Proceedings

2nd International Conference on Innovation and Sustainability

ICOIS 2015

“Strengthening the ASEAN Community to Address Emerging Global Challenges”

November 12-13, 2015
Duangtawan Hotel, Chiang Mai, Thailand
Mobile Messenger Rating, Sharing and Engagement in Global Social Commerce

Kiat Yao TAN¹, Phoey Lee TEH ² and Cheng Ean LEE³

¹ Department of Information System, Sunway University, kiatyao_95@hotmail.com
² Department of Information System, Sunway University, phoeyleet@sunway.edu.my
³ Department of Communication and Liberal Arts, Sunway University, catherinelee@sunway.edu.my

ABSTRACT

The use of the Short Message Service (SMS), available on mobile phones and other devices, for exchanging text messages is gradually diminishing. SMS has been replaced by Smart Phone Apps offering free messaging services; example include Whatsapp, Kakao, WeChat and Viber. The use of these platforms is constantly evolving; they are now used for advertising, group chatting, the sharing of information, and e-commerce communication. This paper provides a review of the currently available Mobile Messenger Applications, comparing their abilities, function and features. In particular the paper focuses on the engaging of these Apps in Global Social Commerce. In addition, the engagement of users towards sharing, commenting and rating the products and services were also discussed.

KEYWORDS: Mobile Apps; Engagement; Rating; Sharing

INTRODUCTION

Short Messaging Service (SMS) has been the main feature found in a mobile phone and mostly used by mobile users when the mobile phone was first launched (Dolmadjian, 2014). Mobile Messaging Application (MMA) has become one of the alternative choice, replacing the similar service provided by SMS (Hoffman, 2013). MMA has the capability for Group Chatting in which Group Chat is normally used when there is more than three people who have the same interest, gathered and chat on the topic in one platform. It required an administrator to host a group chat. The Group Chat has then become a common method of commerce to share information, which later acts as an advertisement platform.

RATING METHOD

There are different types of rating method available online. The unary scale has been popularized by Facebook, where users can note an interest in a particular wall-post or photo by clicking a “Like” button. The binary scale (Like & Dislike) has been used widely in many social-news aggregators like Digg.com and YouTube. (Sparling, 2011a) studies 348 users,
who generated 12,847 ratings on movies and products review. Among all, 2,010 have used the method of unary ratings, 4,163 used binary ratings, 3,978 used the star ratings, and lastly 4,426 used the slider ratings. Their results show the preferences intention of using binary rating.

For a better understanding about the types of rating method, a simple example is provided as follows:

Table 1: Ratings on Websites

<table>
<thead>
<tr>
<th>Rating methods</th>
<th>Example of Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unary</td>
<td>Facebook (<a href="http://www.facebook.com/">http://www.facebook.com/</a>)</td>
</tr>
<tr>
<td>Binary</td>
<td>You tube (<a href="http://www.youtube.com/">http://www.youtube.com/</a>)</td>
</tr>
<tr>
<td>Star</td>
<td>IMDb (<a href="http://www.imdb.com/">http://www.imdb.com/</a>)</td>
</tr>
<tr>
<td>Slider</td>
<td>Hr-survey(<a href="http://www.hr-survey.com/PfSlider.htm">http://www.hr-survey.com/PfSlider.htm</a>)</td>
</tr>
</tbody>
</table>

Unary rating has been popularized by Facebook. Users can show their interest of a wall-post or photo by pressing the ‘like’ button (Sparling, 2011b). Fig 1 shows the sample of Unary Rating from Sunway University Facebook page. Binary rating is a rating method where users give a positive or negative rating to its contents (Anderson, Sims, & Tse, n.d.). For example, if they like the post, they will press the ‘like’ button, if they do not like the post. This rating method is used by YouTube (Sparling, 2011b). Example of binary rating can be seen in Fig 2.

Fig 1: Unary Rating from Sunway University Facebook Official Website
Fig 2: Binary Rating from a video of YouTube

Star rating is a rating method that uses the amount of star to evaluate a certain product or status. An example of star rating method is shown in Fig 3. The Amazon online store, Film affinity, Movies and others have used the “5 stars” rating method that allows users to indicate which products are of their interest. Fig 4 explains the meaning of “5 stars” rating that the users give for each content and each content has a value. These values are defined by (Nuñez Valdez et al., 2011).
Slider rating is a rating method that gives researchers the chance to produce question and answer style that incorporate a greater breadth of answers, as well as enable animation and interactivity. Respondent can simply slide to whatever rating they want (Taylor, 2012). An example of slider rating is shown in Fig 5.

MEDIA SHARING AND FORWARDING

Media sharing is a method that allows us to forward and upload our photos, videos and audio to website and MMA that can be accessed anytime anywhere as long as there is an Internet connection. We can share the media to the public or to selected group of friends (“What is a media sharing site? | Affilorama,” n.d.). Fig 6 to Fig 11 each shows the features of Media Sharing and Forwarding on Viber, WhatsApp, Line, SnapChat, Keek, Voxer and WeChat.
These features are all available for MMA users, no matter which platform the users are using. One component that is missing is the “rating” function, which is to be replaced by the emoticon of “thumb up”, mainly.

