

Evaluation of Commercials by Psychological Changes in Consumers' Physiological Characteristics

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Abstract : There have been many local companies in countryside that carefully produce and sell products, which include crafts and foods produced with traditional methods. These companies are likely to use commercials to advertise their products. However, it is difficult for companies to judge whether the commercials they create are having an impact on consumers. Therefore, to create effective commercials, this study researches what kind of gimmicks in commercials affect what kind of consumers. This study proposes a method for extracting psychological change points from the physiological characteristics of consumers while they are watching commercials and estimating the gimmicks in the commercial that affect consumer engagement. In this method, change point detection is applied to pupil size for estimating gimmicks that affect consumers' emotional engagement, and to EDA for estimating gimmicks that affect cognitive engagement. A questionnaire is also used to estimate the commercials that influence behavioral engagement. As a result of estimating the gimmicks that influence consumer engagement using this method, it was found that there are some common features among the gimmicks. To influence cognitive engagement, it was found that it was useful to include flashback scenes, messages to be appealed to, the company's name, and the company's logos as gimmicks. It was also found that flashback scenes and story climaxes were useful in influencing emotional engagement. Furthermore, it was found that the use of storytelling commercials may or may not be useful, depending on which consumers are desired to take which behaviors. It also estimated the gimmicks that influence consumers for each target and found that the useful gimmicks are slightly different for students and working adults. By using this method, it can understand which gimmicks in the commercial affect which engagement of the consumers. Therefore, the results of this study can be used as a reference for the gimmicks that should be included in commercials when companies create their commercials in the future.

Keywords : change point detection, estimating engagement, physiological characteristics, psychological changes, watching commercials

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