

# DISCOVERING DIGITAL SIGNAGE SYSTEM OPPORTUNITIES AS CROWD ATTRACTOR IN PUBLIC SPACES: A STUDY IN *CHARGE GRATIS* SERVICE

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## ABSTRACT

*Article presented a research about the "Charge Gratis" service that included digital signage, along with free charging device as the crowd attractors in the public space. The main focus of this research was about media display embedded in the uniform of a sales promotion person who displays ads from the advertiser using the qualitative method, through the interview with some expert sources many fields. Article described several possibilities that can be worked in the use of digital signage so that it can be used as a reference in maximizing digital signage in public spaces. It finds that Digital signage is not just functioned as like any other media, but also the awaken interaction and also enhance shopping experiences. The expert sources divide this media display functions into three categories, which is a media information, media entertainment, and media education.*

**Keywords:** digital signage, crowd attractor, public spaces

## INTRODUCTION

Nowadays, the mobile phone cannot be separated from our life. It has become a primary need for most people. We can say that every adult has a mobile phone and not to mention those who has more than one. A mobile phone operating system which embedded in our cellular phone is constantly changing, from a feature phone that is just used for calls and short text to the rise of the smartphone that grows to the society needs. The number of smartphone users in Indonesia until 2012 reached 20% from 220 million mobile subscriptions in total 240 million populations. Table 1 shows the regional snapshot of mobile phone users.

Table 1 Regional Snapshot

Country	Population	Total number of mobile subscriptions/subscribers	Percentage of mobile penetration	Number/percentage of smartphones v/s feature-phones	Average ARPU	Total number of internet users	Percentage of Internet penetration	Number/percentage of mobile Internet users
Indonesia	240 million	220 million	92%	20%	IDR 23,238	55 million	23%	29%
Malaysia	28,7 million	35,7 million	124%	27%	RM 45	17,5 million	61,7%	10 million
Philippines	103 million	90 million	~99%	20/80	US\$ 5	30 million	30%	20%
Singapore	5,14 million	7,79 million	150,4%	73%	US\$ 35,4	9,43 million	183,5%	8,11 million
Thailand	67 million	77 million	115%			25 million	37,3%	1 million
Vietnam	96 million	180 million SIM card sold, with over 60 million active	~60%	<10%	US\$ 4-5	30 million	~30%	Estimate: more than half

Source: (Rao, 2012)

The increasing activity from the mobile phone in daily use is causing battery life problems that become easier discharged. The *Charge Gratis* service is the subject of this study that appears as an idea after observing the phenomenon of many mobile phone users in the world market and the high level of mobile phone consumer dependence, especially in the dependence on the charging device for their mobile phones. The high dependence factor is increasing when they use mobile phone outdoors, particularly in the outdoor event they are attending that causing cell phone batteries run out quickly. If the event attended by thousands of visitors all at once, it causes signal seizure and battery easier discharged. It means that users of mobile phones often run out of battery power, especially when it is in an event.

Advertising and promotion should be planned with a mature strategy in doing this *Charge Gratis* service. Through the right approach, the customer can be reached in specific places that allow reaching certain segments at a specified time. The crowd is money field for the marketer or advertiser. Through the crowd, their advertising or brand may be known by the consumer. They will try to put out the effort and resources to create a crowd, which is known as crowd attractor.

*Charge Gratis* service is one of the crowd attractor ideas that provides free mobile phone charging station in an event. It is presented by charging officers (power man/power lady) that using wearable advertising and mobile charging jacket. Osterwalder, et al (2010) has stated that receiving something free of charge has always been an attractive Value Proposition. Any marketer or economist will confirm that the demand generated at a price of zero is many times higher than the demand generated at one cent or any other price point.

Therefore, *Charge Gratis* (free charging) service can be functioned as the crowd attractor and engagement that needed by consumers as it has a lot of demand in an event. On the other hand, to earn revenue from the advertisers, the *Charge Gratis* provides advertising space for brands that use this service that also can be shown by the logo brand on the front side of the uniform and digital signage content in the back of the uniform as the brand promotion. This service is merging the needs of consumers for charging devices, which can be accessed in public spaces for free. The needs of advertisers to display ads that attract consumer instead of just passed.