MOBILE APPS, FEATURES AND COMPATIBILITY

(Walker, 2014) listed these Mobile Messenger Apps such as Whatsapp, Viber, Facebook Messenger, Line, Voxer, Heytell, Talktone, Keek and Snapchat as the most commonly used Messaging Application. Most of the listed Application are compatible with iOS and Android. However, the fewer features an App has, they more text need to be exchanged. Thus, the requirement to have share media such as postings of photos, video, text and emoticon in the communication. Every MMA has their unique set of combination features, which other mobile messaging application doesn’t have. Some has come with additional features. Table 2 lists the features of MMA, its additional features and compatibility.
Table 2: Mobile Apps, Features and Compatibility

<table>
<thead>
<tr>
<th>Function &amp; App Name</th>
<th>Compatibility</th>
<th>Features</th>
<th>Additional Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whatsapp</td>
<td>iOS, Android, Windows phone, BlackBerry, Symbian, S40</td>
<td>Text, emoticon, photo, video, audio, location, contact, Walkie Talkie</td>
<td>-</td>
</tr>
<tr>
<td>Line</td>
<td>BlackBerry, Symbian, S40</td>
<td>Text, emoticon, photo, video, audio, location, contact, Walkie Talkie, Line Camera, Stickers</td>
<td>Social Page, exclusive partners, celebrities &amp; games</td>
</tr>
<tr>
<td>Viber</td>
<td>iOS, Android, Windows, BlackBerry, PC, MacOS</td>
<td>Text, Emoticons, Photo, Video, location, Doodle, Voice call</td>
<td>-</td>
</tr>
<tr>
<td>Voger</td>
<td>iO, Andriod, Windows, BlackBerry, &amp; Mac OS</td>
<td>Text, photo, location, Walkie-Talkie</td>
<td>Available in desktop</td>
</tr>
<tr>
<td>Keek</td>
<td>iOS, Andriod, Windows Phone &amp; blackberry</td>
<td>Video &amp; comment</td>
<td>Instant sharing video to twitter, Facebook and more</td>
</tr>
<tr>
<td>Snapchat</td>
<td>iOS &amp; Andriod</td>
<td>Text, photo, video, emoticon</td>
<td>Editable and caption able video Video/ photo will not be stored</td>
</tr>
<tr>
<td>Facebook Messenger</td>
<td>iOS, Android, BlackBerry, Windows &amp; web browser</td>
<td>Text, Emoticon, photo, video, audio, location, contact, Walkie Talkie, Stickers</td>
<td>Link to Facebook</td>
</tr>
<tr>
<td>HeyTell</td>
<td>iOS, Android, BlackBerry, &amp; Windows Phone</td>
<td>Text, location, Walkie-Talkie</td>
<td>Push-to-talk</td>
</tr>
<tr>
<td>TextNow</td>
<td>iOS, Android</td>
<td>Text, emoticon, photo, voice call &amp; voice mail</td>
<td>Addable of signature to each text</td>
</tr>
<tr>
<td>WeChat</td>
<td>iOS, Android, BlackBerry &amp; Windows Phone</td>
<td>Text, emoticon, photo, voice, video call, voice call, location</td>
<td>Sight, Name Card, Recall</td>
</tr>
</tbody>
</table>

A total of ten Messaging Applications are compared in Table 2. All the apps are compatible with iOS and Android platforms. Voger and Text Now are not compatible on Blackberry.
MOBILE RATING AND COMMENTS

Table 3 summarizes the ratings and comments function of the apps listed in Table 2. There are only three mobile messaging applications (e.g: Line, Facebook Messenger & Keek) that allows status and media rating (eg. Unary Rating). Although other mobile messaging applications provide group sharing, media sharing and status posting, there is no way for other user to rate or vote for a photo or status posted by someone else. If an individual require any opinion from others about their photo, they can only judge based on the replies they received.

<table>
<thead>
<tr>
<th>APP NAME &amp; FUNCTION AVAILABILITY</th>
<th>LIKE ICON</th>
<th>DISLIKE ICON</th>
<th>STATUS GROUP SHARING</th>
<th>MEDIA SHARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHATSAPP</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>LINE</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>VIBER</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>VOXER</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>KEEK</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>SNAPCHAT</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>FACEBOOK MESSENGER</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>HEYTELL</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>TEXTNOW</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WECHAT</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

In Table 2, we can see that only two mobile messaging applications which are Line and Keek that allows status and media rating (eg. Unary Rating). Users who wish to receive others’ opinions about their photos will only able to judge the replies that they received on the App.”

