DECISION MAKING – THE WAY TO SOLVE PROBLEMS AND DISCOVER OPPORTUNITIES

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Summary: *This paper explains decision making process as the activity of a manager in solving a certain problem, i.e.in using the given opportunity. Several types of decisions are elaborated in this paper, as well as the elements and methods constituting the decision making process.*

Key words: *decision making, problems and opportunities, elements and methods of decision making process.*

Finding both problems and opportunities

Decision making is a mental activity in which man simulates the future, in which he chooses the right course of action in order to solve a certain problem or to take advantage of an opportunity that has presented itself. Successful managers are rated according to the efficiency of decisions they make and according to how efficient the results of those decisions are [1]. Decision making on the part of a manager is closely linked with problems, i.e. with the state where the difference between desired and real state of a certain phenomena is apparent and evident. Everyday practice has shown that most of the time a problem is actually a vailed opportunity at the same time, an opportunity that presents itself when a certain set of circumstances offers to the organization not only to achieve the planned goals, but to overachieve as well.

According to William Pounds, a manager should be warned that there might be a problem if he faces any of the following four types of situtations: a) diversion from previous experience that shows that existing working scheme of the organization broke down somewhere; b) diversion from adopted plans which means that manager's predictions and expectations are not coming through; c) other people constitute a very common and frequent cause of problems for any manager; d) competition that has reached certain results, and this must be addressed immediately with problem-solving activities [2].

Since problems and opportunities are entwined most of the time, it is not always easy for managers to decide whether it is a problem or an opportunity that the organization is facing. The most common errors that managers make when they sense they are facing poblems are: putting events into incorrect order (previous expertise is extremely important in decision making process, but it is not always a reliable guideline regarding future sequence of events), and unrealistic expectations and incorrect judgment regarding manager's own personality and social status.

One of the methods that managers use to locate problems and discover opportunities is the *devil's advocate* method where the same person makes a decision and then negates his own assumptions and then he creates 'counter solutions' based on negative assumptions.

Types of decisions

Types of decisions that managers make are different in nature. Methods that managers use differ as well. According to the decision making process used, we have routine, adaptive and innovative decisions [3]. *Routine decisions* form the problem-solving regulations. This type of decision making is fast and simple, and it is mainly used by the lower level of employees. Higher level managers participate in setting ground rules and they base their decision- making process on those rules. *Adaptive decisions* are adequate for less defined or partly defined problems, as well as solutions of the same kind. Those decisions are the source of the constant improvement of business process in an organization. *Innovative decisions* are based on defining unknown and unusual problems, and this requires that single, unique and most of all creative decisions must be remodelled. This type of decision making requires implementation of new ways and methods, such as systematic innovation process and random innovations and inventions. *Systematic innovation* process is a preplanned and systematic activity where certain problems get dismantled into several smaller problems in order for us to find solutions. Random innovations and inventions are results of individuals' work, where those individuals had dealt with a certain problem commitedly and for a long time, after which process a 'random' solution presents itself to them.

According to Stoner, there are two groups of decisions: programmed and non-programmed decisions. Pre-programmed decisions, in accordance with set procedures and regulations, are used to resolve either complex or simple problems that appear repeatedly and their elements that can be defined. Contrary to that, problems that do not appear frequently or problems that are extremely important get solved by using non-programmed decisions.

Decisions can be results of either individual or group decision making. *Individual* decisions are made by individuals, and *group* decisions are made by groups and this decision making process is, therefore, more democratic and in accordance with common interests.

Elements of decision making

Decision making as a mental process dates back all the way to the very beginning of mankind. People used to arrive at various decisions, often even unaware that they were making decisions, because decision making process is an integral part of everyday life. [4].

It is very important for managers in various organizations to get acquainted with elements, i.e. conditions that affect their decision making. Information, certainty, risks, probability and uncertainty are crucial for decision making. Managers base their decision making on available information, tending, at the same time, to fully comprehend and if possible reduce as much as possible the influence of information that are not available. The importance of decision making process is best seen from one of its definitions that reads: decision making is a process of modifying certain information into some other information.