Advertising and promotion to the right target requires proper approach that matched with the target market to get the expected response. Less precise approach is not only getting rid them of the brand, but also has potential to raise consumer antipathy towards the brand or product that the image is being constructed. The cognitive response approach is the approach most widely used by marketers to find out how consumers react to the messages conveyed and how these reactions affect attitudes toward advertising and the brand as well as the desire to buy. Figure 1 shows the model of cognitive response of this service.

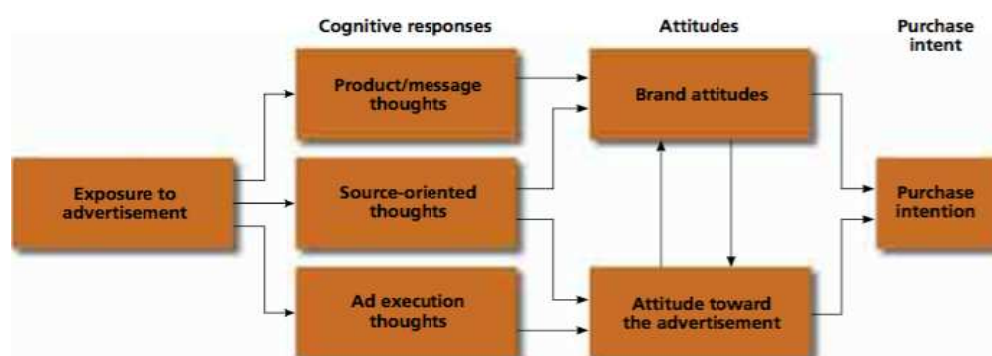


Figure 1 Model of Cognitive Response  
(Source: Belch & Belch, 2008)

As seen from the Figure 1, one of the three categories of cognitive consumers reactions arising from marketing communication activities conducted by marketers is source-oriented thoughts that mentioned by Belch, et al. (2008) as the recipient reaction that is affected by the image of the information source side. A positive reaction would come up if the consumer likes the people who represent the products or services that are being communicated and vice versa. This cognitive reaction will affect consumer positive and negative behavior both towards advertising and the brand itself. Belch (2008) has said that the attitude toward advertising is a tendency to give a reaction that is good or not good for an ad at certain times.

*Charge Gratis* is trying to build a positive response from consumers that is starting with understanding the needs of consumers. In this case, the absence of power source around the consumer for charging their device and then they try to fill those needs through the movable charging service that can be around them. This service provides added value as free service, and the cost is charged to the advertiser. Through this service is expected many consumers feel assisted by the helpful character that embedded in any sales person that carry the service.

This helpful image is aimed at forming the positive source-oriented thoughts as the cognitive reaction. The sales person that carries advertising as a source of information directed to provide services to match the needs of charging for free, or need information about the products or services offered by the advertiser. The feeling helped itself taste of consumers is needed so that the image of a product, service or even a brand of advertisers into memory gives a positive impression on the consumer.

One of the components in *Charge Gratis* service is the media which is a digital signage display that ads from the client. Digital signage is displayed at the back of the uniform sales person offering information, products or services from advertisers. Digital signage is a communication tool that can appear in varied dimensions, ranging from the digital photo frame size that displayed in the living room, up to the form of a digital billboard. Digital signage is designed to have functions can be used to display the flight schedule, internal information in an educational institution or display the latest new mold in a bookstore outlets. It can be a LED or plasma screens, touch screen devices in a booth or kiosk, or even gadgets private property. Kelsen (2010) has described digital signage as experience medium, a place that engages people in the experience. The power of digital signage in the future is the capacity to engage and connect with anyone, anywhere, anyhow, anytime.

The use of the network and mobile devices in relation to the screen display will form a new arrangement of connectedness between media, messaging, and users. Digital signage, such as mobile devices, is allowing the audience to be present in the places where they want to attend. Digital signage is a technology that has the potential to meet the audience in their own environment with the right message at the right time. (Kelsen, 2010).

