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Knowledge management framework for complaint knowledge transfer to product development

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Abstract

The paper presents a methodological framework based on the analytical network process (ANP) approach for selecting knowledge management (KM) solutions for complaint knowledge transfer to product development. Existing approaches to technical complaint management (TCM) mostly neglect the necessity of knowledge transfer, and thus do not address quality or sustainability issues. The framework addresses this shortcoming by providing a systematic approach for selecting appropriate KM solutions in a given organizational environment. Based on extensive literature review competing objectives, diverse criteria as well as various organization specific factors have been identified and integrated into the framework. An expert study amongst 15 KM experts was conducted for parametrizing the model (i.e., to evaluate KM solutions with respect to the identified objectives and criteria). The framework enables long-term effects on failure-based learning and facilitates the design of a more sustainable TCM.

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1. Introduction

These days, manufacturing companies are subject to a market environment that is characterized by constantly increasing customer requirements at shorter product life cycles [1]. In order to meet global competition with regard to these challenges, companies need to design and deliver products both providing significant value to their customers and being sustainable [2]. Herewith, the ability of customer-oriented product development at minimal time becomes a key success factor. Additionally, the consideration of sustainability aspects in the product development process is of

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