In year 2011, Nuñez Valdez has studied the social voting techniques (Nuñez Valdez et al., 2011). He concluded that most of the people who likes a content would assigns the maximum score and if they do not like it, they will assign the lowest score. This is equivalent to “Like
& Dislike” value. In an article by Michael Zhang (Zhang, 2012), at one time of history, YouTube has used the 5-star rating system for its videos. However the service was then replaced with Binary Rating (“thumbs up & thumbs down”). YouTube product manager make this move due to the assumption of its value similarity.

Devavrat Shah, a professor of Information and Decision Systems at MIT says that the flaw of the 5-star rating is too ambiguous and subjective (Zhang, 2012). Human’s rating tends to fluctuate based on their mood. Therefore, Star Rating and Slider Rating will not be the best choice (Zhang, 2012). Thus, with much evidence which supported that Star Rating and Slider Rating will not be the best choice. The Binary Rating (“like & dislike” / “thumbs up & thumbs down”) would be preferred to be included in the MMA.

However, are the current features and functions on our mobile messaging applications suitable in Engaging in Global Social Commerce? In order to further understand the market engagement, a pilot study is carried out with 100 Mobile Messaging Application users.

SYNTHESIS ON MOBILE APPLICATION ENGAGEMENT

1. How the users discover a new mobile messaging application?

One hundred questionnaire were collected to understand the mobile messaging application engagement among the users. Figure 12 shows five pie charts of how the users discovered when there is a new mobile application in the market. The first pie chart reflected that 60% of users agree that they get-to-know a new mobile messaging application from friends, 52% of them found it through social media platform, while 47% of them stated that they were informed by advertisement. Blog in this case was asked separately from social media as it was assumed as a type of website to introduce and reviews new apps, only 9% agree that they get-to-know the new mobile messaging application from blog/website Other than that, other sources seems to be no effect to the introduction of a new application. It can be concluded that social media seems to be an ideal platform to market a new apps.
2 From where does the user download their new mobile messaging application?

Figure 10 shows three pie charts which discuss how the user download their mobile messaging application. 61% of the users downloaded the apps from Play Store whereas 53% of them download it from the App Store. This implies that Android mobile users are larger than iOS users. Not many of them discovered their mobile messaging application which concludes only 10% of them downloaded their mobile messaging application from other sources.

Figure 12: How the users get-to-know a new Mobile Messaging Application

Figure 13: From where the User’s download their new apps
3 Most frequent used Mobile Messaging Application

When the respondents were asked which is the most frequent used apps, Whats’app messenger scored the highest among the respondents with (74%), followed by Facebook Messenger (21%) and Line (5%). The respondents were given nine types mobile messaging applications such as Viber, Keek, Voxer, Snapchat, Textnow and Heytell, but majority of them chose Whatssap and Line.

4 Mobile Messaging Application engagement (frequently used) and Replacement

Figure 15 and 16 show the frequency of usage and replacement of MMA. It was obvious that Whatssap has the highest frequency used (hourly rated) and most of them “never” replace their current mobile messaging application.
Figure 17 and 18 show majority uses the MMA to chat with a friend and with a group as frequent as hourly. From the results above, is this telling us that MMA is actually a good platform to engage with friends? Or it has become an “addicted” habit?

5 User’s Experience with the features/functions of MMA

Figure 19: Satisfaction on the feature/functions

Figure 20: Satisfaction on its effectiveness

Figure 21: Satisfaction in using the Group Chat

Figure 22: Satisfaction on the Media Sharing
Figure 19 and 22 present the users’ satisfaction on the feature/functions of MMA. Majority of the respondents rated ‘highly satisfy’ and ‘very satisfy’ for all the feature/functions available on those Mobile Massager Application. Therefore, the current mobile messaging applications are able to satisfy the users and this is the reason why it has been chosen.

CONCLUSION AND FUTURE WORKS

In this study, we argued that the Mobile Messaging Application has been replacing the Short Message Service. Engaging these convenience tools as a communication channel in Global Social Commerce is potentially in vain. However, understanding from the reviews, rating is actually one of the vital part for opinion mining in Global Social Commerce. Current free messaging services provided by our smart phone applications has obviously does not provide features for rating. It is suggestible that future MMA to include “rating” features. The more functions and features available, the lesser the text communication, and hence the easier the users to share information. Our comparison of the ten different type of Mobile Messaging Application features, has allowed us to examine these platforms, to be utilized or perform as a greater opportunity channels for global social commerce. It has led by understanding the user’s satisfaction levels towards respondents’ opinion. Furthermore, the engagement of a new Mobile Messaging Application has been understood by the influenced of how the users discovery or get-to-new to a new mobile application. The more friends or group of friends using the similar apps, the more the network using the same MMA. Apparently, most of our respondents highly preferred Whatsapp and Facebook Massager. Thus, suggesting the use these MMA in Global Social Commerce, by engaging users, utilizing the media sharing, commenting, rating features will therefore enhance the communication channels.

ACKNOWLEDGEMENTS

This research is funded by the Sunway University Research Office.

REFERENCES


What is a media sharing site? | Affilorama. (n.d.).