

# Consumer Interest in Consuming Bandung's Special Culinary on Instagram Social Media: Sentiment Analysis

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## ABSTRACT

### Keywords

Big Data  
Consumer Interest  
Social Network Analysis (SNA)

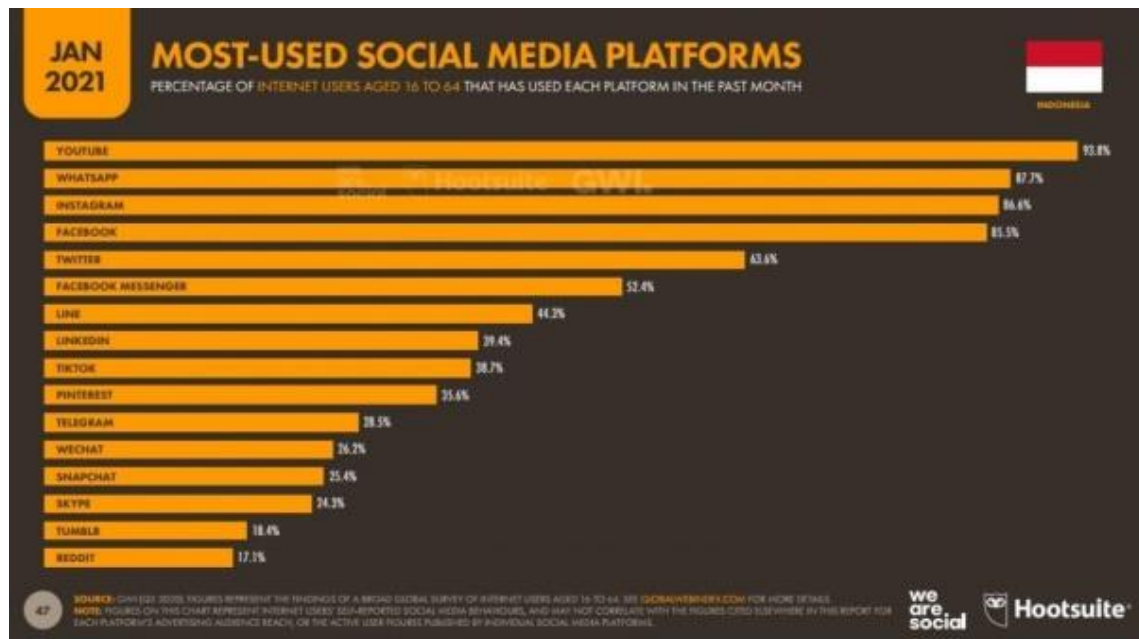
The existence of big data information regarding consumer conversations about culinary, both positive and negative brands, consumer characteristics, customer satisfaction can take advantage of the social media data by business actors to determine the effectiveness of their marketing strategies on Twitter (2). Big data that can be utilized by business actors can be seen from public sentiment through conversations on social media. This study takes texts using #kulinerkhasbandung and #kulineralbandung. The purpose of sentiment analysis is to see positive and negative conversations from text documents and visualizations. Primary data is obtained through observations of consumer activities/interactions that talk about Bandung's culinary specialties on Instagram. This study uses a social network analysis method that focuses on human interaction discussing typical Bandung culinary and halal cuisine. In other words, the measurement and analysis of social networks is mainly based on the ties between actors/nodes. Attributes of actors will help researchers to verify hypotheses of social behavior and analyze certain social phenomena. The population in this study is mention, reply, repost about #kulinerkhasbandung and #kulineralbandung on Instagram social media. In the process of user generated content (UGC) the data collected is a conversation/interaction (17) with #kulinerkhasbandung and #kulineralbandung on Instagram. The research results are in 2022, the movement of talks increased considerably, said to be very good accompanied by neutral comments. As for the hashtag, it can be concluded that batagor, baso, and surabi are Bandung's culinary specialties that are most sought after and in demand by people. The discussion about #kulineralbandung became one of the fourth trending hashtags from #kulinerkhasbandung. This has at least gotten the attention of consumers in the search for #kulinerkhasbandung.

## 1. Introduction

Advances in technology and information have resulted in changes in people's behavior in finding the information they need. Only by having a smartphone connected to the internet, the information needed is available. Richard Hunter (2002) with world without secrets that the presence of new media (new media/cybermedia) makes information easy to find and open. (Nasrullah, M.Si., 2018)

The presence of the new media makes it a challenge for business people to market and introduce their products to consumers. New media provide opportunities in carrying out digital marketing practices to reach a wider market. The media used to carry out digital marketing strategies are social media including Instagram, Tiktok, and Facebook. Not only social media in its use, business people also use e-commerce for marketing their products.

