

Strategic Decision Making Practice in Croatia – Which Decision Making Style is More Effective?

Ivana Bulog

Abstract—Decision making is a vital part of the business world and any other field of human endeavor. Which way a business organization will take, and where that way will lead it, depends on broad range of decisions made by managers in the managerial structure. Strategic decisions are of the greatest importance for organizational success. Although much empirical research has been done trying to describe and explain its nature and effectiveness, knowledge about strategic decision making is still incomplete. This paper explores the nature of strategic decision making in particular setting - in Croatian companies. The main focus of this research is on the style that decision makers on strategic management level are following when making decisions of life importance for their companies. Two main decision making style that explain the way decision maker collects and processes available information and performs all the activities in strategic decision making process were empirical tested: rational and intuitive one. Besides analyzing their existence on strategic management level in Croatian companies, their effectiveness is analyzed as well. Results showed that decision makers at strategic management level are following both styles somewhat equally in order to function effectively, and that intuitive style is more effective when considering decisions outcomes.

Keywords—Decision making style, decision making effectiveness, strategic decisions.

I. INTRODUCTION

DECISION making is a process which characterizes every human being and every organization. Without decisions, an organization cannot achieve any success. Various definitions of the decision making process could be found in the literature, but they are all stating that it is a continuous process, very time consuming for the decision maker, representing the basis of the business existence and performance, and targeting mainly managers. Today, when all organizations are trying to keep their piece of the market cake, their success is more than ever the result of effective and efficient functioning of the management pyramid which realizes itself through decisions making process. Given the complexity of organizations and problems they face, together with the inability of any decision maker to obtain all the information's he/she would like to have, it is impossible to be sure that the choice that has been made in fact represents the best possible option. That is why decision making process needs to be traced carefully and managerial decision making should obtain greater interest in management theory and practice. The manager who understands the nature and principles of decision making will cope with this problem

more effectively than the manager who does not.

Which way the business organization will take, and where that way will lead it, depends on broad range of decisions made by managers in the managerial structure of an organization. Of course, the importance of all managerial decisions is not the same. Strategic decisions are the most important decisions in the organization. They are dealing with the problems that have extremely high stakes, and whose solutions have long-term implications for the organization. They target business areas essential for organizational growth, prosperity, and survival. Strategic decisions determine the stream of all business activities required to achieve organizational objectives. Because of its importance for organizational success, strategic decision making has been a topic of interest for many researchers. Although much empirical research has been done trying to describe and explain strategic decision making, knowledge is still incomplete. This study explores the nature of strategic decision making in Croatian companies. The main focus of this research is on the style that decision makers on strategic management level are following when making decisions of life importance for their companies. Two main decision making style that explain the way decision maker collects and processes available information and performs all the activities in strategic decision making process were empirical tested: rational and intuitive one. Besides analyzing their existence on strategic management level in Croatian companies, their effectiveness is analyzed as well.

II. THEORETICAL BACKGROUND

A. Strategic Decision

In all types of organizations, managers face a need to cope with difficult and complex situations in which they must make major decisions, such as entering new markets, developing new products, or acquiring or divesting businesses, so that an organization can function, adapt progress, take advantage of opportunities and overcome threats [1]. These decisions are strategic ones and they are of the major importance for an organization. They differ from other types of decisions (administrative and operational) because they deal with the range of organizational activities, cope with uncertainty, involve extensive risks and changes, etc. They have been described as decisions that commit significant resources, set precedents, and drive a series of lesser decisions [2]; as ill-structured, non-routine, and complex in their nature [3]. Strategic decisions are among main means through which management choice is actually realized [4].

