Association for Information Systems
AIS Electronic Library (AISeL)

July 2009

A STUDY ON USERS' AWARENESS OF MOVING-PICTURE ADS IN MOVINF-PICTURE CONTENTS WITH DIFFERENT ONLINE MEDIA CHARATERISTICS

Jae Hyuk Lee
SNS, Web 2.0, zeros1205@nate.com

Young-Hee Jung
NSD, Service science, kooki0@nate.com

Soo Yeon Kim
SNS, mobile advertising, sooyuni@gmail.com

Follow this and additional works at: http://aisel.aisnet.org/pacis2009

A STUDY ON USERS' AWARENESS OF VIDEO DIGITAL ADS IN VIDEO DIGITAL CONTENTS WITH DIFFERENT ONLINE MEDIA CHARATERISTICS

- Focusing on specialized video digital services and
video digital pictures in articles of media companies –

Kim, Soo-Yeon
> Master Candidate in Graduate school of Information
> Yonsei University
> #416 New Millenium Hall, 262 Seungsan-no,Seodaemun-gu,Seoul, Korea
> sooyuni@gmail.com

Lee, Jae Kyuk

> Master Candidate in Graduate school of Information
> Yonsei University
> #416 New Millenium Hall, 262 Seungsan-no,Seodaemun-gu,Seoul, Korea
> jax1205@gmail.com

Jung, Young Hee
> Master Candidate in Graduate school of Information
> Yonsei University
> #416 New Millenium Hall, 262 Seungsan-no,Seodaemun-gu,Seoul, Korea
> aaresia@gmail.com

Abstract

Internet plays an important role in our lives and the number of internet users keeps increasing. As internet users are exposed to ads from online media while not knowing, advertising market's interest in video digital ads increases. Thus, this study comparatively measured effects of video digital ads inserted in news-related video digital contents of media companies and those of video digital ads inserted in video digital contents of professional video digital UCC (User Created Contents). Advertising effects were compared between media characteristics (news and UCC) and keyword relatedness (related or unrelated keyword) and interactions of the two factors were measured.
As a result, there was a significant difference in media characteristics and keyword relatedness. As for media characteristics, advertising effects of news-related video digitals were higher than those of professional video digital UCC in all items. As for keyword relatedness, executing ads of keyword related to video digital contents was verified to have higher advertising effects than executing ads of unrelated keywords.
There was no significant difference in interactions between these two factors.
As interest in the video digital advertising market increases, the necessity to introduce a method to analyze effects of video digital ads is raised. As for evaluation of advertising effects of video digitals of media companies, the theme to be dealt in this paper, it is still difficult to state that video digital ads are facilitated in the overall market of video digital services. So under such circumstances that verification is hard to achieve, the attempt of this study is considered to be meaningful.

Keyword: media companies, UCC, video digital contents, video digital ads, advertising effects, media, news

1 INTRODUCTION

Advertising market of internet began to see ad products that reflect media services and users' disposition. Video digital ads gradually expanded and ads associated with UCC (User Created Contents) services spread while diverse indirect ads associated with services such as PPL(Products in Placement)/viral emerged. Among others, video digital ads cast a great significance to service providers in the reality that profit models have not been found in the long-term perspective while video digital services become facilitated.

However, as users easily contacting contents online have a feeling of rejection to ads within video digital contents inserted at the start, middle, and end of contents like TV, the prospect is not so bright yet. Still, related business is willing to gradually execute video digital ads inserted in video digital contents and thinks that users will accept them through the learning process. Also they estimate that execution of specialized ads for each individual user will heighten acceptance level based on characteristics of internet and that there will be a difference based on online media.

Based on the background of internet ads, service issues and social issues briefly dealt before, this study aimed to explore advertising effects of 'news-related video digital ads (hereinafter referred to as 'news video digitals') provided by media companies and those of 'video digital ads' within 'UCC video digital contents' (hereinafter referred to as 'video digital UCC') of 'specialized video digital services'. This is because exploring this will clarify matters as to how advertising effects of video digital services by media companies can be meaningful.

