Gamification's effect in Social Media on CSR activities

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Abstract— **Social Media Marketing is to create brand awareness to the target audience. Many Corporate Social Responsibility (CSR) is using social media with the aimed to distribute information widely and reach more participant. However there is some concerned with budget, participation and other factor that involve which might lead to not enough participant to keep the project on. In order to respond, a gamification method is use to develop the content and process to increase participation. The result shows that the content that developed and using gamification in the process has increase the participant more than triple of regular content. This fact shows that gamification can be applied into social media content and process which increase participation of CSR project.**

Index Term—**Gamification, Corporate Social Responsibility, Social Media Marketing, Participation.**

I. Introduction

In the present, social media such as Facebook or Twitter has become a part of daily life. Different people have different intention of using the social media. Some of them use for entertaining while other might use for business. This has create a new business opportunity for e-Business online. More over Thailand economy are step up to Thailand 4.0 that change economy structure to value-based economy that is driven by innovation and technology. The concept of Thailand 4.0 is to do less but gain more through innovation and technology. One of the five field that government concerned and support is Digital Technology and Internet Industry which is Creative and High-Value Service Industry. Many people and organization that see the opportunity have use social media in marketing. Statistically the number of Facebook users have been growing since 2015 from 17.57 million to 21.94 million in 2018 and was predict that it will grow to 25.13 million in 2022 [1]. This growing number of users show a potential market that organization or company can target in marketing their service and products.

Even there are more than 20 million users of Facebook online and active however to develop content that suit the users included in the potential target group due to various reason such as no purpose behind the content, inability to deliver the message, lack of tactical digital marketing, etc. Sometime the content may get drowned by other online content. Due to that many businesses want to promote and get the target customer attention which might release the content nearly the same time. This make the content to be in the position that might not reach the customers at all. Moreover, online marketing content might not be interested to the users. Many website that sell the space for commercial have shown advertisement which sometime can make users feel inappropriate or annoying and result in closing the Ads immediately. As a result, the company not only have to develop the service and product to complete with competitor in the market but also have to make the content that would draw attention as well in order to deliver the message to the customer.

One of the selected Solution is to use Gamification Method in social media marketing. Gamification is to apply the gaming method to the activity which resulted in increased participation and also creating entertainment for the user. The purpose of this research is to study and apply Gamification Concept to Social Media Marketing. Its aim to help increase participation to the online content which can resulted in more customer to the business and also a guideline for Business Company to use in develop online content for social media market.

II. LITERATURE REVIEWL

Social Media Marketing can be describe as using social media network to create brand awareness and booting website traffic. To achieve such purpose the content needs to be unique in order to attract more attention [2]. The content can be created in various forms that suits the company and target customer. The advantage of using social media marketing are [3]:

• The content can reach a large number of people and can be accomplished free of charge.

• The traffic of the website can be increases through social and business networking which can increase page rank and search result.

• The social network can be integrate with paid advertising to increase the performance.

• The credibility can be increase and verify by others participating which can help increase trust.

• There can be social interaction and interactivity among users in the social network. This can help increase the awareness and participation in the site.

• The social media contains user profile which can help target and direct the content to specific users to increase effectiveness.

• There is also a drawback on social media marketing as well if not manage properly. The disadvantage of social media marketing include [4]:

• To develop content or manage the social media marketing can be time consuming. This is because the admin need to response on the comment or question from many users online.

• There can be trade mark and copy right issue due to the content online might be copy or duplicate easily. So competitor might duplicate the idea and implement it to be better than original.

• The trust issue still a main concerned in social media. Due to the content and users are online, sometime it is hard to trust the content that was create whether they are legit or not.

• Negative Feedback that might be given by various users in social media. The feedback can discredit the company whether the feedback content is true or not. The content in social media can spread very fast and reach many people.

Even company can gain more benefit through the use of social media marketing. However it is not easy to accomplish due to time consuming and issue that might occurred with the content. The content might be copied and duplicated or might face copyright issues. Many people still might feel that the content might be a junk content due to trust and feeling. Moreover, competitor might give negative feedback which affect the company's reputation.

