A Collaborative Quality Function Deployment Model for New Product Development: A Case of Bluetooth USB Dongle

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ABSTRACT

By globalization competition and progress of information technology, enterprises must emphasize the effectiveness for product R&D, innovation and quick response customers' demand to increase their competitive advantages. The quality function development (QFD) is constantly applied for the new product development due to it is valid to reduce R&D cost and time. However, the QFD cannot offer guarantees that all participation partners' demand is adequately considered. In this study, we proposed the collaborative QFD by integrating collaborative product commerce (CPC) and QFD to promote the performance of new product development. In this study, the Bluetooth USB dongle is given as an example to demonstrate our proposed procedure. At first, we construct the key evaluation items for the customers' demand and technical requests. Furthermore, we utilize collaborative QFD to integrate the demands of suppliers, manufacturers, and retailers to obtain suitable criteria for evaluating the new product development of Bluetooth USB dongle. Moreover, the Borda count is applied to combine decision makers' evaluations. Finally, we develop a collaborative QFD prototype system for assisting enterprises to accomplish effectively new product development project.

Keywords : Quality Function Deployment (QFD), Collaborative Product Commerce (CPC), Borda Count, Collaborative Quality Function Development

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TFT-LCD   2003   3   PDM

:   2003   4   QFD   :   QFD

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1999   7

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