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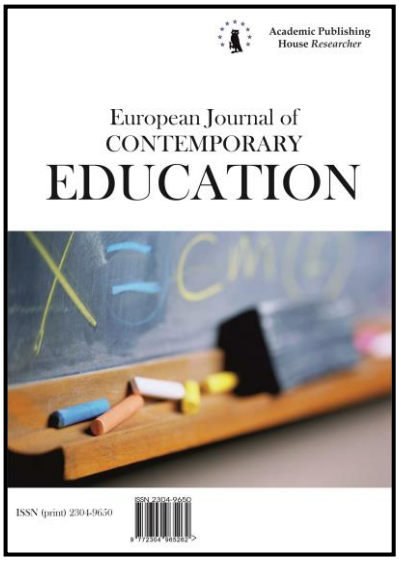

Bounded Rationality, Uncertainty, and Complexity as Decision-Making Contexts: A Case of One University in Russia

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Abstract

Decision making in universities cannot be implemented in an entirely rational mode because of the effects of the bounded rationality, uncertainty, and complexity inherent to the social and organisational contexts. An empirical case study related to launching a new postgraduate educational programme as the in-depth investigation of the chain of related decisions in one university in Russia was used to explain the features of the decision-making process. Data was gathered through 1) five in-depth interviews with the key stakeholders; 2) observations of the situation stages and interviews with other stakeholders; 3) analysis of governmental documents and standards; and 4) analyses of university policies and local documents. Case analysis showed the unclear authority of the institutions involved, vague rules, exclusion of the important stakeholders from the decision process, a lack of experience and expertise, and unclear procedures. The case was interpreted through the lenses of the organized anarchy theory; power and authority perspective; risk avoidance perspective; and bounded rationality perspective. As a discussion and conclusion, it was shown that some strategies can reduce the level of uncertainty and increase the quality of the decisions made, such as decision analysis perspective, decomposition perspective, participation perspective, information perspective, and groupthink avoidance perspective. Also, the role of political negotiations, information provision, additional actions and meetings organization, systematization of the complicated issues, and organizational learning were considered. All these support more mature solutions in the university context.

Keywords: bounded rationality, university management, uncertainty, complexity, decision making.

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1. Introduction

There is a widespread strong desire to find a rational, logical, and coherent approach to decision making that could lead to practical and stable outcomes. But, as many authors have noted (Clemen, 1996; Bazerman, 2006), the whole process often is so complicated, messy, high-risk, overwhelmed with information, so full of ambiguity, unclear payoffs and differing desires and needs, and so suppressed by social expectations that "it is a wonder anything ever gets decided" (Beach, Connolly, 2005: 48). Universities as organizations led by decision makers face this complicated reality too, but the existing studies rare examine such university decision process contexts as bounded rationality, uncertainty, and complexity. To fill this gap, this article explores 1) the impact of bounded rationality on the decision-making process in university using empirical case; 2) the influence of complexity and uncertainty as decision contexts in universities; and 3) possible key features, processes, and procedures leading to a more satisfying decision making in complex contexts. Some effective strategies are suggested: 1) decision analysis perspective, which provides opportunities to consider multiple objectives and diverse opinions, to structure decision problems, to generate alternatives, to identify critical trade-offs, and to justify previous actions; 2) decision process decomposition, which enables enriching a decision by better problem definition, consequences prediction, alternatives evaluation, and, in general, by more clear understandings of the necessary decision process stages; and 3) information perspective, which is aimed at enhancing situation framing, rules selection, best courses of action identification, and outcomes assessment. Information can be gathered through researching a business or organisation, including obtaining feedback. The significance of the approach is that it provides an opportunity to consider bounded rationality, uncertainty, and complexity as contexts of the managerial decision making in universities, deepening existing known approaches to the decision making and applying it to higher education institutions. Recommendations developed in this article may be used widely in decision-making processes in universities at different management levels, and in a variety of practical situations.

2. Literature review

Bounded rationality and the decision-making process

Rationality in the context of decision making refers to the "decision-making process that is logically expected to lead to the optimal result, given an accurate assessment of the decision maker's values and risk preferences" (Bazeman, 2006: 6). The rational model is based on the assumptions of how optimal decisions should be made in ideal conditions. However, in the ideas of the great number of thinkers and researchers, rationality can be used only in a limited way in the understanding the process of decision making. This position is also known as a bounded rationality framework, and is represented, first of all, by Simon, who argued that individuals could be better understood by considering their actual complicated situation, rather than a normative process of decisions (Simon, 1990). While some theorists work on a prescriptive model of decision making, developing exact mathematical methods for optimal decisions regardless the contexts (Keeney, 1982; Howard, 1988), dominant adherents of the descriptive approach focus on the confusion and complexity of the external world and cognitive specifics of the decision makers.