Penetration of user behavior in using the internet based on we are social media data that the highest social media platform used in Indonesia in 2021 is youtube as much as 93.8%. whatsapp 87.7%, Instagram and Facebook are not much different in percentage. It can be seen in Figure 1.



**Fig. 1.** The Most Used Social Media Platforms in Indonesia

Social media is a means of sharing information in the form of text, images, audio and video by today's consumers. Social media has the advantage of everyone's participation by accessing it and providing feedback openly, commenting, liking or liking a post and sharing information without distance and time limits. (Lazuardi, 2014).

The existence of big data information regarding consumer conversations about culinary, both positive and negative brands, consumer characteristics, customer satisfaction can take advantage of the social media data by business actors to determine the effectiveness of their marketing strategies on Twitter (2). Big data that can be utilized by business actors can be seen from public sentiment through conversations on social media.

Nowadays consumers search for culinary reviews online before deciding to buy food and drink. In addition, business actors also provide hashtags to get consumers to see hashtags in Instagram and Twitter column searches. The very high number of Twitter and Instagram users can be a means for the public to conduct online promotions, provide comments in the comments-column, look for trending products and become a reference for places to eat or culinary in Indonesia. This is because of technological developments, culinary references can be used as a means to choose which places to eat to visit and can provide an assessment of the place to eat itself in terms of taste to culinary price ranges. (Muhammad Anwar Hawari, 2021).

Research on sentiment analysis has been done a lot because it is interesting to study. Previous research related to marketing is used as a reference for this research. (Rahma, Agussalim, & Kartika, 2021; Sari & Wibowo, 2019; Zuhri & Alamsyah, 2017) Research on sentiment analysis has been done a lot because it is interesting to study. Previous research related to marketing is used as a reference for this research (Yosmita Praptiwi, 2018)

Sentiment analysis can also be done to find marketing decision making with the application of NLP tools. It was found that the consumer's perception of a brand determines the value of the brand (Kauffmann et al., 2019). This is different from research by Ginting which looks at customer satisfaction with the quality of Gojek and Grab services (Ginting, 2021). The results of the gap analysis can be obtained the priority level of indicators that need to be improved on Gojek and Grab services. Meanwhile, from research by Lazuardi, it examines the perception of brand quality. (Lazuardi, 2014)

Sentiment analysis or it can be said that opinion mining is a field of study that analyzes people's opinions, sentiments, evaluations, judgments, attitudes, and emotions towards entities such as products, services, organizations, individuals, issues, events, topics, and their attributes. There are three levels of sentiment analysis that can be performed for consumer commentary articles: document level, sentence level, and aspect level (9). Kauffmann et al. (2019) in his research also analyzes these

three aspects including (1) analysis of global sentiment in the review (document level) which allows us to measure whether the product is liked by people, (2) analysis of phrase differences (sentence level) to find out what people like and buyers dislike about a product, and (3) positive/negative product extraction.

Based on the explanation above, researchers are interested in researching consumer interest in consuming Bandung's culinary specialties on social media using social network analysis and the naive Bayes method. Bandung is famous for its culinary variety. Based on a survey conducted by detikTravel in 2014, 2,341 respondents chose Bandung as the favorite culinary tourism city in Indonesia, followed by Makassar, Surabaya, Padang and Cirebon. (Nursastri, 2014). The variety of culinary in the city of Bandung is a destination for tourists who want to try the culinary. Of course, be very careful for Muslim tourists who want to try the snacks served. Even though Bandung already has a halal culinary tourism zone (Aulia, 2022). This study takes texts using #kulinerkhasbandung and #kulinerhalalbandung. The purpose of sentiment analysis is to see positive and negative conversations from text documents and visualizations.

## 2. Method

The research method used by the researcher is the method of social network analysis. Research is interpretive research (using interpretations that involve many methods in examining the research problem) (Pan, 2007).

Basically, qualitative research is research that intends to understand the phenomenon of what is experienced by the research subject, for example behavior, perception, motivation, action, etc., holistically, and in a descriptive way in the form of words and language, at a time. special contexts that are natural by utilizing various scientific methods (Mulyana, 2008).