Also the study aimed to find how better effects can be created in executing video digital ads. For this, a comparison between execution of keywords related to video digital contents and execution of those unrelated to them was made. Also whether there are interactions between the two characteristics (media characteristics and related or unrelated keyword) was measured.

2 THEORETICAL BACKGROUND AND RESEARCH HYPOTHESIS INTRODUCTION

Marketing people shall create communication effects such as consumers' brand awareness, brand preference and purchase needs through ads and marketing communication.

There is a study that communication effects are evaluated generally through consumer's awareness, emotion, attitudes and ultimately purchase behaviors (Vakratsas & Ambler, 1999). Mostly, ads aim to have consumers keep buying a certain product or a service, to inform purchasers of other products/services of the certain product/service and to influence them to select the latter at their next purchase. So estimation of communication effects is essential to judge whether goals of an ad have been achieved.

The primary task when estimating communication effects is what is to be defined as the effect and how to measure advertising effects with what evaluation tools.

This study aimed to define advertising effects based on these communication theories. Communication theories are largely divided into two, 'attitude toward the Brand (Ab)' and 'attitude toward the Ad (Aad)' (MacKenzie, Lutz and Belch 1986). Items of evaluation used were established by exploring theoretical backgrounds of the two. It was also found that these theories are useful to evaluation of advertising effects of internet video digitals.

2.1   *Concept of attitude toward the Brand (Ab)*

This is basically to explain the process that consumers are exposed to ads, go through recognition, and form an attitude toward a brand and how the attitude affects consumers' purchase behaviors. This concept can be understood as a method to influence brand choice by forming consumers' friendly attitudes based on understanding of brands advertised.

Theory of Hierarchy of Effects

The theory of hierarchy of effects assumes that consumers pass through a kind of phase-by-phase process in deciding to purchase and are influenced by ads in the process (Barry & Howard, 1990). It is assumed that a marketer can evaluate whether ads programs have worked in the mind of consumers (awareness and emotion) by studying and exploring consumers' psychological process made through hierarchy of effects.

A Model for Predictive Measurement of Advertising Effectiveness

The six-step effects model presented by Lavidge and Steiner (1961) long time ago is a system widely used for evaluation of advertising effects these days. The model divided the process from unawareness before exposure to an ad to purchase after exposure into six steps.

The first two steps are of awareness and knowledge on a product or a service and aim to inform the brand name or information related to a product through the ad. Awareness of product's brand name or ad information is evaluated to mainly estimate recollection or recognition. The next two steps involve emotions related to attitude to a product or an ad and are of liking and preference. This relates to interest in how ads affected consumers' attitudes and whether a specific advertised brand is preferred to other brands. The final two steps are behaviors revealed through actual purchase and are of conviction and purchase.

Vaughn (1980) grouped these six steps into the following four steps maintaining that they can be contracted as for traditional evaluation of ad campaigns.

(1) awareness/knowledge (recollection), (2) liking (change of attitudes), (3) preference, and (4) conviction (brand to be purchased or recently purchased)

As objectives of ads lie in motivating consumers without information on the product to purchase, the four-step model is constructed based on the belief that ads consistently influence purchasers and lead to keep buying or create new purchasers.

In estimating advertising effects of video digitals in this study, exploration took place based on standards whether video digital ads influenced awareness of ads or brands, consumers' emotions or attitudes, or ultimately purchase intent.

1.1 Concept of Attitude toward the Ad (Aad)

Scholars like Shimp (1981), Mitchell & Olson (1981) and so forth maintain that application of the concept of an attitudes toward a brand that has been most generalized in the theory of brand choice of consumers has been limited as differentiation among brands becomes less and presented the concept of attitudes toward ads. The concept of an attitude toward an ad has been studied by various scholars in the areas of ads and marketing for the last 20 years (Brown Stayman, 1992; Bruner, 1998; Bruner & Kumer, 2000).