Descriptive decision researchers point out that an entirely rational manner of decision making never occurs in real life. For example, to make a rational decision, it is assumed that people:

(1) perfectly define the problem, (2) identify all criteria, (3) accurately weigh all of the criteria according to their preferences, (4) know all relevant alternatives, (5) accurately assess each alternative based on each criterion, and (6) accurately calculate and choose the alternative with the highest perceived value (Bazerman, 2006: 4-5).

But such circumstances are unobtainable and can never be fully created either in university or in any other organisation: there is lack of information, time, and other valuable resources that affect the process of decision making (Choo, 2006), as well as personal human cognitive and behavioral trait specifics (Kahneman, 2011).

Importantly, subjectivity and self-serving biases play an essential role leading to the bounded rationality conditions. As an example, Bazerman, considering the cases of audit failures and failed decision making, argues that "most audit failures result from systematic biases in judgment" (Bazerman, 2006: 1), which arises much in advance of the auditors' judgment reports, at the

unconscious stage of the decisions making, and is connected to the institutional arrangements and psychological inability to maintain objectivity, regardless the auditors' honesty. "People tend to form a preference for a certain outcome and then justify this preference on the basis of fairness", notes Bazerman (Bazerman, 2006: 2). Self-serving biases can be explained by the fact that people process information not in a perfect manner: they act subjectively, putting first their personal interest, confusing it with a moral or fair deal. "The human tendency to maintain positive illusions, to make self-serving interpretations, to discount research evidence, and to overlook easily available and relevant information contributed to the "predictable surprise", writes Bazerman (Bazerman, 2006: 3).

People tend to simplify decisions, and it often occurs with heuristics. Kahneman (2011) explored three general type of heuristics, the affect heuristic, the availability heuristic, and the representativeness heuristic. He explains how heuristics occur when emotional evaluation overlaps cognitive reasoning and forces a person to rely on previously formed stereotypes. All these and some other cognitive, psychological, and behavioral characteristics contradict the rational approach and affirm its limitation in decision making.

Complexity and uncertainty as decision contexts

Ambiguity, uncertainty, and disorder are critical characteristics of the modern world (Owens, 1991; Beach, Connolly, 2005), determining decision process conditions in any organization, including universities. Ambiguity leads to stress, and to maintain a proper quality of decision making under stress is a substantial present-day problem (Hart, 1991). The environment is changing rapidly: political, social, and economic conditions require high decision-making speed, confidence, and ability to maneuver and find unique solutions (Garvin, 2001).

Uncertainty can be observed not only in the organization's external environment but as a critical characteristic of the organization itself. Though organizations are usually associated with rational decision-making models, Owens (1991) confirm that there is a gap between theory and professional practice, which often does not refer to normative models. In a variety of organizations, practicing managers rarely use them in work: "Normative decision-making models have no influence on the behavior of middle- and upper-level corporate managers" (Mintzberg, Raisinghani, as cited in Owens, 1991). Very often, goals conflict and goal uncertainty is combined with procedural uncertainty (Choo, 2006), which perfectly describes modern universities. Thus, discussing the decision process in organizations, it can be argued that organizational social contexts are such that rational decision making is hard to translate into actions. This view is supported, for example, by the stupidity-based theory of organizations developed by Alvesson and Spicer, which shows that functional stupidity is an important though under-recognized component of organizational life (Alvesson, Spicer, 2012). Notably, some organizations, primarily educational, public, or illegal ones, are even more complex and complicated than others, so they can be seen as organized anarchies "characterized by problematic preferences, unclear technology, and fluid participation" (Cohen et al., 1972: 1).

Group decision-making process, widespread in organizations including educational ones, is still not very well understood. Some significant influencing phenomenon that lead to poor decision making due to the social contexts, including groupthink, have been shown. This specific and detrimental phenomenon, according to Janis, is "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action" (Janis, 1982, as cited in Hart, 1991: 256). Janis argues that groupthink takes place when there are a strong and persevering leader, a high level of group cohesion, and intense pressure from the side, and lead to a gross neglect of objectives and alternatives, omission of information, subjective selectivity, poor examination of costs and risks, and mistakes in implementation and monitoring (Hart, 1991).

