

Association for Information Systems

AIS Electronic Library (AISeL)

ICEB 2015 Proceedings

International Conference on Electronic Business
(ICEB)

Winter 12-6-2015

A Conceptual Model Of Factors Affecting Popularity Of Marketing Videos On Video Sharing Sites

Jakapan Narkbuakaew

Wachara Chantatub

Sawika Unahanandh

Follow this and additional works at: <https://aisel.aisnet.org/iceb2015>

This material is brought to you by the International Conference on Electronic Business (ICEB) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICEB 2015 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

A CONCEPTUAL MODEL OF FACTORS AFFECTING POPULARITY OF MARKETING VIDEOS ON VIDEO SHARING SITES

Jakapan Narkbuakaew, Chulalongkorn Business School, Chulalongkorn University, Bangkok 10330, Thailand

Tel: +66-8-218-5716, Fax: +66-2-218-5715, E-mail: Jakapan.na568@cbs.chula.ac.th

Wachara Chantatub, Chulalongkorn Business School, Chulalongkorn University, Bangkok 10330, Thailand

Tel: +66-8-218-5716, Fax: +66-2-218-5715, E-mail: wachara@cbs.chula.ac.th

Sawika Unahanandh, Chulalongkorn Business School, Chulalongkorn University, Bangkok 10330, Thailand

Tel: +66-8-218-5794, Fax: +66-2-218-5795, E-mail: sawika@cbs.chula.ac.th

ABSTRACT

Recent studies indicate that 84% of marketers are using video on the websites and 90% of viewers say that watching a video is helpful in the buying decision process. YouTube is one of the most popular free video sharing sites that marketers use to disseminate online video advertisements to their audiences. With this kind of service, video advertisements have a chance to spread more widely than before. Therefore, we are interested in studying the correlation between various factors of video advertisements and the popularity of such video advertisements. In this study, we reviewed prior research as well as other sources on viral factors, popularity of marketing videos, and video sharing sites. Then, we proposed a conceptual model for our future research on the factors that affect the popularity of marketing videos published on video sharing sites. The Interactive Advertising Model (IAM) is adopted as a tool for evaluating the popularity of marketing videos uploaded on video sharing sites.

Keywords: Viral Factors, Marketing Video, Video Sharing Site, Interactive Advertising Model.

INTRODUCTION

Internet advertising is growing closely to TV advertising to become the largest advertising segment. According to PwC, global Internet advertising revenue will increase to US\$194.5bn in 2018, a 10.7% CAGR, compared to US\$117.2bn in 2013 [25]. Moreover, within Internet advertising, video Internet advertising revenue will have the highest growth at a 23.8% CAGR to 2018, followed by mobiles advertising with a 21.5% CAGR [25]. Therefore, video Internet advertising is a significant marketing platform that businesses should be focusing on.

Among video sharing sites, YouTube ranked as the most popular site with 152.8 million unique viewers, followed by Facebook with 83.5 million viewers, Yahoo Sites with 55.4 million, Maker Studios Inc. with 43.7 million and VEVO with 43.1 million [6]. The emerging of such video sharing sites give a great opportunity to businesses to broadcast marketing videos about their new products/services or just convey messages to engaging with their consumers for free. That is why more and more businesses consider uploading their marketing videos on video sharing sites, especially YouTube, as an important marketing campaign. However, one of the most challenges in launching a marketing video on such websites is how to make it a popular video or in other words a viral video.

Viral video is a video that becomes popular from the process of sharing and re-sharing on Internet, e.g. social sites, blogs and email. In addition, the sharing process of viral videos must be unpaid and occurred from consumer to consumer, not from advertiser to consumer, as they perceived likeability, controversial and entertainment characteristics from videos [3] [18] [23]. Many videos got traction from massive viewers and were enlisted to be viral videos. Some of these videos were also ranked by YouTube in the most viewed of all time playlists [31] even though they were published many years ago. One example is PSY – GANGNAM STYLE which is a music video published on July, 2012, and so far has got a total view count of 2.3 billion and still ranked in the first place of the list until now. In previous studies, Chatzopoulou, Sheng and Faloutsos had analyzed the popularity in YouTube using roughly 37 millions videos. They found that viewcount, number of comments, number of ratings and number of favorites are highly correlated [4]. Feroz Khan and Vong also found that when viewcount were increasing, the number of likes were also rise up too. Surprisingly, the number of comments were found to strongly relate to the number of dislikes [12]. This is interesting that going viral may not always good for video owner.