Since the film technology was started about 120 years ago, the communication evolved very faster than before. The silver screen is known as the first screen, and after that, the development of it is very rapid. It was beginning of something new, then became entertainment, a source of news, information, propaganda, and advertisements only in the first decade. Half a century later, it came to the television as the second screen that could provide a more intimate message in the family room. 40 years later came the third screen, which was a combination of two types of technologies; the personal computer with the appearance of the Internet in 1995, which is the first time people have the screen that allows them to see the information they want at any time and in almost any place suitable for them. Technological advances continued with the advent of the mobile phone that moves very quickly. It becomes the most personal screen until in 2002 the technology 2G, 3G and Wi-Fi appears. The mobile phone takes over as the 4th screen, which allows everyone to access information anywhere and anytime. Everyone is possible to communicate with one another, either providing information or selling. Even though those devices cannot fill the gaps in communication networks, there are even

some people who go every day without any of the previously mentioned screens that can convey messages from marketers' employers or other agencies to inform the guide or something that affects decision making. Figure 2 and 3 show the first screen and fifth screen.

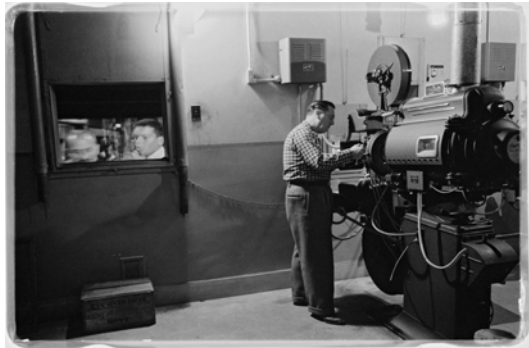


Figure 2 Cinema as the First Screen  
(Source: Trikosko, 1958)



Figure 3 The 5<sup>th</sup> screen, Digital Signage  
in Times Square  
(Source: Levitt, 2014)

The combination of various technical problems allowing digital signage become the new screen that can be found in all places where the absence of four other screens. Start from checkout screen in a shopping center or the screen of a company and institution that can be used both for educational marketing, retail and employee communications environment. Kelsen (2010) has put digital signage in the category of the fifth screen. This fifth screen that creates a visual connection with the important message conveyed in the other screens that we face every day.

Here is the first time there is a screen that fits with what consumers want to see and interact. Digital signage business is in line with the consumer experience, destination, and thinking pattern. It is the right combination for advertisers and consumers. Through digital signage, then comes new communications media in the information, communication, marketing, and entertainment. Just like Laurel (2013) has said in *Computers as Theatre*, "Think of the computer not as a tool, but as a medium" can also be applied to the 5th screen, and so did the others. Kelsen (2010) has called the presence of digital signage as the birth of new media, not just a medium of communication, but also as a medium of experience and a vehicle for involving people in new experiences.

*Charge Gratis* service is another form of digital signage which is also the 5th screen. Through a combination with another device, such as a free charging service while overlooking ads served by a sales promotion sales promotion girl or a boy, it becomes a new media experience that invites people around them to try this new experience. Based on its approach, *Charge Gratis* consumer activities are using their waiting time while the device was in-charge. It is categorized by Kelsen(2010) as a "point of wait networks" in his classification as one from three types of digital signage networks, together with "point of sales networks" that intended to appeal consumers while making a purchase at the cashier for example, as well as "point of transit networks" that designed for customer on the streets that is on the way or in a shop window.

The merge of consumers needs when the device runs out of power with the charging service that they can access freely. It creates the helpful image in clients' mind, so the messages in digital signage can be received with more positive response. The utilization of media display can be expanded over time later, starting from augmented reality, flexible displays, and other innovations. Experience creation for the sake of new experiences makes the clients have unlimited ways to approach customers.

