

# THE DECISIONAL ENVIRONMENT – THEORETICAL ASPECTS

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## **Abstract**

*The present paper speaks about the main theoretical aspects connected to the decisional environment. Thus, we defined the decision and its major role in the managerial process. Secondly we followed the stages and perception along time in defining the concept of decision. After that we described, shortly, the factors which diminish the uncertainty: relevance, correctness, accuracy, precision, completion, timing, usage, consistency, conformity and cost. The next treated aspects were several classifications of the decisions, taking into account different variables or implied elements. In the end we jump at the conclusions.*

**Keywords:** *decision, uncertainty, data characteristics*

**JELL Classification:** M<sub>15</sub>

## **Introduction**

The decision represents the cornerstone of the managerial process; it is that contributes to the plenary exercise of the leading functions (Popescu, D., 2001). Making decisions is the most complex part in the managerial activity; it is also the central element of the basic activity. To decide means to conceptualize a choosing as a mental image or as an explicit model.

## **Literature Review**

The decision defining covered several stages and observed the priority perception of the researchers. Thus:

- ✓ *H. Simion, 1960* – spoke about the choosing of the action direction;
- ✓ *Fishburn, 1964* – stressed the choosing of the action direction;
- ✓ *Churchman, 1968* – uttered that a choosing leads to a certain objective;
- ✓ *A. Radulescu, 1983* – the elaboration of a number of alternative strategies and choosing of one of them;
- ✓ *Bonczek, 1984* – choosing of an action plan;
- ✓ *Minzberg, 1996* – the specific forms of implying the resources in an action;
- ✓ *Power, 2000* – the engagement on a specific action direction;
- ✓ *F.G. Filip, 2002* – the result of conscious activities when choosing an action direction;

✓ *Hâncu, 2002* – the decision can be defined as the chosen solution among many alternative variants;

✓ *Yates, 2003* – the decision is presented as an implication in action; its intention is to satisfy the requirements of a business.

By analysing the defining manner of the same concept, we can utter that generally it is the result of a value judgement on a certain situation. The processes of making decisions can be classified as decisions at the strategic level, decisions of the medium level management, decisions of the data, information and knowledge operators and decisions of the operational management.

### The Characteristics of Data

In conformity with Devlin definition in his work *Data Warehouse from Architecture to Implementation* (1997), data are *what the components of the informational systems create, stock and supply*. Data which were processed by adding new significance or useful pieces of knowledge become information. The information purpose is to diminish uncertainty; its quality is given by the following factors: relevance, correctness, accuracy, precision, completion, timing, usage, consistency, conformity and cost.

✓ **relevance** – a piece of information is relevant when it can be used and offers a significant result. For example, the price of a telephone company shares at the stock exchange is relevant in buying or selling shares, but it is irrelevant in supply commands or when buying raw materials.

✓ **correctness** – a piece of information is correct if it stands against authentic and real data.

✓ **accuracy** – measures the degree of closing by the real value.

✓ **precision** – represents the maximum accuracy in representing a piece of information.

✓ **completion** – refers to gathering all the necessary elements for making decisions.

✓ **timing** – supposes the analysing of the following aspects:

❖ the moment we need the piece of information;

❖ the moment when the piece of information becomes available.

✓ **usage** – reflects the ease in exploiting information for the purpose.

✓ **accessibility** – refers to the necessary time for obtaining the piece of information, with an acceptable level of effort.

✓ **consistency** – all elements which compound a piece of information base on the same assumptions, periods of time etc.

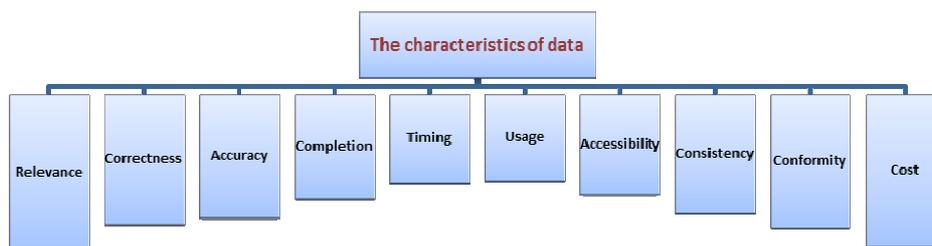
✓ **conformity** – measures the difference between the characteristics of the obtained information and the forecast ones.

