Identifying factors affecting value of Social Network Advertisement

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Abstract. Past researches mainly focus on examining customers' attitude towards advertisement. This paper conversely investigates the factors that would affect the value of an advertisement in social networking sites (SNSs) and then from a cognitive dimension, examines the reasons of why customers have such a positive or negative attitude towards the advertisement. A survey with eighty samples is administrated. The result shows that the value of an SNS advertisement to customer can be mainly influenced by the informativeness, the entertainment, the aesthetics, and the credibility of the SNS advertisement.

Keywords: Social Networking Sites (SNS), Value of Advertisement, Aesthetics, Advertisement Credibility

1   Introduction

The remarkable increase in popularity of Social Networking Sites triggers its commercial use by business organizations. Advertisements appear on different Social Networking Sites and the number keeps on increasing exponentially [1,2].

The number of active advertisers in Facebook is more than 2 millions [3]. In 2014, Facebook's total revenue was $12.47 billion and specifically its revenue comes from advertisement account for over 92% of its total revenue [4]. Compared to the revenue from advertisement in 2013, it records a 64.38% increase in 2014 [5]. These figures illustrate that individuals or organizations are so crazy in publishing their advertisements in Facebook and believing the effectiveness of social network advertising.

Business organizations post advertisement on Social Networking Sites mainly for boosting sales. As advertiser, business organizations want to know whether the money they have paid for advertisement is worth or not. They would continue posting advertisement on the Social Networking Sites if and only if the advertisement is effective in bringing tangible and/or intangible benefits to the organization. Past studies measure the advertising effectiveness using the customers' attitude towards advertisement. Customers' attitudes towards advertisement were tested in [6,7,8]. In fact, one's attitude towards an item would be affected by the value of this item that

can bring to him or her. As such, this study conversely examines the factors affecting the value of a Social Network Advertisement to customers.

2   Literature Review and Hypotheses

2.1   Theoretical Background

Ducoffe established a framework for predicting customers' value towards advertisement, from the aspect of emotional component and cognitive reaction [9]. In his framework, there are three constructs that include informativeness, entertainment and irritation. The three constructs are used to evaluate the value of an advertisement to customers. Ducoffe [10] applied his model in [9] to investigate the effectiveness of web advertisement. His study confirmed that the independent variables include informativeness and entertainment that could affect web advertisement value.

   In 2001, Brackett and Carr reviewed Ducoffe's model by incorporating credibility and consumer demographic information to the revised model [11]. Credibility is positively related to advertisement value. In addition, others scholars regard interactivity as a factor to determine the advertisement value, such as Cho and Leckenby [12] and Wu [13].

   This study adapts the theory of Web Advertisement Model to test how consumers evaluate the value of advertisement on SNS [10,14,15].

2.2   Informativeness

Informativeness refers to the degree to which a SNS advertisement provides consumers with resourceful and helpful information [18]. Petrovici and Marinov reported that informativeness is an immense factor in which influences on Bulgarian customers and marketers [7]. Ducoffe confirmed that perceived informativeness is the indispensable predicators of advertisement value [10].

   H1: Informativeness is positively related to the value of social network advertisement to customers.

2.3   Entertainment

Entertainment signifies the ability to fulfill consumers' needs for enjoyment or emotional release [19]. Aziz and Ariffin found that the creativity of online advertisement increases the value of product or service which is being promoted by the online advertisement [20]. In addition, Ducoffe demonstrated that entertainment of advertisement is positively related to the value of Web advertisement [9].

   H2: Entertainment is positively related to the value of social network advertisement to customers.

2.4 Advertisement Credibility

According to MacKenzie & Lutz, advertisement credibility refers to the perceived truthfulness and believability of advertisement [21]. Advertisement credibility reflects the extent to which customers believe that the products or services are really featured as said in the advertisement. Credibility towards the advertisement can affect the decision making process of potential buyer. Buyer decides to buy a product might be simply because of their belief on the advertisement. Few past studies demonstrated that advertisement credibility has a positive influence on the evaluation of customers straightforwardly [14,17,22].

   H3: The advertisement credibility is positively related to the value of social network advertisement to customers.

2.5 Aesthetics

People like looking at object which fit their taste. They would pay attention to an advertisement simply because of the salience of design. Furthermore, an advertisement with a gracious design can enhance visitors' recognition and recall [23]. People could remember an advertisement in which the design is extraordinary. The principle of web advertisement design suggests magnifying the picture size, strengthening the visibility so as to draw the attention of potential buyers [24].

   H4: Aesthetics of social network advertisement is positively related to the value of the advertisement to customers.

