Decision-making

According to Jan Zieleniewski, "deciding is making a random choice in action, and the set of elements from which we choose in the decision-making process is doubly limited:

- 1. Our knowledge base.
- 2. Our conviction that the objective or feasibility of a given option is *"achievable"*.

Decision-making (cont.)

Economic decisions to be made by the individual

- 1. The allocation of time espoused by the individual must decide how to divide his or her time between income generating work and leisure time.
- 2. Distribution of income must decide how much of the individual's income must be spent on current consumption and how much he or she will save.
- 3. The form of storage of assets espoused by the individual must decide in what form he or she will store his or her assets.
- 4. The proportion of expenditure of the individual must decide in what proportion to divide his expenditure between different consumer goods and services.
- 5. The choice of employment espoused by the individual must decide what kind of work he will take on.

8. Social context of the decision

Decisions

Basic decisions in economic organizations:

- 1. Definition of the mission.
- 2. Allocation of resources.
- 3. Selection of production methods.
- 4. Sources and methods of financing development.
- 5. Selection of directions of supply and sale.
- 6. Organisation of activities.

8. Social context of the decision

Decisions (cont.)

Factors influencing decision making:

- **1. Rationality** as maximisation of usability per unit of income spent or per unit of time spent on specific types of activities.
- **2. Situational factors** availability of different variants of action, possession of certain types of information, and the possibility of their processing.
- **3. Psychosocial factors** attitudes, norms, values, being subject to the influence of specific groups, adopted patterns of conduct.

Decisions (cont.)

Factors characterizing the problem of decision making:

- Subject, i.e. the answer to the question what the problem relates to (e.g. absenteeism, management style, unrhythmicity of production).
- Degree of structuring, i.e. the extent to which it is possible to define all the relevant elements in a given situation and the relations between them.
- > The extent of the reality to which it applies (e.g. strikes).
- Degree of complexity.
- Place of occurrence.
- Frequency of appearance.
- The importance of the problem for the functioning of the whole organisation.

Models of decision making in the organisation

There are two situations in an organisation where we have to make decisions:

- in a certain situation when we know what result we will achieve after choosing a specific decision,
- in a situation of risk when we do not know what result we will achieve after the choice of action.

Decision-making model according to **Herbert Simon**:

- problem identification determination of parameters, possibilities and limitations related to its solution,
- decision design searching for and analysing possible directions of action,
- selection of a solution acceptance of one of the directions of action adopted for the analysis.

Models of decision making in the organisation (cont.)

Decision making model in an organization according to Fritz Zwicky (1898-1974) - morphological (logical-analytic) analysis:

- identification of the decision-making problem identification of the areas of problems that are the subject of analysis, identification of possibilities and limitations related to the problem;
- analysis of the decision-making problem consists in identifying the parameters of the problem (mutually dependent factors, features, functions or elements of the problem) and determining all possible states of each parameter;
- decision design identification of possible solutions to a given problem; determination of those values which, as a result of the analysis in the previous phase, were considered the most important for the assessment of the solution; final choice of the solution;
- developing decisions and putting them into practice.

Decision-making stages

The decision-making process includes the following stages:

- 1. Definition of the problem, i.e. diagnosis of the situation (what decision to make).
- 2. Collect the necessary information (watch and don't assume anything in advance).
 - a) Knowledge of "naked facts" (When has the problem or favourable situations been extended? What events have led to the present situation? What is the real extent of the problem or situation? Who is most affected by the problem? Have analogous situations already taken place? What presumptions do they make in relation to a given situation?).
 - b) Consultation of people.
 - c) Evaluation of external factors.
 - d) List of facts and opinions.

8. Social context of the decision

Decision-making stages (cont.)

The decision-making process includes the following stages:

- 3. Review and analysis of available options and options.
 - a) Identification of options.
 - b) Review of options and options.
- 4. Comparison and evaluation of results
 - a) The role of intuition
 - b) Visualisation of options.
 - c) Evaluation of the cost factor.
- 5. Decision making.