The content in Social Media also plays an important role and becomes leading marketing technique [5]. The content developed by using the consumers' point of view to build relationships by engaging content. Several research states that the content in social media becomes acceptable to users more than an advertisement [6][7]. This might be result from the content was generated by common people similar to user so they feel like realistic more than content from the company that might be farfetched. As a result, the new strategy for company to create the content in social media is focusing on identifying what type of content will be interesting to the relevance group of target audiences [8]. In order to accomplish that the company needs to study the target group on what kind of content (i.e. photo, graphic, or video) is suitable to the group. However, even through the study and developing the content, it might still not interactive or engaging audiences as it should be. The company will face a problem that invest on the research to study the target audience and spend money on develop the content but the content might not reach enough audiences as it should be. So a method to get audiences to interact and engage with the content is still needed to increase the content interest.

Gamification is a method that applied gaming concept to the process or activity to motivate the participant in order to increase participation or engagement [9]. The gamification can be applied in various ways which converts regular activity into a game that participant can enjoy such as applied to education to create game based learning [10]. The concept of gamification are:

• Game Mechanics: Applied the game mechanic to activity such as point, leader board, prize, reward, etc. These will stimulate participant thus increasing engagement and involvement among the participants. The prize system will get participants attention. The participant will engage with the activity in order to get achievement. The achievement from game mechanic is not only for single participant completion only but can also be achieve through competing with others.

• Experience Design: Designed the activity into a game including the story, how to play, space required, format of the game so the participant can experience and feel like playing a game. If the activity is well design this will make the participant feel like he is a part of the activity thus will increase engagement of the participants.

• Digital Engage: Develop participant attachment with the device during the process or activity in order to complete the goal. The time requirement for game completion is vary. Some of activity might take less time for completion while other might take longer. In case of the long activity, the device or tool that required might be an issue due to participant will have to get familiar with it which can take time to learn. So it should not be complicated or otherwise participant might feel it is hard and will be uncomfortable through the rest of the activity.

• Motivate People: Through the game mechanic participant will be motivate to complete the activity or task. The participant will be motivate to come up

with the new idea or innovation in order to complete the task.

• Goals Achievement: the game mechanic can guide or support participants to complete the goal. Some part of the task or activity might be complicate or confusing which might give the participant hard time to complete it. The game mechanic need to have the support of help system that can guide the participant to task completion.

• Gamification can be applied in various way to create the task or activity that is more engaging. Such method can be applied to develop the content that can draw audience's attention and willing to follow and result in increases participation in social media marketing.

III. METHODOLOGY

The content for social media marketing will be develop based on Gamification concept to make the content more interesting with the aim is to increase participation of audience with the content. The component of Gamification that used to applied in developing the content are:

• Game Mechanics: Applied the prize system to social media marketing. The content will be developed in a series with 3 chapter and will range around 2 to 2.5 minutes. Each episode of the content the audience will gain medal when complete the activity. Also the audience will earn the point in each episode to get the reward. The reason that use both medal and point for game mechanic is that the audience will gain immediate reward to point system which will make audience realized that they can gain something after the participation. The medal system plus point system will gain the bigger prize reward. This is to increase and keep the audience in participation. With the social media that people can like and share, the number of

participation can also be increases.

• Experience Design: The content is designed in the story which divided into 3 episode to make the content enticing to follow. The content will explained how to participate so the audience will received all the necessary information from one source and also make the participant feel like he is a part of the activity and result in increase engagement. The flow of game mechanism is present in Fig. 1.

• Digital Engage: the digital engage is one of the crucial part because it is how to get the audience retention. It is to make the audience attached to the content and platform. From various research the content of the online add should range between 2.50-3 minutes any longer than that will lost the audience attention. Such the concept will be applied in the content of social media marketing as well. So the total time for audience involvement will be 3 minutes or a little more than that. Thus the process of involvement and to get the point or medal will make it not to complicate which the audience and complete the task by themselves.

• Motivate People: the content and process will develop to motivate audience to complete the task. The game mechanism that will be used on the social media is the activities of like, share, comment, and so forth. These action will be calculate and provide code which can be used to gain reward.