Group decisions are difficult to make because it requires consideration of the uncertainty and the desires of other group members (Beach, Connolly, 2005). As decision making engages multiple members with multiple interests, there is always inherent conflict: members form coalitions and use political power, promoting preferred decisions (Choo, 2006). Interestingly, Wallach, Kogan, and Bem (1962) note that spreading responsibility widely in group decisions leads to less responsible personal choice within the group, combined with the tendency to join the group. Additionally, their research confirms that persons tending to take more risk have more influence on the group than more conservative individuals.

To summarize, complexity and uncertainty are decision contexts affecting both the external environment and internal university procedures, which leads to the substantial difficulties in the process of making effective decisions. Some perspectives on how to reduce risks and increase the effectiveness of the decision-making process in such circumstances will be discussed further.

Decision analysis perspective

Decision analysis is widely used in business and government sectors as an intelligent method for addressing complex decision contexts. Clemen considers decision analysis an excellent tool, noting that "decision analysis provides effective methods for organizing a complex problem into a structure that can be analyzed" (Clemen, 1996: 2). In particular, it includes the possible courses of action, the possible outcomes and the likelihood of them, and potential consequences to be resulted from the different outcomes. This approach works with uncertainty in a unique way, not denying or ignoring it, but identifying its sources and systematically representing them.

Decision analysis involves various methods. Some authors describe such structuring tools as decision trees (Clemen, 1996; Beach, Connolly, 2005), influence diagrams (Clemen, 1996; Howard, 1988), decision matrices, expected value computations (Beach, Connolly, 2005), and clarity tests (Howard, 1988). Importantly, "in an uncertain world, good decisions can lead to bad outcomes, and vice versa" (Howard, 1988: 682), so it is crucial to make a distinction between decisions and results, actions and consequences. To evaluate a decision must mean to accentuate the stakes and the odds, not the decision results (Vlec, 1984).

Decomposition perspective

The attempts to make the decision process more accurate led to the appearance of the various models structuring the reality and reducing vagueness. Describing the rational decision-making process, Bazerman (2006) includes six steps. The first is a correct definition of the problem that will help to avoid wrong problem solving. The problem should not be described in terms of a solution, as well as being missed in excessive detailing, or to be too narrow and represent only one part of the bigger problem. The second step is to identify all criteria relevant to the issue. As all the criteria have different importance, the third step is to weight them. The fourth step is generating the alternatives, and it is important not to spend too much time and to stop before "the cost of the search outweighs the value of the added information" (Bazerman, 2006: 4). The fifth and most challenging step is to rate each alternative using each criterion. The last sixth step is to calculate weighted ratings of the alternatives and to find a final optimal decision.

Different authors describe similar steps. Indeed, Hammond, Keeney, and Raiffa (as cited in Bazerman, 2006) suggest a similar eight steps of rational decision making. Some typical stages can be discerned. Bridges suggests that "four steps are typically involved in reaching a decision: (1) defining the problem, (2) identifying possible alternatives, (3) predicting the consequences of each reasonable alternative, and (4) choosing the alternative to be followed" (Bridges, as cited in Owens, 1991: 283). Thus, following the precise steps of decision making is regarded as useful practice, with the emphasis on the decomposition and cyclicity of the process.

Information perspective

To reduce uncertainty, the decision maker must obtain and interpret appropriate information. Indeed, information-search activities require a great deal of time, energy, and resources, and have a massive impact on the quality of the decisions (Choo, 2006). Choo proposes three dimensions of the information needs: "1) to frame a choice situation, (2) to define preferences and to select rules, and (3) to identify available courses of action and assess their projected outcomes" (2006, p. 248). Importantly, "acceptable level of performance is usually not the highest level of performance possible: rather, it is one that is good enough to fit the organization's perception of reality and values" (Choo, 2006: 267). Information search should stop when a satisfactory solution is found.

Sometimes it can be beneficial to carry out business research, which has a purposeful and systematic framework. Mainly, it is important for the strategic decisions, which are the most difficult and unstructured. Business research is "systematic, controlled, empirical and critical investigation of phenomena of interest to managerial decision makers" (Davis, Cosenza, 1993: 9).