This is to perceive as an important variable directly or indirectly influencing attitude toward a brand and purchase intent. Also there were attempts to conceptualize and verify the relation between the attitude toward ads and other variables that an advertiser takes interest to understand and explain the process of hierarchy of effects. If the concept of Ab assumes consumers as rational and reasonable decision makers, the concept of Aad starts from the assumption that consumers are emotional and experiencing. Thus, according to this concept, ads aim to derive favors for a brand by forming favorable attitudes to the ad rather than directly delivering product attributes or benefits to directly influence consumers' belief in product attributes.

In this context, Hollis (1995) saw that consumers' attitude toward ads works as an important variable influencing consumers' memory of ad messages and tried to estimate attitude toward as messages in division between active/passive dimension and positive/negative dimension.

Hollis maintained that consumers' attitude toward ads and memory of ads plays a more important role to achieve long-term ad goals like formation of a positive attitude toward the advertised brand or brand construction rather than short-term sale effects (Ranchhod, 1998).

Evaluation of attitude toward ads can be used as a useful tool to estimate effects of internet ads as well.

Internet ads are defined as marketing communication unfolding two-way communication with networks while individuals or organizations use internet and advertisers and marketers can effectively achieve corporate marketing goals utilizing such unique characteristics of internet media. A perspective that studies into the process of effects of internet ads shall approach based on interactions between media and users unlike traditional studies into advertising effects of mass media illuminating relations between stimulation and responses based on one-way exposure is being raised (Choi, Hwanjin, 2000). This means that we shall take interest in how much of advertised brand or messages meant to be delivered remain in memory of consumers and which evaluative attitude consumers form about ads.

Actually, several studies produced results that there were advertising effects such as increased brand awareness, improved product awareness and increased purchase intent even before the process of ad clicking through exposure to simple web banner ads (Briggs & Hollis, 1997; Internet Advertising Bureau, 1997).

2 RESEARCH METHOD

2.1 *Research questions*

This study aims to measure and compare advertising effects of video digital ads with 'news video digitals' and 'video digital UCC' and to make a plan for better execution of ads. This will produce implications of advertising effects of media companies' video digital contents and further present more effective methods in executing ads. Thus, the author established the following hypotheses.

<Hypothesis 1>News video digitals will have more advertising effects based on media characteristics than video digital UCC.

<Hypothesis 2>As for advertising effects based on relation to ad keywords, those of related keywords will be higher than unrelated keywords.

<Hypothesis 3>As for interactions between two characteristics, advertising effects will be highest with news-related keywords.

The following research design was arranged to prove the hypotheses.

2.2 *Research design*

As this study bears a few limits, an artificial environment was arranged for research methods. Four types of groups of video digital contents were made and a video digital with three themes per type was exposed. The study had participants see the video digital of this study first and fill in the questionnaire. Respondents were not informed of existence of four types and were allowed to see only one type selected at random, after which video digital contents were seen for the questionnaire. Also a device obligating respondents to answer questions only after seeing one or more video digitals was arranged. To produce even results on four types of video digital contents, video digital contents of types 1-4 were programmed to be faced based on the order of respondents.

Samples were users of DAUM (www.daum.net) and the device to find internet users' disposition of usage was a questionnaire composed of six questions.

Four types of video digital contents in the study are as below.

Type1> Three to which a video digital is attached were selected among articles of media companies.com and the whole commercial film video digital ad was inserted at the front of video digital contents. Video digital ads, then, were composed of ads unrelated to keywords of the video digital and the article.

Type2> A video digital ad related to the video digital of the selected video digital contents of Type 1 and the article was established.

Video digitals of Type1 and Type2 were registered to Tag Story (www.tagstory.com) and were applied to the relevant article page.

Type3> Three video digital contents among video digital UCC were selected and the whole video digital ad was inserted at the front of video digital contents. Video digital ads, then, were composed of those unrelated to keywords of video digitals and the article.

Type4> Video digital ads related to article keywords of the relevant video digital were composed in three video digital contents selected in Type3.

