

# Approaches to diagnostics of agricultural and food-processing subjects

## *Přístupy k diagnostice zemědělských a zpracovatelských subjektů*

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**Abstract:** Diagnostics of business subjects from the field of agriculture and food-processing, which are understood as socio-economic units, serves to determine the health of subjects considering them to be live organisms. These entrepreneurial subjects go through their development stages and their real-time status corresponds with the homeostasis of the business systems and the environment. The resulting diagnosis determined by diagnostic methods has to help to reach the goals, which – based on the activities of the business – lead to generation of an appropriate reaction to the identified status of the diagnosed business. Goal-setting is preceded by determination of the “a posteriori” anamnesis or diagnosis of the business.

**Key words:** business, diagnosis, anamnesis, homeostasis, health

**Abstrakt:** Diagnostika zemědělských a zpracovatelských subjektů, které chápeme jako socioekonomické jednotky, slouží k zjištění podnikového zdraví, když posuzujeme podniky jako živé organizmy. Tyto podnikatelské subjekty procházejí fázemi svého rozvoje a jejich stav v reálném čase odpovídá stavu homeostázy systému podniku a jeho prostředí. Stanovená diagnóza určená metodami diagnostiky musí napomoci realizovat cíle, které aktivitami podniku vedou k vytvoření odpovídající reakce na daný zjištěný stav diagnostikovaného podniku. Stanovení cílů předchází stanovení podnikové anamnézy resp. diagnózy a posteriori.

**Klíčová slova:** podnik, diagnostika, anamnéza, homeostáza, zdraví

## INTRODUCTION

Focus on the issues of diagnostics of business subjects operating in the field of agricultural production and on their transformation results from the need to identify their status related to the development in time, which comes from understanding them as live organisms going through particular development stages similar to real live entities. Therefore, also some theoretical approaches dealing with the development and health of businesses state, that a business goes through its life-cycle (Hron 2004).

The term diagnostics in relation to business subjects is rather new in the conditions of our business management (Tomšík 1992). Therefore, it appears to be theoretically fruitful to alive (revitalise) diagnostics in management in its application to see a business as a life organism, which is or is not in a homeostasis (Klimeš 1992) with all components of business environment. Thus, the aim of this paper is to find methodological approaches to diagnostics of business subjects from the viewpoint of some Czech or foreign environment. A part of the goals is to define the terms diagnostics, diagnosis, anamnesis

or their application in a business subject as a socio-economic unit.

## MATERIAL AND METHODS

Based on the aim, set in the previous chapter, literature sources of especially European authors focusing on the issues of diagnostics, determining diagnosis, and monitoring homeostasis of a business system after the year 1990 will be used as a secondary material of research of the above-defined issues. The result will be a synthesis of the identified methods used for diagnostics of business subjects in agriculture or food-processing, which will contribute to theoretical approaches of solution of business changes, crises, and positive development in order to reach of business goals using all business resources. Diagnostics uses the methodology of system theory; organisational behaviour; methodological approaches towards environmental analysis; situation analysis; and obviously leads to the use of methods of competitive strategy formulation. Business subjects from the resource perspective have to be understood as so-

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cio-economic units and the length of their life depends on regeneration of its parts, ability to accommodate to the environment. When determining the anamnesis of a business understood as a living organism, we have to diagnose its individual parts – realities (buildings, offices) are the body of a business, machines are its organs and muscles, stocks are its fat. Finance represents the blood of a business, and people the neural system, which is dominated by the brain – the corporate management. Correctly done diagnostics enables the management “a priori” and “a posteriori” assurance of balance of individual parts of the business in order to keep them healthy.

## RESULTS AND DISCUSSION

Application of the principals of diagnostics in management is rather new, in the conditions of the business subjects in the Czech Republic. Some authors (Tomšík 1992) define it as a sequence of three stages: 1. to know, i.e. to command information about the monitored field and to look for the knowledge indicators; 2. to understand, what presumes introduction of the methodology of diagnostics and its standardisation; 3. to explain, find relations among the elements of the diagnosed system in order to know the relations of material influences, and thus to prepare a range of activities.