The research question of this study are “What are the factors that make marketing videos go viral?” and “How viral marketing video with its features affect consumer responses?” This study is going to find some clues for this question by reviewing findings and guidance from both previous academic researches and practitioners’ suggestions. Then, a conceptual model is proposed for this study.

RESEARCH OBJECTIVES

The objective of this study is to articulate a conceptual model of factors affecting video popularity and its influences on consumer responses.

LITERATURE REVIEW

In this study, we use the term viral factors as the factors that affect the popularity of videos. Due to our exploration from both academic researches and practitioners’ suggestions, there are many factors that should be considered when creating a viral

The Fifteenth International Conference on Electronic Business, Hong Kong, December 6-10, 2015

marketing video. However, we classified these factors into three main categories which are video metadata, emotion, and video content. Our investigation were summarized as follows.

The first category of viral factors is video metadata. There were 3 factors in this category that received attention which are video title length, video length, and published day. In West's study, he found that the average length of the 20 viral videos from TimeMagazine's popular video list was 2:47 minutes [30]. This time length of the viral videos was also consistent with the finding by Jiang, Miao, Yang, Lan, and Hauptmann which they studied on a larger set of viral videos, 446 viral videos in total [18]. They found that most viral videos have shorter duration, 2:18 minutes on average, while the videos in quality group and background group were more than 4 minutes length on average. For video title length, West found that that viral videos had around 3 words [30]. While Jiang, Miao, Yang, Lan and Hauptmann found that viral videos had around 5 words [18]. There was a story which recommended what were the perfect days to upload a video. According to the study by Gill, Arlitt, Li, and Mahanti, they analyzed Internet traffic on YouTube. Their work showed some interesting information that "people usually go watching videos on weekday more than weekend" [14]. The most fraction is on Thursday, followed by Wednesday. Cheng recommended to release video on Monday or Tuesday, that are also weekday [5].

The second category of viral factors is emotion. The effect of emotions on video is also important. Many studies found that the audiences whose emotions were highly aroused after watching the video will had intention to share those videos more than the others who experienced low arousal emotions. Among those who had high arousal emotions, positive emotions such as hilarity and astonishment seemed to have more effect on sharing intention than the negative emotions like sadness [22]. Some specific emotions such as happiness, funny, surprise, scary, sadness and anger found more in viewers who intended to share or already shared when compared to those who did not share [17]. Teixeira analyzed facial expression to reveal the feeling of the viewers when they were watching advertising videos [28]. According to his finding, he suggested techniques that can help commercial video to be watched and shared. For examples, he found that the video advertisings which contained nudity content aroused shock emotions. Even if the viewers who felt shock may watch the video to its end, they did not share those videos. So, the videos should make viewers feel surprise but not shock in order to make them to be shared. Dobele, Lindgreen, Beverland, Vanhamme and Van Wijk analyzed the influence of six primary emotions including joy, surprise, angry, disgust, and sadness on sharing. In their finding, element of surprise need to be in viral message and should be mixed with other emotions [7]. The other perspective of emotions used in video content is emotional tone which are pleasant, coactive, and unpleasant. Eckler & Bolls [9] used this definition in their observations. They found that the video with pleasant emotional tone evoked the most positive attitude toward the advertising video followed by coactive state and unpleasant respectively. Moreover, they also found the same impact of emotional tone on attitude toward brand. In addition, pleasant emotional tone let viewer intent to forward the most followed by coactive emotional and unpleasant emotional consequently [9]. Furthermore, attitude toward viral video advertisement is a major factor affecting video sharing [16] and those videos need to make viewer like enough to make them share [23]. Concerning how to measure emotions, there are two major methods which are explicit method and implicit method. The explicit method is based on asking the samples directly about the emotions they experienced by using different kind of tools such as scales, cartoon-like pictures and so on. This methods can be used to assess subjective feeling regarding experienced emotions. Whereas the implicit method is used to assess autonomic reaction when the participants are given the stimuli [8]. The implicit method also has many tools including analysis of facial expression. Ekman classified basic emotions into six major emotions: anger, happiness, surprise, disgust, sadness, and scare [10]. He used these basic emotions in his facial expression analysis study [10].