• Goals Achievement: the help mechanic will be provide in the research to help participant complete the goal which will be provided through help system. The online game system will be develop to support social media marketing which developed in the form of web based. The content that the audience view and complete the task in social media will earn them a point which will be trade into code to use with the online game.
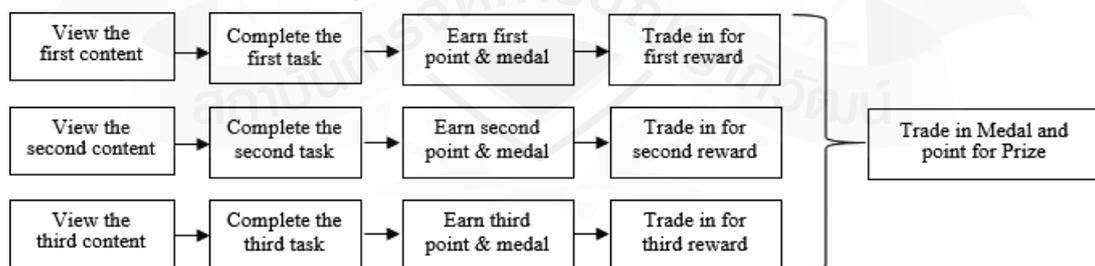

Fig. 1. Game prize and reward mechanism.

After audience received the content in social media marketing they will have a series of tasks to complete in order to receive the point. The game prize mechanic develop in flexible way which participant can earn some point even they are unable to complete the task. However for those that complete all of the

task will earn more point plus medal which can be trade in for reward and Prize. Once the task completed, participant can submit information to the system to verify. After the verification from the system the code will be generate and send to the participant to use in the game system.

IV. Experiment: A Case Study Of Social Media Marketing For Csr Project

The concept of Corporate Social Responsibility (CSR) is for the companies or organizations to act or contribute back to a society and environment. The problem that arise is that most of the time such news of CSR event spread on social media very quick and wide. However once it has been sharing sometime people forget about event and not participating such event. So many time that the event has many like and share but not many participating. So gamification have been adopted to develop the content to promote CSR on social media. In this research the content for CSR project developed into two types: the first one is just a regular ads that provide information of the project and the second one is the ads that develop by using gamification mechanism. Both of ads will be present to 10th grade high school student in different school that has the same CSR project and similar environment and test subject. The aims of the experiment is to study whether content that develop with gamification and using game mechanic can increase participation in social media marketing.

The target group of this research is 10th grade high school student one class (around 50 students) from each high school. The process is to presents the content of CSR project in the class though Facebook then see how the student react and participated.

TABLE I
Target group population

Name	Boy	Girl
High school A	24	18
High school B	20	24

The content for CSR project is to reduce the use of plastic bag in a VDO format. The content will be post and distributed on social network, in this study will be on Facebook. The ads content will be 1) Impact of plastic bag to environment 2) Reduce & Reuse the plastic bag 3) Garbage bank; turn plastic bag into profit. These content will be developed into ways: regular content that provide information and content that adapted gamification. Both content will concluded with like and share sentence for student to share the content with other to see how participant can be increase in CSR project that might not benefit them but benefit the community.

The VDO content will be release on the Facebook every 10 days. This is to give participants sometime to complete the task. Once the participants viewed the content and complete the task. They can submit the information to the system then the game system generates the code based on the level of completion for participant to use the code in the game to upgrade the character to complete the game.

The game system used information that participant submitted and generate code for participant to use in the game to develop character which they can complete with other online though the game system. There are two part of the information that requires; the first one is questionnaire about the content which randomly selected and the second one is the information that participant complete the task with. The game mechanic included the social network feature which participants can shares the game progress and result online to increase engagement and competition.

V. Evaluation

The evaluation of the research on increase participation through gamification was collect by questionnaire online through the game system and also through the data that collect on the social network. The questionnaire distributed to both target groups to collect the data for comparison. The questionnaire cover how the participant feel about the content, the engagement of the content, the participation toward the content, and so forth. The summary result for evaluation is in the table below.