Video digitals of Type3 and Type4 were registered to MNCAST, a professional UCC site. There are 20 items for evaluation of advertising effects. For definition and measurement of advertising effects, ' the theory of communication effects' explaining that "evaluation takes place through consumers' awareness of ads and emotions, measurement of attitude toward ads and ultimately consumers' purchase behavior" was introduced. As for elements for measurement of advertising effects, 20 items (5 responses to ads –ad evaluation, awareness, degree of notice, recollection ratio, and recognition ratio/ 6 positive attitude to ads -fun, interest, concentration, feeling happy, comfort, and beauty/6 negative attitude toward ads - irritation, displeasure, interruption, boredom, plainness, and insufficient delivery/3 attitudes to service and products -trust, interest, and purchase intent) were measured.
As for attitude toward ads, there are many items. So to achieve correct results from questionnaires, positive and negative elements were mixed. The survey took place for 3 weeks from November 5 to November 24, 2008.
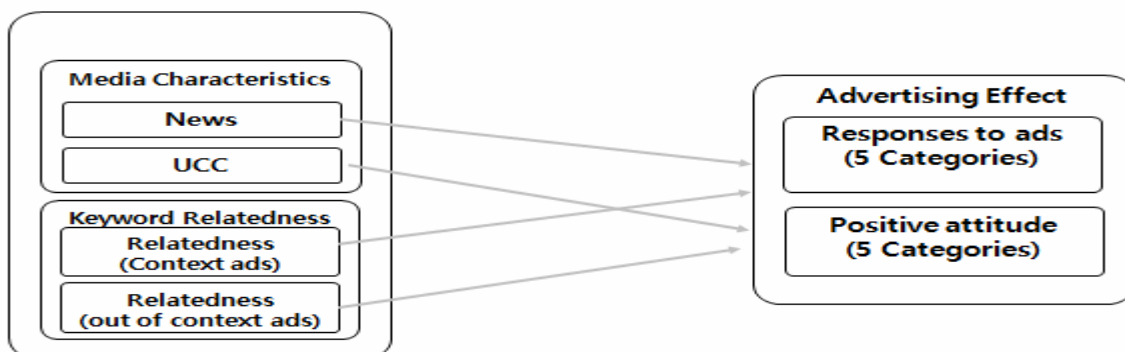
2.3   Structural Model

Figure 1. .   Research Model

3   RESULTS OF THE STUDY

3.1   *Characteristics of respondents*

The following represents total and group characteristics of respondents.

There were 35 respondents for Type1 (news & unrelated keyword), 45 for Type2 (news & related keyword), 42 for Type3 (UCC & unrelated keyword), and 43 for Type4 (UCC & related keyword) and there were 165 valid responses.

By gender, there were 99 male and 66 females, which tell that the former is higher in ratio. While there are differences of gender ratio among 4 groups, overall, they were similar.

By age for total respondents, there were 2 teenagers, 19 aged 21-25, 52 aged 26-30, 57 aged 30-35, 22 aged 36-40, 11 aged 41-50, 2 aged 51 and above, which tells that those aged 25~35 was 65% or higher and ages lower and higher were similarly composed. Four groups also had age ratios similar to total respondents' ratio.

By occupation, there were 2 middle and high school children, 14 undergraduate and graduate students, 108 salaried people, 19 professionals, 7 engineers, and 8 others. Main respondents in this study were salaried people aged 25~35.

3.2   *Manova (Multiple Analysis of Variance)*

MANOVA was conducted to identify validity of 20 evaluation items of advertising effects according to media characteristics and keyword relatedness.

(1) Reactions to ads

Results from analysis of 5 items of reactions to ads are as shown in [Table1].

	ads evaluation	awareness,	degree of notice	recollection level	recognition level
A	7.942**	0.014	8.214**	5.780*	4.725*
B	4.260*	4.613*	8.465**	17.360***	5.456*
AB	2.015	0.714	0.176	1.132	0.050

Table 1.   Analysis of 5 items of reactions to ads

$* p<0.05 ** p<0.01 *** p<0.001$

Note1) A: Media characteristics, B: Keyword relatedness

Note2) Values represent F-value and the asterisk (*) refers to significance probability.

Based on results from analysis, there was no significant difference in awareness by media characteristics (A) ($p>0.05$) but there was a significant difference in items of ads evaluation, degree of notice, recollection level, and recognition level ($p<0.05$). Thus, it can be stated that there is a significant difference in ads evaluation, degree of notice, recollection level, and recognition level among reactions to ads by media characteristics (news-UCC).

