

Recommending actions criteria in FMEA: A Survey in Brazilian Automotive Companies

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Abstract

Purpose

Unlike other procedures for risk assessment, FMEA can evaluate a potential risk. This is accomplished setting the Risk Priority Number (RPN), by combining the scores of Severity, Occurrence and Detection. When the RPN is identified as high, actions should be recommended to minimize it. The criteria for recommending actions in FMEA is specific in each company, but since the guidance included in the fourth edition of Automotive Industry Action Group (AIAG) FMEA Manual, which recommends that the cut value in RPN should not be the only criteria for recommending actions, an increase in the diversity of criteria has been noticed.

Design/methodology/approach

A Survey was done in around 4% of Brazilian companies with ISO/TS16949 certification in order to understand how the diversity of the criteria for recommending actions is.

Findings

Such criteria, in some instances, are not clearly defined and known by the staff, which has contributed significantly to the subjectivity increasing in decision about the need for taking action.

Research limitations/implications

Data collection was conducted in two stages, first a personal invitation was made by telephone and then a specific questionnaire was sent.

Originality/value

Cases with more than one criteria and also cases with no fixed point values were observed, with a total of 16 different combinations. Considering the point values that make the rules, each situation was observed only once, highlighting the variety of criteria within the survey sample.

Keywords: FMEA, RPN recommending actions, Survey, Brazilian Automotive Industry