

MANAGEMENT OF HUMAN RESOURCES IN THE AUTOMOTIVE INDUSTRY

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ABSTRACT

In this paper the requirements regarding human resources for the automotive industry in Slovakia are defined. The reasons for the existing, undesirable fluctuations are identified as stress at work, manufacturing waste and lack of commendation or communication. The identification and improvement of all company processes are the principles of efficient human resource management. How to implement the “DEM-KAWA” model for effective management of an organization to keep employees motivated and empowered in order to provide the necessary atmosphere for manufacturing quality products is introduced.

Keywords: human resource management, manufacturing quality products.

INTRODUCTION

Slovakia is becoming the manufacturing leader in the automotive industry. It is predicted that in 2008 it will pride itself with the highest automotive production per capita in the world. Some compare Slovakia to the Michigan of the thirties. Beside taxation incentives, this is mostly due to the availability of highly qualified and low cost labor in Slovakia.

With the influx of the automotive industry into Slovakia, the competition in attracting and keeping qualified employees is becoming fierce. The most blatant example of this is the situation in an Industrial Park where one of the most important suppliers in the automotive industry had a 70% employee turnover in one year. With this, the company could not maintain the necessary quality in supplying the car manufacturer (OEM – Original Equipment Manufacturer) with Just in Time (JIT) part deliveries as per the strict delivery regime.

One of the consequences of such a dire situation is the application of a special shipping regime whereby a third party inspection company provides 100% independent inspection of all supplied parts before these are shipped to the OEM. The costs of such an arrangement must be borne by the supplier, which has a severe financial impact on its budget.

COMPETENCE, AWARENESS AND TRAINING

The requirements of ISO 9001 and ISO/TS 16949 regarding human resources (HR) are identical. It is necessary to:

- a) determine the necessary competence for personnel performing work affecting product quality,
- b) provide training or take other actions to satisfy these needs,
- c) evaluate the effectiveness of the actions taken,
- d) ensure that its personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives, and
- e) maintain appropriate records of education, training, skills and experience.

ISO/TS 16949 puts even more emphasis on HR management by requiring that the organization must establish and maintain documented procedures for identifying training needs and achieving

competence of all personnel performing activities affecting product quality. Personnel performing specific assigned tasks shall be qualified, as required, with particular attention paid to the satisfaction of customer requirements.

Both standards emphasize effectiveness of training. The pressure on cost in the automotive industry is very high, which requires effective and efficient use of the HR budget. The days of high HR budgets with no accountability are gone. The monies spent on employee development become a factor in the price of the supplied part and must be paid by the customer.

It is necessary to define the job requirements in well designed job descriptions. These provide the first input into establishing the training needs. The job descriptions should be tailor made for the given positions. This is where the effectiveness of the HR processes starts.

It is a good practice to develop qualification (substitute) matrices on the shop floor, and in laboratories or other organizational units. Again, these must be set up efficiently to ensure sufficient backup in the case of absent employees, and to ensure employee rotation for ergonomic or other reasons. Usually, such a matrix defines several levels of qualification: a) trained to work under supervision; b) trained to work independently; c) qualified to perform on-the-job training. Qualification matrices regularly updated and displayed on information boards contributes to motivate the employees to improve their qualifications. It is supported by monetary incentives to ensure loyalty of the employees.

The best companies establish their own internal training system with scoring targets and attainment levels, with instructors being the best experts in the company.

The creation and maintenance of employee awareness of the company goals, objectives and targets, and orientation on customer needs (Customer Specific Requirements – CSR) are important.

EMPLOYEE MOTIVATION AND EMPOWERMENT

Surveys of employee satisfaction are an important tool to gauge the employee “mood” and provide input into an action plan to improve the situation. The objective is to keep employees motivated and empowered, in order to provide the necessary atmosphere for manufacturing quality products. Obviously, monetary motivation is very important and should not be below that of similar companies in the neighborhood.

However, surprisingly, monetary awards are not always in the first place of employee dissatisfaction. Often it is work stress, the manager’s attention and lack of commendation or communication. To deal with stress at work, often an ergonomic study with employee rotation can help. Regular meetings between the worker and his or her supervisor are important to ensure free communication and it is not limited only to problems at work; often, help with individual personal problems is needed and appreciated.

Both ISO 9001 and ISO/TS 16949 require that the organization should determine and manage the work environment needed to achieve conformity with product requirements. This relates to cleanliness of the work place, and safety and general empowerment of the employee. The 5S system (Seiri - Separating, Seiton - Set-in-order, Seiso - Shine, Seiketsu - Standardize, Shitsuke - Sustain) and small improvement steps related to everyday activities – Kaizen help to increase employees’ empowerment.

ISO/TS 16949 requires that product safety and measures to minimize the potential risks to employees should be addressed by the organization. The management system provides a systematic way to deal with occupational risks, based on the specification OHSAS 18001.