Keyword relatedness (B) had a significant difference in all items of advertising effects of ads evaluation, awareness, degree of notice, recollection level, and recognition level ($p<0.05$). Thus, all items of advertising effects had a significant difference as for keyword relatedness (related-unrelated). In addition, there was no significant difference in items of interaction (AB) between media characteristics and keyword relatedness ($p>0.05$).

(2) Positive attitude toward ads

Results from analysis of six items of positive attitude toward ads are as presented in [Table 2].

	fun	interest	concentration	feeling happy	comfort	beauty
A	2.224	4.719*	4.152*	4.200*	4.762*	6.860*

B	22.800***	15.827***	16.873***	15.566***	16.001***	5.072*
AB	1.972	0.033	0.078	0.051	1.020	1.533

Table 2.   Analysis of six items of positive attitude toward ads
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in all six items of positive attitude toward ads such as fun, interest, concentration, feeling happy, comfort, beauty according to media characteristics (A) (p<0.05). Thus, there is a significant difference in positive attitude toward ads according to media characteristics (news-UCC). As for keyword relatedness (B), there was a significant difference in all 6 items of positive attitude toward ads such as fun, interest, concentration, feeling happy, comfort, and beauty (p<0.05). So there is a significant difference in all items of positive attitude toward ads as for keyword relatedness (related-unrelated). In addition, there was no significant difference in items of positive attitude toward ads as for items of interactions (AB) between media characteristics and keyword relatedness (p>0.05). Thus, interactions are considered to be non-existent.

(3) Negative attitude toward ads
Results from analysis of six items of negative attitude toward ads are as presented in [Table 3].

	Irritation	Displeasure	Interruption	Boredom	Plainness	Insufficient delivery
A	8.108**	5.740*	4.220*	8.567**	4.385*	5.980*
B	24.857***	28.645***	26.048***	25.256***	27.217***	23.250***
AB	0.000	0.008	0.185	0.006	0.104	0.671

Table 3.   Analysis of six items of negative attitude toward
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in all six items of negative attitude toward ads such as irritation, displeasure, interruption, boredom, plainness, and insufficient delivery according to media characteristics (A) (p<0.05). Thus, it can be stated that there is a significant difference in negative attitude toward ads according to media characteristics (news-UCC).
Also, there was a significant difference in all six items of negative attitude toward ads such as irritation, displeasure, interruption, boredom, plainness, and insufficient delivery as for keyword relatedness (B) (p<0.05). Thus, it can be stated that there is a significant difference in all items of negative attitude toward ads in keyword relatedness (related-unrelated). In addition, there was no significant difference in items of negative attitude toward ads as for items of interaction (AB) between media characteristics and keyword relatedness (p>0.05). Thus, interactions for negative attitude toward ads between media characteristics and keyword relatedness are considered to be non-existent.

(4) Attitude toward services or products
Finally, results from analysis of three items in attitude toward services or products are as shown in [Table 4].

	Trust,	Interest	Purchase Intent
A	8.230**	4.875*	5.358*
B	18.499***	12.477**	20.893***
AB	1.905	2.632	1.192

Table 4.   Analysis of three items in attitude toward services or products
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in all three items of attitude toward services or products such as trust, interest, and purchase intent according to media characteristics (A) (p<0.05). Thus, there is a significant difference in attitude toward services or products according to media characteristics (news-UCC).
As for keyword relatedness (B), there was a significant difference in all three items of attitude toward services or products such as trust, interest, and purchase intent (p<0.05). Thus, it can be stated that in keyword relatedness (related-unrelated), there is a significant difference in all items of attitude toward services or products.
Also as for items of interaction (AB) among media characteristics, keyword relatedness, and users' disposition, there was no significant difference in items of attitude toward services or products (p>0.05). Thus, it seems that there is no interaction on attitude toward services or products between media characteristics and keyword relatedness. Based on these, among Hypothesis1~3 presented by the author, Hypothesis1 and Hypothesis2 were verified while Hypothesis3 had no significant difference, which makes verification meaningless.

