



Architecture of Social Media Marketing Using Gamification

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ABSTRACT

Social media consumers are increasingly active in creating marketing content. Impact, many companies have become interested in online social marketing programs to invite consumers. However, even though the companies said they would need to be active on social media, they did not really understand how to do it, how to determine performance indicators, and how to measure them. As companies develop social media strategies, platforms like Instagram, Youtube, and Twitter connect elements that stand alone, not part of an integrated system. This article provides a systematic way to discuss and conceptualize online social media, as an ecosystem of related elements that use digital and traditional media.

Key words : Social, Media, Marketing, Gamification, Online

1. INTRODUCTION

Social media marketing is the key to introduce a product to consumers. companies must start this campaign, if they want their trademarks to be widely known by the public, because that is where the crowd gather in global internet spaces. several companies have successfully carried out campaigns on social media with good and effective ROI and some have been semi-successful or even failed. This is related to problems in social media marketing as follows.

1) No Marketing Strategy. At the beginning of the campaign it is necessary to identify the product, the target consumers and the uniqueness of the product. common mistakes like this often occur in doing social media marketing.

2) Incorrect target consumers, Clear segmentation is important to increase brand awareness.

3) Handling negative responses that are not appropriate, for example such as not handle feedback effectively and apologizing only for a formality. This can be anticipated by changing the moment as an opportunity to improve the products and services offered.

4) Communication like a robot. Social media is filled by people from various backgrounds and culture, people prefer to be responded like humans with an effective and good approach

5) Customer service is only used for formalities, it will affect on consumers becoming passive about the products and services offered. Conversely, good customer service can certainly add up selling and cross selling from various marketing channels.

6) Little interaction and tend to be passive results in a decrease in the availability of a brand.

7) Posting information that tends to be the same and irrelevant, in responses consumers will move, because they are bored.

8) Does not have analytic tracking of the use of social media, so it is difficult to measure the success of a campaign accurately and efficiently.

9) Using language that is not good even rude to provoke virality, it needs to be measured properly, of course it must be in line with the companies image.

10) There is no policy regarding social media. Information that comes out of the company must be controlled properly in order to maintain the confidentiality and rating of the company.

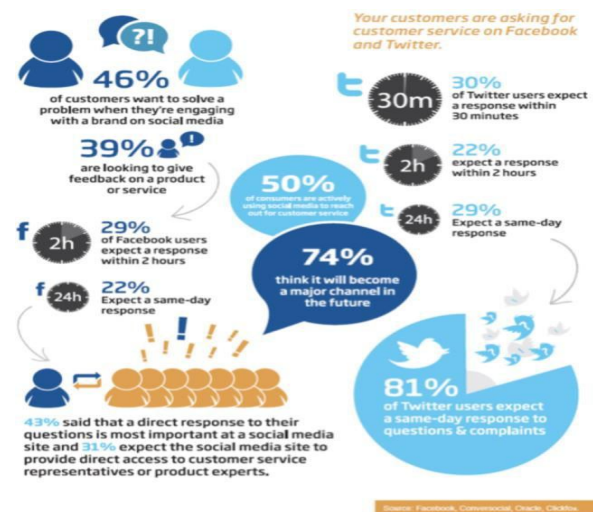


Figure 1: Social media expected responses.

To increase audience involvement, an approach using gamification can be taken, by introduce an idea of using game thinking with a combination of mechanical games to solve problems and engage the audience. Other researchers define gamification as the use of game design elements and game mechanics outside the context of the game itself.

2. LITERATURE REVIEW

The social media dimension has many variations and uniqueness. It can be used as a guide in making decisions for the right marketing strategy, according to [1] there are two factors that build variations in social media marketing, such as:

1. Half-life of information, is the age of the availability of information that can be used as a source of information by users, can be in the form of blogs and brand building.

2. Depth of information, is the depth of a piece of information that can be in the form of an online forum containing information from various users.

These factors show the importance of variations in types of social media in increasing ROI and appropriate segmentation, as shown in Figure 2 below:

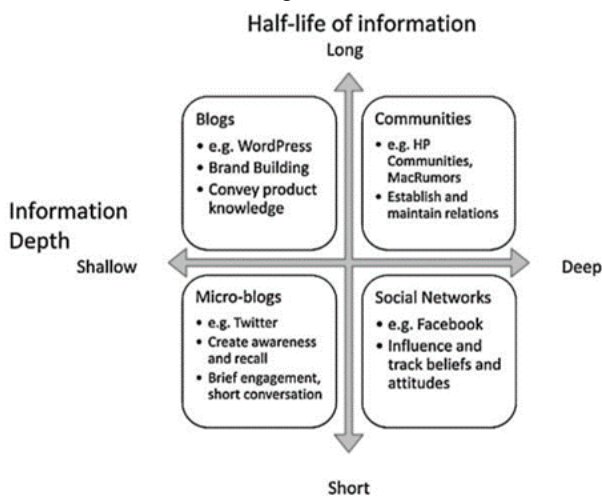


Figure 2: Social media by information half-life and depth, and associated marketing objectives and purposes.

