

A Preliminary Study of Cinemagraphs as a Tool in Enhancing Public Service Announcement (PSA) On Smoking Habit Issue

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Abstract

Cinemagraph is a high definition new type of visual media that lies in between photos and videos where some parts that want to be highlight are animated and loop seamlessly while others remain completely still. Besides, this would serve as the future of new communication through social media by delivering contents in interactive way. Objectively, the point is to introduce the technique in creative industry in Malaysia at a new platform, thus this would give new breath in the related industry. Following this, this serves as a new hybrid image technology by replacing the current poster advertisements in the production phase where the process of printing and making the poster by machines is abolished, because of the technology is replaced by the place through electronic system. Results from the pilot test demonstrate that the self-designed measure is a very much reliable instrument, with an overall Cronbach alpha value of .93. Three factors emerge with high reliability scores of .70 and above. The correlation analysis demonstrates that the entire three dimensions are not perfectly correlated as their correlation analysis illustrates from low to moderate scores. Findings from the analysis confirm the reliability of the scale and validate the influenced results of the perception of public in predicting the existing of cinemagraph technique through the campaign. Results from the study demonstrate that the measurement used in the pilot study can serve as a potential measure in accessing the usability of Cinemagraph in Public service Announcement (PSA) campaign.

Keywords high definition, interactive, hybrid image, social media, advertisement

1.0 Introduction

Cinemagraph is a format in digital process that shows movements of pictures. It consists of two layers where video as the major that lies in the background and the photograph on top of it as the base of the format. In other words, it is the animated GIFs (Graphic Interchange Format) that is created by looping frames of video with subtle movements, then layering it with a still frame and carefully masking a portion of the composition to reveal motion (Niewland, 2012). This concept of living photos has been inspired by the Harry Potter book series released between 2001 and 2011 by J.K. Rowling. Even though at the beginning this format has been introduced as GIF format where the characteristics of these were in minimal level, it is slowly moving together with the modern era through time. It grows rapidly to increase the potential of advantages that will be enhanced according to what this technique needs, where soon it will be a part of users needs and option especially in creative multimedia. This coincides with the flow in which cinemagraph is seen as hybrid photo where the format only will be seen through electronic media. In future, advertising industry especially can save hundreds of million in the production process because it will not be published through printed version using paper in newspaper or magazines instead electronic media will be the major platform for this to perform.

Advertising is one successful communication media that has existed for some 300 years at least. Its function is to deliver information such as selling products, services or free-profits message to the public through various platform, for example website, billboard, newspapers and magazines. Advertising is a form of communication paid by individuals or companies, with the aim of influencing people to think or act in a particular way or providing information (Green, 2012). Public Service Announcement (PSA) for example is one of the platforms that lies in the category of unpaid advertisement which is specifically designed to inform the public about a specific issue or cause through newspapers classified section, television spot or radio announcement and poster. Mainly, it provides valuable information that possibly their lives positively. In other words, it is a campaign on raising awareness, changing public attitudes and behaviors towards social issues (Mckinney, 1989). Commonly PSA are mostly closely related with the programs run by government or voluntary agencies such as health issues like smoking campaign and obesity campaign.

Smoking activities happened since the late of 1942 (L. Gilman, 2004). This can be seen through the history, which proved that the smoke was served as the food for the spirits that inhabited the shamans (Benonzi, 1565). Meanwhile, smoking also invites an addictive pleasure when someone starts at first. This is because of its large amount of nicotine, which acts as the main ingredient in cigarette that would please the smokers with pleasure for about an hour (Keyishian, 2004). There are numerous cases reported a few years back about how dangerous smoking is and how it can affect the life of smokers through all kinds of campaign such as public service announcement with websites, posters and billboards, but the rate of acceptance by public is lackluster at best. Anti smoking campaign, which is, runs by Ministry of Health Malaysia has failed to reach the aim of reducing the rate of smokers among Malaysian, and is seen as a failure project (Utusan Online, 2010).

This study is important since the findings would help to recognize the function of this new technology of cinemagraph that will be applied in the advertising field and act as a public service announcement tool, thus helping to promote the anti-smoking campaign in Malaysia. Various objectives are outlined for this study: 1) to introduce the new technology of 'hybrid image' or cinemagraph in the Malaysia's creative industry; 2) to promote cinemagraph as the new medium of communication in social media feeds; 3) to implement current anti – smoking campaign from using still images to an interactive new media style using cinemagraph. In order to meet the research objectives, three (3) research questions are proposed: 1) Did the public know about the cinemagraph technique; 2) What is the current trend of communication through social media; 3) How to improvise the current PSA anti-smoking habit with the technique? Results from this research would give extra credits for the art community in Malaysia especially those who are involved in the industry to help promoting and selling the products using the cinemagraph technique, while at the same time helping the generation to reduce the amount of paper used to print as the advertisement can be seen through social media feeds. Findings from this study will also help to encourage the generation to explore new medium of communication in a way while honing the fresh talent. Finally, outcome from this research can help the industry in Malaysia to take a step further towards the advancement of technology together with other developed countries.