Rational decision-making model

The rational decision-making model is based on the conviction that the most effective decisions are the result of several stages of analysis. It can be used both in organisations and in the case of problems of individuals. It is important to apply it whenever we make a decision that is to change our lives.

Steps:

- **Step 1: Identify the problem** that we define as the difference between the existing state and the desired state.
- Stage 2: Knowledge of decision criteria goals, values, attitudes.
- Stage 3: Determining the weights of criteria not all criteria are equally important.

8. Social context of the decision

Rational decision-making model (cont.)

- Steps:
- Stage 4: Development of possible solutions we list all options for solving the problem.
- **Step 5: Evaluation of possible solutions** we assess the strengths and weaknesses of each of the possible choices.
- Step 6: The choice of the solution with the highest rating is the optimal choice.

Strategies for decision making

Strategies to be followed when making decisions are:

- Maximising the probability of profit consists in evaluating each of the possible variants and selecting the one with the highest chance of success.
- Profit maximization consists mainly in the assessment of possible benefits resulting from the selection of particular variants of the one that provides the greatest benefits.
- Minimising the probability of loss in this case, we choose the action with the lowest probability of failure.
- Minimising the size of the loss first of all, we consider the possible costs of selecting each of the possible actions. We decide to choose the one that will ensure the lowest possible losses.

Models of conduct in decision-making

The basic models of conduct during decision making are:

- Formal rational model searching for the optimal decision.
- > Model of limited rationality search for the first satisfactory decision.
- Garbage can model decision making sequence rejected. Lack of clear rules and randomness. Sometimes we adjust the problem to the previously found solution. In the assessment of a decision made according to this model, the most important thing is the rationality of action. Decisions worked out with the use of this model are not optimal, but the model itself allows us to work out a decision necessary in a situation of time pressure.

Decision-making procedure

The "Decision tree" is one of the methods of decision support (graphical method). It presents the decision-making process, the associated random events and the possible results of different selection options under conditions of uncertainty and risk.

A tree consists of a root and a branch (leading from root to subsequent tops). The vertices from which at least one edge (branch) emerges are called knots and the other vertices are called leaves. In each node, a certain condition of the observation is checked, and on its basis one of the branches leading to the next apex is selected. Classification of an observation consists in moving from root to leaf and assigning to this observation the class recorded in the leaf.

Barriers (errors) in making individual decisions are:

Excessive self-confidence

It results from a very good opinion about oneself and a very optimistic vision of the future. People who are overly self-confident also have a false belief that they can control random events. Such behaviour is wrong because it is not possible to imagine all variants of events. Being too self-confident, we search for information that will confirm our choice and we are not able to reliably assess past decisions. Excessive self-confidence applies especially to situations outside our field.

Barriers (errors) in making individual decisions are:

Undecidedness, inaction

The cause of indecision and inaction can be: low self-esteem, fear of making a mistake, perfectionism, desire to maintain control, lack of motivation, poor organisation, too many things to do at a given moment. When we are not able to decide on a given option, there may be a conflict between options to choose from or the task is unpleasant and we postpone it. The recipe for indecision may be to make any decision in the case of insignificant matters. Once a decision has been made, one should not regret it, even if it does not turn out to be right. In the case of indecision in serious matters, you can impose an obligation to perform in the presence of other people, because it will be more difficult for us to withdraw from its implementation.

Barriers (errors) in making individual decisions are:

> A tendency to satisfy desires immediately

It is tempting, but it can lead to a financial catastrophe. We want to fulfill our desires immediately, because it is pleasant and the cost of our decisions comes later, especially when we satisfy our desires on credit. The recipe for such behaviour may be to set long-term goals and take into account future costs.

Barriers (errors) in making individual decisions are:

> Anchor effect

People tend to pay attention to the first value that appears and this value influences the assimilation of further information. When making the right decisions, one should pay attention to extremely high or extremely low or very optimistic or very pessimistic values and they should always be rejected. When negotiating, you should not attach importance to the initial offers.