One more useful type of information is feedback results. "The results of one decision provide new information on which to base yet other decisions. Thus, 'feedback loops' were added to some process models to ensure that the outcomes of decisions would be considered as future decisions were pondered" (Owens, 1991: 267). Feedback and other kinds of information contribute to the

organizational learning, which promotes goals adaptation, rules attention, performance assessment, and in general, helps to find more viable solutions (Choo, 2006).

Groupthink avoidance perspective

Some available strategies for avoiding the influence of the groupthink phenomenon that was described above also need to be examined. Janis, who first researched this phenomenon, accentuates the importance of independent experts, critical approach maintenance, and default of the preferred options (Moorhead, 1991). The ideas of Moorhead, Ference, and Neck also attract attention and impress with their thorough analyses of the phenomenon, which pays particular attention to time limits and leadership style. They suggest alerting group members to the disadvantages of the short decision time, including pressure, discouragement of dissent, and self-censorship (Moorhead, 1991). Time pressure should be reduced by any means. A leader should not be the laissez-faire type of leader. Instead, being strong and demanded, "this leader is active in directing the activities of the group but does not make known the preferred solution" (Moorhead, 1991: 548). Garvin suggests leaders to pay attention to body language of the group members to trace the signs of the hidden disaffectation and disagreement (Garvin, 2001: 115). He also proposes to avoid early closures, to maintain minority views, and to value the input from "helpful Cassandras, people who are known for raising hard questions and offering fresh perspectives about the dangers of proposed policies" (Garvin, 2001: 115).

3. Materials and methods

In this article, a case study as the in-depth investigation of the chain of related decisions in one particular Russian university is used to explain the character and peculiarities of the decision process. Due to this, close and detailed examination of the case and related contextual conditions was held. The case is related to the following decision problem: a new promising master`s degree educational programme (NMP) was developed in the university investigated. The idea of the programme was initially approved, but during the process of the programme launch, unpredicted obstacles appeared and led to the closing of the programme before it began, termination of education agreements with enrolled students, and a transfer of students and the programme to another university. Thus, the chain of events and decisions had led to the fact that the new programme was not supported and launched. The situation developed through several stages, each of them a part of the general decision, and the case developed, in general, satisfactorily, but the level of uncertainty gradually increased. Finally, the decision situation became a problem and then a tough decision was made. This case investigation examines what exactly happened, who were main stakeholders, why the final decision was what is was, what underlay this decision, and what the analysis of the case can reveal about the nature of decision making in the university environment.

Data was gathered from a variety of sources and by using several methods: 1) First, five in-depth interviews with the key and most engaged stakeholders were carried out. Further, the positions and occupations of the main stakeholders will be indicated but not the concrete individuals, in support of the principle of anonymity. The interviewees were: 1) the head of the new educational programme (NMP); 2) a representative of the personnel department; 3) the person responsible for the quality of education development; 4) the top decision-maker; 5) external consultant on organizational development. These respondents were selected due to their maximum involvement in the situation at different stages, due to their high expert level, and also due to their integration into the decision-making structure. Interviews included questions of an expert nature concerning ideas about the goals of opening a new education programme, its intended results, the need to build supporting processes, infrastructure, the place of the master's degree level in the structure of the educational process of the university in a whole.

2) Secondly, the included observation of the development of the situation was carried out at all its stages. The observation was implemented through participation and recording of working group meetings of the main stakeholders given below according to a specially developed scheme. It included the objectives of the discussion at the beginning of the meeting and the results reached by the participants at the end of each working group meeting. Each protocol was accompanied by the summary creating, where structural and process deficiencies and mismatches were recorded. Meetings were held with different stakeholders every two weeks for six months; each meeting lasted 1 hour; In total, the volume of the formalized observation was not less than 12 hours.

3) Thirdly, other stakeholders presented below were taken short semi-structured interviews to gather existing opinions and characteristics of the situation (10 semi-structured interviews in total).

4) Governmental documents and standards were analyzed: federal-state higher education laws and professional standards and documents governing the organization of the educational process in higher education institutions.

5) Relevant university policies and local documents were analyzed, including "The project on the transformation of education", "Statement on the organization of educational activities within the university", "Statement of the main education programme", "Analysis of the competition procedures for the graduate educational programmes", "Regulations for the design, implementation and closure of the main graduation programmes".

Qualitative data were analyzed using the method of content analysis.

