Discussion on the Value of E-billboard Advertising and E-play the Frequency

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Abstract

The appeal of the e-billboard advertisements is to obtain the benefits of broadcasting at the crossroads. Playing e-advertisements at crossroads can improve consumers' chances of accessing advertising content. Thus, e-advertising is a new way of advertising promotion.

The study main to explore whether is the e-advertisements value and the play frequencies of e-advertisements by consumers' percept. This study uses the both of ANOVA analysis and Chi-Squire analysis statistical analysis to calculation the received questionnaires data. The results shown that had differences between the times of the consumers through at crossroads the e-advertisements and to saw play frequencies of e-advertisements.

Keyword: e-billboard advertisements, e-advertising value

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Motivation
The e-media driven by digital technology is developing rapidly. Digital technology has prompted the rapid installation of e-commercial facilities such as airports, MRTs, stations, department stores, and elevators in recent years.

E-billboard advertising is a signage platform that uses digital monitors as a medium to communicate with target customers at different specific locations and specific times through high-quality videos, animations, images and text. E-billboard advertising can be installed inside and outside close to the point of consumption. In addition, they are also can inside the road crossing to play the advertising text when the consumers are through these places a day.

Thus, the e-advertisements provided can be completely close to the needs of the masses, and the information can be directly transmitted to the target customers, which to enhance the effect of message dissemination with visual and auditory expressiveness.

However, the aim of this study is for consumers' perception of the value of advertising, especially in today's widespread use of information e-technology, it is necessary to use e-billboard to explore consumers' perception of the value of advertising.

**Literature**

The proposed by Zeithaml (1988) to suggest that whether a commodity has value is derived from a trade-off viewpoint. Researchers believe that advertising information is the communication and exchange between advertisers and consumers; however, the
exchange means the value of gains and losses (Houston and Gassenheimer, 1987). Thus, the existence of value depends on the sum of what we pay and what we get. When we pay every cent of value (money) for a commodity, the higher the value and benefit we get, we will think that the commodity is valuable.

Ducoffe (1995) proposed that advertising value is the overall subjective evaluation of consumers' relevant utility or value of advertising, and mentioned that the factors that form advertising value will change with the same media characteristics. Moreover, consumers will be willing to spend more time on their favorite advertising. Mayer (1991) mentioned that the process by which consumers can meet consumer demand with their advertising messages is considered to be a key factor affecting consumers' overall advertising attitude.

In terms of the concept of advertising value, it is a subjective evaluation of a consumer's relative value or practical advertisement, and the advertisement is regarded as a commodity, and whether it can bring consumer benefits or meet consumer needs is used as the decision whether the advertisement is valuable standard. Therefore, in addition to the information provided by the advertising content, the value of advertising must also allow consumers to be happy and avoid interference (Ducoffe, 1996).

Aaker and Brown (1972) pointed out that as far as consumers are concerned, when they receive advertisements through the same media, they usually think that advertising content closer to the media context has higher value. That is, whether the media itself is suitable as a medium for product or service sales and advertising will
affect consumers' evaluation of advertising (Cannon, 1982). Ducoffe (1995) believes that media characteristics will affect the value of advertising.

**Test analysis**

Showing in the Table 1, this study divided 5 groups, for numbers of times the e-billboard advertising saw to play at the road crossing a day.

<table>
<thead>
<tr>
<th>Advertisement value</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>&gt;4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The advertisements on the e-billboard to me are useful.</td>
<td>3.12 (0.80)</td>
<td>3.42 (0.84)</td>
<td>3.74 (0.74)</td>
<td>3.53 (0.74)</td>
<td>3.71 (1.24)</td>
</tr>
<tr>
<td>2. The advertisements on the e-billboard to me are valuable.</td>
<td>3.08 (0.94)</td>
<td>3.53 (0.38)</td>
<td>3.78 (.71)</td>
<td>3.93 (1.03)</td>
<td>3.68 (1.25)</td>
</tr>
<tr>
<td>3. For me, it is important source for finding the information for me that the advertisements on the e-billboard.</td>
<td>3.12 (0.88)</td>
<td>3.49 (0.84)</td>
<td>3.84 (0.67)</td>
<td>3.87 (1.13)</td>
<td>3.46 (1.07)</td>
</tr>
</tbody>
</table>

Note: ( ) is standard deviation.