4. 3   Analysis of differences according to media characteristics
Analysis of difference was conducted through t-test with groups and items identified to have a significant difference based on MANOVA. Firstly, the difference according to media characteristics was analyzed. This is the result from verification of "News video digitals will have more advertising effects based on media characteristics than video digital UCC."

(1) Analysis of items of reactions to ads according to media characteristics
Results from identification of difference in items of reactions to ads according to media characteristics are as presented in [Table 5].

	Media characteristics	N	M	SD	t-value	p
ads evaluation	News	80	3.33	1.18	2.736	0.007**
ads evaluation	UCC	85	2.84	1.12	2.736	0.007**
degree of notice	News	80	3.23	1.17	3.005	0.003**
degree of notice	UCC	85	2.67	1.20	3.005	0.003**
recollection level	News	80	3.51	1.35	2.501	0.013*
recollection level	UCC	85	3.00	1.28	2.501	0.013*
recognition level	News	80	0.49	0.50	2.241	0.026*
recognition level	UCC	85	0.32	0.47	2.241	0.026*

Table 5.   Difference in items of reactions to ads
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in ads evaluation, degree of notice, recollection level, and recognition level which showed a significant difference in the pre-mentioned MANOVA (p<0.05). In all of these, results of items of reactions to ads of the news video digitals group were higher than those of video digital UCC group.

(2) Analysis of items of positive attitude toward ads according to media characteristics
Results from identification of difference in items of positive attitude toward ads according to media characteristics are as presented in [Table 6].

	Media characteristics	N	M	SD	t-value	p
interest	news	80	2.96	1.36	2.256	0.026*
interest	UCC	85	2.53	1.08	2.256	0.026*
concentration	news	80	2.95	1.37	2.094	0.038*
concentration	UCC	85	2.53	1.21	2.094	0.038*
feeling happy	news	80	3.03	1.35	2.107	0.037*
feeling happy	UCC	85	2.64	0.99	2.107	0.037*
comfort	news	80	2.99	1.32	2.194	0.030*
comfort	UCC	85	2.58	1.08	2.194	0.030*
beauty	news	80	2.93	1.22	2.616	0.010*
beauty	UCC	85	2.47	1.01	2.616	0.010*

Table 6. *Difference in items of positive attitude toward ads*
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in all of interest, concentration, feeling happy, comfort, and beauty which showed a significant difference through MANOVA (p<0.05). In all of these, responses to positive attitude toward ads were significantly higher with the news video digitals group than the video digital UCC group.

(3) Analysis of items of negative attitude toward ads according to media characteristics
Results from identification of difference among items of negative attitude toward ads according to media characteristics are as shown in [Table 7].

	Media Characteristics	N	M	SD	t-value	p
irritation	News	80	2.56	1.23	-2.901	0.004**
irritation	UCC	85	3.11	1.18	-2.901	0.004**
displeasure,	News	News	2.35	1.13	-2.511	0.013*
displeasure	UCC	85	2.81	1.23	-2.511	0.013*
interruption	News	80	2.86	1.43	-2.140	0.034*
interruption	UCC	85	3.31	1.22	-2.140	0.034*
boredom	News	80	2.61	1.22	-3.052	0.003**
boredom	UCC	85	3.18	1.16	-3.052	0.003**
plainness	News	80	2.75	1.10	-2.249	0.026*
plainness	UCC	85	3.14	1.14	-2.249	0.026*
insufficient delivery	News	80	2.73	1.24	-2.498	0.013*
insufficient delivery	UCC	85	3.19	1.14	-2.498	0.013*

Table 7. *Analysis of difference of advertising effects of items of negative attitude toward ads according to media characteristics*
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in irritation, displeasure, interruption, boredom, plainness, and insufficient delivery, all of which showed a significant difference in the previous MANOVA (p<0.05). For all of them, the news video digitals group showed significantly lower responses of negative attitude toward ads than the video digital UCC group.

