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# THE EFFECTIVENESS OF 3D HOLOGRAM AS A NEW ADVERTISING MEDIUM IN KLANG VALLEY, MALAYSIA

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## **ABSTRACT**

Marketing communications is currently experiencing a period of major change. One of the biggest factors is a response from the current needs and high demands to replace the traditional media methods used. These changes have been impacted to the marketing communications. Since 1999 (Barnes, 1999) the ambient advertising has been applied and nowadays it has been improved based on current needs. From Andy Warhol (1963), when you see the 'pop' factor in the advertising, you will not see the sign in the same design. Statement in BBC news by Dr. Frank Shaw, he said that consumer will see a great step forward with 3D video ads, which react to their context and mood changes. It is clear from this report that we are at a critical point. In order to create visual 3D hologram as a most important research, the medium advertising is a first step to be used widely. In addition, this study is also focus on development of new medium for advertising using a hologram as an alternative medium for advertising as to expand the usage of holograms in Malaysia. The medium advertising told us that the impact from the research is the 3D hologram as a message delivery. Moreover, the experiment also helps to cut costs either than to make the observation, collecting data and analysis, to create 3D hologram. As a conclusion, findings from this analysis product test in public area will be further discussion for the advantages and disadvantages.

**Keyword:** New Media Advertising, Ambient Advertising, Ad recall, Digital Advertising, 3D Hologram.

## INTRODUCTION

In this era, there are various kinds of medium for advertising. The advertising medium can be categorized into three categories which are above the line (ATL), below the line (BTL), and through the line (TTL). Each categories classified has different marketing strategies approached to a specific target audience which has been specified by the company or the organization itself to deliver the messages to the audience in an effective way.

ATL is a type of advertising through media such as television, cinema, radio, print, and out-of-home to promote brands or convey a specific offer. This type of communication is conventional in its nature and is considered impersonal to customers. It is much more effective than when the target group is very large and difficult to define (Bhasin, 2010).

Ambient advertising is one of the example medium categorized as ATL. Nowadays, ambient advertising has developed and used New Media as one of the element in advertising. The advanced technology used digital screen, which is known as Digital Out Of Home

(DOOH). This DOOH is a form of out-of-home advertising is a medium that replaced the printing medium that used digital signage to display the messages to specific locations and consumers at specific times (Yackey, 2009).

To ensure Malaysia has an established medium for advertisement aligned with the current progression of technologies, Image 3D Hologram is considered as a new potential medium for advertising to be applied here in our country. The theory of holography was developed by Dennis Gabor in 1947, where the development of laser technology has made the holography to be possible (Gabor, 1948), However, the usage of this Image 3D Hologram is still limited to certain matters such as presentation, montage or exhibition.

In this study, an insight and a thorough research on Visual 3D Hologram is done, as one of the potential medium to be used for advertising in Malaysia. Using statistics, analysis and surveys that has been made, a new medium of advertising will be established using hologram technology with a moderate cost used.

## **Problem Statement**

A media researcher predicted that worldwide spending on out-of-home advertising will expand by 8.3% in 2011 to about \$26.4 billion (magnaglobal, 2012). it is stated that a faster growth of this type of advertising medium compared to any other ordinary type of advertising medium shows a high demand for out-of-home advertising globally and it is crucial for future purposes of delivering the messages to the consumers.

According to Schaefer, new methods of advertising are emerging in the digital era that is reshaping the traditional world of advertising, and to stay on top of the game, marketers need to be able to utilize these new methods (Schaefer, 2009), This statement shows clearly that the current world of advertisement needs a new developing medium aligned with the propagation of the emerging technologies. A new fresh kind of advertisement of selling products as to convey the customers effectively is needed as the community nowadays has immune with the typical advertisements used.

Research shows that marketers spend money by the truckloads for advertisements and promotions where most of these go unseen and unheard. Malaysia Advertising Expenditure Report 2011 (Malaysia, 2011), reported that RM8.7 billion has been spent for advertising. Newspaper medium dominates the expenditures with 41%, followed by FTA television with 29.1%, Pay television with 21.2% and other mediums with 8.6%. Surprisingly, based on the result of the surveys made, it shows that the current community in Malaysia are more attracted to digital signage as a medium for advertising with 30.6% compared to radio and television with only 25% selections.