Table 1. Categories and subcategories of analysis

	Categories of analysis	**Subcategories – semantic units, keywords**
1	Norms and regulations	regulations, control, regularity (permanence, stability), responsibility, obligations, verification, accreditation, document, requirements
2	Development and change	idea, approbation, renovation, update, development, goal, opportunity, resources
3	Cooperation, partnership	we (ours, us), consent, partnership, perspective, interest, offer, interaction
4	Optimization	order, conformity, efficiency, optimality, lack, resources
5	Uncertainty	Lack of regulation, unstable, unclear, unknown, vague, new, uncertainty

Interested parties:

• The head of the NMP: initiated the idea and development of the new master`s degree educational programme. He has strong relationships with the industry and supports the cooperative relations with two other universities as prospective partners. He is the initiator of the process and the one who promotes it in all stages;

• Members of the Department–academics, senior lecturers, associate professors: give the expert review of the idea of the NMP and help to improve it.

• Methodical Council of the Faculty: provides expert review of the NMP.

• Methodical Council of the University on Educational Issues: provides expert evaluation and assessment of the NMP on a higher level.

• University Education Administration Office (EAO). Its role is to check that all the NMP documents are correct and that the NMP meets the legal standards.

• University Office of Chargeable Educational Services: provides organisational and financial services to all structural units of the university.

• Center for the Development of Education Quality (CDEQ): promotes new initiatives in the education and support education leaders.

• Top executive decision maker: evaluates the NMP at the final stage. After his approval, the NMP can be advertised and the enrollment process can begin.

• Office of New Enrollment: responsible for the legal support of the NMP, including preparation of education agreements between university and students.

• Universities–partners of the NMP: members of two universities who were to deliver some learning units to students and be the experts for the students` educational project to be part of the NMP curriculum.

• Industry partners of the NMP interested in the students' project results.

• Institute of Distance Learning: manages the work of the Moodle system for all the university departments and education programmes.

• Students: those interested in enrollment in the NMP.

• Human resources department (HRD) of the university: not involved in the decision situation at the early stages, but at the final stage, it faced the fact that an employee (the head of the NMP) intended to quit his job because of the case.

• University consultant on organizational development: tried to mediate the situation and find the best solution for everyone.

4. Results

National and organizational contexts analysis

An analysis of state regulations and legislation in the field of higher education in Russia revealed that the new law on education, Federal Law №273, passed in 2012, had significantly expanded the opportunities for citizens of the Russian Federation to gain access to the master's degree level of education, including the right to get free education of the master's degree level. The government introduced financial incentives for educational organizations to develop master programmes, systematically increasing the state expectations for the preparation of masters. For the period from 2014 to 2016, the rate of the admission of students at masters` degree level had increased by more than three times. Thus, the launch of new graduate programmes and attracting students has become one of the priority areas of educational strategy of the universities in Russia. Part 153 of the Federal Law №273 secure the right of universities to create modular, network, and distance learning masters programmes; it also supports the idea of involvement of the employers to the educational process in masters programmes.

Regarding the university organizational context, development of master programmes in experimental format began there in 2003 in connection with the transition to the implementation of a multi-level education system (bachelor + master levels). A department of magister degree education level was allocated, whose main task was to support the development and implementation of new master educational programmes in all the faculties. The department also provided organizational support to programme developers in students recruiting. Since 2011, a significant part of the faculties entered the active phase of the transition to multi-level education (bachelor + master levels). Reducing the learning and teaching time during the transition from specialist education (5 years in total) to undergraduate education (4 years in total) had led to compression of the academics` workload. At the same time, relatively new activities of developing master programmes had increased. However, by that time, many questions about new educational programmes development for this new level were largely not clear. There was an active problematization of the master's level in areas:

- content, curriculum and design, outcomes of masters education;
- disciplinary design of educational programmes, the transition to interdisciplinarity;
- organization of the educational process;
- interests of stakeholders and joint design of educational programmes with the participation of international partners.

The master degree level development was defined as the priority for the period 2015–2020 and became a subject of a series of strategic sessions at the university in 2015–2017. Specialized training was organised for graduate programmes developers with the involvement of the outer experts in 2016. Organizational support for the programmes` development was carried out by the Centre for the Development of Education Quality, established in 2015. The centre has developed regulations for organizing a project competition for new master's programmes and receiving financial support. Also, regulations have been introduced for the opening of interdisciplinary educational programmes called autonomous postgraduate educational programmes. Also, to attract students, scholarship programmes were established for postgraduate education programmes. The measures taken contributed to the increase in the activity of the design of new masters programmes. All these had led to the development of the considering case described in detail further.