(4) Analysis of items of attitude toward products or services according to media characteristics

Finally, results from identification of items of attitude toward products or services according to media characteristics are as shown in [Table 8].

	Keyword relation	N	M	SD	t-value	p
trust	Non-relatedness	77	2.51	1.05	-4.354	0.000***
trust	relatedness	88	3.24	1.10	-4.354	0.000***
interest	Non-relatedness	77	2.60	1.13	-3.718	0.000***
interest	relatedness	88	3.26	1.16	-3.718	0.000***
purchase intent	Non-relatedness	77	2.23	1.04	-4.669	0.000***
purchase intent	relatedness	88	3.03	1.15	-4.669	0.000***

Table 8.   Attitude toward products or services according to media characteristics
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in trust, interest, and purchase intent, all of which showed a significant difference in the previous MANOVA (p<0.05). In all of these, the news video digitals group had significantly higher attitude toward products or services than the video digital UCC group.

Thus, based on results from measurement of advertising effects according to media characteristics, in all items, the news video digitals group had higher advertising effects than the video digital UCC group, which verifies "Hypothesis1- News video digitals will have more advertising effects based on media characteristics than video digital UCC."

4.4.   Analysis of difference according to keyword relatedness

Difference according to keyword relatedness was also analyzed. This is the result verifying "Hypothesis2- As for advertising effects based on relation to ad keywords, those of related keywords will be higher than unrelated keywords."

(1) Analysis of items of reactions to ads according to keyword relatedness

Firstly, results from identification of difference in advertising effects according to keyword relatedness are as shown in [Table 9].

	Keyword relatedness	N	M	SD	t-value	p
ads evaluation	non-relatedness	77	2.86	1.23	-2.219	0.028*
ads evaluation	relatedness	88	3.26	1.09	-2.219	0.028*
awareness	non-relatedness	77	1.09	0.29	-2.090	0.038*
awareness	relatedness	88	1.20	0.41	-2.090	0.038*
degree of notice	non-relatedness	77	2.64	1.15	-3.078	0.002**
degree of notice	relatedness	88	3.20	1.21	-3.078	0.002**
recollection level	non-relatedness	77	2.79	1.31	-4.318	0.000***
recollection level	relatedness	88	3.65	1.23	-4.318	0.000***
recognition level	non-relatedness	77	0.30	0.46	-2.532	0.012*
recognition level	relatedness	88	0.49	0.50	-2.532	0.012*

Table 9.   Difference in advertising effects according to keyword relatedness
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in ads evaluation, awareness, degree of notice, recollection level, and recognition level, all of which showed a significant difference in MANOVA (p<0.05). In all of these, the group of related ads keyword has significant higher advertising effects than the group of unrelated as keywords.

(2) Analysis of items of positive attitude toward ads according to keyword relatedness
Results from identification of difference in positive attitude toward ads according to keyword relatedness are as presented in [Table 10].

	Keyword-relatedness	N	M	SD	t-value	p
fun	non-relatedness	77	2.45	1.15	-4.895	0.000***
fun	relatedness	88	3.35	1.19	-4.895	0.000***
interest	non-relatedness	77	2.34	1.10	-4.077	0.000***
interest	relatedness	88	3.09	1.26	-4.077	0.000***
concentration	non-relatedness	77	2.30	1.03	-4.294	0.000***
feeling happy	relatedness	88	3.11	1.40	-4.294	0.000***
feeling happy	non-relatedness	77	2.44	1.09	-4.044	0.000***
feeling happy	relatedness	88	3.16	1.17	-4.044	0.000***
comfort	non-relatedness	77	2.38	1.12	-4.131	0.000***
comfort	relatedness	88	3.13	1.19	-4.131	0.000***
beauty	non-relatedness	77	2.47	1.15	-2.399	0.018*
beauty	relatedness	88	2.89	1.09	-2.399	0.018*

Table 10.   Difference in positive attitude toward ads according to keyword relatedness
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in fun, interest, concentration, feeling happy, comfort, and beauty, all of which showed a significant difference in MANOVA (p<0.05). In all of them, the group of related ads keyword has significantly higher positive attitude toward ads than the group of unrelated as keywords.