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B. Strategic Decision Making

Among different manager's decisions, strategic decision making is a complex process that must be understood completely before it can be practice effectively [5]. Strategic decision making is central managerial activity in all types of business organizations; large and small, for profit and not - profit, private and public [1]. Its importance primarily results from effects it has on organizational performance. Namely, successful strategic decision making enables an organization to maintain competitive position, align internal operations with external environment and survive threats and challenges, while conversely, because of their magnitude, a single, poorly made strategic decision can lead to the demise of an organization and result in corporate embarrassment, large economic losses for stakeholders or even bankruptcy [6]. Therefore, it is not surprising that there is a growing interest into the strategic decision making process among researcher all over the world.

In spite of much work that has been conducted in the area of strategic decision making, especially during the 1990s, we still know little about strategic decision making process and factor affecting it [5]. Knowledge is still limited and mostly based on descriptive research and assumptions that have not yet been tested. The influence factors and outcomes of strategic decision processes have been the subject of numerous studies over the last three decades [7]. Different researchers attempted to model strategic decision making process as well as to identify types of strategic decision making processes. Others have been interested in investigation of specific characteristics (dimensions) of strategic decision making process, while some investigated effects of these characteristics (dimensions) on organizational outcomes. Some researchers where interested in factors that influence specific characteristics (dimensions) of the strategic decision making process, as well as in mediating impact of some factors on process outputs.

C. Decision Making Style

Understanding strategic decision making as a process structured from the activities of information gathering, processing and assessment; as a process of knowledge and information transformation in managerial activities [8], in the literature which deals with the issues of how decision making truly happens in organizations, two basic decision making style could be identified: rational and intuitive. These styles, based on the principles of main behavioral decision theories, are explaining how decision making happens in organization. The differences between them reflect different behavior of decision makers with regard to their way of thinking, perception of the entire environment, understanding of different internal and external variables and their interactions, interpretation of events, undertaken activities in the search for possible outcomes in order to achieve defined goals, etc. Rational style denotes decision making based on formal analysis, it is methodological by nature, proactive, and time exhaustive, while the intuitive one denotes decision making based on overall knowledge, experience, available information, but without the support of formal analysis.

Generally, when it is about strategic decision making, researchers have given preference to rational decision making over intuitive. One of the basic assumptions is that systematic and careful analysis yields choices which are superior to those coming from intuitive processes, but this assumption have recently come under fire, because advances in cognitive and artificial intelligence confirmed that there is nothing mystical or magical about intuitive processes [10]. Moreover, researchers confirmed that intuitive processes evolve from long experience and learning [9] and that it is consist of the mass of facts, patterns, concepts, techniques, abstractions, and generally what we call formal knowledge or beliefs, which are impressed on our minds [10].

Empirical researches have confirmed that both decision making styles are represented in the field of strategic decision making.

D. Decision Outcome

Although researchers have put their effort in explaining the nature of strategic decision making and its characteristics from different perspectives, including two mentioned styles as well, there is still little evidence how decision making style influence decision outcome, what can give an answer to the question - which decision making style is more effective?

In many studies, organizational performance is often used as a substitute for decision outcome, but some researchers have expressed concerns about this substitution because organizational performance is related to factors (e.g. organizational environment, political climate, decision acceptance) that may or may not be related to the decision making process. Namely, these factors can have an important impact on organizational performance without necessarily having anything to do with decision making process [11]. So, in an attempt to measure the outcome of implemented strategic decisions some authors have chosen organizational level and evaluated organizational performance as quantitative measure, while others have chosen decision level and evaluated decision outcome using qualitative measures such as loyalty to implemented decision, satisfaction with decision etc.

III. RESEARCH METHODOLOGY

A. Objectives

This study attempts to contribute to the better understanding of the nature of strategic decision making by drawing upon an empirical investigation about the strategic decision making practice in Croatian companies. The research objectives of the paper are (1) to analyze the existence of two main decision making style at strategic management level (rational and intuitive) and (2) to evaluate which style is more effective considering decision making process outcomes.