Content analysis showed a combination of contradictory attitudes towards "constancy" and "variability", "duties" and "initiatives". The declared value of the distributed decision through the use of the term "we" was noted. At the same time, specific actors were not indicated by

respondents. In the statements of the administration representatives, the use of "we" referred to the groups of administrators who regulate the process; academics were mentioned as "they". Thus, the meaning of "we" is those who are developing a new educational program, but in fact – "we" means those who are regulating it. The use of keywords of the category "norms and regulation" was noted in relation to the actions of other actors, not to the activities of respondents. When analyzing the results of the situation, stakeholders stated the value of renovation and changes, but at the same time, such words as "optimization", "order", and "control" were often used.

Decision process dynamics and concomitant difficulties

The decision to develop and launch the considered NMP were comprised of several stages; some difficulties or problems can describe each of them:

Table 2. Decision process dynamics and following uncertainty problems

Decision process stage	Following uncertainty problems and complexity difficulties
1. The Head of the NMP had found the partner universities and industry representatives and discussed the idea of NMP with them. Initial agreements were developed.	There is no clear university policy about partnerships with other universities and industry. The level of this uncertainty is high. “I did not find any clear regulations of university partnerships in educational programs”, “My partners were not agree to transfer their content into our MOODLE platform because of the copyright issue” (Head of the NMP)
2. The head of NMP discussed the idea and main features of the NMP with members of the Departments, Methodical Council of the Faculty, the Methodical Council of the university (3 stages of discussions). The NMP was approved.	Master’s degree education is new, the Russian education system, new programmes are not regular, and supporting processes are unclear. The policy and strategy for the development of the graduate education programme in the university and at the particular faculty are insufficient. The criteria of support for the NMP are obscure. Discussions in collegiate bodies are mostly formal. There is a lack of expertise in new educational topics. “The university development program aims to support new educational programs appearance. Unfortunately, not many academics are ready to participate in it and there is a lack of competencies” (member of Methodological Council) «We are interested in the emergence of new educational programs, but honestly speaking, the regulation of their appearance, approval and launch is still vague” (Department member)
3. The head of the NMP had a series of interactions with Education Administration Office (EAO) to make the NMP meet the legal education criteria. The NMP was corrected.	The government does not provide strict regulation to the education programmes of universities. It gives general guidelines that leave space for initiative and creativity, but the frameworks given are also too broad and open to interpretations, leading to ambiguity. “We have standard framework to regulate new educational program. It leaves some

	unusual issues uncovered, so a Head of NMP have to coordinate it with his superiors" (EAO member)
4. The head of the NMP requested the Office of the Chargeable Educational Services to estimate the cost of the NMP and, based on it, identify tuition cost for future students. This inquiry caused a problem and was made with very approximate numbers as a result.	There is no standard of a financial model that can be used for the new education programmes; budgeting principles, as well as profitability parameters, break-even point, and financial performance criteria are not clear. "I did not get any substantial help with clear financial model of the Program" (Head of NMP)
5. Some required actions to launch the NMP were taken by its head: - The teaching staff was allocated. - Industry requirements for educational projects were identified. - The website was launched. - Programme enrollment conditions were declared. - Students' applications for enrollment were collected and assessed. - Students were enrolled.	The difference between a master's degree programme and a professional development programme is unclear. No precise rules and norms about new educational programme content development, enrollment requirements, and staff allocation were found. Interaction with the related managing structures of the university is weakly regulated. "It is clear that changes are constantly happening in education, there are many interesting courses, things to try…" (student) «It was hard to gather a teaching team for the Program, as it lays basically on individual initiative" (Head of NMP)
6. Institute of Distance Learning suggested developing programme units in Moodle for additional funding. The offer was rejected, because partner universities did not want to transfer their copyrighted teaching content to the third party. Uncoordinated actions of supporting structures were revealed.	Uncertainty in partners' copyright content usage was discovered. "We offered this educational program to locate its content on our MOODLE platform, but they refused" (IDL representative)
7. Education agreements between university and students were considered inaccurate and terminated before the start of the semester. The top executive decision maker decided not to correct it but to stop the programme before it began. The NMP was transferred to a partner university. 90 % of enrolled students agreed to keep their choice of the programme and signed the agreement for education with this partner university.	Risks taken by the institution: - closing of the new master's programme - reputation risk - loss of profit - time costs of all the stakeholders - financial costs of programme promotion "It's a pity that it happened" (Top executive) "I was really mad at that moment" (student)
8. The head of the NMP had discussed the situation with HRD. The discussion of the situation with management board did not happen. The situation did not become a case to scrutinise. The head of NMP was offered a position in another university; he accepted it and quit.	The situation formally did not fall under the consideration of the any commission, even though there were apparent difficulties and ambiguity during the decision process steps. The case was not recognized by the knowledge management system of the institution as worthy to scrutinise and take actions to prevent possible similar future situations. The talented employee quit. "I was very upset: I made so many efforts and