The interviewees at the three times group at the road crossing one day, they saw to play the e-billboard advertising and percept the item “The advertisements on the e-billboard to me are useful” had most highest score. The group through intersection and to saw e-billboard for four times a day, they highest of agrees with the item of "The advertisements on the e-billboard to me are valuable".

The item “For me, it is important source for finding the information for me that
the advertisements on the e-billboard”, had the highest score for the 4 times group percept, to saw the e-billboard advertising play at the road crossing a day.

The ANOVA analysis (one-way analysis of variance), to test whether differences between different numbers of times the e-billboard advertising saw to play at the road crossing a day, to percept the advertisement value. As shown in Table 2, the five group percept the both items “The advertisements on the e-billboard to me are useful” and “For me, it is important source for finding the information for me that the advertisements on the e-billboard” there are significance difference between 5 groups percept.

Table 2  ANOVA analysis of numbers of times the e-billboard advertising saw to play at the road crossing a day

<table>
<thead>
<tr>
<th>Advertisement value</th>
<th>F value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The advertisements on the e-billboard to me are useful.</td>
<td>6.998***</td>
<td>0.000</td>
</tr>
<tr>
<td>2. The advertisements on the e-billboard to me are valuable.</td>
<td>1.913</td>
<td>0.107</td>
</tr>
<tr>
<td>3. For me, it is important source for finding the information for me that the advertisements on the e-billboard.</td>
<td>8.791***</td>
<td>0.000</td>
</tr>
</tbody>
</table>

In addition to, this study use the Chi-Squire analysis to test the interviewees percept the different the group numbers of road crossings with the e-billboard advertising to through a day, they usually percept numbers of times the e-billboard advertising saw to play at the road crossing a day (Table 3).
Table 3  Chi-Squire analysis of numbers of times the e-billboard advertising saw to play at the road crossing a day and numbers of road crossings with the e-billboard advertising to through a day

<table>
<thead>
<tr>
<th>Numbers of times the e-billboard advertising saw to play at the road crossing a day</th>
<th>Numbers of road crossings with the e-billboard advertising to through a day</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60 (16.928)</td>
<td>30 (42.32)</td>
</tr>
<tr>
<td>2</td>
<td>31 (51.336)</td>
<td>176 (128.34)</td>
</tr>
<tr>
<td>3</td>
<td>1 (15.824)</td>
<td>21 (39.56)</td>
</tr>
<tr>
<td>≥4</td>
<td>0 (7.912)</td>
<td>3 (19.78)</td>
</tr>
<tr>
<td>Total</td>
<td>92 (92)</td>
<td>230 (230)</td>
</tr>
</tbody>
</table>

Pearson Chi-Squire: 363.391
Degree freedom: 9
p: 0.000***

**note:**

① “***”, p<0.001
② Without brackets are observed value, ( ) expected value.

The result shown that, once group to through road crossings with the e-billboard advertising a day, these interviewees at least percept once to saw to play the e-billboard advertising at the road crossing. The results also shown in that as a group more times group to through the crossings, they to saw the e-billboard advertising more times.
Conclusion

The results of the research show that as consumers many times pass through intersections with e-billboards, the probability of saw to e-advertisements will increase. Therefore, the e-billboard is set at the crossroads, which has the effect of advertising.

As for whether e-advertising will bring advertising value to consumers, consumers believe that it has a significant difference effects. Moreover, the e-billboard advertising can be consumers find that they are sources of some important information.

References