The last category of viral factors is video content. There is no concrete concept about how to design video content to be viral. However, there were some suggestions of how the content should be. According to Miller, there were three most common characteristics of videos which were used to promote brands and products: informative, educational and entertaining [19]. For the first characteristic, informative, the videos that have this characteristic are the ones that provide useful information for viewers, something which they are looking for or something that help them make some decisions. The information from this video may be introduction of a new product or even the company situations. For example, tourism industry may produce a video that provides information about the featured destination or comparing the cost to different destinations. The second characteristic is educational which is a video that helps educate the viewer how to do something useful step-by-step. The videos that has this characteristic is often called "how to" video. Berger and Milkman studied educational characteristic in online newspaper. Their result also confirmed that consumer tended to share useful practical content due to some reasons such as to help others or for self enhancement [1]. The final characteristic of videos is entertaining. They are videos that have to have something interesting and humorous.



<https://www.youtube.com/watch?v=XQcVIIWpwGs>



<https://www.youtube.com/watch?v=vHuE9x-mv00>

Figure 1. An example of video advertising using children (left) and animal (right) as video appeal.

Furthermore, there are many others suggestion from websites that practitioners wrote about how to make a successful video. For example, wikiHow recommended many tips such as video should begin with basic to advance ideas, follow the popular trend, show off an amazing talent, using funny or cute animal, and make a music video. Golan and Zaidner investigated content of 360 viral advertisements to identify the main advertising appeals. They found that humor was by far the most commonly used in advertising as it took 91% of the ads, followed by sexuality, animals, violence and children respectively [15]. Siripiyavatana and Sutheerawong studied the effect of advertising technique called Prankvertising on consumer behavior [27]. The Prankvertising aims to create a phenomenon of viral marketing by playing prank on target which were set up by company and then these events were recorded and shared over the Internet. They found that using Prankvertising together with a particular emotion will lead to different consumer buying decision. Caring emotion which contains friendliness and love affected the highest degree on willingness to buy, while negative and forceful emotion discouraged buying decision the most.

Violations are threats such as insult, not wearing pants, attacks and so on. Surprisingly, using violation content concurrently seems benign, the extent to which it seems okay, will made that content looks humor and will be shared [29]. Moreover, using higher levels of violence in humorous video advertising also resulted in better retention of brand and greater involvement with the video message while attitudes toward the brand remain the same [2]. In addition, provocative content like sexuality and violence is used in many viral videos compared to television advertising [24]. However, the use of sexuality in videos was not recommended as viewers will not share it even if they like it [28]. The use of images of youths especially females has become a trend in advertising even if it is not related to their products or services. This technique is considered to be sex advertising which aims to attract attention from viewers. The sex advertising is one that uses nude images of women or girls as sex appeal. However, there is no ethical basis for this characteristic being used in advertising. In addition, using of sexuality is not recommended even if it is able to attract viewers but it does not mean viewers will like the product [20].

Using of cuteness in video media is also interesting to be considered. The presence of children in advertisements has become a new trend in Malaysia's advertising industry. Murad, Saahar, Halim studied the children portrayal in press advertisement and found that various industries, not only in children products or services industries, are using children as their selling strategy [21]. Moreover, portraying loving children creates an emotional appeal. Roller babies Evian which was suggested by Miller is presented in Figure 1 (left) is a good example video that has entertaining characteristic and also use a cuteness of children. Furthermore, there were many videos using animal moments that became viral and presented in both commercial and non-commercial videos. THE DOG, a commercial video in banking industry in Thailand, was just uploaded on May 18, 2015 and so far attracted more than 6.0 million viewers. Even though the language used in THE DOG is Thai language, it attracted viewers from around the world. A snapshot from THE DOG videos can be seen in Figure 1 (right).