2.0 Literature Review

Current media communication excessively loads with various types of ads and campaigns, not just to sell products or services, but also to gain the credence of potential customers about their things (Green, 2012). From the latest information, news, and gossip about what happen around, to the selling of products and sending the good message of something is also in trends. Along with these growths, advertising is one of the voice-out tools to send or deliver the contents from one party to the receiver (Green, 2012) In fact, advertising uses various media to work with the contents to deliver the message to the users, for example graphic poster, photography, video, TV commercials and others. In the current era where everything seems possible, technology moves concomitant with times that proves all things comes in handy and easier. Innovation comes from those previous traditional practices, which is turned to a new technology where it is a change to a new way, or even better way. Cinemagraph is a popular new type of visual media that lies in between photos and videos; some parts of the frame are animated and loop seamlessly, while other parts of the frame remain completely still (Niewland, 2011). What makes cinemagraph special is because it is a high quality gif or video that is very smoothly looped. In other side of issues, current situations where none of the health activities which were consumed daily, has made human stressful. A result of this situation we are being pushed by workload, family matters, life issues and so on; which happen to be the case towards unhealthy lifestyle. When the smoking activity starts to take part in everyday schedule, it is one of the ways to release the burden. It is proven by the history of smoking where cigarette was invented to reduce the tiredness (Gilman, 1942). We all know that smoking cigarette as part of our daily life that can harm and cause bad effects to our health. This happened because cigarette is addictive, where the nicotine, which acts as the main ingredient, is a powerful and addictive drug that turns to be the major cause of this habit (U.S. Department of Health and Human Services [USDHHS] 1988, p. 9). Researcher find that these three issues are related closely and hope that findings from this study would introduce the new technique of cinemagraph towards the Public Service Announcement (PSA) on smoking habit campaign in a new level of the industry in Malaysia, as well as helping to reduce the rate of smoking habit with the campaign. It seems to be the perfect timing for the campaign to get new breath of enhancement as reported by Utusan Online 2011 stated that anti-smoking campaign in Malaysia as a failure project that none of the objective help smokers to stop smoking. Therefore, this study enables the researcher to explore the new technology in order to make the aim of introducing the technique to a higher stage becomes successful.

3.0 Research Methodology

3.1. Sample and Procedure

A quantitative research methodology was utilized to collect the data. To validate the scale, a pilot survey of 38 respondents consists of female and male was conducted, both of them were selected randomly. The respondents comprised of individuals between 19 to 25 years of age, which is the target sample of the study. They are mostly Malay as it is thought that the Malays are the most highly rated in the ethnicity category for distribution of adults research section (Gats, 2011). The questionnaires were personally hand-delivered after a brief explanation at the beginning of the session regarding of what this survey was all about. The session ran for 30 minutes in a random classroom. The self-designed measurement was initially done in Malay language and it was translated into English for the final distribution of the questionnaire. Responses were captured in a 5-point Likert scale anchored by 1 as ‘strongly disagree’ to 5 as ‘strongly agree’. Demographic information on age, gender, race, marital status, education, and location background were obtained by asking participants to select appropriate category.

3.2 Measures

The self-developed measures include three (3) variables which consist of 43 items, six (6) items are on the 1st section which evaluates the demographic profiles, nine (9) items are on the 2nd section which focuses on smoking habit, and the rest of the 27 items are on the 3rd section, which are divided into three (3) phase where the 1st phase contains eleven (11) items that evaluated the Cinemagraph technique. The 2nd phase contains eight (8) items on Public Service Announcement (PSA) in general while the 3rd phase contains the same eight (8) items, which look at the use of Public Service Announcement (PSA) with Cinemagraph technique. The 3rd phase was run only after the respondents were explained and shown the related material on screen. The data was quantitatively analyzed using Statistical Package for Social Science (SPSS) Version 17. In order to validate the self –developed measures, several analyses were performed including Exploratory Factor Analysis, Reliability Analysis and Bivariate Correlation Analysis. These analyses were conducted to assess the reliability and validity of the measures besides identifying the number of factors that emerged from the variables reflecting the Theory of Reasoned Action. Meanwhile, a *p*-value of 0.5 was employed to determine statistical significance.