Normal conditions under which we make decisions are: certainty, risks and uncertainty. [5].

Certainty as one of the elements of decision making represents the state where managers are fully acquainted with their tasks and where they have clear alternative solutions with reliable data about their outcome.

In decision making processes managers are often not able to foresee with final certainty the outcome of their alternative solution. At the same time, they might have enough information and ⁄ or data to foresee the level of probability that a certain desired state shall be achieved. This position represents the risk within managers' decision making processes and it is characteristic of adaptive decisions. Probability is a statistical measure that shows the chances that a certain event or outcome shall materialize. [6].

Uncertainty is the state where managers do not dispose of all the necessary information and ⁄ or data for defining problems or establishing the probability that alternative solutions shall occur. In such a situation managers do not have at their disposal all the key data necessary for decision making or they face external factors that are beyond their control.

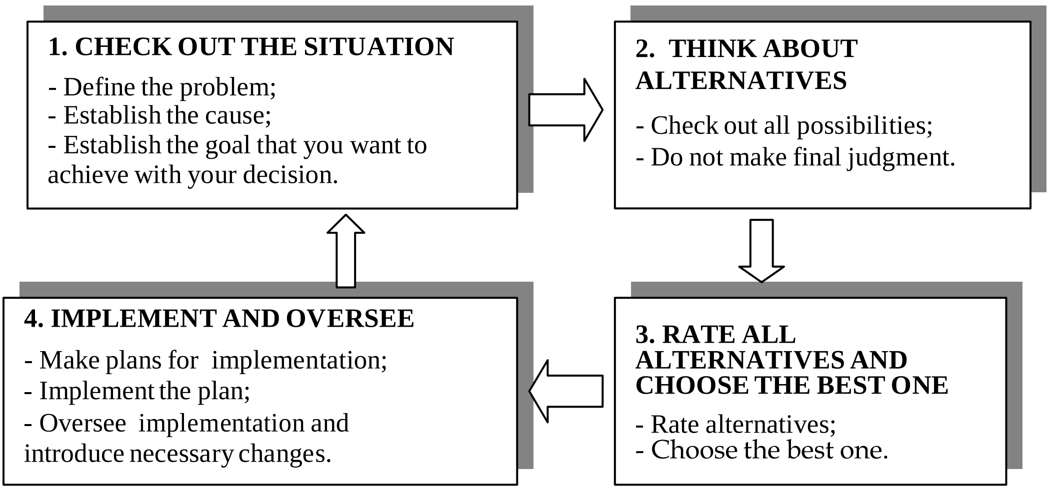
«In order to make a better decision, I first cease following a bad decision.»

Claiming that a large number of individuals make many bad decisions and, accordingly, lose their positions at work and in everyday life, in his book Spencer Johnson has put forward a map towards reaching better decisions [7].

He ascertained that our bad decisions are based on illusions we used to believe in, and our good decisions are based on reality that we did recognize on time.

Rational decision making model helps managers to reach high-quality decisions with high probability of success, through a decision making process that follows four different stages: 1) analyze situation, 2) consider alternatives,
3) rate alternatives and choose the best one, 4) implement and oversee.

Figure 1: Rational decision making model



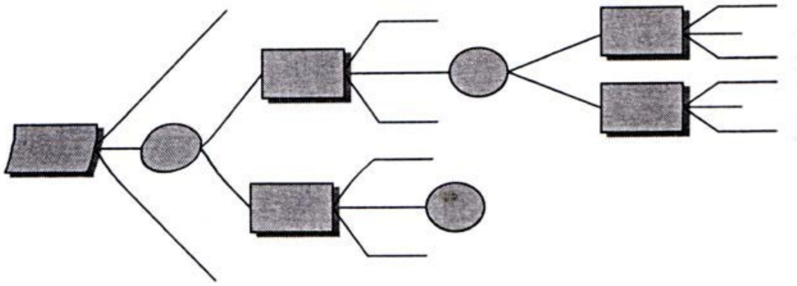
Assistance in decision making

Decision making as a complex process requires various technical support tools for decision making, and those tools are supposed to make managers' job easier. There are various types of support tools: methods, procedures and instruments for easier decision making.

