Slogans as Design Implications for Future Forms of Customer-Product Interaction

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Abstract
Slogans are embodiments of brand essences. They are thought to have potential to induce emotional responses that may steer consumers toward or away from certain products. This paper presents a physiological measure of customers’ voice of slogans for better understanding of customers’ emotions inclining to certain brands. Findings from the evaluation have shown that this measurement technique affords high consistency with the participants’ perceptions of the brand slogans chosen for this study. The implications of this study are that slogan can be considered as an ingredient for developing persuasive customer-product interaction.

Keywords
Emotion recognition, slogan and advertising

ACM Classification Keywords
H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction
Slogans have long been used as a constituent in advertising campaigns [7]. In the USA, researchers estimated that consumers would have viewed about 350,000 advertisements by the age of 18. This means
that advertising is one of the most widely shared experiences in the lives of most people.

An advertising slogan is an expression that is written for its memory potential and is often repeated to increase its recall [10] and encourage the consumer to remember the sponsor’s particular brand when confronted with a set of alternatives [2]. In branding literature, a slogan is typically defined on the core of its common purpose: “Slogans are short phases that communicate descriptive or persuasive information about a brand” [9]. Slogans may have positive effects on their brands and may work as carriers of brand equity [8]. Mathur and Mathur indicated that announcements of advertising slogan changes affected firm’s annual profits by an average amount of US$ 6-8m [3].

The following will describe some background into how emotion embedded in advertisements is measured. Then the recognition of emotion from speech signal system will be described. Finally the evaluation results and implications will be outlined.

**Background and previous work**

There are two major types of methods to measure emotions: self-reported measurements and physiological measurements. Both methods have been applied in advertising research to record emotional reactions to advertising stimuli. However, the two methods are basically different. Self-reported measurements focus on thoughtful reflections about the emotions felt with respect to an advertising stimulus. On the contrary, physiological measurements focus on continuous emotional reactions that are not distorted by higher cognitive processes [6].

Self-reported measurements have been widely used to measure emotional reactions to advertising. Self-reported measurements record the respondent’s subjective feeling. Self-report scales of subjective experiences are the most commonly used procedure in the emotion research. Since the validity of self-report for measuring lower-order emotions is often influenced by cognitive or social desirability limitations, the measurement of autonomic reactions can conquer this problem as they measure emotional responses outside the respondents’ control. Some researchers emphasized the need for measures of emotion to go beyond self-reported measurements and declared that “autonomic nervous system and other physiological processes” at least accompany subjectively felt emotions [1]. Recently, several techniques have been developed to capture autonomic reactions. Skin conductance, heart rate, facial expression and neuroscience are four well-known physiological measures.

Given the significance of emotions in the advertising process, accurate measurement of emotions is crucial. Advertising literature is not straightforward on what measurement instrument provides the most valid emotion measurement. There is a significant need to investigate the validation of current measures of emotions applied in a marketing context. The use of oral language is a more primary and general cognitive ability than writing. It would be most obvious with spoken language if a link exists between language processing and emotion [11].

**Recognition of emotions from speech signal**

An emotional corpus needs to be built up in order to form a base for eliciting emotions from speech signals.
In this study, five primary emotions, anger, happiness, sadness, boredom, and neutral (unemotional), are investigated [4]. We invited eighteen males and sixteen females to portray these emotional states. Twenty different prompting sentences with one to six words were designed. These sentences are purposely neutral and meaningful so the participants can easily express them with these emotions. This exercise yielded a corpus containing 3,400 utterances. Figure 1 shows the emotion recognition architecture based on the K-NN (K-Nearest Neighbor) technique [5].

Evaluation
A pilot study was launched to evaluate consumer’s emotions towards certain brand slogans by applying the emotion recognition system. The brand slogan, “McDonald is all for you” spoken for fast-food chains McDonald, was chosen on the bases of brand awareness, brand associations, and degree of loyalty. We invited eight participants (four males and four females) to record their voice of slogans for the given brand. Participants were asked to watch TV advertisings of McDonald. They then speak out the brand slogan in a temporary recording room where ambient noise can be avoided in order to form a calm surrounding. Each voice-recording subject took about fifteen to twenty minutes to complete.

The chosen brand is popular to a certain degree in the Taiwan market. In term of advertising theme promoted in the slogan, McDonald is in efforts to position an umbrella theme for promoting association of warm, caring, and happy when consumers experiencing with its food and services. It applies the emotional appealing to their all-over services experiences.

The result of our experiment shows several interesting findings. As shown in figure 2 (Right), the twisted pentagon shape of McDonald slogan suggests the planned position delivers combinations of overall emotions with particularly priming through happiness. Such result is consistent with the planned emotional theme of McDonald’s slogan without considering any semantic-based measurement. The overall emotion reflecting peripheral route of information process can be partially evidenced in the radar chart. In consumer’s mind-set, peripheral route of information process is suitable to mirror interpersonal emotion type in the McDonald’s slogan. In addition, the variations among the participants’ preferences are also can be seen in the findings. For example, in figure 2 (Right), the subject, M1, spoke out McDonald slogan with the speech features revealing more on happiness parameter than other parameters. In a follow-up interviewing, comparing to other participants, he admitted that he is a frequent customer for McDonald.
Conclusions
This paper presents a physiological measure of customers' voice of slogans for better understanding of customers' emotions inclining to certain brands. The preliminary results of the experiment yield high consistency with the participants' perceptions of the brand slogan chosen for this study. Although this is only a pilot study to apply emotion recognition from speech signal to measure brand slogans, this study shed a light on a highly possible avenue leading to contribute the understanding of brand slogan strategy. Also, the results show an implication for developing persuasive customer-product interaction. Slogans may have positive effects on early stage of consumer-buying behavior. That is to help consumers identify their needs for products or services.

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References and Citations