There are three objectives of this study, which are to describe and compare the current trend of ambient advertising in Malaysia, to analyze the effective element and characteristic of out of home advertising in Malaysia, to expand the use of holograms in advertising media.

This study significantly to enhance the current technology of New Way of digital out-of-home advertising in Malaysia. This is a starting point for developing the new technology.

In addition, this study is also focus on development of new medium for advertising using a hologram as an alternative medium for advertising as to expand the usage of holograms in Malaysia.

Through the holographic adoption, the medium can then be applied and improvised for other future used.

#### LITERATURE REVIEW

## Advertising and Ambient advertising

The arena of communications of marketing is subjected arguably to its biggest period of change. This reflects the power of factoring as the coming of 'mega-agency' by virtue amalgamations, niche specialist service providers, agency structure changes, media convergence, focus more on the accountability of agencies (Thomas, 1999).

'Ambient' is a term used by clients and agencies, and just beginning to emerge in the literature, but there is some disagreement about what is really ' is '. Since the 'newness' and may have difficulty in 'pinning down', there has been very little written on the subject and no attempts have yet been made to adequately define it. To minimize the gap between theory and practice, It is considered important for new ideas and concepts like these will be discussed in academic forums even if only to deny the existence or value of. Ambient was first used in connection with advertisements in 1996 by Concord, UK agent advertisement that specializes in outdoor campaigns. It evolved from the need to apply a single term for what the increased demand from clients for 'something different' in their advertising. Clients, attention to the issue of cut-through, competition, reduced effectiveness and interested audience wanted (and still want) ads 'to bite' of their institutions. This encourages the client to see something different advertising agencies put in place an unusual, like on the floor, petrol pump handles and backs the toilet door - Previously not considered as a location for advertising. As the campaign did not fit neatly existing categories such as out-door, print, radio, or television and therefore a new term was coined. (Sandra Luxton, 2000).

Although the different locations they may no longer have subverted the conventional and the main areas based on their repetition. These ads have reached a level of prevalence and although it may still be considered unusual, have lost the 'wow! 'factor – key information used by those involved in creating Ambient campaign (Martin, 1998).

Surprisingly, Jane Barnes stated that the ambient medium term began appearing in British media jargon about the year 1999 and later established as a standard term in the advertising industry. This is the name given to a new generation of out-of-home products and services described by some media as a non-traditional or alternative. The key to successful ambient media advertising is to select the best media format available and combined them with an effective message and content (Barnes, 1999).

## **Digital Out Of Home (DOOH)**

The new medium of Digital Out-of-Home (DOOH), which is also called Out-of-Home Video Advertising, In-Store TV, Captive Audience TV, Digital Signage, Dynamic Digital Display or another name, offers advertisers one of the most targeted and powerful way of reaching consumers.

## 3D visual and hologram development

The effect produced by the lenticular printing, the pepper's ghost illusion or modern variants such as the musion eyeliner, and volumetric displays are often confused with holograms (Hall, 2011). The pepper's ghost technique, the easiest to implement this method, the most common claims in a 3D display (or called) 'hologram'. While the original illusion, which is used in theater, repeated to the actual physical objects and people, which is located outside of the stage, a modern variant of replacing the source object with a digital screen, which displays images generated by 3D computer graphics to provide the necessary depth cues. Reflection, which seems to float in the air, is still flat, however, making it less realistic than if the 3D objects that is actually being reflected. An example of this is the digital version of pepper's ghost illusion including Gorillaz show at the 2005 MTV Europe Music Awards and 48 Grammy Awards, and Tupac Shakur virtual performance at the Coachella Valley Music and Arts Festival in 2012, rapping together during the recent Snoop Dogg set with Dr. Dre. (Carolyn Sung, 2012).

## The use of holograms in Malaysia

The use of Holograms which are often in use in Malaysia is a 2D hologram. In Malaysia, the hologram sticker use as a sticker label for product safety. Hologram in Malaysia began to introduce starting in 1997, and brought in by the National Platinum (Malaysia N. P., 2008). Following with it, an organization, DCMW Research and Development Sdn Bhd, Kuala Lumpur has produced several products that use lighting and this 3D hologram image, which only can be viewed at the National Platinum Malaysia (Chiang, 2008).

