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# ANALYSIS OF COMPLAINT PROBLEM SOLVING PROCESS TO SUPPORT SMART DEVELOPMENT IN AN AUTOMOTIVE COMPANY

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#### Abstract:

Complaints management process is very important from the point of view of each company, particularly production companies. Claims both internal and external generate costs, which the companies must face. To identify properly the source of the problems formation all sorts of methods and tools of quality management can be used. This will indicate in an unambiguous manner the cause of the problem and help to take corrective and preventive actions in effective way.

**Key words:** problem solving, complaint management

#### **INTRODUCTION**

This article presents a case study of complaint problem solving process, which is implemented in an automotive company. In the form of a flow chart the actions were outlined. This actions are being taken in order to solve a particular problem. The flow chart proposed actions to seal the flow. This can be done by using additional quality tools.

#### **COMPLAINT PROBLEM SOLVING PROCESS**

The flow of action in case of appearing quality problems must be strictly defined and unambiguous. This is very important procedure because everybody knows what they are responsible for. The Fig.1 presents main actions which should be implemented by used of particular quality tools to solve the specific problem considering complaints. Attention should be paid to the fact that quality problems regard both areas – internal and external. Defects or nonconformity in the next phase of production process or in the external customer can often be identified in product. The flow of action in both cases should be the same because an internal customer must be treated on the same level as an external customer [1, 4].

The following flow is divided into three stages. First stage is connected with recognition of a problem and acquisition of information (yellow color). At the beginning the Quality Controler or the Quality Engineer have to prepare Quality Alert. This is a form which consists of: issue name, quantity of units which relates, date, photos presenting a problem and signature of a person who writes Q-Alert out. Then Quality Engineer identifies a problem and gathering information about it. These tasks in automotive company are not standardized [5, 7].

Second stage concerns detailed analysis of issue (orange color). In this phase the Quality Engineer convenes a quality meeting during which workers connected with production, process and logistics should be present. These people form an interdisciplinary team. All members strive to identify causes of a problem. Usually they use 5 Why method but sometimes Ishikawa Diagram as well. The most popular

method employed to generate ideas is brainstorming. When a set of possible solutions is accumulated ideas which are deployed in the first instance will be chosen [3, 5, 7].

The last stage is related with realization of chosen solutions (green color). After implementation, each action must be verified for effectiveness. For this purpose the Quality Engineer has to conduct a quality visit which has a similar structure as a checklist. The company uses process and product audit as well. It helps to assess if everything is implemented in a proper way [3, 5, 7].

## PROPOSALS TO SEAL THE FLOW OF COMPLAINT PROBLEM SOLVING PROCESS

A red contours in the chart (Fig. 1) are marked proposals to seal the flow of complaint problem solving.

In the current troubleshooting the aspect of improving the implemented actions is missed. Excess of problems, results in the effectiveness of actions not confirmed being often. If the problem appears again, actions are verified and analysed once more. It shouldn't be done in this manner. Hence the flow has to include more actions and additional quality tools.

For identification of the problem Check Sheet could be used. This is a simple tool, that enables presenting observations from the tested product or process in tabular way. It can be used to report various kinds of defects, failures or costs indicating the specific location of their formation. To gather information and data about the problems 5W+H can be applied. It owes its name to five questions starting from "W" - What, Where, Who, When, Why and one question that starts from "H" - How. Analysis of the problem will significantly facilitate the histogram and Pareto-Lorenz Diagram. This diagram is used to determine what factors generate a major problem. It should be guided by the principle that 20% of factors affect 80% of the problem. The input data to prepare the diagram could be collected in the form of a Sheet Control. Also to choose the best solution of scoring method can be used assessment [2, 4, 6].

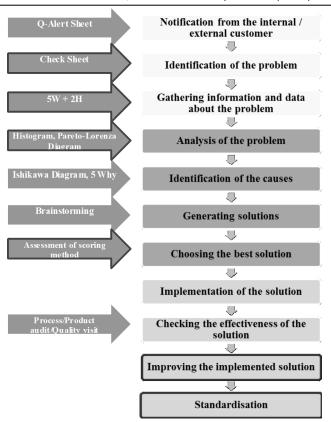


Fig. 1 Flow of complaint problem solving process Source: Own elaboration based on [7]

#### **SUMMARY**

All referred quality tools are used in the automotive company but they are rarely used to analyse complaint problems. To carry out a correct analysis, which will bring the desired results elimination of the problem should be prepared. Of course two final stages cannot be forgotten. These stages are improvement of implemented actions and development of standards that help to sustain the number of complaints on a defined level. Achieving the objectives concerning complaints is a key indicator for the company [3,5].

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