Viral Measurement

In previous study, there were many attempts in creating a formula to claim whether a video is a viral video. Figueiredo, Benevenuto, and Almeida used the views at peak day and its total views to classify the video into three groups, namely viral, quality and background [13]. Their formula was then tested by Jiang, Miao, Yang, Lan, and Hauptmann with many viral videos, including PSY-GANGNAM STYLE, but the result showed that those videos were not categorized in the viral group [18]. Another study by Google's researchers defined the term of viral video as the popular video with at least 60% of views in the first month from social sources like watching a video from blogs, clicking on a video link in emails, and so on [3]. However, the information is not available to outside researchers. There are other test for checking if it a viral videos or not. Jiang, Miao, Yang, Lan, & Hauptmann used viral videos from three sources, Time Magazine's popular videos, YouTube Rewind 2010-2012 and Equal Three Episodes. In their finding, the correlation between the number of documents returned from Google search engine and the number of views in viral video group were more than twice of the other two groups which are quality and background [18]. The finding shows that these correlations can be used as the socialness as defined by Broxton, Interian, Vaver, and Wattenhofer [3]. However, from practitioners perspective, there are arguments among agencies that how much views needed to be a viral successful. 27.8% of them voted that more than one million views needed to be a successful viral video while there are equally 22.2% of them consider 100,000 views, 250,000 views and 500,000 views as a successful viral video. Only an even percentage of respondents

which are 2.8% voted for 25,000 views and 50,000 views [11].

Interactive Advertising Model

Rodgers and Thorson proposed the Interactive Advertising Model (IAM) to provide an integrative processing model of Internet advertising which incorporates the functional and structural schools of thought [26]. This model offers a broad scheme to classify most Internet ads and a number of common features unique to these ads. It contains three parts. The first part considers consumer motive in Internet uses and information process related to prior attention, memory and attitude before interacting with the ads. The second part describes advertising structure and consumer responses is the final part. The IAM shown in Figure 2.

