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## THEORY OF DECISION MAKING IN MANAGERIAL PRACTICE

**Summary:** Nowadays top managers and their decisions have the great influence on the growing performance of the company and the successfulness in its business. It is necessary to make managerial decisions (mainly of the financial character) systematically and to formulate them accurately for strategic, tactical and operative management. Managerial decisions have relations with the internal organizational and economic (responsibility) structure of the company, which has to work in the external competitive environment progressively enough in order to increase its performance.

**Key words:** managerial decision making, decision-making problem, internal users, information of external market environment, diagnostic information.

#### 1. Introduction

Decisions belong to the competence and responsibility of managers and they have the influence on the performance of a firm and the results of its activity in accordance with its own course of the entrepreneurial process (production of final products and semi-finished products, providing services) in the internal world firm and with the relation to the external world of the market economics.

# 2. Managerial decisions for the management of entrepreneurial subprocesses

Managerial information is used in time for suitable and practical decisions so as the company is managed to increase its performance and to transact the business succesfully in the competitive economics of the present market.

A managerial decision is characterised as the choice of the best decision from many offered and surveyed alternatives which concernuncertain future and follow from the effective fulfilment of company targets.

Managerial decisions are made on all levels of the company management. Their immensity is considered as:

- strategic (long-term) decisions,
- tactical (medium-term) decisions,
- operative (short-time) decisions.

There is the connectedness of managerial decision making and the continuous process which diffuses through all management levels of the company. The managerial decision is always one of the management components. The decision making is the process of the managerial choice from some alternatives of the solution of the given decision-making task under specific conditions. The effects, which the decision in its realization invokes, are different. The decision made on the existing problem has two related aspects, i. e. the content aspect characterizing the factual decision-making problem and the form aspect oriented on the needed way and algorithm of the solution of the decision-making problem.

The solution of managerial decision-making problems runs as a continuous process when it is possible to identify some relatively isolated steps which together create the algorithm of the solutions of decision-making problems. These problems are seen in the gradual sequence of steps:

- the ascertainment of decision-making problem and its study,
- the analysis of the problem by chosen criteria of its appreciation,
- preparing and the formulation of alternatives of the solution,
- the presentation of effects for a decision about the specific alternative of the solution and effects for unaccepted alternatives,
- the choice of the suited alternative of the solution,
- the realization of the decision which is connected with the chosen optimal alternative of the solution.
- the control of the decision being made.

The steps of the mentioned algorithm have their logical sequence and reciprocal irretrievability. The quality managerial work still accepts the other possible step which is before the ascertainment of the problem, i. e. its prediction on the basis of good knowledge of the entrepreneurial world and the mutual chain of events.

The early determination and solution of the decision-making problem facilitates the course of other decision-making processes.

Important factors which have the influence on the results of managerial decision making are such as:

- the type of decision-making problem and the area of the solved problem,
- knowledge, skills and features of a manager, who deals with decision-making problem, or of a team which solve it,
- used methods of the decision making,
- qualities of the managed human potential,
- the degree of informedness of a manager,
- the measure and quality data and information,
- the position of the manager or managing worker in the hierarchy of management and in relation to the competitive world.

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It is possible to divide the types of decision-making problems by some view points. Every decision-making problem can have the character of simpler or more difficult problem. Simpler problems are often repeated; there are routine procedures for the solution of these decision-making problems. More difficult problems are marked by the considerable number of factors, changes in the competitive market are typical of them and the great number of criteria is needed to the formulation of their solution.

It is also necessary to judge decision-making problems from the organizational view point as problems arising in sale, production, supply and so on or from the time view point when decision-making problems can come in the operative management of the entrepreneurial process, during decision making about the strategy and the tactic of the company.

The managerial decision making represents the process of the choice between two or among more possibilities of solution of the given decision-making problem under specific conditions. Then it is possible to express formulations as:

- the needed target solution and its formulation,
- the formulation of substantial conditions influencing solved processes, i. e. the
  definement of factors which influence given decision-making problems or will
  influence them in the future; defined conditions decide about the selection of
  potential alternatives of the solution of the problem by the given criterion,
- the definement of feasible alternatives of solution of the decision-making problem; particular alternatives will be differed by the amount of the economic benefit,
- results which will come by the acceptation of the given alternative of the decision-making problem under specific conditions, namely with the certain measure of the informedness of a manager; this measure will be moved from the uncertainty to the certainty.