✓ **cost** – represents the consumed resources by the company in order to obtain the piece of information.

The managerial decision represents a result of the managerial functions exercise (Dragomir, R.G., 2008), leaning on the following elements: the objective or objectives, different ways to achieve the objectives and choosing only one

variant from many possible ones. The managerial decision directly reverberates over the behaviour, actions and results of the implied factors, but also on the economics and technical indicators of the company.

**Fig. no. 1.** *The characteristics of data*



The decision is a responsible act, based on several requirements of rationality; it has to be scientifically founded, opportune, efficient, complex and empowered.

Making decision at different levels means:

- ✓ *strategically* supposes the establishing of the company objectives, resources and politics on a long term, reported to the economic environment;

- ✓ *tactically* assures the management control and mainly refers to the efficiency of the used resources;

- ✓ *operationally* establishes the means of fulfilment for the activities planned by medium and strategic management, but also the resources criteria.

The decisions are the result of a dynamic process influenced by many factors. One division grouped them as follows:

- ✓ *Unstructured decisions* are random order decisions, the decisional factor has to judge, evaluate and understand directly and immediately the problem under discussion. There are not specific procedures when making this type of decisions.

- ✓ *Structured decisions* are repetitive, of routine, made under specific procedures. This type of decisions does not have novelty character each time.

The detailed structure of the decisions (Popescu, D., 2001) was made according to: the available information, management level, time component, the level of decision programme, number of decisional criteria, number of persons founding decisions etc.

Depending on the available information as concern the variables which influence the results, the decisions are classified as follows:

- ✓ *Decisions under certainty conditions;*

- ✓ *Decisions under uncertainty conditions;*

- ✓ *Decisions under risk conditions.*

Depending on the management level, we can notice:

- ✓ *Decisions taken at superior levels;*

- ✓ *Decisions taken at medium levels;*

- ✓ *Decisions taken at low levels.*

If we observe the time variable, we distinguish:

