


The first stage of a proposal of a theoretical model for managing a new product development process

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Abstract: Developing products consists of a process that involves knowledge and various functional areas and presents a high degree of complexity and iteration in its execution. It is characterized by an intense flow of information, by a great number of people involved, and even by companies working together in an inter-firm collaboration. The literature presents various models and approaches to describe a new product development process. However, they usually do not adequately represent its dynamics. The aim of the present work is to describe the product development process based on the nature of its elements covered by the literature. Moreover, the purpose of the article is also to identify how the interaction among them occurs. A representative conceptual model of this process is proposed within two levels of integration. The theoretical model is based on six dimensions (strategic, organizational, technical, planning, control and operational) integrated in structural and operational levels. The paper also identifies what the elements that compose the operational dimension are and how the interaction between them can be characterized. In addition, some properties that affect the new product development process are outlined. The conceptual model presented attempts to meet the needs of a more adequate representation of the dynamics of new product development by integrating different perspectives and helps understand it. The paper also emphasizes the need for new studies with a detailed analysis of the interaction and the integration of the elements presented here.

Keywords: product development management, product design, new product development.

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