Employee awareness must include environmentally friendly manufacturing, waste separation and recycling of waste material. Not only is this often a customer requirement in the automotive industry, but also it is common sense in the current climate of awareness of global warming and the associated consequences which we all have to bear. Systematic attention to environmental

issues thrives best in the management system built and maintained in compliance with the ISO 14001 requirements. Environmental awareness very often goes together with improved safety and good quality. The quality objective to reduce manufacturing waste, internal scrap and external claims is also an important environmental objective.

It can be seen that an integrated management system based on the ISO/TS 16949, ISO 14001 and OHSAS 18001, when efficiently implemented, also provides also necessary work place environment for the important motivation and empowerment of the employee. All this becomes part of the COMPANY CULTURE.

EFFECTIVE MANAGEMENT OF HR

It is common to divide company processes into the management processes, the value creating processes (also, the main or customer oriented processes – COPs) and supporting processes. The HR processes belong to the key supporting processes.

All processes should be continuously improved, not just when shortcomings occur or in response to failures identified, but also as a result of a continuous review. An essential tool for improving processes is the ability to measure performance.

PROCESS ORIENTED STRUCTURE

4 Main clauses ISO 9001/9004

- Management Responsibility
- Resource Management
- Product Realization
- Measurement, Analysis and Improvement

‘If you cannot measure it, you cannot control it

If you cannot control it, you cannot manage it

If you cannot manage it, you cannot improve it!’,

Peter Drucker.

Every effectively managed organization tries to implement the “DEM-KAWA” MODEL principal as follows:

- Develop mutual interests
- Employee suggestions
- Personnel communications
- Employee participation
- Synchronisation - (internal) customer’s requirements and supplier’s specifications
- Information exchange
- Commendation & correction
- Promotion to influence.

'DEM-KAWA' MODEL

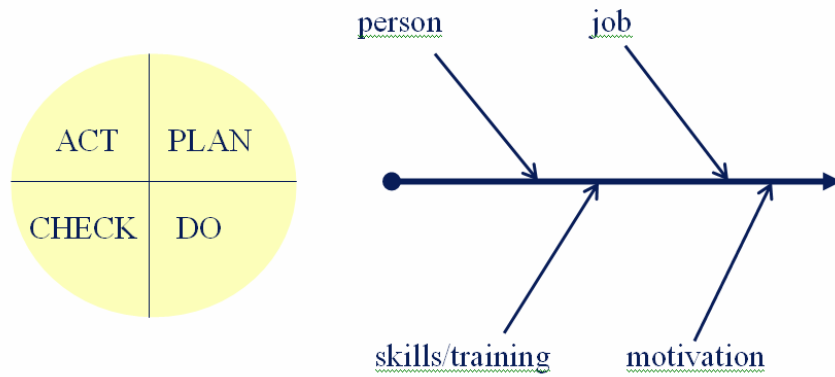


Fig.1 "DEM-KAWA" model.

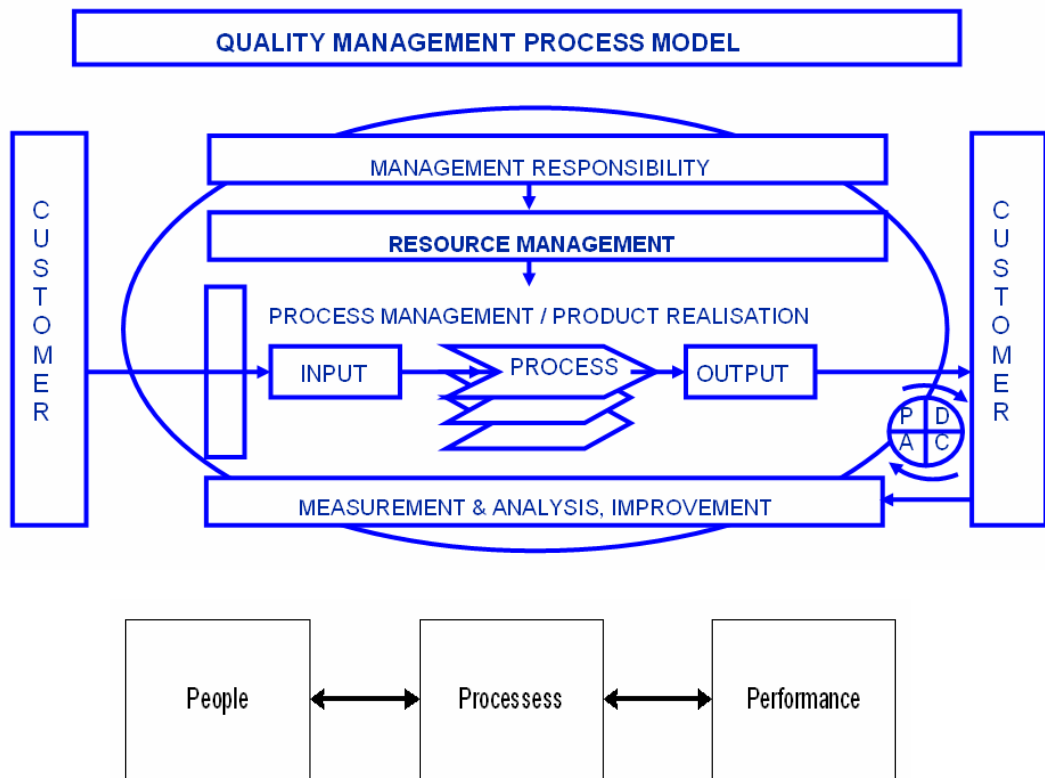


Fig.2 The main stone of organization.