	took individual initiative to put this idea forward and bring the program to launch". (Head of NMP) "Unfortunately, we have no power to influence this situation, as this is education management issue" (HRD)

The situation showed that the primary role is that of the final top executive decision maker. All the previous stages of the programme approval by the various departments and councils were found to be complementary but powerless on the last stage of the process, although at first glance it does not seem so. This can be explained by the unclear authority of these institutions in the process of launching the NMP, vague rules, and obscure authorities. Essential stakeholders, such as enrolled students, industry partners, and partner universities were excluded or ignored in the decision process. It can be explained similarly by the lack of the relevant experience and unclear procedures of inclusion in the decision process. Consequently, the final decision was made without discussion, in a tough mode, and on unclear grounds.

5. Discussion

University as an organized anarchy

Universities are perfect examples representing the model of the garbage can decision process (Cohen et al., 1972). This is characterized by problematic preferences, which were demonstrated in the case: stakeholders struggled to choose between risk and reputation, new partners and old game players, new ideas and old procedures. The university operated on various inconsistent preferences loosely connected to each other. There was a lack of coherent structure, which is shown by the sophisticated schemes of the decision process. The organization "discovers preferences through action more than it acts on the basis of preferences" (Cohen et al., 1972: 1). This is confirmed by the final decision, which contradicted the previous decision stages.

Unclear technology, which is another essential feature of the garbage can model, was also observed: the process of launching the NMP was unclear from the very beginning to the end, with no precise algorithms and rules, obscure areas of responsibility of the related supporting administrative units, and open questions in most stages of the decision process.

Fluid participation as a part of the garbage can decision process model was expressed in the relationships with industry partners and partner universities: on one hand, they were competent and authoritative parts of the agreement; on the other, they had no real power in the final decision. Their time and efforts therefore varied significantly. Fluidity was also manifested through the displacement of the student from the NMP in the current university to another university, showing uncertain organizational boundaries.

Cohen, March, and Olsen pointed out that the garbage can process is one in which problems, solutions, and participants move from one choice opportunity to another in such a way that the nature of choice, the time it takes, and the problems it solves all depend on a relatively complicated intermeshing of elements (Cohen et al., 1972: 16).

In light of that, the manner of organizational choices can be described as resolutions without reference to explicit bargaining. In the case, organizational goals are unclear or unknown, and decisions became a result of interpretation of different ideas within it.

Weick's ideas correlate with the garbage can model and also can be used to shed light on this case. He claims that "many aspects of organizations exhibit loose coupling between intentions and actions of organizational members, between system parts which should be tightly coordinated, between means and ends" (1976, as cited in Keeney, 1988: 392). Additionally, the situation is described by the procedural uncertainty (Choo, 2006). Indeed, situation analysis shows that the intention of organization members to maintain the NMP during the process of its launch had led to the action of its closing.

Power and authority in the decision process

The NMP launching was a specific and particularly new precedent for the organization, so it is worth looking at its political mode (Choo, 2006). Organizational culture specifics require creating a powerful guiding coalition (Kotter, 2007) in the very early stages of any project.

The head of the NMP had strong alliances outside the university but weak contacts inside the institution, and his external partners were unable to influence the situation.

Administrative staff on all levels was not ready to share their authority. As Kerr showed, "the managers—while embracing the rhetoric of democracy, empowerment, and participation – have been reluctant to share power, grant autonomy, disclose information, or include employees in substantive decision making" (Kerr, 2004: 81). The organization has a strong hierarchical nature, and this means, according to Kerr, that participation rights are distributed unequally, when higher-level staff is gaining greater influence over all critical decisions and lower-level staff has little or none. The case demonstrates this very clearly.

The decision process mostly remained the advocacy-not-inquiry approach and contest more than collaborative problem solving: persuading others and defending the position dominated the constructive criticism and balanced arguments, and the outcome was seen mostly as win or lose, more than collective ownership (Garvin, 2001).

