

HUMAN RESOURCES MANAGEMENT IN THE PRODUCTION COMPANY DURING AN ECONOMIC DOWNTURN – QUALITY ASSURANCE CONTEXT

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ABSTRACT

The paper deals with the problem of human resources management in a production company during an economic downturn. The downturn caused a reduction in the number and volume of orders and consequently there was no possibility of using all available human resources. The problem is illustrated as a case study of a chosen automotive company.

Keywords: economic downturn, human resources, quality assurance, quality costs

1. HUMAN RESOURCES MANAGEMENT

One of the basic management goals is to make people and teams start to cooperate in order to minimise weaknesses of a particular organisation and to make the best use of its participants' strengths and talents [1][2]. Knowledge, strengths and experience of an organisation's participants are also called intellectual assets of that organisation. Knowledge resources also include data and information that are the basis for building individual and collective knowledge. They are subject to constant change, which is a sign of a learning process in a particular organisation [3]. The nature and features of intellectual assets show that knowledge belongs to people, and it is people, not organisations, that are carriers of this resource. A company's human capital, or capital of knowledge, capabilities and motivation, is nowadays perceived as the main source of building an inimitable and sustainable competitive advantage. However, human capital is unsustainable, because a company cannot own its employees: "a company's most valuable assets leave it daily at 3 p.m." [4].

Inferring from the above, it can be stated that the major characteristics of a good manager include: flexibility and the ability to motivate and create effective teams. This can be achieved by for example recognising employees' strengths, setting goals and creating technical and organisational conditions for action. Flexibility consists in being able to adapt to a particular situation, i.e. "a good manager is neither 'stern' nor 'lenient'. What he or she is like should make it possible for him or her to achieve his or her targeted goals" [1]. It needs to be borne in mind that army commanders and managers in a production company differ in their ways of achieving objectives. Research conducted in the Ohio and Michigan State Universities shows that task-oriented aviation commanders are perceived as more efficient than those that are people-focused. On the contrary, in production companies it is people-focused managers, i.e. those who encourage their employees to set objectives together and make their own decisions, that are seen as effective [5]. However, such a generalisation does not always work in practice. In some situations a manager in a production company should employ management

methods used by an army commander, which for example stems from an economic downturn during which conditions are recognised only partially and decisions are made under uncertainty and/or risk [6]. Crisis is defined as a period of depression, a turning point or a potential breakthrough moment experienced by a particular social or political system [8]. Crisis takes on various forms depending on where it occurs. In a company risk is a threat to its existence [9], or a danger of losing economic independence caused by external and internal factors. A particular feature of external conditions is their complexity and interrelations when it comes to the impact they have on companies [9]. This creates uncertainty and makes it impossible to identify the fundamental causes. In such a situation managers respond using their intuition and experience, identifying the likely causes of the problems and taking decisions that will produce results as quickly as possible.

In a crisis situation managers have little time to make a decision, have a sense of threat, surprise and unpredictability. This explains why they act under stress and tend to be intolerant. They adopt an authoritarian management style, have a short attention span and a short time perspective, which does not create favourable conditions for methodological and substantive precision of decisions taken. This results in, for example:

- Choosing information selectively,
- Basing their decisions on experience,
- Tolerating the lack of clarity,
- Making themselves sensitive to others' opinions,
- Prioritising short-term benefits.

A theoretical model of preventing crisis allows for eliminating the weaknesses mentioned above through identifying the causes of the problems, or collecting information about:

- What phenomena, processes and entities have contributed to a crisis situation?
- What is the scale and intensity of the crisis phenomena and what is their rate of increment?
- To what extent do problems a particular company is experiencing generate new ones?

Factors that make it possible to overcome a crisis situation include, among other things:

- Both senior and lower management level employees and operational personnel, who counteract problems by committing themselves to fulfilling a task assigned to them and identifying themselves with their company's goals,
- Information that supports decision-making processes through analysing and controlling the environment and the inside of an organisation, and helps choose the appropriate development strategy.

2. MANAGEMENT DURING AN ECONOMIC DOWNTURN

The state in which the world economy was between 2008 and 2009 is called the global economic crisis. It resulted in a slowdown of the world economy, and even its collapse in some countries. Companies started to experience serious financial problems and carry out mass dismissals to cut costs and avoid bankruptcy [7]. Such a situation was the case in one of the Polish companies operating in the automotive branch. Initially, the company registered a 40% decrease in the number of orders a month. One of the first responses on part of the most senior executives was to minimise costs by reducing the cost of salaries, which resulted in dismissing part of employees [10]. In the first quarter of 2009 the company discharged almost 20% of its 250-strong personnel. 80% of the dismissed staff were production-support workers. The first six months of 2009 saw losses in the entire group, which the described company was part of. As a result, the group closed down its two factories. Part of their production was shifted to the Polish branch, which led to a gradual increase in the number of orders. The company also committed itself to implementing two additional projects. The negative consequences of the previous reduction in employment started to be felt instantly. There were

not enough employees, especially production-support workers, so 70 new people were taken on [Fig. 1]. However, in fear of the crisis the plant started cooperation with a temporary employment agency instead of offering its employees employment contracts.