B. Design and Sample

Survey was conducted among Croatian publicly traded companies. To collect primary data, a questionnaire was used as the main research instrument. The unit of analysis was an organization, specifically strategic decision making process. Since the outcomes of strategic decisions are a function of the

people who are actually involved in making them [1] the data for this study were collected from executives who were closely involved in making these decisions. Questionnaires with cover letters were posted to the Chief Executive Officers (CEOs), including an appropriate introduction, key terms, questions related to the general organizational and individual characteristics, questions related to the strategic decision making, and also stamped, self-addressed return envelopes. In order to minimize distortion and memory problems, examiners were asked to determine one or more specific successful strategic decisions that have been made in the last 5 years. The following questions required answers in accordance to the recalled decisions. Commitment to one (most important) decision among the aforementioned strategic decisions, created the framework within which managers have answered all the questions about the strategic decision making.

The final sample involves 86 companies that agreed to participate in the survey which corresponds to a response rate of 38.74 percent. The response rate is high considering the nature of the research.

C. Measures

To measure *rational decision making style* respondent were asked to report on scale of one (strongly disagree) to five (strongly agree) the extent to which decision maker, when making strategic decision, explicitly emphasizes the following: (a) comprehensive and systematic search for information, (b) the extensive analysis of collected information, (c) usage of analytical techniques, (d) thorough and careful consideration of activities in the process of decision making and their monitoring through formal and written report (formalization of the process), (e) consideration of a number of alternatives, (f) evaluation of alternatives in terms of costs and benefits. The six ratings were averaged and had a Cronbach's alpha of 0.848.

Considering *intuitive decision making style*, respondent were asked to report on scale of one (strongly disagree) to five (strongly agree) to extend to which decision maker, when making strategic decision: a) rely on pure judgment in making strategic decisions; b) place emphasis on the past experience in making strategic decisions; c) rely on gut-feeling in absence of needed information when making strategic decisions. Cronbach's alpha for these three items is 0.784.

In terms of the efficiency of each decision making style the *outcome* of the strategic decision making was tested relying on perception of managers on following: (1) how much they are satisfied with the way the decision was made and (2) implemented, (3) what results is shown after implementation, and (4) the extent to which decision is followed without additional intervention to address emerging, unanticipated problems. A Cronbach's alpha for this scale is 0.740.

The statistical processing of gathered data was made on a PC using Excel and SPSS software for data processing.

IV. RESULTS

The companies are located in nine industries. Processing industry is the most representative industry in the sample

accounting for 32.56 percent of the companies. Companies where the number of employees exceeds 250 employees are prevailing in the sample.

The average age of respondents is between 46 - 55 years. The lowest level of education among managers at strategic management level is college level (5.81%). The most represented is B.Sc. level of education (68.60%). Further, 22.1 percent have a master degree, while 3.49 percent have a doctorate. Qualification structure of employees is on a satisfactory level. The respondents had an average experience of 4 - 5 years in the current company in their current position. 73.26 percent of the respondents were male.

Strategic decisions are not the same in all companies. Decisions which are strategic in one industry may not be so in another [12]. Their occurrence and type may be contingent on a wide variety of factors. Fig. 1 represents a list of successfully implemented strategic decisions during the last five years in publicly traded companies in Croatia.

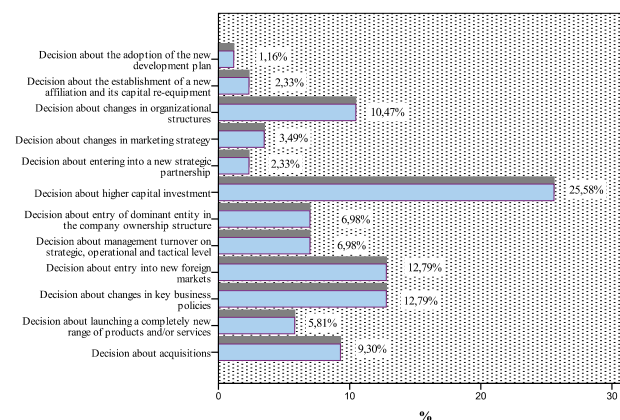


Fig. 1 Successfully implemented strategic decisions

Based on the respondents' (CEOs) answers the list of twelve strategic decisions is created. As shown in F efficient decision areas in the sample vary as follows: decisions about higher capital investment (25.58%), decisions about entry into new foreign markets and changes in key business policies (12.79%), decisions about changes in organizational structures (10.47%), decisions about acquisitions (9.30%), etc.