It is right to survey the probability, what can come in a given alternative. It is also logical that the measure of the uncertainty is indirectly proportional to the informedness. It is known that the greatest risk comes on the contrary during the lowest informedness. Then so-called "Bayes rule" is accepted, which says that the summation of probabilities for particular alternatives is equal to one. It means that particular alternatives exclude one another.

The significant model of the managerial decision making enables to apply all methods of the decision making from the simpliest to more difficult methods on various levels of the company management.

Using various methods is different by algorithms of decision-making processes, types of data files, the specific content of solved processes, the degree of the informedness and by the access to the risk. Today there are a lot of methods of managerial decision making in the continual decision-making process. Their use is given by managed area and its character.

The methods of the management of people are taken for example from the area of psychology and sociology, the methods of economic and financial management are used during the decision making of economic processes, the methods of the project management serve in the elaboration of projects and so on.

The time horizon has also the influence on the choice of managerial decision making methods. That is why the methods are used in the area of the strategic, tactical and operative management of a copany (including the decisions).

It is necessary to mention from the view point of practices that every used method of decision making can have the influence on the realization of the accepted decision. Therefore it is useful to choose especially these methods which have the real basis and which work with verified data files and information.

## 3. Information structure for managerial decisions

The quality determination of the information structure required for the decision making of managers has to start from the knowledge of:

- decision-making targets which managers need to solve,
- conditions which serve to the decision making.

Managerial decisions run usually under the conditions of time and information pressure. Decisions have to be quick and should be right. Using of information systems and systems of information technologies as the information support for the decision making has the same significance as the knowledge of a lot of science areas and personal characteristics of the specific manager. Requirements given on information systems and information technologies have to be specified so that software products enable the following:

- to give operative questions,
- to secure relevant data and information in various ways of measuring the aggregation with the possibility of the detailed view,
- to keep the great volume of data and internal or external information,
- to process data and information with the aim to differentiate and notify new opportunities, possibly "dangers" for the development of a company,
- to keep historical information,
- to process the development of various economic information in time,
- to show the trends of development of some economic values.

The demands of the creation of information system for managerial decisions are influenced by the content of the management, namely above all by specific features of the management on the top level and by the fact that there are problems to structure some decision-making targets or it is not possible to structure them.

The requirements of the volume and the variety of processed data and needed information for the management on the top level are considerable. Firstly, the need of aggregated internal data and information and secondly, the need of miscellaneous external information are growing with the level of management.

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Managers cannot be only users of the information system which has been created for them. They have to coach the conception of the information system on the given level of the management. They should support the idea that the strategy of the information system under the conditions of information and communication technologies is a component of the company strategy.

If the company (enterprise) has to run well in the competitive environment, then managers need information, which enable to verify so-called financial health of the company. There is information which provides instruments of the management of the entrepreneurial process when it is possible to assess what situation is just typical of the company. It is important to consider also the information about the external environment for the decision making together with diagnostic information.

It is respected that the information structure for the managerial decison making can be divided into two groups:

- diagnostic information, which declares the present entrepreneurial activity supporting the decision making on the strategic and tactical level of the company management:
  - basic economic information,
  - performance information,
  - information about competence, i. e. the sector of the activity,
  - information about the allocation of resources,
- information about the external environment

Basic economic information about the company with the software support is connected with the instance system of plans and budgets, information of the financial and account analysis for the managerial management and so on.

The analysis of the criterion "Economic value added" belongs to the criteria of the measurement of company performance. It arises from thinking that the company does not cover its costs if the amount of the reported profit does not exceed the valuation of the capital. The productivity of all factors of the production is measured just by the measurement of the value added over all costs, namely including the valuation of the capital. So-called benchmarking is the newest instrument used for getting the information about the productivity of factors, i. e. the method of comparison of own performance with the best performance in the sector on the Czech, European or world market

Information about competence is information about the sector of the company activity. Thereby the information about the needs of clients interconnects with the abilities of the producer and supplier. The methodology of measurement and management of relevant competence is based mainly on the analysis of market environment and on innovative ability of the company.