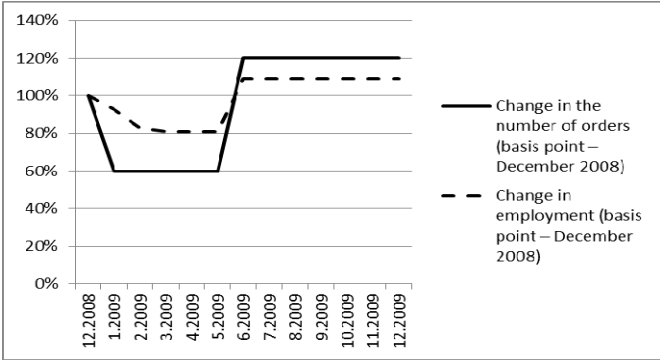


Figure 1. Change in the number of orders and employees between December 2008 and December 2009 (in %, the basis point is December 2008); source: own work based on [10]

In line with the procedures in force prior to the economic crisis, new production workers should receive thorough training before they start work. Normally, the training procedure provides for a five-day training session for each worker and results in his or her fitness for work in a particular department being approved by executive managers. However, the plant hired about 10 people a week because of the urgent demand in the production plant. Since there were not enough trainers, new workers started work after merely 2-3 hours of training [Fig. 2]. As a result most of the people did not catch up with the fast pace of learning, were not able to face responsibilities resting on them, and quit work after several days. Those were mainly people with no specialist education in a particular field, therefore they felt overburdened with their responsibilities. In addition, the nature of their jobs, high responsibility for products and low wages did not encourage them to become permanently bound to their workplace [11]. At the same time long-serving and experienced workers also started to quit their jobs, because the newly introduced system of continuous work did not appeal to them, as they were forced to work in a three-shift system. At the beginning of July 2009 there was a sudden increase in the number of faulty goods. Production defectiveness rose to the level of 45% on particular production segments. The biggest losses were registered during one of the last production stages – the assembly stage.

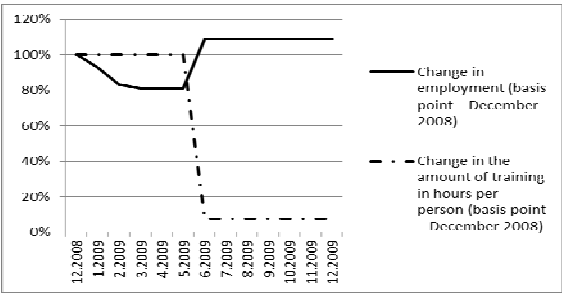


Figure 2. Change in the number of employees and training sessions expressed in hours per person between December 2008 and December 2009 (in % the basis point is December 2008); source: own work based on [10]

Analysis was carried out into the causes of incompatible goods in the production process of one of the subassemblies and an order for 1000 pieces was examined. During the first manufacturing stage 65 faulty elements were identified. It was stated that the incompatibilities were due to a worker operating the machine improperly, which meant that the error was caused by human factor. After the elements were painted, it was noticed that 27 of them showed paint chips, which had been caused by the pain surface being greased before a layer of paint was applied. That was also caused by human error. While a body with metal elements was being assembled, it was discovered that 24 of them were not compatible as far as their functionality was concerned. It turned out that the elements were too wide and their dimension exceeded the upper tolerance bound for that element – the errors were made by the operators.

The described example was not an isolated case. Similar analysis was carried out for other processes and determined the main causes of the incompatibilities. The analysis showed that the most frequent cause of the faults was the improper operation of the injection process. The person responsible for making plastic elements using injectors did not follow instructions for the job, although they contained specific information on principles of working with that product. The source of the problem turned out to be the fact that the production-support worker failed to follow the instructions.

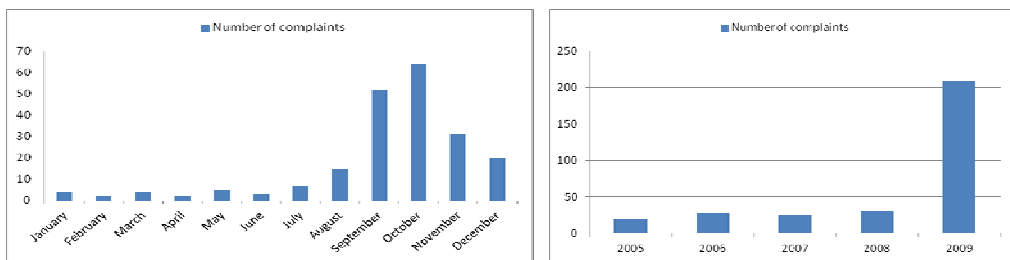


Figure 3. Number of complaints in 2009 as compared to the years 2005-2008

Source: own work on the basis of [10]

Most errors in the described production process were discovered. Some of the faulty products, however, were sold, which soon resulted in an increase in the number of unsatisfied customers and complaints. Figure 3 (Fig. 3) shows the number of customer complaints in September and October 2009, which were critical months for the company.

