

# THE CURRENT SITUATION IN THE EUROPEAN UNION AND THE AUTOMOBILE INDUSTRY

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*Summary: Problems in the automobile industry began during the first post-war recession in mid-2008 decline in demand in almost all countries. In the following period the effects on car company and the EU Member States fully accept rescue plans. In the background of today's problems are mainly problems of currency stability in the EU and national economic performance.*

*Key words: automobile industry, restructuring, logistics.*

## INTRODUCTION

The European Union is the world's largest producer of automobiles. Annually, they produce about 18 million, about one-third of world production. During the crisis in 2008, the EU has decreased the number of new cars sold about 1,2 million. In January 2009, this market segment showed 27 % lower than the year before. These data only confirm the fact that the automobile industry is vulnerable to economic recession, which has sold cars curve downward trend. Although the current situation is creating pressure on car producers to prepare for possible repetition of the difficult economic situation in the context of today's currency and debt crisis in the euro zone.

In this crisis period, the car company, if they want to be competitive and survive, they must focus on significant change and innovation.

## 1. IMPLEMENTING NEW TECHNOLOGIES AND MODEL OFFENSIVE

### 1.1 New technologies and model offensive focused mainly on the production of smaller and more fuel efficient cars

In the period when the automobile markets expect a decrease of sold cars is a time suitable for the installation of new technologies and their implementation in practice. What makes the situation easier is the fact that introduction of innovation within the production process at the time of maximum demand is ineffective due to losses arising from introduction of innovation. Therefore, from the economic point of view the period suitable for introduction of innovations is rather in times of the economic crisis when production capacities do not indicate high usage level. Existing factory units suffice to meet demand but also prepare for new, more technological and advanced units. In case of the economic crisis end, all these newly created factory units will take advantages of it opposite to their competition. Currently, automobile factories focus mainly on concept of so-called "hybrid power" that combines

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either the power of petrol or Diesel engine with electromotor and therefore offers the engine power of the above standard, moreover, with low emission and improved economics of combustion. However, this conception remains dependent on petroleum fuels.

Transportation is responsible for approximately 71 % of petroleum consumption in EU. Automobile transport is 98 % dependent on petroleum fuel, remaining 2 % comprises of other power fuels (mainly electricity, gas). European Union tries to reduce sector dependence on petroleum fuel, therefore set the following target – until 2020 to substitute 20 % of the original fuels for alternatives. One of the possible alternatives is hydrogen. Its main advantages are the following features:

- it can reduce both dependence on petroleum and CO<sub>2</sub> emissions and pollution caused by transport – reach a null value is possible in practice,
- belongs to the most often element in the world,
- is an universal energy bearer - can be made from any source.

Automobiles based on electromotor driven by hydrogen fuel elements are more effective, they use 40-60 % of monopropellant energy.

Battery-driven vehicle represents other kind of alternative. Power source is usually accumulator that has to be charged from the external source one day before driving. Trailing throttle depends on accumulator capacity. Accumulator belongs to the weakest elements of this alternative whereas its capacity does not allow the similar kilometrical power as combustion engines. Technical break within the battery-driven vehicles development got started with development of electricity, control systems and new types of accumulators (for example SCIB batteries), but mainly with fast increase in energy costs, i.e. fuels – mainly petroleum and gas. To the main advantages belongs also simpler automobile design with location of power directly in wheels, electronics and accumulator set located in the floor part. Automobile body construction can be therefore constructed in a more variable way within the same car chassis.

Some car manufacturers have embarked on the production of smaller more fuel efficient cars, they want to attract more potential customers.

## **1.2 Modify the internal structure of enterprises**

The main factor that is to be applied within restructuring is absolute pragmatism. It is necessary to treat each stage of the project in consideration of the specific and precisely defined goal; otherwise the given changes fail to achieve the desired effect.