Support tools used for routine decision making are rules and standardized procedures (external and internal manuals) and artificial intelligence (information technologies for certain functions).

For adaptive decision making we use various support tools, i.e. methods that need to be supported by information technology. Among others, here we have: decision matrix, level of rentability and decision tree. These methods are very important to solve problems and to follow decision making process more easily in situations where we have risk uncertainty.

Figure 2: Decision tree [8].



Decision tree is used in situations where the person who makes a decision can postpone that decision until he is satisfied that he has the best decision, i.e. the acceptable solution. In cases where decision is being postponed we have more diversification in decision tree, but at the same time in that same process we get additional information as well as additional expenses in the decision making process. Decision tree consists of: 1) decision nodes, commonly represented by squares; the squares represent decision makers who evaluate many actions and alternatives and select the best one; 2) chance nodes represented by circles; these represent possible outcomes of certain actions, i.e. alternatives, and 3) branches represented by lines and these show certain actions (alternatives) that managers and executives can perform in this process.

Creative methods as decision support tools are linked with innovative decisions, and here we differ the following: «delphi» technique as the method for group decision making; «brainstorming»; creative thinking, etc.

Delphi method – Aware that resources are limited, the project team must - to the highest possible extent - use wisdom and expertise of those with considerable experience in relation to problems that should be solved. A group must behave and react as a whole. Members of a group are required to individually put forward their opinions and reasons as a base that serves to support their evaluation. After gathering and processing the information, the process should be stopped if a concensus has been reached. Contrary to that, a copy of the processed data (most often summarized) is distributed to every single individual and then they are expected to comment on the report and try and revise their old evaluations. This way the process is continued until either concensus on satisfactory reliability is reached or some other path towards same goal is selected. [9].

Brainstorming decision making method is based on intensive discussions, exchange of ideas and open communication between members of the group that is supposed to make a decision. [10]. This group that is expected to make a decision must be autocensorship free; it must be free of fear and of the sense of discomfort as to how someone else shall react upon either suggestions or discussions of any other member of the group. When all the ideas have been presented, they are then being evaluated in order to select the best decision. This technique is very helpful specially when we must collect many ideas in order to arrive to a solution for a certain problem, and it is implemented when certain important strategic decisions in an organization are being made.

Summary

Successful manager are rated in accordance with the efficiency of decisions they have made and according to results of those decisions. Managers' decision making is closely linked with problems, i.e. situations where there is apparent difference between desired state and realistic state of certain phenomena.

Four types of situations should warn managers that a problem is likely to occur: a) diversion from previous experience that show that existing working scheme of the organization broke down somewhere; b) diversions from adopted plans which means that manager's predictions and expectations are not coming through; c) other people constitute a very common and frequent cause of problems for any manager; d) competition that has reached certain results; this must be addressed immediately with problem-solving activities.

According to the decision making process used, we have routine, adaptive and innovative decisions. We also have two types of decisions, depending whether they were made by individuals or by groups. *Individual* decisions are made by individuals, and *group* decisions are made by groups

It is very important for managers in various organizations to get acquainted with elements, i.e. conditions that affect their decision making. Information, certainty, risks, probability and uncertainty are crucial for decision making.

Rational decision making model helps managers to reach high-quality decisions with high probability of success, through a decision making process that follows four different stages: 1) analyze situation, 2) consider alternatives,
3) rate alternatives and choose the best one, 4) implement and oversee.

Decision making as a complex process requires various technical support tools that are supposed to make managers' lives easier. Here we have: methods, procedures and instruments for easier decision making.

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