Barriers (errors) in making individual decisions are:

Selectivity of perception

It is not possible to look objectively at any event, especially when it is ambiguous. Our perception is influenced by attitudes, interests, experiences and the environment. While overcoming the barrier of selectivity of perception, one should remember that what is true and beautiful for us does not have to be for another person. We should also try to look at the situation through the eyes of another person, which will help to save many disappointments.

Barriers (errors) in making individual decisions are:

Looking for confirmation

The tendency to look for confirmation influences where we look for information, i.e. we tend to look for information that already confirms what we know.

Biased approach

The approach depends on experience, education, culture. The different approaches are best illustrated by examples concerning the perception of losses and benefits. The way to overcome the tenderness of one's approach is to be aware of it and to be sure that it is appropriate to the situation. If it is not appropriate for a particular problem, it should be changed.

Barriers (errors) in making individual decisions are:

> Warnings arising from the availability of information

The wide presence of the media in our lives makes us think that catastrophes, catastrophes and wars happen more often than in reality, which leads to the distortion of judgements and the likelihood of events and prejudices towards a given phenomenon. When making important decisions, one should be aware that one can be subject to prejudice, so one should not rely too much on one's own memory but rather on reliable documents and take into account the whole period of the decision and not just the last one before the decision. One should also be aware of the tendency to succumb to clear information and sensations.

Barriers (errors) in making individual decisions are:

> Overinterpretation

People tend to interpret even unfavourable events to their advantage. They hope that after a series of failures the probability will equalise to their advantage. In order to avoid the trap of overinterpretation, care should be taken when comparing unequal situations. Extreme results, both positive and negative, can be expected to be followed by results closer to the average. Do not trust small attempts, as they can distort the results.

Barriers (errors) in making individual decisions are:

Seeing regularities where they do not exist

Some events are governed by chance and do not depend on us. Some people tend to attribute explanations to random events and even create superstitions that distort decisions. One should remember that random events happen to everyone and it is difficult to predict and control them, so one has to come to terms with them. It is also helpful to be aware of one's own superstitions and to try to overcome them.

Barriers (errors) in making individual decisions are:

Irrecoverable costs

The decisions we make concern the future and not the past, so we should not pay attention to the costs and losses incurred, even if we are to be accused of inconsistency in action. It is necessary to recognize situations in which continuing to act is beneficial for us and in which it is not. It is good to be able to admit the error. Stubborn persistence at the same time as a decision may bring more harm than a change of decision.

> Experience

It helps you to make the right decisions for routine actions. However, it can be a mistake when it leads to arrogance, excessive self-confidence, perceptual errors and limits creativity. It also fails in new situations and where innovative solutions are required.

Barriers (errors) in making individual decisions are:

Limited searches

In a rational model of decision making, once the problem has been defined, we search for possible solutions. We tend to narrow down our search for solutions because we move most willingly after what we already know. When making a decision we do not go beyond the first acceptable solution, but in order to avoid this trap we should look for many possibilities and not assess them too early. You have to look for opportunities that are not obvious and increase the number of options to choose from.

Barriers (errors) in making individual decisions are:

Emotional involvement

Emotions influence our decisions, so when we are stressed or very excited, we should postpone making a decision. In this case, it is good to have a person with you who will cool them down and help you to check out other options.

Excess of information

The amount of information is not synonymous with its quality. When taking up information, you need to focus on your goals. It is necessary to accept that we will never be able to possess all the necessary information and that we always take some risk. When making a decision, it is better to postpone the decision than to decide immediately.

Risks arising from group decisions

When generating ideas with the help of "brainstorming", a so-called "production blockade" can occur when one of the members speaks for too long and prevents the other members of the group from presenting their ideas.

At the stage of proposal evaluation, it may be enough for the so-called **"syndrome of group thinking"**. This happens when the group is more concerned about maintaining the internal cohesion of the group than about making the right decision.

A minority that does not agree with the majority - when a minority insists on its decision, then the remaining majority begins to analyze the problem more deeply and take a broader perspective and reflections on the problem become more creative, as a result of which the situation may contribute to an increase in the effectiveness of the decision making process.