E. (1999). *The Managerial Decision-Making Process*. Houghton Mifflin Co, p.555.

14. Harrison, F. E., Pelletier M. A. (2000). The Essence of Management Decision. *Management decision*, Vol. 38, Issue 7, pp.462-469.
15. Hawkins, K., Power, C. B. (1999). Gender Differences in Questions Asked During Small Decision Making Group Discussions. *Small Group Research*, Vol. 30, No 2, pp. 235-256.
16. Hess, J. D., Bacigalupo, A. C. (2011). Enhancing Decisions and Decision Making Processes Through the Application of Emotional Intelligence Skills. *Management decision*, Vol. 49, No. 5, pp. 710-721.
17. Hi, X., Mittal, V. (2007). The Effect of Decision Risk and Project Stage on Escalation of Commitment. *Organizational Behaviour and Human Decision Processes*, Vol. 103, No. 2, pp. 225-237.
18. Huy, Q. N. (1999). Emotional Capability, Emotional Intelligence and Radical Change. *Academy of Management Review*, Vol. 24, No. 2, pp. 325-45.
19. Isenberg, D. (1984). How Senior Managers Think? *Harvard Business Review*, Vol. 62, Issue 6, pp. 81-90.
20. Janis, I., Mann, L. (1977). *Decision Making: A Psychological Analysis of Conflict, Choice and Commitment*. NY: The Free Press, p.488.
21. Jennings, D., Wattam, S. (1998). *Decision Making: An Integrated Approach*. Pearson education, p.364.
22. Khatri, N., Alvin, H. Ng. (2000). Role of Intuition in Strategic Decision Making. *Human relations*, Vol. 53, No. 1, pp.57-86.
23. Lakomski, G.; Evers, C. W. (2010). Passionate Rationalism: the Role of Emotion in Decision Making. *Journal of Educational Administration*. Vol. 48, No. 4, pp. 438-450.
24. Lee, D., Newman, P., Price, R. (1999). *Decision Making in Organisations*. London: Financial times Pitman Publishing, p. 262.
25. Lunenberg, F. C. (2010). Escalation of Commitment: Patterns of Retrospective Rationality. *International Journal of Management, Business and Administration*, Vol. 13, No. 1, pp. 1-5.
26. Matzler, K.; Uzelac, B.; Bauer, F. (2014). Intuition: the Missing Ingredient for Good Managerial Decision Making. *Journal of Business Strategy*. Vol. 35, No. 6, pp. 31-40.
27. Mowles, C. (2015). *Managing in Uncertainty: Complexity and the Paradoxes of Everyday Organizational Life*. Routledge, p. 188.
28. Mullins, J. W. (2007). Good Money After Bad. *Harvard Business Review*, Vol. 85, pp. 37-48.
29. Nutt, P. C. Wilson, D.C. (2010). *Handbook of Decision Making*. John Wiley & Sons, p.720.
30. Robbins, S. P., Judge, T. A., Odendall, A., Roodt, G. (2005). *Organizational Behaviour. Global and Southern African Perspectives*. Cape Town: Pearson Education South Africa, p. 496.
31. Robson, C. (2011). *Real World Research*. 3rd edition. John Wiley & Sons, p. 608.
32. Sanz de Acedo Lizarraga, M. L., Sanz de Acedo Baquedano, M. T., Cardelle-Elawar, M. (2007). Factors that Affect Decision Making: Gender and Age Differences. *International Journal of Psychology and Psychological Therapy*, Vol. 7, No. 3, pp. 381-391.
33. Secchi D. (2010). *Extendable Rationality: Understanding Decision Making in Organizations*. Springer Science & Business Media, p.180.
34. Tran, V. (2004). *The Influence of Emotions on Decision Making Processes in Management Teams: Doctoral thesis*. Geneve: University de Geneve. Retrieved: <http://staff.maxwell.syr.edu/cgerard/Fundamentals%20of%20Conflict%20Resolution/The%20Impact%20of%20Emotions%20on%20Decision%20Making%20Processes%20in%20Management%20Teams.pdf>. Access: 16.12.2015
35. United Nations. Commission on Sustainable Development. (2009). Report on the 17th session. Retrieved: [http://www.un.org/ga/search/view_doc.asp?symbol=E/CN.17/2009/19\(SUPP\)&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=E/CN.17/2009/19(SUPP)&Lang=E). Access: 07.01.2016.
36. Venkatesh, V., Morris, M. G., Ackerman, P. L. (2000). A Longitudinal Field Investigation of Gender Differences in Individual Technology Adoption Decision Making Processes. *Organizational Behaviour and Human Decision Processes*, Vol. 83, pp.33-60.
37. Weber, E.; Johnson, E. J. (2009). Mindful Judgment and Decision Making. *Annual Review of Psychology*, Vol. 60, pp.53-85.
38. Wood, J. T. (2013). *Gendered lives: Communication, Gender, and Culture*. 10th edition. Cengage Learning, p. 416.