(3) Analysis of items of negative attitude toward ads according to keyword relatedness
Results from identification of difference in negative attitude toward ads according to keyword relatedness are as shown in [Table 11].

	Keyword relatedness	N	M	SD	t-value	p
irritation	non-relatedness	77	3.32	1.22	5.013	0.000***
irritation	relatedness	88	2.42	1.08	5.013	0.000***
displeasure	non-relatedness	77	3.09	1.27	5.359	0.000***
displeasure	relatedness	88	2.15	0.94	5.359	0.000***
interruption	non-relatedness	77	3.64	1.26	5.285	0.000***
interruption	relatedness	88	2.61	1.23	5.285	0.000***
boredom	non-relatedness	77	3.39	1.18	5.172	0.000***
boredom	relatedness	88	2.48	1.08	5.172	0.000***
plainness	non-relatedness	77	3.42	1.09	5.328	0.000***
plainness	relatedness	88	2.55	1.00	5.328	0.000***
insufficient delivery	non-relatedness	77	3.43	1.16	4.939	0.000***

insufficient delivery	relatedness	88	2.56	1.10	4.939	0.000***

Table 11.   Difference in negative attitude toward ads according to keyword relatedness
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in irritation, displeasure, interruption, boredom, plainness, and insufficient delivery, all of which showed a significant difference in MANOVA (p<0.05). In all of them, the group of related ads keyword had significantly lower negative attitude toward ads than the group of unrelated as keywords.

(4) Analysis of items of attitude toward products or services according to keyword relatedness
Results from Analysis of items of attitude toward products or services according to keyword relatedness are as shown in [Table 12].

	Keyword relatedness	N	M	SD	t-value	p
trust	non-relatedness	77	2.51	1.05	-4.354	0.000***
trust	relatedness	88	3.24	1.10	-4.354	0.000***
interest	non-relatedness	77	2.60	1.13	-3.718	0.000***
interest	relatedness	88	3.26	1.16	-3.718	0.000***
purchase intend	non-relatedness	77	2.23	1.04	-4.669	0.000***
purchase intend	relatedness	88	3.03	1.15	-4.669	0.000***

Table 12.   Analysis of items of attitude toward products or services according to keyword relatedness
* p<0.05 ** p<0.01 *** p<0.001

Based on results from analysis, there was a significant difference in trust, interest, and purchase intent, all of which showed a significant difference in MANOVA (p<0.05). In all of them, the group of related ads keyword has significantly higher attitude toward products or services than the group of unrelated ads keyword.
Accordingly, based on results from measurement of advertising effects according to related or unrelated ads keyword, as the news video digitals group had higher advertising effects than the video digital UCC group in all items, "Hypothesis2- As for advertising effects based on relation to ad keywords, those of related keywords will be higher than unrelated keywords" was verified. As for Hypothesis 3, verification failed as there was no significant difference based on results from MANOVA.

5.   DISCUSION

5.1   Conclusion and Recommendations

So far, difference of advertising effects between 'video digital ads' within 'news video digitals' and those within 'video digital UCC' was studied. Exploring this helped to draw out significant results in terms of ads of video digital services by media companies.
It was found that news media have better advertising effects in media characteristics and that advertisements applying related keywords produce better advertising effects. As for news having better results in media characteristics, an inference can be made that this was supported by capacity to produce contents and basic trust toward users held by media companies. Also, the point that ads keyword matching is realistically difficult compared to

video digital contents may be a missing link and a limit of this study.

If there are additional studies related to those that raised understanding of whether respondents were pre-aware of the relevant ad while similarity of ads and accuracy of ads keyword matching after video digital ads are realized in the real market, more accurate results can be expected.

This study not only presented implications in the academic dimension but also can be a foundation to provide materials through which effects of ads as media can be estimated in advance in practical affairs. Furthermore, as for sales of video digital contents of media companies discussed above, measuring how much value video digital contents produced by media companies would have based on valuation of contents and which contents will have values will make an excellent study.

References
References can be available upon request. E-mail to authors(sooyuni@gmail.com).