Risk avoidance perspective

The case demonstrates that the head of NMP took all the main risks on himself as the central figure, leader, ideologist, and implementer of NMP project. The idea of the NMP was discussed through some meetings, and Whyte writes that the use of committees and councils leads implacably to suppression of courage and risk, and, where choosing between more and less risky courses, preference for the conservative direction (Whyte, 1956). But, as we can observe, group interactions, on the contrary, led to the acceptance of the NMP as a new and risky type of educational programme. Why did this happen? Wallach, Kogan, and Bem argue that "persons with stronger individual risk-taking proclivities tend to become more influential in the group than persons who are more conservative" (Wallach et al., 1962: 77). So the NMP was approved and went through many stages. But the final decision was not collective, and it eradicated previous achievements. Why did the group members not contradict such a decision? This can be explained by the fact that "increased willingness to take risk would eventuate from this decreased feeling of personal responsibility" (Wallach et al., 1962: 85). The final responsibility was taken by a person who was not a part of any discussion group, acted personally, and preferred not to take risks.

Bounded rationality as a decision context

Was the chain of decisions described in the case rational? Analyzing all its stages, we can see that this question is complicated, because the decision situation initially followed seemingly rational procedures and rules, but later the level of uncertainty and ambiguity increased, significant lack of information was revealed, and potential heuristics were suspected. Thus it is hard to explain this situation through rational lenses, because there was no knowledge about possible alternatives, no clear decision rules, no risk level determination and understanding of consequences. Additionally, "values by which alternative consequences of action can be compared in terms of their subjective value" (March, 1991: 97) were also not clear. Stakeholders could not to identify criteria and accurately weigh all the relevant alternatives, calculate, and choose among the alternatives (Bazerman, 2006: 4-5). In addition, Owens writes that a variety of organizations' research has proven that practicing administrators and middle- and upper-level managers rarely use normative decision models in actual work, they hardly influence their behavior (Owens, 1991). Thus, it is preferable to analyze the case through the lens of bounded rationality.

Possible alternatives and required actions

Some actions can be suggested to improve the course of such decision situations. First, political negotiations should be carried out. It means that to reduce risk resistance, the primary decision maker should have been involved in discussions in previous stages. Also, to increase the chances of the acceptance of the preferable decision, the head of the NMP should have been negotiating with the dominant local coalitions and gotten prior support or at least a neutral position from them. In any case, the powerful coalition should be created at the earliest stages of the project. In general, the mode of the decision-making process would have been better oriented to the inquiry approach rather than an advocacy approach (Garvin, 2001).

Second, information as a crucial part of the decision process should have been found and provided (for example, official regulation of the relationship with external partners). An advantageous type of information is the feedback results. Such results can "ensure that the outcomes of decisions would be considered as future decisions were pondered" (Owens, 1991: 267).

Feedback from the head of NMP could give priceless information on the current system errors and process gaps.

Third, additional supportive actions should be made where needed. If there is too high a level of uncertainty, it is better to postpone the final decision and organize separate additional meetings regarding the missing procedures and standards for any new educational programme, which can help to decrease a level of ambiguity, uncertainty, and disorder.

Fourth, to systematize the complicated decision process can be helpful. It would be beneficial to use a decision tree or some other decision analysis instrument to present the entire complicated process, all its stages, elements, and stakeholders (Keeney, 1988). It could help to show the blind spots in the organizational processes scheme and prepare a plan of additional supportive actions. Such tools can be beneficial both for individuals and group of stakeholders, revealing multiple objectives, structuring the decision problem, identifying trade-offs, and justifying previous actions.

Finally, organizational learning should be used more extensively, especially in cases like the one described. It could help to coordinate various goals inside the organization, pay more attention to the existing and missing rules, assess the performance of the departments in a new way, and eventually help to find more satisfying solutions (Choo, 2006).

6. Conclusion

Decision making in universities cannot be implemented in an entirely rational mode because of the effects of the bounded rationality and high level of ambiguity, novelty, and movement inherent to the social and organizational contexts. Nonetheless, some strategies can be developed to reduce the level of uncertainty and to increase the quality of the decisions made, such as decision analysis perspective, decomposition perspective, participation perspective, information perspective, and groupthink avoidance perspective. Also, the role of political negotiations, relevant information provision, additional actions and meeting organization, systematization of the complicated issues, and organizational learning were considered.

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