Automated Detection of Customer Experience through Social Platforms

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Abstract

The emergence and acceptance of social media have become a crucial aspect of daily lives in the worldwide population. As a result of this phenomenon, it is not surprising that customers' buying patterns exhibit continuous change. For capturing the experience of consumers during their visit to a retail store, previous studies have proposed in-store customer experience (ISCX) scale from data captured through traditional methods like survey research. Accordingly, ISCX is conceived as a subjective internal response to and interaction with the physical retail environment.

The present study builds upon prior research and we take the concept of ISCX with the purpose of developing an automated model for capturing ISCX from data collected through a social network like Facebook. This approach offers a low-cost, real-time alternative to traditional elicitation methods. We gathered data from English written contents by Facebook users and collected approximately 1,6 million comments made in public sites belonging to 50 companies worldwide (e.g. Clothing and jewelry retailers, whole Box and electronics Stores), including IKEA, Samsung, Whole Foods, Walmart, Tiffany, Victoria Secret, and Dillards. Five reviewers manually checked the messages filtered by the automated model, resulting in a high accuracy, confirming the high effectiveness of the model in classifying Facebook written messages.

Keywords: Customer Experience; Machine Learning; Data Classification; Text Mining.