

## Virality in Social Media Advertising: A Case Study in Bandung Tourism

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**Abstract.** *The growth of tourism in Indonesia makes Bandung, as one of the major cities in Indonesia, has to improve its tourism even further. One of the plans of the Department of Tourism and Cultural Bandung is about how to advertise tourism in Bandung City. The current state of Bandung Tourism Ambassador advertisement is through social media Instagram by using her intuition. This research proposes a new system to help Bandung City promotes its tourism destination by using STEPPS (Socio-currency, Trigger, Emotion, Public, Practical Value, Story) factors and service-dominant logic approach. By analysing the value of each factor, the advertiser can determine which words and topic that can make the advertisement viral and more engaging, thus boosting the popularity of Bandung tourism.*

**Keywords:** *Bandung city tourism, content analysis, STEPPS, service science*

### 1. Introduction

In the 21<sup>st</sup> century, social science has grown quite rapidly and is among those things is the social science data growth, which is a Big Data issue and presents with a tremendous technological and managerial challenge. Unlike machine and other electronic devices, Big Data consist of the user or people generated contents which are unpredictable and can be influenced by many things (Ch'ng, 2014). Big data itself often recognised to be used as a tool to deducting and predicting a marketing decision and also executing marketing campaigns. It is said that big data influence itself has shaped and transformed the market into the way marketing is conducted nowadays (Erevelles, Fukawa, & Swayne, 2016). According to (Erevelles, et al. 2016), many marketing decision making was using Big Data as their initiatives to increase their understanding of consumer behaviour in the market itself.

According to the Department of Cultural and Tourism of Bandung City, tourism is one of the most critical aspects of Bandung City. Since 2010, tourism in Bandung City has

growth a lot to a measure of a significant contribution to Bandung City total revenue. Total revenue generated by tourism in Bandung City even reach 48% of total revenue in 2010. Even though it has grown

Significantly, tourism in Bandung city still did not get proper acknowledgement from local or international tourist and media. Bandung did not even get included in the top 10 Indonesian destination place by Ministry of Tourism of Indonesia itself. After conducting focused group discussions with the Department of Cultural and Tourism of Bandung City, they said that Bandung still has much room to grow in the tourism sector. The aspects are :

1. Tourism Destination which includes: destination development, facilities development, transportation development, and local empowerment
2. Tourism Industry, which includes: Tourism industry development, the competitiveness of the local product, local business partnership, and responsibility to the environment and socio-cultural
3. Tourism Marketing, which includes: Tourist market development, destination's

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- brand development, and tourism advertisement development.
4. Tourism Institution, which includes: Development of the official organisation for local, private, and community in the destination, development of human resources, and development of operational regulation.

Nowadays, the best way to promotes anything is by using social media. By using social media, tourism advertisement development issues can be tackled In the current state, Bandung Tourism Ambassador has already advertised Bandung Tourism by using social media (Instagram), but the content of the advertisement is utterly based on the ambassador's intuition thus not ensuring the success of the advertisement. By viewing the process of the advertisement using service-dominant logic, we can involve the customer in making the advertisement that the customer wanted and makes the advertisement more successful. However, involving the customer in making advertisements is not easy because it requires a constant update on the current condition of the customer thus required a big data method to help fill the gap. Berger (2016) said that by psychologically, virality in online content is decided by reviewing six factors which called STEPPS (Social Currency, Trigger, Emotion, Public Figure, Practical Value, and Story). By using big data, psychological aspect of consumer behaviour (STEPPS), and service-dominant logic, this research proposes to create a new system which helps Bandung City to advertise their tourism destination. As a preliminary study, this research was conducted to see the impact of the psychological aspect of consumer behaviour (STEPPS) towards the virality in tourism advertisement in social media, specifically for Bandung city in this case.

## 2. Literature Review

### 2.1 *Social Media and Tourism*

The definition of social media has been discussed in several types of research.

Wikipedia defines social media as “interactive computer-mediated technologies that facilitate the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks”. Kietzmann, Hermkens, McCarthy, and Silvestre (2011) define social media as “interactive computer-mediated technologies that facilitate the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks”. On the other hand, Cohen (2011) summarised 30 different version of the definition of social media. Cohen (2011) said that social media must include three essential characteristics and aspect, which is:

1. Social media are online tools, applications, platforms, media, and relied on the evolution of information technology
2. Social media are peer-to-peer communications channels which enabling its users on new communications method and online interaction, including sharing, collaborating, and creating content online.
3. Social media links the user to form a virtual community by using cross-platform and affecting their behaviour and real life.