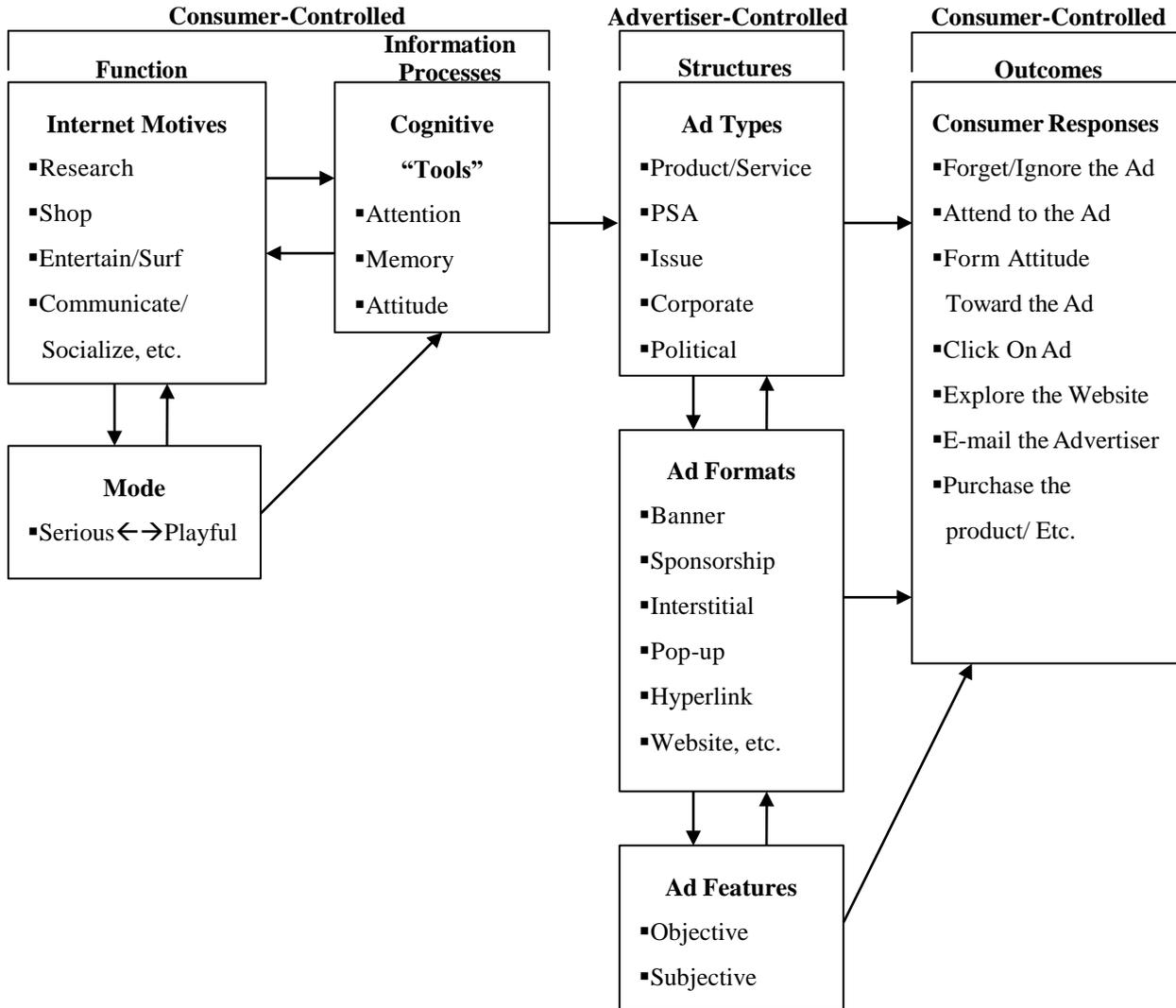


Figure 2. Interactive Advertising Model (IAM) by Rodgers and Thorson (2000)

The IAM model are suitable for most online advertising by representing a whole process of how Internet user interact with online ads. Firstly, the consumer-controlled describe the motive of Internet user when they utilize the Internet. These Internet motives also come with mode which are serious or playful and the mode can changed during their Internet activities. For example, someone who looking for stuff on the Internet with playful mode may changes to serious mode when they found an item they interest. However, there are many advertising on the Internet. Thus, Internet users may experience some online ads during their Internet use and then process those ads using cognitive tools, which are attention, memory and attitude, before making some responses towards the ads. Secondly, The IAM presented structures of the ads in interactive environment which seems as a stimulus that affect consumer responses. The structures are consist of ad types, ad format and ad features. Finally, after Internet users process information towards online ads they found, they then give some responses to it. Even if Internet users ignore the ads, it is also counted as a consumer response.

CONCEPTUAL MODEL

In our study, we considered marketing videos as one kind of Internet advertisings because Internet users may find these kind of videos during their Internet activities. Then, they may watch the video and give respond to it. Given this background we applied the IAM to our study based on the ads structures part and the outcomes part because it enough to answer the research questions. The conceptual model adapted from IAM was shown in Figure 3.

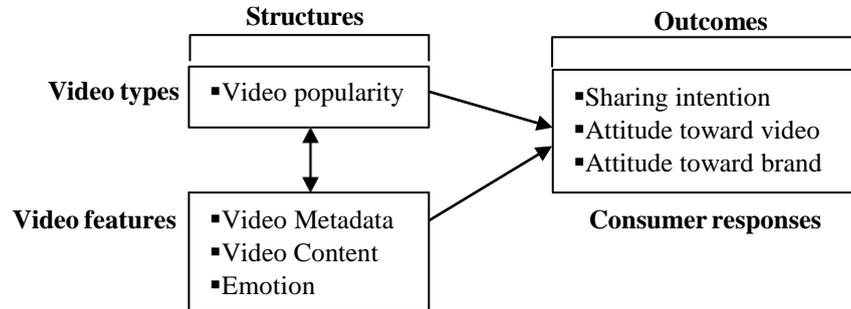


Figure 3. A conceptual model of factor affecting the popularity of marketing video on video sharing sites, which is adapted from the Interactive Advertising Model (IAM)

As a study aim for analysis the factor affecting the popularity of video on video sharing site. Therefore, video types in our study, which adapted from ads type in original IAM, is video popularity. The video popularity may categorized into high and low popularity marketing videos or be a continuous variable. Moreover, it excluded ads type which were categorized by IAM because their features are not related to the objective of this investigation. We did not include video formats in our model because we only study on one format which is video. Concerning video features which were classified into two main categories: objective features and subjective features. In this investigation, we decided that video metadata, for example title length, duration and published day, and video content are objective features while emotion are subjective features. The different between our conceptual model and the original IAM was shown in Table 1.