In general, the process of restructuring is understood to be some specific methodological approach to relocation of company's resources. In addition, as one of the possible means of management changes includes rights, liability and correlation of all subjects within the business activity. It is just optimization of these two parts that constitutes a basis of any internal and external restructuring efforts. The whole restructuring process of the company is divided into stage of consolidation and development, each with its further subdivisions. First of all, company (concern) is reduced that makes it more effective in order

to expand gradually again later. The consolidation stage is characterized by reduction in activities and searching for the internal reserves of the company (1).

At the present crisis the automobile factories trouble with lack of funds and surplus production capacities. Therefore, within the consolidation process liquidation is to be ensured firstly and then outlook and cleansing of economy has to be taken. In other words, it is necessary to know producer's situation, what is the source of his profit but also of loss, prices of products and the capacity of company. Following it deficiencies, mostly within orders, are to be eliminated in order to ensure everything on time. Then, reorganization of human resources should follow, i.e. modification of organization structure, what relates to employee saving but also to reallocation of responsibilities and competences. The last stage of the consolidation process is represented by motivation of people; mainly it belongs to the tasks of the subject who manages the whole change. As soon as the consolidation process is completed everyone within the company should be fully employed. The noticeable output is cost saving.

The development stage requires both vision and strategy. Firstly, it is important to define what kind of product the manufacturer wishes to produce in the future. Then, within the second step of the development stage comes up to the modification of management system, most often the company passes to the procedural management, eventually the already existing management adapts to new conditions. As to the next step, the producer should focus on revenues and margins because profit is essential for the functionality. The fourth step is focused on investing in either technologies or innovations. The last step of the development stage can be marked as acquisition - the company decides, for example to buy some competitor or already existing factory; in fact, when searching for the subject convenient for association it tries to gain a new strategy investor.

### **1.3 Reducing the total costs**

Rapid increase competitiveness in the market can be achieved by lowering prices, which requires in particular to reduce production costs. Potential areas for cost reduction are mainly the following.

#### ***1.3.1 Reduction of production and logistics costs***

Transport of the individual components to consumer represents the largest cost-share of the total logistics costs. Larger distance results in cost increase. On the other hand, the more suppliers and the lower distance make large savings. To the typical example belong automobile factories Porsche AG – all their important suppliers reside in distance of max. 200 km from the factory. In case of such distances small component deliveries in the real time JIT (Just In Time) and JIS (Just In Sequence) are taken into consideration (2). Implementation of JIT/JIS philosophy into the production process results in increasing labour productivity, reduction in both reserves and storage accommodation, and quality improvement. At the present time the application of JIT/JIS strategy within realization of inter-companies supplies represents an essential advantage for large consumers. In fact, specific order seems to be only some kind of “foreign storage on wheels with components” that leads up to its assembly line.

### **1.3.2 Reduction of personnel costs**

Personnel costs within the automobile industry represent 15 up to 20 % of the total costs. During the Depression, however, their share increases, whereas the enterprise even if produced in the core staff spend some of the costs to employees by virtue of the Labour Code.

Both contract employees and job agencies represent one of the possible solutions because they offer opportunity to respond to changes in market requirements. In reality, labour costs (per 1 employee) of contract employees are higher than of permanent employees. And in case of production stoppage the absolute pragmatism belongs to the key factors of the restructuring projects because anytime within the projects takes into consideration specific and precisely defined goal, being further elaborated into detailed fragmental steps which are, despite occasional necessary recondition with respect to parties concerned, fulfilled in a precise way. However, they vanish due to changes in market demand - the agencies are paid for the realized services having been ordered in advance.

## **CONCLUSIONS**

The European Union is the automobile industry among key factors in the national economy, so when a company (car manufacturer) finds himself in economic difficulties, it is necessary to:

- change the structure of production,
- make key changes to the strategic development,
- remove or convert inefficient components,
- non panic and work on innovative programs.

Only those companies which are able to adapt new conditions of the market are able to survive. Whereas authorized capital for both moderation of immediate crisis in times of indebtedness of company and investment support to fixed assets or sales has only short-term effect; on the other hand, development, research and implementation of new knowledge to mass production help to ensure company survival as well as its perspective growth in the future.

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