Since 2011, there has been an increasing amount of research emerging about social media impact on tourism. The reason is that social media growth is probably never stopped at this point. The number of users in social media is also ever-increasing since then. For example, in 2019, the number of Facebook users is reaching 2.38 billion of the user, doubling up from the number of users in 2011, which is only 1.2 billion. These growths have been unusual to take advantage of. Thus there have been much research about social media and its advantages in many aspects.

One of the aspects that we can utilise is about tourism. Social media plays an essential role in several aspects of tourism, such as information search and decision-making behaviours (Fotis, 2012), tourism promotion (Bradbury, 2011), and developing competitive tourism destination (Kiráľová, & Pavlíčka, 2015). It is also proven that using social media

as marketing tools for tourism destination is an excellent strategy (Fotis, 2012).

### 2.2. *Virality Theory*

Berger and Milkman (2012) found out that online content can be viral if the post itself has a secure emotional connection with its viewer. They said that virality is driven, in part, by physiological arousal. Content that evokes high-arousal positive or negative tends to have higher virality. Although this theory works for general content, we still need to prove that these aspects work for tourism content. Furthermore, Berger wrote a book called "Contagious: Why Things Catch On" in 2013 which further expand the virality theory in his book, he said that there are six factors that influence the virality feature of online content. The six factors are :

1. Social Currency, which is about what makes people care about how they look to others, the current popular things that make people engaged
2. Trigger, which is top-of-mind, event or something that happened recently and affecting people behaviour
3. Emotion, which is emotional content like Berger and Milkman (2012) wrote
4. Public, which is shown the community aspect or public figure of the current accessible object.
5. Practical Value, which is something that benefits the reader in daily life
6. The story, which is information that bundled in an exciting story that related to the object of promotion

This virality theory relates to what Kim, Hwang, and Fesenmaier (2005) said. Kim et al. (2005) said that there are strong linkages among top-of-mind awareness, ad awareness, requesting travel information, and the likelihood to visit a specific destination. Those linkages mean that a successful advertisement can further improve the probability of tourists to visit a specific destination if the advertisement goes viral. Keagan and Rowley (2017) stated that there is a massive opportunity for using social media and word of mouth to advertise a product. They said that in the end advertiser would be forced to

forget their old-school method of advertising and adopt new technology-based advertising in order to effectively use social media and the likely the multiple co-creation of product and services. The implication to this research is that social media is the correct and efficient way to advertise a new product and the virality theory supports the guide on how to advertise products effectively in social media or online content.

By applying this virality theory to the Bandung advertisement system, the system can be improved and increase the number of engagements, which is measured by the number of average likes in the social media account.

### 2.3 *Service Science*

Service science is defined as the study of service systems and the co-creation of value within the complex constellations of integrated resource (Spohrer, Anderson, Pass, & Ager, 2008). The concept of service science has shifted the view of phenomena from good-dominant (G-D) logic to service-dominant (S-D) logic. In the G-D logic, we view the phenomena as how to maximise the profit from the entire process of the phenomena. Meanwhile, S-D logic views the phenomena to each component involved and trying to share the value benefit for them. Value co-creation itself is the process that involves all participants in the system in order to create value together. In S-D logic, the participants itself goes beyond customer involvement with production, design customisation, or even self-service (Vargo, Maglio, & Akaka, 2008).

Kijima and Arai (2016) said that value co-creation process could be achieved in four phases, which is: co-experience, co-definition, co-elevation, and co-development. The co-experience and co-definition is the phase when customer and provider share their internal model and try to co-define a mutual understanding of the service. The co-elevation phase is a zigzag spiral process of customer expectation and provider capabilities. In this phase, the higher

expectation of the customers will lead to a higher quality of service by the provider (need-pull). Following the higher quality of service, the customer will also increase their expectation (seeds-push), thus creating an ever-increasing quality system. The last phase, which is the co-development phase, is the phase when co-innovation is generated by simultaneous collaboration among various

entities. In order to create a service system, these value co-creation process must be supported by value orchestration platform. By creating this value orchestration platform, customer-provider interaction can be bridged to happens smoothly. This two-layer service system model is proposed by Kijima and Arai (2016) as can be seen in Figure 1.