2.6 Value of Advertisement

According to Ducoffe's [9] definition, advertisement value is defined as "subjective evaluation of the relative worth or utility of advertisement to consumers". Ducoffe [10] describes advertisement value as a cognitive estimation of the extent to which advertisement offer customers what they need. Ducoffe [10] uses two different constructs which are advertisement value and attitude towards advertisement to evaluate advertisement effectiveness. Customers evaluate the advertisement value in which the advertisement can bring to them cognitively. At the same time, customers can express their emotion by reflecting via the attitude towards the advertisement. The two constructs are mutually inclusive such that customers can dislike an advertisement but they deem its valuable and versa.

3   Research Methodology

In this study, an online questionnaire is administrated. 80 responses are received. Out of the 80 responses, 74 responses are valid. The measures of Informativeness, Advertisement Value and Entertainment are adapted from [9,15,16,25,26,27,28] whilst the measure of Advertisement Credibility is derived from [16,29,30]. The

measure of Aesthetics is developed in this study. Card sorting, exploratory factor analysis and other relevant tests are done.

4   Data analysis

4.1   Factor analysis

Both confirmatory factor analysis and exploratory factor analysis are performed. Five factors are extracted. The five factors include: Advertisement Value (Value, 5 items), Informativeness (INFO, 4 items), Advertisement Credibility (ADC, 3 items), Entertainment (ENT, 3 items), and Aesthetics (AES, 2 items). The factor loadings of all items are greater than 0.5.

In the factor analysis, Cronbach's alpha values are ranged from 0.620 to 0.894. Other than that of Aesthetics (scored only 0.620), other factors are having a cronbach's alpha of 0.7 or above.

4.2   Correlation analysis

The result of bivariate correlations shows that Value of Advertisement has significant correlations with Informativeness, Entertainment, Aesthetics and Advertisement Credibility. The correlations are 0.543, $p<0.001$ for "Informativeness", 0.568,$p<0.001$ for "Entertainment", 0.534,$p<0.01$ for "Aesthetics", 0.540,$p<0.01$ for "Advertisement Credibility" respectively. All independent variables are positively correlated to the value advertisement.

4.3   Regression analysis and discussion

As shown in Fig. 1, the result of multiple regression exhibits that Informativeness, Entertainment, Aesthetics and Advertisement Credibility are significant related to Value of Advertisement. H1, H2, H3 and H4 are substantiated.

In addition, the study shows that Entertainment contributes the largest part in regression model in which R^2 Change is 0.322. The main function of social networking sites is for social communication, so entertainment and recreation become crucial to users. In this study, we found that entertainment element of an advertisement is a key factor to satisfy the needs of customers. If an advertisement is not fun enough, users would not look at it or ignore it after reading.

Aesthetics works as the secondary indicators for predicting the value of advertisement on SNS. In the regression model, the R^2 Change of Aesthetics account for 11%. Everyone loves aesthetic design no matter that they are assessing to an online website or a social network advertisement. The design of an advertisement affects customer's attentiveness towards a social network advertisement [24]. Hence, it is no doubt that aesthetics influence the perceived value of advertisement. Social

network operators should improve their advertisement design quality so as to improve the value of their advertisement.

Advertisement Credibility and Informativeness shows that R^2 Change is 0.071 and 0.036 respectively. This illustrates that Advertisement Credibility also plays an important role in the perceived value of an advertisement. But Informativeness does not affect the value of a social network advertisement much, which is similar to the result in Ducoffe's study [9]. In other word, users do not care too much about the information convey by advertisement in SNS.
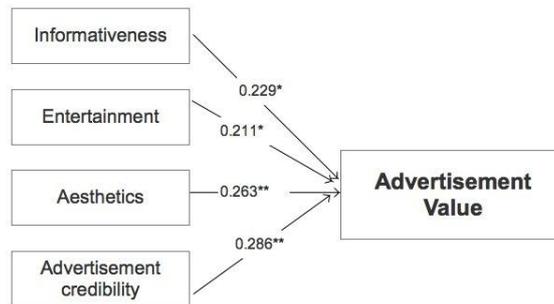

Fig. 1. Research model (* p<0.05, ** p<0.01).

5   Conclusion

The aim of this study is to examine the factors that affect the perceived value of advertisement in social networking sites. All respondents have experience in browsing and evaluating advertisements in SNS. Over 50% of respondents describe that advertisements in SNS pop up quite frequent, at least more than 3 times per day.

In the correlation analysis section, it shows four constructs have significant correlation with Value of Advertisement. The four constructs also positively related to Value of Advertisement in the regression.

In addition to past researches, we also considered Aesthetics in estimating the perceived value of an advertisement in SNS. Some factors such as Informativeness and Entertainment are adapted from Ducoffe [10]. Ducoffe's web advertisement model reported that Irritation is negatively related to the value of an advertisement [10]. However, this factor is not significant in our study. This might be because of the differences in characteristics between SNS advertisement and traditional web advertisement. Sometimes, advertisements shared by friends instead of publishing by the platforms or the advertisers. We will further investigate the reasons as well as other factors that would affect the perceived value of an advertisement in SNS in future study.

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