Diagnostics as a methodological approach to strategic planning focused on expansion or diversifications starts to appear in the 60-ies of the 20<sup>th</sup> century (Gervais 1995).

Diagnostics, which precedes strategic planning or can be a part of strategic planning, is focused on determination and evaluation of the level of existing competitive ability and interconnection between business capacity and its sources. In another concept the goal of diagnostics is to identify strengths and weaknesses of a business. At the same time, the task of diagnostics is to identify the opportunities and threats in relation to a particular business, and also the values and expectations of employees, and especially those who manage them. A framework of this is given in Figure 1.

If according to the Figure 1 there exists accordance among three levels of business diagnostics, it is not ne-

cessary to change the whole strategy, and small tactical changes should be sufficient. Diagnostics is understood not a descriptive method, but an active pursuit to identify the main variables encircling a business, their mutual interactions and our necessary reaction to these interactions.

If the diagnostic methods are specific for every field, the general approach in particular steps stays the same – knowledge of results, their analysis, and proposal for solution. For these purposes we can apply the differential diagnostics, which comes from a comparison and identification of similar symptoms of business health and its evaluation in connection with all symptoms and circumstances. Diagnostics has its time periods. Done based on the results and experience, it is called “a posteriori” diagnostics. It is important for specification of the achieved results in relation to the formulated goals.

Diagnostics in advance (a priori) precedes activities, and brings a prognosis of the future activity, allows adopting the best solution of those considered.

Diagnostics a posteriori in analysing the health of a business can be compared to anamnesis, i.e. analysing the status of the business organism before there appeared its health defects.

### Diagnostics of the environment

Today's conditions for business development are delimited by homeostasis with the globalising environment. From this viewpoint, it is suitable to do several diagnostics according to the status of a business within its development stage. For these reasons, we recommend to use the diagnostics described by Lemaire (1997). That is the diagnostics of abilities to enter international environment, which is focused on evaluation of the short-term or long-term development potential in seeking diversification of own markets, adjustment of the offer and the trade procedures.

Another recommended diagnostics is focused on implementation. It is the case of interest of the long-term operation in one or several foreign markets. Within this diagnostics, Lemaire (1997) recommends to focus on the

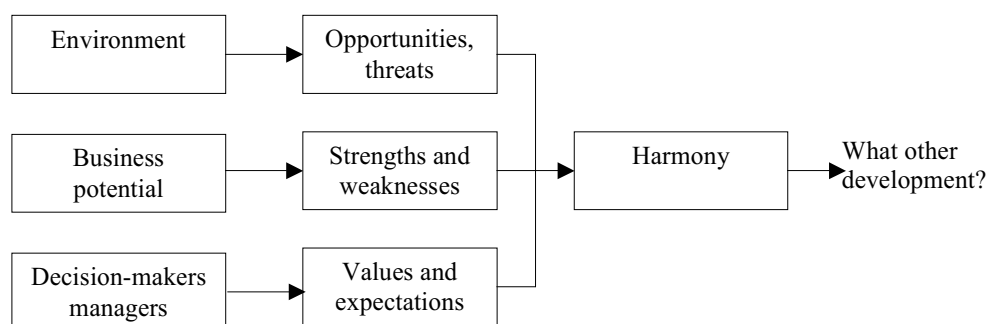


Figure 1. Types of analyses for diagnostics (adapted from Gervais 1995)