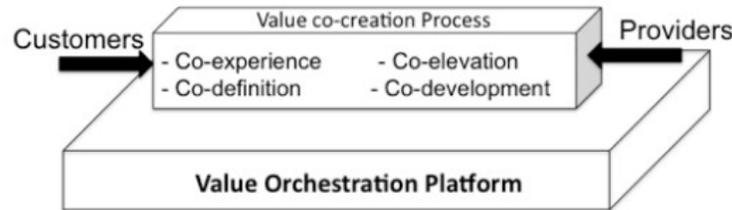


Figure 1.  
Two Layer Service System

### 3. Methodology

#### 3.1. Research Design

This research is using social media to gather the data required. The data will be the post of tourism-related to social media, Facebook and

Instagram. The post then manually coded to determine the STEPPS factor from each post. By using multiple linear regression, engagement value or virality value will be calculated based on the STEPPS factor in each post. The research was designed as this flowchart in figure 2.

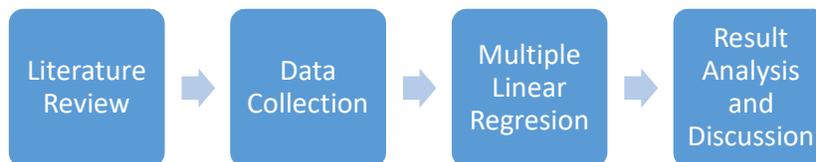


Figure 2.  
Research Design Flowchart

#### 3.2. Population and Sample

The population is an advertisement about tourism in Bandung city, which originated from social media Facebook and Instagram. This research is using a balanced sample with 50% of the viral post and 50% of the non-viral post. The viral post indication is based on the average likes on each post's Facebook or Instagram account. By using a benchmark, the viral post has an average of more than 4% of the account's followers. There are 100 data used in this research originated from the

various account on Facebook and Instagram

#### 3.3 Variables

This research is using multiple linear regression which has independent and dependent variables. Independent variable consist of STEPPS variable, which is :

1. Social Currency
2. Trigger
3. Emotion
4. Public
5. Practical Value
6. Story

The dependent variable will be engagement, which depicted the virality of the post. Engagement counted by using equation 1.

$$Engagement = \frac{Number\ of\ likes}{Average\ likes} \quad (1)$$

#### 4. Finding and Discussion

The results of multiple regression are shown in table 1. The results showed that in the

Bandung tourism context, the most significant factors that influence virality in a post is Social Currency and Story (p-value = 0.009, and 0.007) with Trigger (p-value = 0.035) has some significance in determining virality of the post. The results also have an R<sup>2</sup> value of 0.6, which means that the model explains that 60% of the variance of the dependent variable and does not explain the rest of the variance. F-test showed a p-value of 0.02, which means that the model explains the dependent variable significant enough.

Table 1.  
Multiple Linear Regression Result

Independent Variable	Coefficient
Social Currency	0.2863**
Trigger	0.3722*
Emotion	0.071
Public	-0.02
Practical Value	0.17
Story	1*

\*\*p = 0.01, \*p = 0.05, f-test p = 0.02, R<sup>2</sup> = 0.6  
Dependent variable = engagement

By viewing the results, it seems that Social Currency and Story has the most significant influence on virality followed by Trigger even though the coefficient between social currency and trigger has different says. This means that the trigger still plays a big part in how people connect with the post. People tend to have different mind on a different occasion, for example on rainy season people would not want to go to a hiking trip, they prefer indoor tour such as shopping, so they do not get interrupted by the rain. The exciting part is the story. Among 100 posts, the story is rarely shown up. The story only

showed up in 36 posts, but each of that post has incredible engagement value. This means that, if the advertisement can make a great story that related to the tourism destination or object, people most likely to engage with the post and come to the tourism destination (Kim et al., 2005).

By applying these results combined with a service-dominant logic perspective, we can improve Bandung's advertisement system. The service blueprint of the current system can be seen in figure 3.