The validity of the decision making styles constructs was assessed by exposing all the items to factor analysis. The analysis supported distinction between constructs of rational and intuitive style. As already mentioned, Cronbach's alpha was 0.848 for the rational decision style and 0.784 for intuitive decision style, what was considered satisfactory. Table I presents the correlations among all the variables that form construct of decision making styles. It can be seen that all the variables are statistically correlated. Correlations between the variables that form rational decision making style construct (1-6) and those that form intuitive decision making style construct (7-9) are positive and statistically significant.

TABLE I
STATISTICALLY SIGNIFICANT CORRELATIONS BETWEEN VARIABLES THAT FORM DECISION MAKING STYLES

Variables	1	2	3	4	5	6	7	8
1. Comprehensive and systematic search for information								
2. Extensive analysis of collected information	.487**							
3. Consideration of a number of alternatives	.394**	.545**						
4. Evaluation of alternatives in terms of costs and benefits	.480**	.548**	.447**					
5. Usage of analytical techniques	.287**	.464**	.367*	.426**				
6. Formalization of the process	.518**	.599**	.585**	.548**	.496**			
7. Meaning of the past experience related to the same or similar problem areas	-.286**	-.348**	-.312**	-.325**	-.244*	-.541**		
8. Reliance on judgment	-.448**	-.524**	-.444**	-.427**	-.342**	-.673**	.678**	
9. The importance given to emotion, and affective reactions	-.416**	-.492**	-.322**	-.453**	-.277**	-.687**	.526**	.590**

* $p \leq 0.05$, ** $p \leq 0.01$. N=86

Out of the 36 correlations between rational decision making style variables (1-6), only one (consideration of a number of alternatives \leftrightarrow usage of analytical techniques) is statistically significant at the level of 5% ($r=.3687$), while all others are statistically significant at the 0.1% level. Correlations between intuitive decision making style variables (7-9) are statistically significant at the 0.1% level and they indicate strong relationship among them ($r > 0.05$). Also, it is noteworthy that correlations among variables of rationality and intuition are negative, but statistically significant at the 0.1% level. This confirms the existence of the two decision making styles, different in their nature, in strategic decision making process in Croatian companies.

When observing mean scores of individual items constituting the rational decision making style (the average value of all items was 3.48) and comparing it with the mean scores of individual items constituting intuitive decision making style (the average value of all items was 3.30), it is evident that managers somewhat equally use rationality and intuition in their decision making (Table II.)

TABLE II
DESCRIPTIVE STATISTICS FOR DECISION MAKING STYLES

Variables	Std.	
	Mean	Deviation
1. Comprehensive and systematic search for information	3,56	,729
2. Extensive analysis of collected information	3,72	,807
3. Consideration of a number of alternatives	3,65	,808
4. Evaluation of alternatives in terms of costs and benefits	3,57	,834
5. Usage of analytical techniques	2,89	,554
6. Formalization of the process	3,50	,942
7. Meaning of the past experience related to the same or similar problem areas	3,49	,837
8. Reliance on judgment	3,29	,906
9. The importance given to emotion, and affective reactions	3,12	1,078

It can be concluded that managers in Croatian publicly traded companies on strategic management level, when making strategic decisions, are following both rational and intuitive style what in turn can have higher impact on decision output than following a single decision making style. Studies have shown that positive decision results often do not bring the dominance of single decision making style, but that synergy of rationality and intuition creates overall greater

positive outcomes. Decision maker must know (sense) when and to what extent follow each style in all the phases of decision making process.