As a consequence, the company suffered additional costs related to the production of replacement parts for complaining customers, which, in turn, caused difficulties with meeting deadlines for new orders. Attention needs to be paid to yet another important intangible factor that is difficult to be assessed in terms of money, namely a decrease in trust on part of customers and the company's tarnished reputation.

3. CONSEQUENCES OF CHANGES IN THE STRUCTURE AND QUALITY OF HUMAN RESOURCES IN THE CONTEXT OF ENSURING PRODUCT QUALITY

Fig. 3 shows that in the first months of 2009 the number of complaints was low and analysis of the company's detailed data allows stating that the complaints mainly concerned small incompatibilities. An upward trend could be noticed starting in August 2009, and the biggest number of customer complaints was registered in October 2009. Compared to the number of

complaints in the previous years (Fig. 3) the year 2009 was the worst in the history of the company.

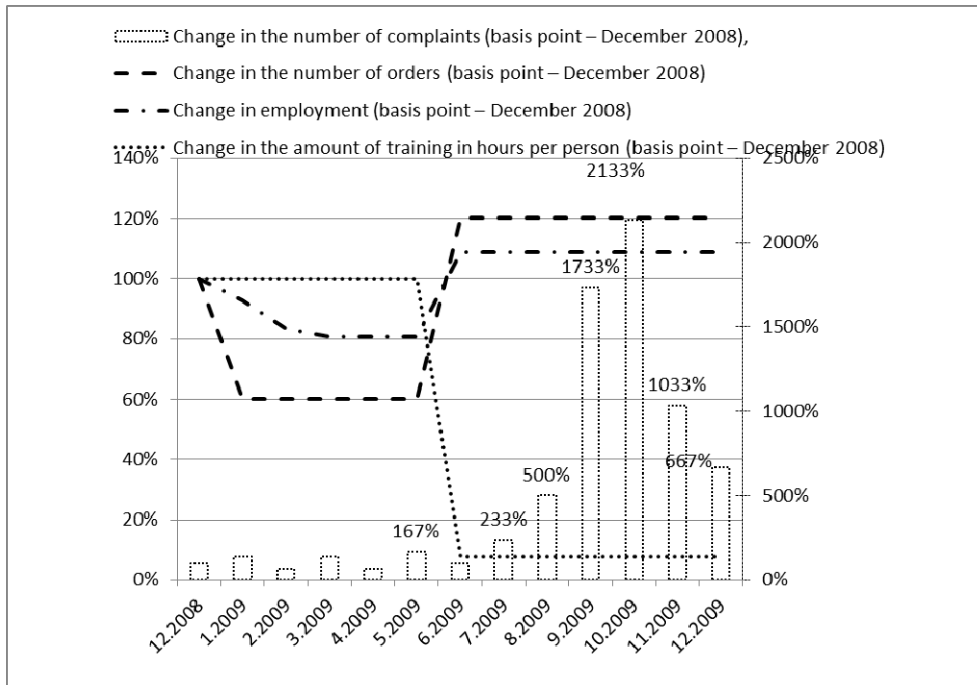


Figure 4. Relation of changes in the number of orders, personnel employed and the amount of time devoted to training against the number of complaints, source: own work based on [10]

The increase in the number of complaints in 2009 was caused by events that had taken place three months earlier [Fig. 4]:

- The decision to dismiss a large number of production-support employees in order to minimise the cost of salaries,
- Insufficient analysis of the environment and signals from the headquarters of the group – two European branches were closed down and production was moved to the described location.

In order to adapt to the situation, it was necessary to make human resources available again. Unfortunately, attention was only focused on the number of employees, and not their qualifications:

- Seasonal workers without proper qualifications were employed,
- There was a dramatic decrease in the amount of time devoted to preliminary training.

That had an influence on decreasing the value of prevention costs related to quality assurance (planning the quality of a product and personnel training). However, in the long run (May-August 2009) [Fig. 4] there was a considerable rise in the number of complaints, and in overall costs, as a consequence. The fact that the consequences of the decisions started to be felt after some time caused the company's managers to evaluate the situation improperly. That meant that the company was not prepared to fulfil new tasks (orders and projects) and the decisions taken only made the situation worse. What turned out to be the most difficult task was to restore the situation to its previous state, because each introduced change caused lasting effects: the loss of experienced employees, new attitudes and a new style of work introduced by seasonal workers, a decrease in employees' morale, undermining customers'

trust, etc. The last consequence, namely losing loyal customers may have brought about the worst financial losses [12]. Therefore, in December 2009 the plant applied to the group for a subsidy for its operation. The obtained funds were mainly invested in personnel training and purchase of professional software for production planning and management, which helped stabilise the condition of the company.

The company stopped buying services from intermediaries and returned to the original routine of taking on employees and carrying out extensive training. For the first three months of 2010 there was an improvement in the quality of manufactured products, which, in turn, resulted in the decrease in costs of complaints.

The analysed example shows that even during a crisis laying off employees requires particular deliberation. This may improve financial results in the short term, but in the long run this leads to an increase in costs and losses mainly stemming from discrepancies. It needs to be realised that properly trained employees are an excellent investment that enables overcoming problems faster.

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