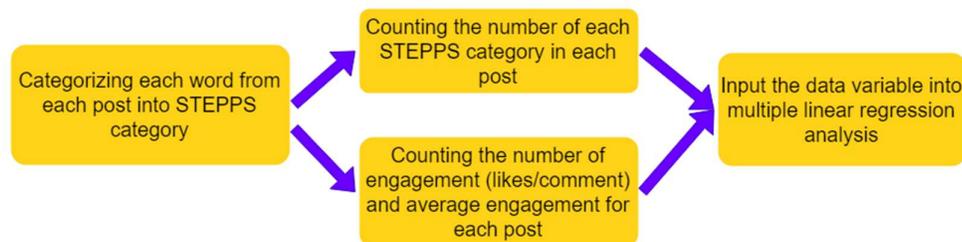


Figure 3.  
Research Framework for STEPPS Analysis

In figure 3, there is no correlation between the customer and advertiser (Bandung Ambassador) at all. Bandung ambassador creates what is reasonable based on her intuition alone, resulting in inconsistent results. The proposed result in figure 4

showed the interaction between the provider (advertiser) and the customer, which resulted in a newly co-created value that can be used to formulise a better advertisement.

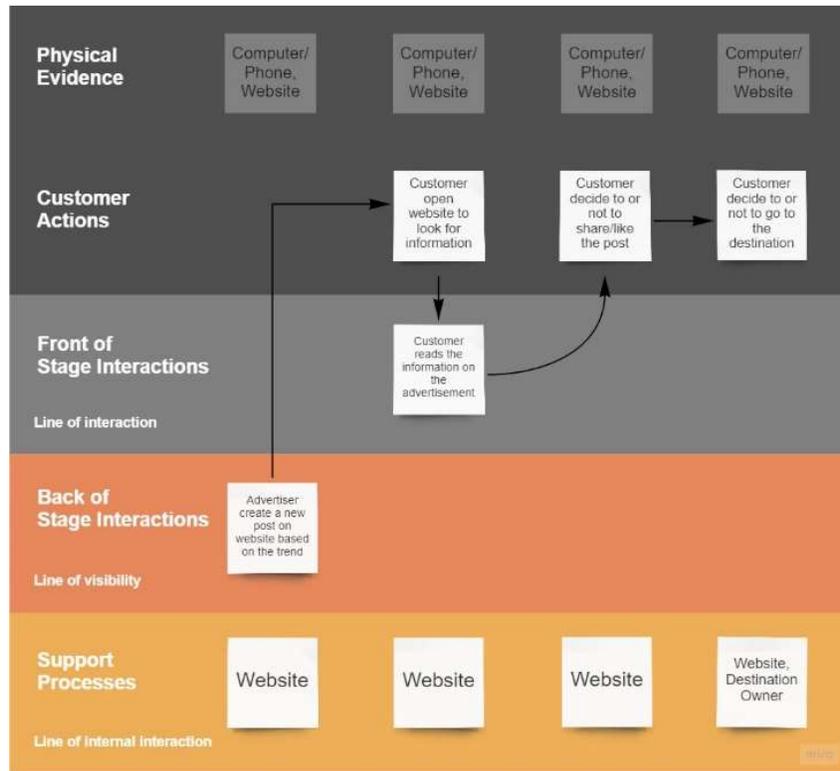


Figure 4. Existing Service Blueprint

The value from the result will be the base of what determines the trend on each time. Even though the only significant factors are only social currency, trigger, and story, the others factor should still be considered because the trend can be evolving, and the value of the factor can be changed over time. Based on the trending topic, an advertiser can adjust their advertisement to create the best advertisement during a time, thus achieving the process of value co-creation.

## 5. Conclusion

By viewing the results, STEPPS theory can be used as a factor that determines whether the tourism post in social media will become viral or not, especially in Bandung City. If the advertisement post becomes viral, there is more likely that the customer will come to the tourism destination. The system for it can be achieved by following the service blueprint in figure 4 and service system in figure 5.

