

## Evaluating 8D Reports Using Text-Mining

**Authors :** Benjamin Kuester, Bjoern Eilert, Malte Stonis, Ludger Overmeyer

**Abstract :** Increasing quality requirements make reliable and effective quality management indispensable. This includes the complaint handling in which the 8D method is widely used. The 8D report as a written documentation of the 8D method is one of the key quality documents as it internally secures the quality standards and acts as a communication medium to the customer. In practice, however, the 8D report is mostly faulty and of poor quality. There is no quality control of 8D reports today. This paper describes the use of natural language processing for the automated evaluation of 8D reports. Based on semantic analysis and text-mining algorithms the presented system is able to uncover content and formal quality deficiencies and thus increases the quality of the complaint processing in the long term.

**Keywords :** 8D report, complaint management, evaluation system, text-mining

**Conference Title :** ICECS 2018 : International Conference on Engineering and Computer Science

**Conference Location :** New York, United States

**Conference Dates :** April 19-20, 2018