The cornerstone of an organization are the qualified, motivated and satisfied employees whose manage and improve the organizational processes (Fig.2). The organization tries to define polices

for Human rights, which contains for example the following information: discrimination, voluntary employment, child labor and freedom of association.

The picture below describe the Phases of the Process Employees Satisfaction Survey.

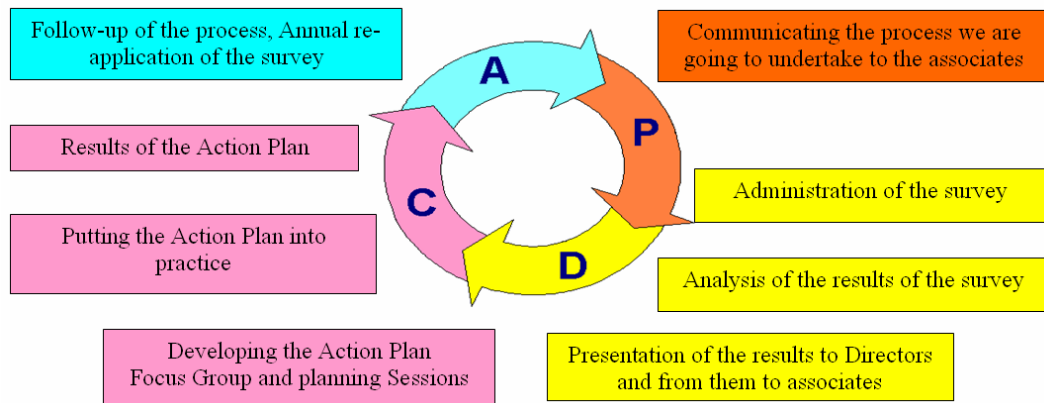


Fig.3 Phases of the Process Employees Satisfaction Survey.

Example of training flowchart implemented in one company in automotive industry:

I. Training application

- a. New hirings and transfers through the organization
- b. Moving from hourly to salary status
- c. Internal Transfer, new job assignment
- d. Skill/knowledge/qualification; improvement

II. Training needs and training performance

- a. Education/experience (Dept Mgr., Recruit. Specialist)
- b. Introduction/Training (Manager HR.)
- c. Training Needs Identification

i. Dept Manager

- Run performance reviews and skill gap analysis
- Define training needs
- Select training participants
- Define training objectives
- Evaluate situation before training
- Notify HR. department

ii. HR.Department

- Establish/update
- Submit to Training Steering Committee
- If required organize training
- Collects Training Record sheet
- Collects Training Evaluation Sheet

III. Training effectiveness

- a. Training on the job (Dept. Manager & evaluates training effectiveness)

IV. Competence

- a. Competence evaluation (Dept. Manager – evaluates competence, Issue “Skill Gap Analysis”)

MEASUREMENT OF THE PROCESS HUMAN RESOURCES MANAGEMENT

To be able to keep the HR processes effective and improve them, we have to define suitable processes and their measurement (performance indicators). These performance indicators are regularly reviewed by the management (typically monthly) to decide on appropriate action plans.

Obvious measures that come to mind are the drawing up of the assigned HR budget, the number of performed training sessions, and the number of training days per year per employee.

Then, we want to measure the effectiveness of the training sessions themselves. The training participants measure the performance of the training instructors, the content of the training material and success in reaching the training objectives. The most important measure of the training is its contribution to the improvement of workplace processes, in other words, it is the application of the acquired knowledge in the participant's performance at work. This cannot be measured right after the training itself, it is measured after two to four months after the training, jointly by the employee and his/her supervisor. This ensures that the effectiveness of the training is measured as it affects the use of the newly acquired knowledge at the workplace.

The employee satisfaction survey provides the opportunity to define many other important performance measures. These may concern communication of important information to the employees (info boards, closed TV circuit, etc.), the leadership of the management, the incentive program for improvement suggestions, quality and environmental awareness, safety at the workplace, etc.

It is also very important to have well defined categories and measurements reflecting the reasons why the employees leave the company (turnover). Attending to the employee needs, and eliminating or mitigating the causes of the employee turnover is most important to stop the outflow of employees and stabilize the company performance.

Only in the environment of openness and steady improvement of the employee / workplace conditions can the company objectives be met and provide the necessary conditions for the company culture.

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