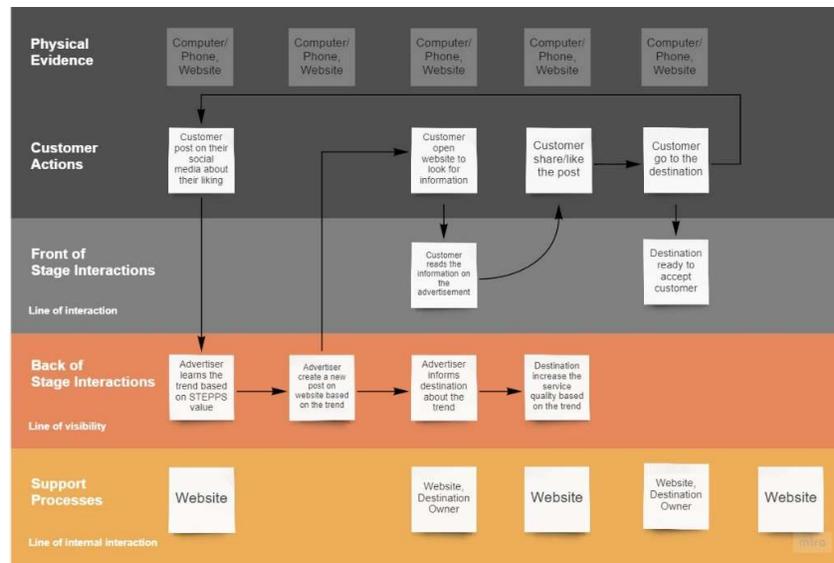


Figure 5.  
Proposed Service Blueprint

However, the real challenge on the system will be how to collect the data and process it in real-time so we can determine the trend at a specific time. A system that is using machine learning to gather and analyse data would be the best to solve the problems, but the algorithm to do so is rather complicated. By achieving that kind of a system, the process of advertisement would be much better and yield better results.

This research has several weaknesses in itself. Even though this research can determine the value of each factor, the factors itself has multiple meaning and can be researched further to determine the true meaning of each value. For example, social-currency in the tourism context can mean the destination place itself or the object that exists in the destination, or it can also be culinary of the place. Because this is an early study of implementing STEPPS factor in Bandung tourism aspect, that details have not been added yet and can be continued in further research. Furthermore, this research context is only for tourism in Bandung City; further research can be conducted to compare the factors between different city or even between different categories such as tourism section and politic section.

## References

- Berger, J. (2016). *Contagious: Why things catch on*. Simon and Schuster.
- Berger, J., & Milkman, K. L. (2012). What makes online content viral?. *Journal of marketing research*, 49(2), 192-205.
- Bradbury, K. (2011). Blogbury N Academic Writing N Analysis Paper: Fall 2011: The Growing Role of Social Media in Tourism Marketing (COMM 427). *Pobrane z: http://kelseybradbury.weebly.com/uploads/1/0/9/2/10927387/tourism-socialmedia-comm427.pdf (10.08. 2016)*.
- Ch'ng, E. (2014, August). The value of using big data technologies in computational social science. In *Proceedings of the 2014 International Conference on Big Data Science and Computing* (p. 6). ACM.
- Cohen, H. (2011). *30 social media definitions*. Retrieved from <https://heidicohen.com/social-media-definition/>.
- Erevelles, S., Fukawa, N., & Swayne, L. (2016). Big Data consumer analytics and the transformation of marketing. *Journal of Business Research*, 69(2), 897-904.
- Fotis, J. (2012). Discussion of the impacts of social media in leisure tourism: "The impact of social media on consumer behaviour: Focus on leisure

- travel". Pobrane z: <http://johnfotis.blogspot.com.au/p/projects.html> (10.08. 2016)..
- Keegan, B. J., & Rowley, J. (2017). Evaluation and decision making in social media marketing. *Management Decision*, 55(1), 15-31.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons*, 54(3), 241-251.
- Kijima, K., & Arai, Y. (2016). Value co-creation process and value orchestration platform. In *Global Perspectives on Service Science: Japan* (pp. 137-154). Springer, New York, NY.
- Kim, D. Y., Hwang, Y. H., & Fesenmaier, D. R. (2005). Modeling tourism advertising effectiveness. *Journal of Travel Research*, 44(1), 42-49.
- Kirářová, A., & Pavlířeka, A. (2015). Development of social media strategies in tourism destination. *Procedia-Social and Behavioral Sciences*, 175, 358-366.
- Spohrer, J., Anderson, L., Pass, N., & Ager, T. (2008, December). Service science and service-dominant logic. In *Otago Forum* (Vol. 2, No. 2, pp. 4-18).
- Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European management journal*, 26(3), 145-152.