Abstract

With the expanding of the internet, so did electronic commerce grow. Most of the people already buy products like books and movies on the Internet, but more complex products like computers, kitchens and cars stay behind in sales. One of the reasons is that most sites operate via a menu-driven navigation and keyword search, which are hard to use. Customers are confronted with technical jargon which they are not able to understand, or are subjected to annoying or irrelevant questions. Online customers want the same personalized advice and product offerings like their off-line counterparts.

The goal of this thesis is to explore how to improve online e-sales, especially for complex products, in order to increase the number of sales, and therefore expand the market. Prior to creating a model for the improvement of e-sales dialogs, current techniques that can be used to improve the current e-sales dialog are discussed. Then complex products are defined and a small case will be presented to see how Dell handles his online sales. To get an indication how customers deal with online sales, a small market research will be performed. This market research will address the strong and weak points of the current way products are sold online.
Following out of the market research a user model will be presented. This user model will be used to create a model for the dialog manager. This model aims to improve the e-sales dialog by supporting the customer in the buying process through adaptive interaction, being able to understand what the needs are of the customer. Finally, a proof of concept will be used to proof the validity of this model.

Keywords: *online sales, economic feasibility, e-sales dialogs, information need level, fuzzy logic, case-based reasoning, noncooperative dialogs, user models, complex products, classifying complex products, Dell, market research*