#### **METHODOLOGY**

This study begin with observation on every current advertising medium used in Klang Valley area. To be specific, it is done at Jalan Bukit Bintang, Kuala Lumpur area. Duration of the observation is four (4) month period. Observation is vital as to identify the effectiveness and impacts of Out-of-home medium of advertising towards the societies. Each of the ambient advertising and public sculpture are then been gathered and comparisons are then been made, based on the idea of "Pathetic Theory" of Aristotle.

Data collections are done by gathering all of the literature review, pictures needed and analysis of each documents been made. Apart from that, questionnaires are also handed out via online to 100 respondents.

Experiments been conducted to improvise the hologram technology using minimal cost. Various materials and techniques used in this experiment to get the best result, thus the next step of inventing the real product been done after completion of analysis. By this experiment as well, the most suitable materials are chosen onto different kinds of surface to produce the best image 3D hologram. The content of the video is also then been experimented.

Selected place for this pre-test session is at Publika, Solaris Dutamas where it is done during the peak-hour time, which is at 8pm-10pm. The pre-test is conducted using two techniques, which are:

## 3.5.1 Unobtrusive observation, Observe: be quiet, watch, understand.

This method is done by observing without any explanations made to the consumers. By using this method, suggestions or opinions are taken and been recorded as to be taken into account for further improvements to be made. Information obtained by first impression of the consumers will be useful for future use later on.

#### 3.5.2 Obtrusive observation

Before pre-test is done, questions are prepared, and the questions are then been asked to the consumers to identify the capabilities of the product of hologram to attract the consumer's attention, in delivering the messages and the impact of the Image 3D hologram towards the public.

Analysis of the every data and observations collected from the respondent on the 3D hologram product is done and the weaknesses from the recommendations recorded are taken into account in order for the author to improvise the product produced.

## RESULT AND DISCUSSION

The fist section of the survey is the demographic of the respondent. From the surveys that have conducted, 55% are male and 45% is female. It also showed that 50% of respondent are 26-35 years old, 30% is 18-25 years old and 20% is 36-50 years old. The respondents were randomly selected, where those who were interested in 3D holographic display, this is in accordance with the method in use (obtrusive observation).

		N	%
Gender	Male	55	55
	Female	45	45
	Total	100	100
Age	18-25	30	30
	26-35	50	50
	36-50	20	20
	Total	100	100

Table 1: Analysis of Demographic Study

Based on the result in Table 2, the survey indicates that majority of the respondents, 75% never seen the 3D hologram medium and 25% know about 3D hologram. 65% respondent very impressed to the 3D hologram medium and 25% attracted by medium, just 10% said the

medium is usual. 55% respondent indicated that it is very good. 33% said it is good and 10% respondent said the medium is average.

Table 2: Respondent feedback about 3d Hologram medium

		N	%
Respondent has seen a medium (3D hologram)	Yes	25	25
	No	75	75
	Total	100	100
Respondent has ever seen a medium (3D hologram)	Online	20	5
	Magazine	1	0.25
	Television / Movie	4	1
	Live	0	0
	Total	25	25
Respondent attracted to the	Very Impressed	65	65
medium	Usual	10	10
	Yes	25	25
	No	0	0
	Total	100	100
Respondent views on the medium.	Very Attractive	55	55
	Attractive	35	35
	Average	10	10
	No	0	0
	Total	100	100

Table 3 shows the respondent opinion, 98% of the Respondent agreed to make the hologram as a new advertising medium. Surprisingly, when 80% Respondent stated the estimated cost is higher than it should be. In this study, 80% can recall the advertising or message that was presented through this medium, 15% respondent half-remembered and 5% cannot recall what they see.

*Table 3: Respondent opinion* 

		N	%
Respondent opinion, whether is it suitable as a new advertising medium.	Agree	98	98
_	Disagree	2	2
	Total	100	100
Respondent recall the	Recall	80	80
advertising and message	Can't recall	5	5
	Half-remembered	15	15
	Total	100	100

Through the respondent's opinion was in the analysis, 98% of respondents agreed to make a hologram of one advertising medium, is because of the attraction of the medium and 3d hologram attractions have helped respondent to remember what they had seen the advertising content

## **DISCUSSION AND FINDING**

From this study, author can conclude that this experiment and idea development is well established and done with a great result has been achieved.