TABLE I
Evaluation result from high school a (regular content)

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1) The content is motivate and make you want to engage in CSR project	0.00	4.76	80.95	14.29	0.00
2) The Flow and process is easy to learn	0.00	9.52	76.19	14.29	0.00
3) The content is engaging which you would like to continue playing	0.00	7.14	47.62	45.24	0.00
4) You feel like you are part of the content	0.00	0.00	47.62	52.38	0.00
5) The content make you want to share the content	0.00	0.00	35.71	64.29	0.00
6) Number of participant at the beginning					42
7) Number of share content					61
8) Number of like content					158
9) Number of participant at the end					69

TABLE II

EVALUATION RESULT FROM HIGH SCHOOL B (CONTENT WITH GAMIFICATION)

Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1) The content is motivate and make you want to engage in CSR project	0.00	50.00	38.64	11.36	0.00
2) The Flow and process is easy to learn	27.27	40.91	22.73	9.09	0.00
3) The game system is engaging which you would like to continue playing	43.18	45.45	11.36	0.00	0.00
4) You feel like you are part of the content and game	25.00	45.45	27.27	2.27	0.00
5) The prize/ reward system is motivate for completing the task	47.73	43.18	9.09	0.00	0.00
6) The content and game system make you want to share the content	59.09	31.82	9.09	0.00	0.00
7) Number of participant at the beginning					44
8) Number of share content					148
9) Number of like content					237
10) Number of participant at the end					141

From the evaluation result and collected data it can be clearly seen that use of gamification (in High schoolB) can increase the engagement and participants. The engagement is increase through like and share which result in number of participants at the end of CSR project increase more than triple through gamification. As for result from questionnaire, the result is in the range of agree to strongly agree with gamification.

The content developed with gamification concept result in 50% of participants found that it is motivate and want to engage in CSR project while only 4.79% only found motivate and want to engage in regular content. This is because the content develop with gamification create the story that give participant and experience that they are part of it and the game system make the content very interesting. Participants want to participate and learn what they will get as prize or reward.

The game system is also major contribution in which make the participant want to participate and continue with CSR project. From the result it can be seen that just content alone participant feel more on the neutral range with CSR project. This is because participant feel like it is a one way communication which no interaction between participant and content at all. However with gamification participants feel like it is more interactive the content was develop and link to the game which make participant eager what to learn, what are the mission and what prize will they get.

By involving social network feature such as like and share to the game system help increase the participants. From the data collected from gamification method, at the beginning when the first VDO is release 38 high school student like and share the content within an hour. After 24 hours, there are 79 likes and 63 shares of the content. By the end period of the first campaign, there are 132 likes and 99 shares. The number of participant is increasing in each content and game campaign and finally at the end of third campaign there are 237 likes and 148 shares of the content. The period of the campaign show no significant change to the result. The number of participant did not increase in the campaign with longer period of time. Participant trend to prefer a shorter campaign because they can get reward faster.

VI. CONCLUSION

From research study gamification can help increase engagement and participation through the use of game mechanic. In the field of CSR project, this is needed because some CSR project does not have budget to cover the event and will be operate mainly on participation. This can be applied in the social network where content will be generate and distributed widely. Thus making the content more interesting and become two ways communication which participant can feel like he is a part of it and become engaging through the game design mechanic. The result of the study from both high school target groups, it shows that the target group that use gamification is more lively and more activity that occurred during the content and campaign. This can be worthwhile when develop the content on social network because there is a cost in developing the content such as money, time, manpower, etc. So if there is not enough view, like, or share, then the content might not reach enough audience and might not worth when compare to the development cost. Gamification has proven to be quite useful mechanic to apply in various activities that aimed to get more engagement and participation.

VII. Future Work

This research study focused mainly on the develop content with the game mechanic and pay little attention to develop the game system. The improve version of the game system is needed inorder to help participant feel the game experience. The game system will make the event more interesting and more engaging. Participants will gain better experience though well design game mechanic. A well design game mechanic can generate an in game reward which can reduce the cost of prize and reward. Other works that can be add on is to make the system become more general which can be used in various CSR project for more engagement and participation to make the project sustain. Lastly the study of gaming and Social network's relation is also considering for future work.

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