The analysis of the market environment consists in monitoring the company and its competitors successfulness on the market. Entrepreneurial success is attributed to the company if the market appreciates something and customers want to pay for something. The success shows what the company has the advantage in and that the

advantage brings its monopol position on the market. Specific lack of success in business should be taken as the first signal that either the market is changed or the competence of the company is diminished.

The measurement of the innovative ability of the company should provide important information about:

- the innovative performance of the competition so that to give the innovation survey in the whole sector of the business for the time period,
- innovations in own company which were successful on the market,
- the amount of costs the company spends on the research and development of a product,
- the assessment if innovative plans of the company are in context of the development of the market and company targets, which should be fulfilled.

The evaluation of given information depends on the specific personal evaluation of managers, who at the same time ought to be interested in the conception of information systems and systems of information technologies.

The last important group of needed diagnostic information is the information about the allocation of resources, that is mainly of the capital and efficient people. Both these mentioned resources and their right allocation decide if the company is prosperous in business.

Companies (enterprises) judge the invested capital by following criteria:

- the amount of the return on investments.
- the time of the returnability of investment,
- cash flow.
- discount present value.

Unless the manager really wants to assess the suggested investment he has to consider all four criteria and at the same time the risks of particular investment, too. Information system and the system of information technologies ought to preserve important data about successful and unsuccessful investments. They provide so invaluable support for the managerial decision making.

Four information groups which are depicted above show only present entrepreneurial activity. This information helps tactical management of the company. It has to be refilled with the information of the external environment for strategic plans.

The following information of the information system and the system of information technologies belong to systematic information for the purposes of the strategic management:

- markets.
- regular and potential customers,
- technology in the own sector,
- technology in other sectors of activities,
- world finance,
- changes in the European and world economic system,
- taxes, social legislation in the area of interest,

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- market preferences,
- distribution channels,
- law for the human potential,
- others

All these groups of information are useful for the quality management of the entrepreneurial process in the competitive economics of the contemporary market.

## 4. Summary

The competence and responsibility for particular areas of the company management have to be divided among managers in the framework of the co-ordinated management of all entrepreneurial subprocesses. The strategic thinking of managers should give the answer to the question: "What must top management do for the achievement of the entrepreneurial success?"

Top manager or a manager on the appropriate management level must have the responsibility for making decisions. Decision making is possible to see individual and team decision making. Managers on the top level of a company (enterprise) and on the level of intradepartmental structures (centres) make individual decisions in their managerial work. It is possible to characterize them as decisions with right addressed responsibility of the specific person. Individual decisions are quicker, but they can have more subjective character. On the contrary team decisions are connected with the collective responsibility, i. e. they are made with less addressed responsibility of the specific person. The acceptation of team decisions can be longer from the time view point in some cases, however, it can of course have more objective character.

It is right to know the miscellaneous structures of internal information for the support of managerial decision making and to have at disposal the great volume of information from the external environment of the company. The qualified manager must be knowledgeable about the needed volume of information. Minimum information comprises too small spectrum for the decision making. On the contrary redundant information must be eliminated from the decision-making process. The manager competentlywithout emotions chooses certain alternative from the optimal volume.

The marketing system, production and financial system, the system of human resources, managerial information system and the system of information technologies certainly help to make the right decision. It is necessary to know that no software processing can substitute the decision of a manager, but it can support the speed of the quality decision.

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## TEORIA PODEJMOWANIA DECYZJI W PRAKTYCE ZARZĄDZANIA

Streszczenie: Obecnie menedżerowie i ich decyzje mają znaczny wpływ na działalność rozwojową przedsiębiorstw i osiągane przez nie sukcesy. Niezbędne jest, aby decyzje zarządcze (głównie o charakterze finansowym) były podejmowane systematycznie i sformułowane dokładnie tak, aby zaspokoić strategiczne, taktyczne i operacyjne potrzeby zarządu. Decyzje zarządcze mają związek z wewnętrzną, organizacyjną i ekonomiczną strukturą przedsiębiorstwa, które musi działać w zewnętrznym otoczeniu konkurencyjnym tak, aby poprawiać swoje wyniki.