Contribution from this study is the important discovery identified from data and analysis made from this project which is the real Malaysian's perspective of mediums used and also the impacts of each medium towards the consumers

Author can also conclude that the timing for the community to be socialized publicly has also gives an impact on the importance on the advertising medium efficiencies. Some of the existing advertising medium such as radio and newspaper are considered as irrelevant since the consumers are now starting to immune with these medium.

Apart from that, based from the statistics obtained, most companies in Malaysia has chosen certain unsuitable places for advertising thus results in non-effective on delivering the messages to the community

Furthermore, a new important discovery obtained from this study is that the acceptance from the community towards the new medium produced using 3D hologram. A great impact and positive results obtained from the community with the existence of this new medium of advertising in order to increase the effectiveness of delivering the messages.

This new medium invented was able to attract attentions fast and effectively as from the observations done shows that average of 100 respondents has stopped to watch this advertisement for an hour.

Based on the research and analysis done, it is proved that using hologram technique; hologram can be obtained using a low cost. Selection of suitable materials results in producing a clear image of hologram at four sides. However, it is also depends on a specific size used, which is 1280x780. Achievement in producing this medium is also a good start for invention of 3D hologram, thus open up Malaysian's mind to develop this inventing sector based on the statistics obtained using questionnaires of the pre-test done. Result shows that all respondents agreed that this medium can be widely used commercially.

This new emerging hologram produced can still be seen with a presence of light, not only at dark places like the previous product of 3D hologram.

Results from this study have all answered the research questions stated. Based on the objectives and aim for this study, researchers done accordingly but there were certain obstacles such as difficulties in materials selection to be used and products structure since author has no expertise on those areas.

Lessons learnt from this study is that results from data collected has helped in doing the analysis and author has discovered many new advertising mediums that has been used. There are also pros and cons in terms of materials, visual hierarchy and visual scanning aspects that have been identified for future studies. From these analysis and findings, more ideas and matters that can also be expanded to produce a better product.

Despites that, various kinds of surface have been used throughout the experiments conducted to produce the best hologram images, but the best materials and surface are chosen based on the criteria of easy to handling the product.

In terms of video invention, based on the experiments done, it has teaches the author on how to arrange the best position of the video to create the best template for screen resolution.

## **Conclusion and Recommendation**

As for the conclusion, author can conclude that hologram can be used as one of the potential alternative medium for advertising and 3D Hologram can also deliver messages to consumers effectively. Visual 3D hologram can also give a great impact to the advertisement industry and this statement has been supported by 65% respondents and 100% respondents agreed that this medium can be used as one of the medium for advertising.

Results from this study proved that image 3D hologram can be produced with a low cost and from the experiments that has been conducted; author has identified how this new medium for advertising will give beneficial for our country. Author hopes this study will help in the development of the advertising industries thus encouraged for other studies on advertising medium to be used in Malaysia. Detail research should be done on the visual (content) and product (casing) used that has been invented.

#### REFERENCES

- Andy. (2010). Digital Tiger. United Kingdom: Digital Tiger.
- Barnes, J. (1999). Making a difference with ambient media. .London.
- Carolyn Sung, T. G.-R. (2012). *Tupac returns as a hologram at Coachella*. California: CNN Senior Entertainment .
- Hall, J. (2010). Digital Out Of Home Right Time, Right Place. Media Planet, 6.
- Hall, J. (2011). Holographic announcers at Luton airport. London Luton Airport: BBC.
- Malaysia, N. (2011). *Malaysia advertising expenditure report*. Kuala Lumpur: Nielsen Malaysia.
- Martin, C. (1998). 'Joking aside'. Marketing Week;, 50.
- Schaefer, D. H. (2009). *Essentials of Contemporary Advertising*: Second Edition. California: The McGraw-Hill Companies.
- Bhasin, H. (2010). *Above the line marketing*. Retrieved February 5, 2011, from marketing91.com: http://www.marketing91.com/above-the-line/
- Chiang, D. (2008). *Hologram*. Retrieved Julai 2, 2011, from DCMW Research & Development: http://www.dcmw.com.my/hologram.html
- Malaysia, N. P. (2008, June 12). *Hologram*. Retrieved Julai 2, 2011, from angkasa.gov.my: http://www.angkasa.gov.my/planetarium/
- Yackey, B. (2009, october 19). *Defining DOOH*. Retrieved mei 2, 2011, from digitalsignagetoday: http://www.digitalsignagetoday.com/article/160564/Defining-DOOH

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