Table 1. A comparison of the original IAM and the conceptual model of factor affecting the popularity of marketing video on video sharing sites.

No.	Interactive Advertising Model (IAM) By Rodgers and Thorson	Conceptual model of factor affecting the popularity of marketing video on video sharing sites.
<i>Structures</i>		
1.	Consist of ad types, ad formats and ad features	Consist of video types and video features. The video types are representative of ads types and video features are representative of ads features.
2.	Ads types include: Product/Service, PSA, Issue, Corporate, Political	Video types are classified by popularity of marketing video.
3.	Ads features are classified into objective and subjective.	Video features are classified into video metadata (e.g. duration, title length, and published day), video content (e.g. children, animal, and prank) and emotion (e.g. humor, sad, and surprise). The video metadata and the content are considered to be objective features while emotion as a subjective feature.
<i>Outcomes</i>		
4.	Consist of many consumer responses. For example forget/ignore the ad, attend to the ad, form attitude toward the ad, click on ad, explore the website, e-mail the advertiser and purchase the product.	Focus only sharing intention, attitude toward video and attitude toward brand which were investigated the most in previous viral video studies.

LIMITATIONS

There is no appropriate measure for classifying a video into viral or non-viral marketing video because it is various from many perspective as Feed Company did surveyed with executives from the top US creative ad agencies and media buying firms [11]. Moreover, according to viral video definition, which is a video that becomes popular through the process of internet sharing, we cannot follow its entire characteristics because we cannot collect view sources of videos. Moreover, there are many websites that posted viral marketing videos with just thousands of views, not a million. Therefore, we use high or low popular marketing video instead of viral or non-viral marketing video. Another major limitation is that there are many viral marketing videos around the

world and these videos use different languages. As a conceptual of this study presented consumer responses, the result may be biased due to language barrier.

