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A Hybrid Data-Handler Module Based Approach for Prioritization in Quality Function Deployment

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Abstract : Quality Function Deployment (QFD) is a systematic technique that creates a platform where the customer responses can be positively converted to design attributes. The accuracy of a QFD process heavily depends on the data that it is handling which is captured from customers or QFD team members. Customized computer programs that perform Quality Function Deployment within a stipulated time have been used by various companies across the globe. These programs heavily rely on storage and retrieval of the data on a common database. This database must act as a perfect source with minimum missing values or error values in order perform actual prioritization. This paper introduces a missing/error data handler module which uses Genetic Algorithm and Fuzzy numbers. The prioritization of customer requirements of sesame oil is illustrated and a comparison is made between proposed data handler module-based deployment and manual deployment.

Keywords: hybrid data handler, QFD, prioritization, module-based deployment

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