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## Applying Self-Organizing Maps Method to Analyze the Corrective Action' s Quality Provided to Customers with Mobile Terminals

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### ABSTRACT

In the after market phase, responding to issues raised by customers within a reasonable time is crucial. Another factor which is important to customers is the quality of the issue corrective actions (QoiCA). This paper analyses the QoiCA from the user' s perspective, regarding the quality of corrective actions provided through an in-built tool (GENIUS) used within corporations. A survey questionnaire was sent to different participants in the network chain which handles or resolves the issues. The participants were from 17 European countries and 7 non-European countries. Responses were analysed, using statistical methods and the Self Organising Map (SOM) model and results were used to pinpoint or suggest the areas that are seen as opportunities for improving the quality of the corrective actions provided. Higher quality of corrective actions, along with other initiatives, will help to improve customer' s satisfaction. Three of the clear issues observed in this paper that contribute to long issue resolution time (iRT) are: 1) Long time to receive samples; 2) High frequency for asking more information from lower levels; and 3) Business impact price tag, to allow the issues to be prioritized, were missing from the escalated issues. QoiCA is jeopardized when: 1) A poor description of the issue is provided by the creator of the issue; 2) A poor response to the default requested additional questions (information) regarding the reported issue on top of the issue description. The authorized service vendors (ASV) users need more training with the in-built tool so that they know, for example, where to get help when they need it. When customer issues are resolved satisfactorily, there is a much higher chance that the customers involved will remain satisfied and loyal.

### KEYWORDS

Self-Organizing Map (SOM); Customer Satisfaction; Corrective Actions; Issue; Issue Description

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