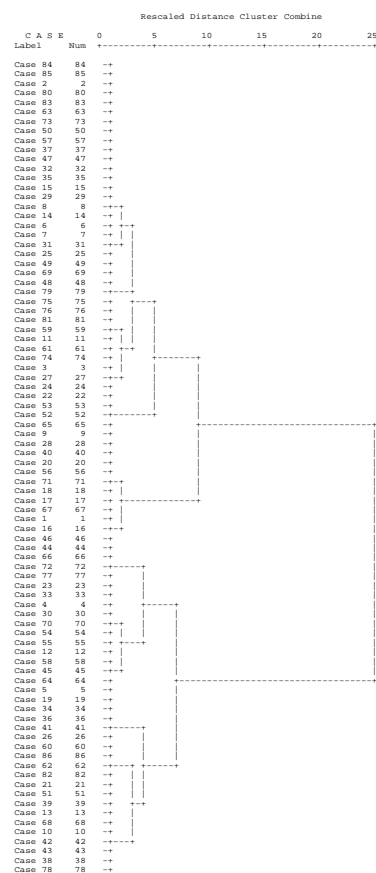


Fig. 2 Hierarchical cluster analysis for the decision outcome

In order to examine which decision making style is more efficient, cluster analysis was performed in which the hierarchical classification method was used to group companies according to their similarity, respectively association regarding rated quality of the implementation of the decision making process. When evaluating the minimum distance between clusters, Ward's method was used. Fig. 2 represents a graphical representation of the grouping which

visually in two-dimensional space shows a hierarchy within the final cluster. Fig. 2 shows that all companies in the sample are classified into two main clusters, where the first represents companies where the decision outcome is at a higher level

(N=51), and the second one companies where it is on the slightly lower level (N=35).

Next step in answering the research question which decision making style is more efficient demanded the conduction of multiple linear regression analysis.

TABLE III
MULTIPLE LINEAR REGRESSION ANALYSIS FOR DECISION MAKING STYLES CONSIDERING DECISION OUTCOME

Model		Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics	
		B	Std. Error		t	Sig.	Tolerance VIF
1	(Constant)	2,729	,654		4,172	,000	
	Intuitive decision making style	,214	,090	,336	2,379	,020	,559 1,789
	Rational decision making style	,107	,120	,127	,898	,372	,559 1,789

a. Dependent Variable: Decision outcome

Table III shows that when observing individual tests of significance (t-test) it is clear that intuition in decision making significantly affects the decision outcome ($\alpha = 0.020$). It can be concluded that intuitive decision making style is more efficient. The same cannot be said for the rationality in decision making because the t-test in regression analysis shows that it insignificantly affects the decision outcome ($\alpha = 0.372$). Also, the Beta coefficient confirms that intuition (0.336) has the greatest effect on the decision outcome comparing with rationality (0,127).

V.CONCLUSION

The results of the research presented in this paper need to be discussed in terms of the importance of rational and intuitive decision making in organizations. The analyses supported initial assumptions about existence of two basic decision making styles: rational and intuitive; on strategic management level in Croatian companies. Both styles are equally used by managers when dealing with strategic decisions, but results indicate that both do not have the same influence on decision outcome.

The empirical results also provide deeper understanding of the nature of relationship between decision making styles and strategic decision outcomes. This relationship was empirically tested in an attempt to appraise the effectiveness of decision making styles. The results indicate that decision makers use two basic styles (rational and intuitive) in strategic decision making in order to function effectively, and that intuitive style is statistically related to decision outcomes. On the basis of conducted analysis it is possible to make a conclusion that intuitive decision making style affects the quality of the decision making process. It can be concluded that intuitive way of decision making leads to better results comparing with rational.

The results presented in this paper shouldn't diminish the importance of rational decision making style, which has been recognized among researchers as important, moreover critical factor for effective strategic decision making.

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