REFERENCES

- [1] Berger, J., & Milkman, K. L. (2012) 'What makes online content viral?', *Journal of Marketing Research*, Vol. 49, No. 2, pp. 192-205.
- [2] Brown, M. R., Bhadury, R. K. & Pope, N. K. L. (2010) 'The impact of comedic violence on viral advertising effectiveness', *Journal of Advertising*, Vol. 39, No. 1, pp. 49-66.
- [3] Broxton, T., Interian, Y., Vaver, J. & Wattenhofer, M. (2013) 'Catching a viral video', *Journal of Intelligent Information Systems*, Vol. 40, No. 2, pp. 241-259.
- [4] Chatzopoulou, G., Sheng, C. & Faloutsos, M. (2010) 'A first step towards understanding popularity in YouTube', *INFOCOM IEEE Conference on Computer Communications Workshops*, pp. 1-6.
- [5] Cheng, K. X. (2013) 'Dancing youtube sensation Karen Cheng's 10 tips for making your video go viral', available at <http://www.fastcompany.com/3014984/how-to-be-a-success-at-everything/dancing-youtube-sensation-karen-chengs-10-tips-for-making->
- [6] comScore, Inc (2015) 'comScore releases April 2015 U.S. desktop online video rankings ', available at <http://www.comscore.com/Insights/Market-Rankings/comScore-Releases-April-2015-US-Desktop-Online-Video-Rankings>.
- [7] Dobele, A., Lindgreen, A., Beverland, M., Vanhamme, J. & Van Wijk, R. (2007) 'Why pass on viral messages? Because they connect emotionally', *Business Horizons*, Vol. 50, No. 4, pp.291-304.
- [8] Drozdova, N. (2014) 'Measuring emotions in marketing and consumer behavior: Is face reader an applicable tool?', Master Thesis, Dept of International Business, Norwegian School of Economics, 2014.
- [9] Eckler, P. & Bolls, P., 'Spreading the virus: Emotional tone of viral advertising and its effect on forwarding intentions and attitudes', *Journal of Interactive Advertising*, Vol. 11, No. 2 2011, pp. 1-11.
- [10] Ekman, P. (1999) 'Facial expressions ', *Handbook of cognition and emotion*, vol. 53, pp. 226-232.
- [11] Feed Company (2008) 'Viral video marketing survey: The agency perspective', available at http://feedcompany.com/wp-content/uploads/Feed_Company_Viral_Video_Marketing_Survey.pdf.
- [12] Feroz Khan, G. & Vong, S. (2014) 'Virality over YouTube: An empirical analysis', *Internet Research*, Vol. 24, No. 5, pp. 629-647.
- [13] Figueiredo, F., Benevenuto, F. & Almeida, J. M. (2011) 'The tube over time: Characterizing popularity growth of youtube videos', *Proceedings of the fourth ACM international conference on Web search and data mining*, pp.15-28.
- [14] Gill, P., Arlitt, M., Li, Z. & Mahanti, A. (2008) 'Characterizing user sessions on youtube', *Electronic Imaging 2008*, pp.681806-681806.
- [15] Golan, G. J. & Zaidner, L. (2008) 'Creative strategies in viral advertising: An application of taylor's six-segment message strategy wheel', *Journal of Computer-Mediated Communication*, Vol. 13, No. 4, pp. 959-972.
- [16] Huang, J., Su, S., Zhou, L. & Liu, X. (2013) 'Attitude toward the viral ad: Expanding traditional advertising models to interactive advertising ', *Journal of Interactive Marketing*, Vol. 27, No. 1, pp. 36-46.
- [17] Izawa, M. (2010) 'What makes viral videos viral?: Roles of emotion, impression, utility, and social ties in online sharing behavior', Master Thesis, Dept. of Communication, The Johns Hopkins University.
- [18] Jiang, L., Miao, Y., Yang, Y., Lan, Z. & Hauptmann, A. G. (2014) 'Viral video style: A closer look at viral videos on YouTube', *Proceedings of International Conference on Multimedia Retrieval*
- [19] Miller, M. (2011) *YouTube for business: Online video marketing for any business*, Pearson Education.
- [20] Moses, A. & Charles, M. (2014) 'Sex as an advertising appeal: A review of its ethical basis, functions and effects', *International Journal of Management Sciences*, Vol. 4, No. 1, pp.25-34.
- [21] Murad, K., Saahar, S. & Halim, A. A. (2015) 'Does cuteness sell? A content analytic study of children portrayal in press advertisement', *Proceedings of the Colloquium on Administrative Science and Technology*, pp.29-40.
- [22] Nelson-Field, K., Riebe, E. & Newstead, K. (2013) 'The emotions that drive viral video', *Australasian Marketing Journal (AMJ)*, Vol. 21, No. 4, pp. 205-211.
- [23] Petrescu, M. & Korgaonkar, P. (2011) 'Viral advertising: Definitional review and synthesis', *Journal of Internet Commerce*, Vol. 10, No. 3, pp. 208-226.
- [24] Porter, L. & Golan, G. J. (2006) 'From subservient chickens to brawny men: A comparison of viral advertising to television advertising', *Journal of Interactive Advertising*, Vol. 6, No. 2, pp.30-38.
- [25] PwC (2015), 'Global entertainment and media outlook 2014-2018', available at <http://www.pwc.com/gx/en/global-entertainment-media-outlook/segment-insights/internet-advertising.jhtml>.
- [26] Rodgers, S. & Thorson, E. (2000) 'The interactive advertising model: How users perceive and process online ads', *Journal The Fifteenth International Conference on Electronic Business, Hong Kong, December 6-10, 2015*

of interactive advertising, Vol. 1, No. 1, pp. 41-60.

- [27] Siripiyavatana, O. & Sutheerawong, S. (2014) 'Prankvertising phenomenon: The effects on consumer buying decision', Master Thesis, Dept of International Marketing and Brand Management, Lund University.
- [28] Teixeira, T. (2012) 'The new science of viral ads', *Harvard Business Review*, Vol. 90, No. 3, pp. 25-27.
- [29] Warren, C. and Berger, J. (2011) 'The influence of humor on sharing', *poster presented at the Association for Consumer Research conference*, St. Louis, MO.
- [30] West, T. (2011) 'Going viral: Factors that lead videos to become internet phenomena', *Elon Journal of Undergraduate Research*, pp. 76-84.
- [31] YouTube (2015), 'Most viewed videos of all time (Over 100 million views)', available at https://www.youtube.com/playlist?list=PLirAqAtl_h2r5g8xGajEwdXd3x1sZh8hC.