4.0 Results

4.1 Exploratory Factor Analysis

Examples are studies in which the used consist of a lot of questions (variables) and studies in which mental ability is tested via several subtests, like verbal skill tests and logical reasoning ability tests (Darlington, 2004). The observable variables can be clustered into factors, each reflecting an underlying property that is generally shared by a certain group of variables (Hair, Babin, Anderson, Tatham & Black, 2006). For ease of interpretation of the factors obtained, the researcher restricted them into three (3) main factors instead of eigenvalues of more than 1. The three (3) factors solution is clustered into Factor 1: Cinemagraph Technique; Factor 2: Public Service Announcement (PSA) in general, and Factor 3: Public Service Announcement (PSA) with Cinemagraph Technique. The three factors displayed an acceptable limit factor loading of 0.50 or more (Hair, Babin, Anderson, Tatham & Black, 2006) for each item. Based on the results of the exploratory factor analysis, it is demonstrated that all items (27 items) are clearly defined and logically associated with their factors. Meanwhile, based on the rotation squared loading, the three (3) factors solution has a range of eigenvalues of 3.16 to 4.16 that accounts for 42.78 percent of the variables explained. The analysis of the structure is presented in Table 1 : Exploratory Factor Analysis.

Table 1 : Exploratory Factor Analysis

Factors	Factor Loadings
Factor 1 :Cinemagraph Technique	
Cinemagraph is an interactive technique that can create an interesting contents moving in the photo.	.42
Cinemagraph has an element of emotion that can attract viewer’s attention.	.32
Cinemagraph will be the next future in advertising replacing the current poster ad with electronic advertising.	.53
Cinemagraph will be seen as one of the ways to save and reduce the mount of papers that are used to produce printed poster ads.	.38
I can see the interactivity of the contents through this technique.	.51
I prefer this technique compared to the poster ad.	.52
I can see the movement of the content through this cinemagraph technique.	.45
I don’t think this technique can give any advantages to the public.	.08

I cannot see the future of cinemagraph technique in Malaysia for the next 10 years..	.31
I can see the content of cinemagraph to be High Definition (HD)..	.55
Whenever I see the ads, moving images attracts me more rather than regular still images ads..	.18
Factor 2 : Public Service Announcement (PSA)	
I understand that PSA campaign is to deliver specific issue or cause, with valuable information with could affect life positively.	.61
I can understand clearly the message that contains in the PSA campaign.	.50
I can easily find PSA campaign whenever I go.	.41
PSA campaign should be given new breath of future and current concepts of idea..	.55
PSA campaign in Malaysia is better than other country in Asia..	.19
I often see or hear anti-smoking messages on television, radio, billboard, poster, newspapers and magazines..	.46
I am aware of warning sign posters and it gives me influence on how dangerous smoking habit is..	.41
I think that the posters on stop smoking campaign affect my smoking habit.	.43
Factor 3 : Public Service Announcement (PSA) with Cinemagraph Technique	
I am familiar with campaign A..	.47
When I saw both campaigns, my eyes are more attracted to campaign A.	.50
When I saw both campaigns, I can see the movement made by the technique in campaign A.	.27
When I saw both campaigns, campaign B grabbed my attention at first.	.47
I think campaign B is more effective in delivering the messages.	.55
I can see the interactive elements in campaign B, but should be improvise	.35
I want to see more of campaign B in future	.24
I think, campaign B can be seen in social media apps, electronic LED billboard, website, apps in mobile and other suitable sources in future.	.35

4.2 Reliability Analysis

Reliability analysis is the situation in which a scale should consistently reflect the construct it is measuring (Field, 2006). The purpose of conducting a reliability analysis is to examine the consistency of the results achieved by the same participants in the same repeated measurement, and the higher the reliability of the measuring procedures is conversely, the less consistent the results are the lower the reliability (Whichard, 2006). Cronbach Alpha of 0.70 was used as the benchmark in accessing the reliability measures. A satisfactory level of reliability depends on how a measure is being used, thus a minimum value of Cronbach Alpha .70 as suggested by Nunally (1978) is considered as a sufficient value in determining the construct reliabilities of the measures. A reliability analysis was conducted on the (3) factors solution. Based on the reliability analysis results, 2 from the 3 factors displayed construct reliability of more than .70 and only one factor at 0.69. Factor 1; Cinemagraph Technique which consists of 11 items accounts .72; Factor 2; Public Service Announcement (PSA) in General which consists of 8 items scores.7.4 and Factor 3; Public Service Announcement (PSA) with Cinemagraph Technique which consists of 8 items also shows a .69 of Cronbach Alpha. The high values of Cronbach Alpha from these factors (i.e., more than minimum value of 0.70) display that the measures are consistent in measuring what it is supposed to measure Meanwhile, the variance explained of the three factors accounts for 17.28% (Factor 1), 9.96% (Factor 2) and 10.70% (Factor 3), while standard deviation ranges accordingly from 4.15, 3.15 and 3.27. Table 2 shows the results of the reliability analysis from the three (3) factors.