The use of several types of social media also influences consumers to know and try a product. There are two categories regarding these, such as profile based and content based described by [2]:

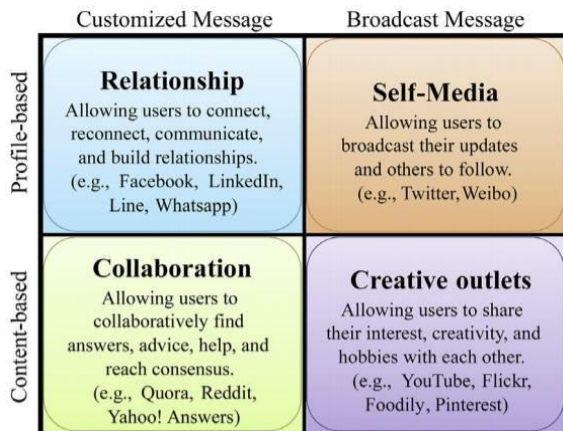


Figure 3: Social media matrix.

1) Relationship is a profile based service. This usually requires two-way confirmation to establish a connection, selective filtering to have friends and with various levels of privacy protection, and mainly used to build new relationships with others.

2) Self Media is a type of social media service that tends to be personal or subjectivity to a particular profile, usually established and used by well-known organizations, artists, or certain products.

3) Content-based, is a content-based social media to broadcast messages to all audiences with creative action. this includes services that facilitate individual interests, activities and hobbies.

4) Collaboration, is social media that consists of content-based sites, but can be adapted to the needs of users. these sites include social questions - answers like Quora, stack-over-flow, and others.

An important step in the development of a social media strategy involves the concept of a social media ecosystem. This needs to be visualized in terms of the three types of media types such as owned, paid, and earned. this allows marketing strategies to develop a clear idea of the extent of the right campaign on each media platform such as a website, Facebook, and Twitter.

Social media strategies must focus on matrix conversion such as sales over time and to show brand enhancement and corporate involvement in global internet spaces.

The following is an example of the matrix presented by [1] related to marketing expenses that can be used to evaluate media services and estimate ROI.

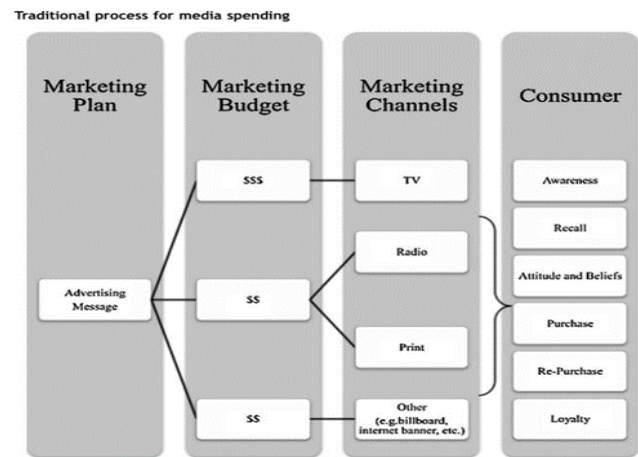


Figure 4: Traditional process for media spending.

When deciding on a marketing campaign budget on traditional media, the marketing team will decide how much to spend on various media channels and thinking of marketing strategies.

3. RESEARCH METHOD

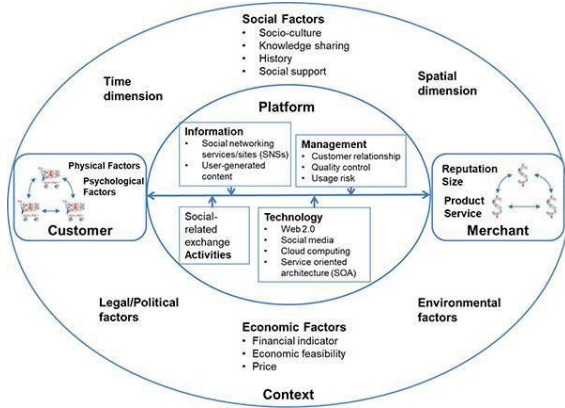


Figure 5: S-commerce Framework.