## METHODS

In this article, the researcher uses qualitative method through the interview with some expert sources many fields, as the research took place. It is recorded from their respond to the display used in the service Charge Gratis, whether related to the current conditions, as well as the possibilities of its development in the future. These data are all the perspectives from the experts working in the surrounding areas of multimedia, both regarding marketing and technology.

The subject interviews are four sources experts, which is a Kompas journalist that has covered the event that is attended by *Charge Gratis*, a director of Dasa Communication that often does brand awareness, a commissioner from diverse businesses around multimedia that is also a practitioner as well, and a director from business activation game console.

## RESULTS AND DISCUSSIONS

All of the sources are expert in their field, and researcher gives the same question to the expert that interviewed. As written down, here are the following questions and answers submitted to the interviewees that can be seen in Table 2, 3, and 4. In Table 2, the sources are asked about the ideal placement of the media display to deliver material.

Table 2 Ideal Media Display Placement based on Expert Resource Perception

No.	Respondent Name	Status	Responden Answers
1.	Heru Sri Kumoro	Kompas Newspaper Reporter	Placemark is quite comfortable. Users are more interested in their charging activity, or communicate between users than watching the media display systems.
2.	Sam August H.	Director of Dasa Strategic Communication	The placement has been fit enough in terms of eye direction, aesthetic and physiological aspects for the bearer of the display media. If too upwards, it may interfere with the view to the stage, for example.
3.	Soni Wibisono	Director of artnfx & A-Box Activation Game Console Founder	From the considerations to ergonomic of the bearer, it should be somewhat upwards, so it is not overburden the lower back.
4.	Benny Capella	Director of A-Box Activation Game Console	No Answers.

(Source: Anam Fathoni)

Based on the answers from Table 2, two respondents said the placement is quite ideal, because if it is too high and it will disturb other people, but if it is too low are less visible. While in Table 3, the sources are asked about the comfortable dimensions and size of the media display to deliver material.

Table 3 Ideal Media Display Size based on Expert Resource Perception

No.	Respondent Name	Status	Respondent Answers
1.	Heru Sri Kumoro	Kompas Newspaper Reporter	The size is quite ideal When resized would be disproportionate.
2.	Sam August H.	Director of Dasa Strategic Communication	The current size are fit, if it's too big are worry to become unattractive, if smaller may not be visible message. More important, the designs had to distract first (awareness), so users are interested to see (interest), are keen to try (desire), included in the system (action) in measures that are relatively short.
3.	Soni Wibisono	Director of artnfx & A-Box Activation Game Console Founder	In order that messages can be read, it should take at least 10 inches, slightly larger from the currently used media (iPad) measuring 9.7 inches.
4.	Benny Capella	Director of A-Box Activation Game Console	The size is still too small, it is feared to become illegible from a distance that is expected to be visible message.

(Source: Anam Fathoni)

Based on the answers from Table 3, two respondents have believed that the size is sufficient with consideration if it is changed again, it would be disproportionate or if the size is enlarged, it will become less interesting and if less feared to be not visible. While the two other respondents have stated that the size is too small with the legibility reasons that the minimum distance to make the display legible for 1 meter upwards, so the screen size supposed to be 10 inches or more.

In Table 4, we can see the responses of the sources that being asked about the material and content that will get more attention to put on the display.

Table 4 Media Display Exploration based on Expert Resource Perception

No.	Respondent Name	Status	Responden Answers
1.	Heru Sri Kumoro	Kompas Newspaper Reporter	<b>Interactive Game</b> The content color is supposed to has more contrast opposite to the suit or wardrobe, for example using complementary color or different value. Need to add audio, to clarify the material further, especially when the lighting is very bright or the display exposed under the sunlight.
2.	Sam August H.	Director of Dasa Strategic Communication	To create a system that distract <b>Awareness</b> , so keen to see and build <b>Interest</b> , up to curious enough to try / <b>Desire</b> arises, until <b>Action</b> happened to get into the the service system. Interactive games, quizzes and stuff, with a simple step, easy to follow and there is an element of surprise that attracts people around, with gifts that creates the next interaction. Interaction with the artist through the media display, then call the people corresponds to the name for those who are logged in. All activity which expand the database for the client that will be used as the consideration in determining the program.