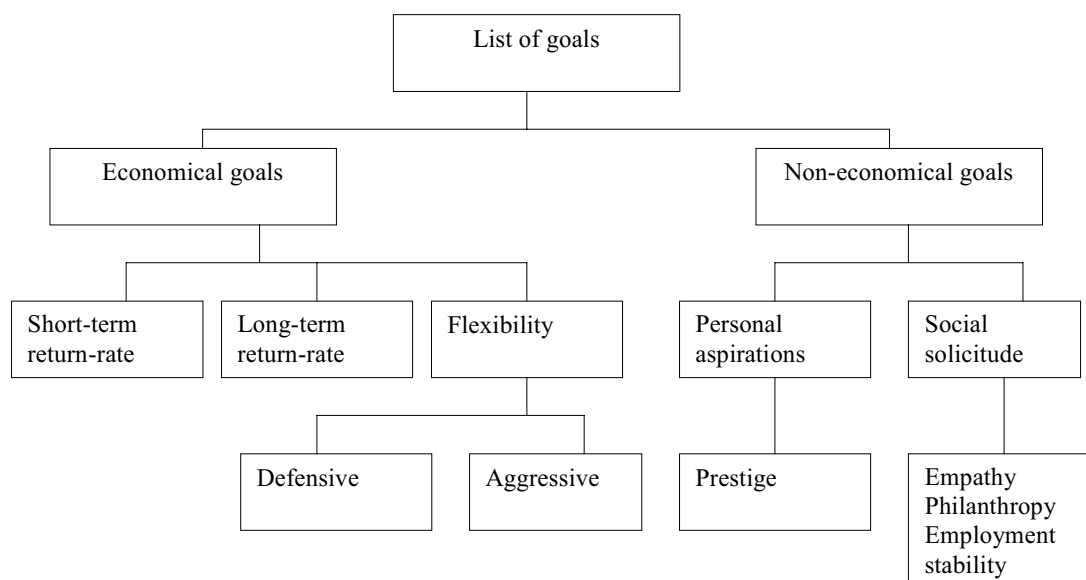


Figure 2. Elements of strategic management

key functional issues, where he includes production and product relations, marketing and sales, financial resources, and relations between the strategy, human resources, and organisational culture. Within the implementation diagnostics, it is suitable to transfer it on a corporate level towards a judgement of managers' willingness to penetrate international markets, judgement of their competencies within the functional units of a business, financial, technical and technological resources, and ability to formulate an offer, which is adjusted to the international territory. Diagnostics elaborated in this way is then confronted with the local diagnosis performed at the same time. The local diagnosis is focused on institutional limits (laws, standards), production conditions and premises (costs, quality), local and foreign competition, logistic limits, and obviously also on the consumer habits (taste, prices, anxiety to be different). The goal of these implementation diagnostics is to judge their homeostasis, which determines the steps necessary to be done in order to keep the balance of both environments.

In these diagnostics, it is generally recommended to use statistical data, which can help in decision-making using the probability-based methods, when according to the results we can behave as managers with a negative attitude towards risk, or judicious hazard-takers.

When evaluating the health of a business, which can be in different stages of its life-cycle, it is suitable to use the identification of anamnesis with the help of the a posteriori diagnostics based on historical data. Based on the identified diagnosis, we can do the a priori diagnostics, which is dependent on the forecasted data about the status of the environment, and enables us to define different alternatives of diagnoses about the future behavioural status of a healthy business in different environmental conditions surrounding it – from local to glo-

bal. Concluding activities within diagnostics include also proposals of solution alternatives.

In connection with the accomplished diagnostics of a business, it is afterwards possible to proceed to goal setting and identification of activities towards their achievement. So, there already follows the primary managerial sequential function, which is planning. The result of it can be a definition (a list) of the goals of the business, which correspond to its health identified as a result of a homeostasis with the environment (Figure 2).

Strong strategic management has to be interested in and has to monitor all the organs of the business, and the manager, as a medical practitioner has to tend at the business bed. When one of the organs seems to be overloaded, consultant in the role of a medical specialist is preventively called to counsel.

## CONCLUSION

Diagnostics of business socio-economic subjects serves to determine a business health, when considering businesses as life organisms, which go through various stages of their development (life), and the determined actual status is a result of homeostasis of these systems with the external environment. Balance of both environments (business, and external) has to be achieved through strategic management of a business using the managerial functions of planning. Diagnostic approach towards the management of agricultural and food-processing businesses seems to be necessary for their strategic management, based on the previous observations. Based on a business anamnesis, we decide about the probable future with the knowledge of the recognised reality.

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