Figure 5 is an overview of the s-commerce or social commerce framework. Social commerce itself is a new business model of e-commerce, which utilizes Web 2.0 technology and social media to support exchange activities related to social activities. In Figure 5 above, it has 4 main components, such as Customer, Platform, Merchant, and Context. Customers and Merchants represent the basic elements. Platform as a link component contains four entities such as Information, Management, Social and Technology. Context is a new component that describes the whole framework. The four components are interlocked and interact with each other.

Social media itself is Technology entity and Platform component which is part of the framework. As explained above, social media is a means to be able to interact with various people through global internet spaces. In addition, social media can also be used to carry out marketing processes to consumers.

The platform area is a big challenge for data security issues, according to [12] Predictable Adaptive Privacy Policy (A3P) can be used in conversations related to information systems that aim to provide user experience in privacy settings without introducing a new complexity and can be used automatically to generate privacy according to the user's personalization. Security must be important thing for every system, this is very essential to avoid unauthorized expose or modification of the information [13].

Cloud computing as a data storage solution must be completed properly, based on [14] a multi-authority access control system for cloud storage can be used in cloud storage by agreeing on an access policy and encrypting data before uploading to the server and storing user data then provides data access services for other users. Certificate Authority (CA) is a fully trusted entity and is responsible for issuing global UIDs for each user and system. For being successfully developed system, hardware, software and cloud must be tested for several hours without causing problem on both for the system [15].

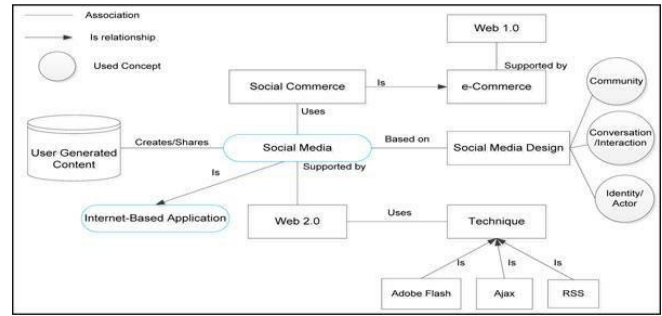


Figure 6: Entity Technology concept in component platform.

In accordance with Figure 6, social media is supported by internet and web-based applications that use techniques such as Ajax, Adobe Flash, RSS. Cloud computing provides all of its resources as a service. It uses established standards and best practices obtained in the SOA domain to enable global and easy access to cloud services in a standardized manner. SOA is an architecture that allows users to break problems into services that can be integrated to provide solutions. One of the most important services in SOA is ESB (Enterprise Service Bus).

4. RESULT AND DISCUSSION

The structure of the gamification element packaged as Social Management System (SMS). The establishment of this SMS was adjusted based on [3] to be used as a base reference to meet the gamification criteria that have been examined previously.

Table 1: SMS Elements

No	Support Game Element		
	Description	Element	Mandatory
1	Definable rules, scripts for complex rules	Constraint	Yes
2	Embedding multimedia content	Emotions	No
3	Synchronous and asynchronous communication tools	Relations hips	Yes
4	Interactive material	Challenge s	Yes
5	Assigning random challenges	Chance	No
6	Sequences of challenges for many users	Competiti on	Yes
7	Delivering information on progress in current activities	Feedback	Yes
8	Definable rewarding rules	Rewards	Yes
9	Checking challenge progress and passing control	Turns	Yes
10	Definable achievement rules	Achievem ents	Yes
11	Assigning images to achievements	Badges	No
12	Delivering information on current and all-time rankings	Leaderboa rds	Yes
13	Level progress	Levels	Yes
14	Point counter	Points	Yes
15	Information on users network of contacts	Social graphs	No

The basic mechanism of this gamification must facilitate the user and admin to configure and manage various important elements in the SMS such as progress and leaderboard.

5. CONCLUSION

Social Management System (SMS) can be integrated with social media platforms with gamification mechanisms that are regulated and processed through the backend system, administrators can plan flexible and interactive scenarios through scripts and well defined rules.

The architecture shown here is web based and is not specific to using a specific programming language. This can be implemented with various technologies that run on the web to support interactive and effective gamification. Included a custom script that can be run accordingly for social media marketing combined with the gamification platform.

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