Table 2 : Reliability Results

Factors	Cronbach Alpha (α)	Variance Explained	Standard Deviation (SD)
Factor 1	.72	17.28%	4.15
Factor 2	.74	9.96%	3.15
Factor 3	.69	10.70%	3.27

4.3 Correlation Analysis

The correlation analysis results showed that the dimensions of each factor are not appropriately correlated as their correlation coefficient are illustrated by low to moderate scores indicating that these measures are designed to measure the conceptually different but related constructs. Indeed, the differences in the profiles between two or more groups are also found to be statistically significant. The differences between factors are stated in Table 3 below, where it shows the Factor 1 is significantly different from Factor 2 at the rate of $p < 0.05$, while Factor 1 and Factor 3 shows that the rate is in $p < 0.01$. However, between these two factors that are Factor 2 and Factor 3, there is no significant difference. However for Factor 2 and Factor 3, they are measuring almost the same but related concepts. Therefore, these indicate that some of the measures of these two factors need to be dropped as they demonstrate a low factor loading.

Table 3: Correlation Analysis Results between Factors

	Factor 1	Factor 2	Factor 3
Factor 1	1.000		
Factor 2		0.405*	1.000
Factor 3	0.438**	0.212	1.000

p<0.05,* p<0.01

5. Discussions and Implications

This research aims to introduce the technique of cinemagraph in the creative industry in Malaysia through the Public Service Announcement (PSA) of anti smoking habit campaign. Findings from this study provide an evidence of the validity of the scale in measuring the acceptance of new technique cinemagraph through the PSA anti smoking habit campaign in Malaysia. Results from the exploratory factor analysis and reliability tests demonstrate that all three (3) dimensions of Cinemagraph technique, Public Service Announcement (PSA) in General, and Public Service Announcement (PSA) with Cinemagraph technique are appropriate in measuring the acceptance of the new technique of cinemagraph through the Public Service Announcement (PSA) on smoking habit campaign in Malaysia. Previous articles found that the PSA anti smoking campaign in Malaysia is a failure project (Utusan Online, 2010) and also the rate of smoking habit in Malaysia is still at high level especially among young adults (GATS, 2011). Thus, there seems to be a strong relation between these two sources for making this research a reality. This study also identifies that exposure about the format is still at a minimum level, which may give this research's arguments more reliability, thus the researcher can proceed with more findings and dig in with lots of new search about this technique in future, and can share with related parties on how to develop this technology in the creative market platform. Result from the reliability tests also shows that the knowledge of Cinemagraph technique is reliable and consistent in accessing the exposure of the technique among public who are new about this. The reliability coefficient reflects the effectiveness of the measurement instrument (Nunnally, 1978). The correlation analysis also proves that the self-developed measurement is relatively accurate in accessing conceptually different but related constructs that were identifies from the theory. The instrument is useful in collecting data that can be used in several processes, for example to examine both exposures about the technique if they are tested with some target group. In addition, it can be used to prove how far the effectiveness of the cinemagraph's contents, which are, equipped with the related technique that might have influence the lifestyle among users. Hence, the local creative team can plan their project, which includes the cinemagraph technique, which can suit the current trends. The creative industry locally nor overseas has developed thousands of powerful ideas each second to build stronger and powerful material as part of the medium in communication regardless of whether it is used to send information, sell products or promote services and others to the users. With the right approach and creative idea, the creative industry can gain profits besides promoting the technique as a part of the platform for both national and foreign market.

6.0 Conclusions

New media is spread through live feeds faster than ever in the current technology era. Following these updates, users always want better and faster updates about news and information through the feeds at any time. Advertising and social media are related closely where they help to deliver the message to the user besides gaining the profit from it. Additionally, the technique been use is one of the most important things on how to captivate the user's initial attention. Though this study focuses on the scale validation, future research may investigate other related topics such as the perception of public according to the gender, the effectiveness of campaigns without the new technology and so on. Results from the analysis display that the self-developed measures are appropriate to be applied in accessing the perception of public towards the campaign. Hence, this study has somehow indicated that the introduction of the technique of cinemagraph in the creative industry will not only bring the industry a step forward, but also will become one of the ways in making profit to the related parties. Thus, with the new enhancement of technology, this technique will promote sustainable technology and will create paperless environment.

7.0 References

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