

Chapter 4

A CUSTOMERS' NEEDS MODEL FOR MASS CUSTOMIZATION

Up to now, the focus in mass customization research has been mainly oriented toward the product (Svensson/Jensen 2001, p. 5). The development of a high number of product variants that can be manufactured by achieving a near mass production efficiency is mostly the main concern. However, as aforementioned in the previous chapters, customers represent a decisive factor for success in mass customization. They play a very specific role in the value chain and provide valuable input for design and manufacturing. In order to successfully achieve mass customization, customer requirements have to be carefully addressed and understood. For this reason, the main objective of this chapter is to present and discuss a model that enables one to better understand customers' needs in mass customization.

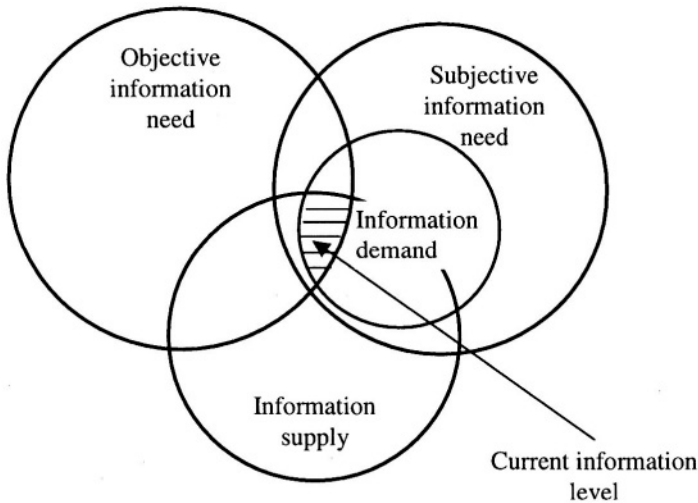
1. THE CUSTOMERS' NEEDS MODEL

1.1 Information Supply and Need Model

The customers' needs model in mass customization will be elaborated according to the information need and supply model described by figure 4-1. This model stems from the information theory and makes the distinction between the objective information need, subjective information need and information supply.

The objective information need defines the type and quantity of information that a decision maker should use for an optimal achievement of a specific task. The subjective information need represents the information

that the decision maker considers to be relevant for completing the task. After determining which information is needed, a corresponding information supply has to occur. It is noteworthy that there are some discrepancies between the objective information need, the subjective information need and the information supply. Therefore, the corresponding circles in figure 4-1 do not superpose. For the problem solving, only a portion of the subjective information need will actually be asked for. This corresponds to the information demand. The intersection of the objective information need, information supply and information demand corresponds to the current information level. This area represents the supplied information that actually works towards the task completion (Wigand et al. 1997, p. 88).



(c) John Wiley and Sons Limited 1997. Reproduced with permission.

Figure 4-1. Information supply and need model

(Source: Wigand et al. 1997, p. 89)

1.2 The Objective and Subjective Customers' Needs Model

In mass customization, communication between the customers and supplier is necessary. Customers express their individual needs, which enables the mass customizer to manufacture the custom-made product. To relate customers' needs to the information need and supply model, customers' needs are considered from two perspectives, namely as the information the customers should know or actually know about their own