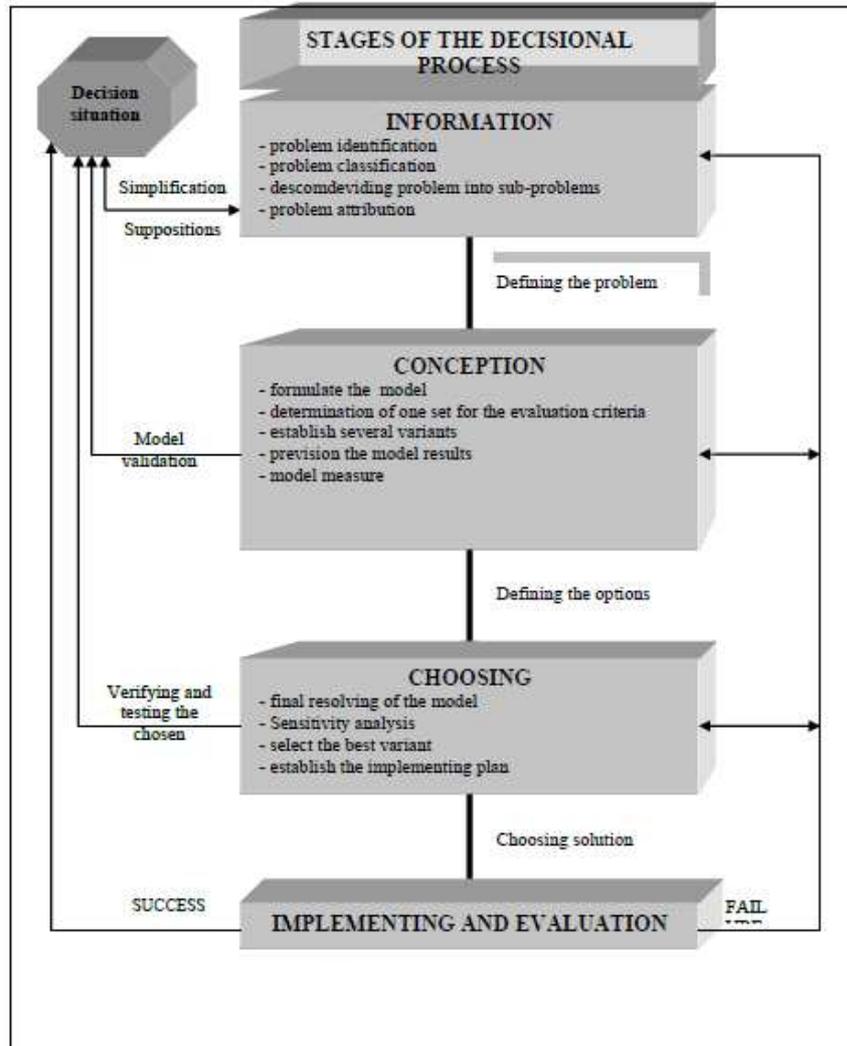
✓ *Strategic decisions;*

✓ *Tactic decisions;*

✓ *Current decisions.*

The fundamental element within the decisional process is the human decider. If one takes into account the magnitude of the phenomena that are to be analysed, but also the limits of human being, it is necessary that the decider be informational assisted in making decisions. The step by step decisional process is presented below:

**Fig. no. 2.** *The stages of the decisional process*



The first stage of the decisional process is *information*. This means a process of collecting, processing, classifying and presentation of data referring to the situation under discussion. If this first stage is fully realized, the next steps will follow smoothly. The problem identification and its classification contain many sub-stages in order to eliminate the perturbing factors.

Among the difficulties appeared during this stage, there are: defining the problem in terms of speciality function, defining the problem in terms of solution, diagnosing the problem in terms of symptoms.

*The conception* or design proposes to evidence different ways of action in order to solve the problem, each of them implying a set of actions. The data obtained previously are now used for building, testing and validating the models and the foreseen solutions. This stages ends with the options defining.

*Choosing* is the basic stage for decision making. The purpose of this stage is the fulfilment of the general objective, by resolving the problem. The choosing of the optimal solution is not only a temporary option, but it influences the following stages: implementation, control and evaluation.

During the stages of *implementation and evaluation*, the decider brings into practice the chosen variant. It is followed by the observing and measuring the obtained results.

### **Conclusions**

The establishing of the alternatives probable and possible is a process that can be realized with the help of the concepts and equations, although the choosing of the best solution has a pronounced subjective character, depending on the personality, temperament and experience of the decider, the available information and also the environment.

The decider has a limited control over the environment. This can also be evaluate: it can be favourable or unfavourable, hostile; it can also be certain, uncertain or with risks; stable or flexible and so on. The context is defined depending on the environment, relevancy and information.

Within so many elements involved, with human aspects and subjectivity, with the contribution of the informatics devices, the decisional process is a very complex one; it cannot be comprised in few and simple utterances. It evolves, changes, implying more and deeper aspects and components.

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## References

- Bândaș, C. (2007), *Sisteme suport de decizie pentru managementul performant*, Editura Brumar, Timișoara.
- Dragomir, R.G. (2008), *The Decision – A Result Of The Main Financial*, Universitatea „Constantin Brâncuși”, Târgu Jiu, Conferința anuală Internațională „A.N. Whitehead”, ediția I.
- Drucker, P. (2007), *Despre decizie și eficacitate*, Editura Meteor Press, București.
- Filip, F.G. (2007), *Sisteme suport pentru decizie*, ediția a II-a, Editura Tehnică, București.
- Gartner, (2006), *Essential Components and Success Factors of Business Intelligence and Performance Management*, Gartner Symposium IT Expo 2006, Cannes, France.
- Mateș M., & Dzitac I. (2010), *Aplicații informatice în economia modernă*, <http://www.uvvg.ro/studia/economice>.
- Power, D.J. (2002), *Decision Support systems: Concepts and Resources for Managers*, Greenwood Publishing Group.
- Popescu, D. (2001), *Procesul decizional în întreprinderile mici și mijlocii*, Editura Economică, București, 2001.
- Skorepa, M. (2011), *Decisional making: A Behavioral Economic Approach*, Palgrave Macmillan.

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