Table 4 Media Display Exploration based on Expert Resource Perception (continued)

No.	Respondent Name	Status	Responden Answers
3.	Soni Wibisono	Director of artnfx & A-Box Activation Game Console Founder	<p><b>As the media information:</b> Able to informations from the time, weather, traffic jams, or even streaming CCTV conditions in the exhibition that may be displayed in Media Display and spread via social media.</p> <p><b>As the entertainment media:</b> As the objective or game target. Display with CCTV, to record the expression of the attendants, which then displayed in larger screen in order to attract more people. Fashion display for client brand/service promoting/activation.</p> <p><b>As the media education/teaching aids:</b> Interactive games, for example in the event of dairy products, looking for molecules, vitamins, etc.</p>
4.	Benny Capella	Director of A-Box Activation Game Console	<p>Can be used for activation in events or a concert. <i>Activation Bundling package</i> that may fit into the concert even for example, as most sponsors usually encounter activation distraction, when they are doing activation in the event. Video streaming can be used to develop an atmosphere at the concert, so people outside could feel what visitors feels in the concert. As the eyewitness, utilizing visitors lifestyle, that answered narcissistic needs and always connected, eg photo booth who connect with social media such as Path, Facebook Twitter, or video conferencing for communicating or even live chat between visitors through the media display from the sales person to another sales person that bring the media system.</p>

(Source: Anam Fathoni)

Based on the answers above, there are 6 respondents choosing interactive games, 6 respondents chose the streaming activities within the event, 4 respondents chose tweet or comment on social media, 4 respondents chose live streaming the same event but elsewhere, 3 respondents choose augmented reality, and there are several inputs such as the ability to submit new songs for other people, other events from client service providers such as simPATI/Telkomsel, and also information promos.

Wibisono explanation amplifies what Brakus & Alamanos (2013) said that digital signage could have two beneficial effects for a retailer. The first effect is the communication effect, the cues contained in the broadcast messages evoke specific experiences in customers that, in turn, positively affect the attitude towards the advertiser and consumers' approach behavior. This is especially true if the messages contain affective or a mix of affective and intellectual cues. Second, digital signage has an additional 'umbrella effect'. That is, it enhances the shopping experience (note that we told our respondents that the study 'concerned the shopping experience') which in turn, results in an increase in intended spending (the umbrella effect).

## CONCLUSIONS

Digital signage is not just functioned as like any other media, but also the awaken interaction and also enhance shopping experiences. It is concluded from diverse answers about media display exploration. The expert sources divide this media display functions into three categories, which is a media information, media entertainment and media education.

As the Information Media, it can inform time, weather, traffic jams, and streaming conditions in the exhibition/CCTV. And also to spread information through social media, who will be displayed in the Media Display as well. As the entertainment media, it can be a shooting game, which the

display can be functioned as the game target. The triggered game from the mobile phone can be added wi-fi that the radius is set, so there is a link between users with screen media display which brought the media system, in other words, to pass the game, the customer supposed to be around the media system. The display can also mount a camera as well to record the expression of curious people around, which then displayed on a larger screen such as LCD projectors in other places, in order to attract more people. The focus in the future can be towards fashion display to promote or activation from the client's brand or service. So that the display media may be a trigger or activate people to do something who associated with the promotion. While as the educational media, it is interactive games. For example in the event of dairy products, looking for molecules, vitamins, etc.

The augmented reality is a bit difficult to use because it requires people to stay in place to activate it. Besides attractive for the users, media placement like this can be developed into diverse functionalities which can be customized to the needs of users who use the media, as well as the needs of the advertiser or the client who pays the Charge Gratis service.

Considering from now, even the media using the iPad (solid rectangular) can be explored into many functionalities, along with technological developments, such as flexible LED that have more better resolution; we can say that when the technology is applied to media placement. It will have limitless possibilities that will continue to evolve along with the user needs that can be utilized as the client's crowd attractor.

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