In this study using a social network analysis method that focuses on human interaction talking about typical Bandung culinary and halal culinary. In other words, the measurement and analysis of social networks is mainly based on the ties between actors/nodes. Attributes of actors will help researchers to verify hypotheses of social behavior and analyze certain social phenomena. For example, in the social network friendships of college students, researchers can find phenomena and draw conclusions that ethnicity has a considerable effect on friendships between people. (Pang & Lee, 2008)

The population in this study is mention, reply, repost about #kulinerkhasbandung and #kulinerhalalbandung on Instagram social media. In the process of user generated content (UGC) the data collected is a conversation/interaction (Alfajri, Adhiazni, & Aini, 2019) with #kulinerkhasbandung and #kulinerhalalbandung. The data collected in this study include social media data about content related to #kulinerkhasbandung and #kulinerhalalbandung.

## 3. Result and Discussion

Researchers describe the results of the study by making categorizations to make it easier for further researchers to analyze including: (1) consumer conversations on #kulinerkhasbandung and #kulinerhalalbandung (2) sentiment popularity on Instagram.

### 3.1. Consumer Conversation on #kulinerkhasbandung and #kulinerhalalbandung

Instagram's provide hashtags in each post to find market share easily. In addition, the use of interesting captions and location is a way for business people to target consumers directly to their profile accounts. Instagram has a feature that can help business profile users find out positive, neutral or negative consumer feedback (Firrezqi, 2021).

Consumer responses to Bandung culinary can be seen from the use of the hashtags culinaryhalalbandung and culinarykhasbandung for three years from 2019 to 2022. Data collection from 2019 is to see how the graph of the development of culinary interests and talks from the beginning of the pandemic to the endemic of Covid 19 in Indonesia. The following is the result of scrapping data as shown in Figure 2:



**Fig. 2.** Sentiment Movement Chart

The graphs of sentiment movement produced are (1) in 2019 the amount of data using #kulinerkhasbandung and #kulinerhalalbandung is still being discussed, but the graphs are not too close or intense by Instagram users and the resulting sentiment is neutral, positive and negative. (2) For 2020, less attention has been paid to the conversation, seeing the graph going down and getting negative comments. (3) in 2022, there will be a movement of talks by looking at the graph of the number of data in 2 which is said to be very good accompanied by neutral comments. (4) In 2021-2022 there will be intense conversations accompanied by various emotional comments, namely negative, neutral and positive.

The results of scraping using app.brand24.com (picture 3) whose data was taken from August 25, 2021-25 August 2022, namely positive interactions totaling 242, negative 28. Instagram users mentioning posts totaled 1453 and social media reach reached 6.1M users.

**Numerical summary**

1455 MENTIONS	1453 SOCIAL MEDIA MENTIONS	2 NON-SOCIAL MENTIONS	6.1 M SOCIAL MEDIA REACH
300 NON SOCIAL MEDIA REACH	962 K INTERACTIONS	1453 USER GENERATED CONTENT	928 K LIKES
242 90% POSITIVE MENTIONS	28 10% NEGATIVE MENTIONS	\$ 428 K AVE	0 MENTIONS FROM TWITTER

**Fig. 3.** Scraping Data Kulinerbandung

The results of scraping #kulinerbandung August 25, 2021 - August 25, 2022 can be seen in Figure 4 which is getting a lot of attention, namely Bandung, culinaryjogja, culinaryjakarta, culinaryindonesia, which are still being discussed by Instagram users.

**Context of discussion**

view kocok info menu resepkuepraktis masukkan cara ruang hari selamat terbaru yuk aduk sdt bunda sdm enak green rasa dapur miliki mandi promo minyak butter bubuk tidur memiliki tepung kulinersurabaya jadi kamar cemilananak garam jam jajanpasar buah api lupa bandung lantai makanan nasi tap bahan bandunghts resepkue kalo telur mulai resort untuk kota mempunyai santan punya bandungfoods makan pasir terigu nya city follow keluarga gratis banget order nih kulinerindonesia aja menit suka kulinerjakarta puth kulinerjogja type rata air bun kuning goreng susu ayam miar resep love carport harga loyang rumah adonan resejajan mencoba makananindonesia adem resepbolu kuliner coklat gula

**Fig. 4.** CulinaryBandung Talk

Meanwhile, based on the results of the scraping of Figure 5, which became a discussion about Bandung's culinary specialties, it received great discussion attention, including typical Bandung cuisine, West Java culinary, Seblak, Hotjeletotofficial, and batagor which are still being discussed by Instagram users.

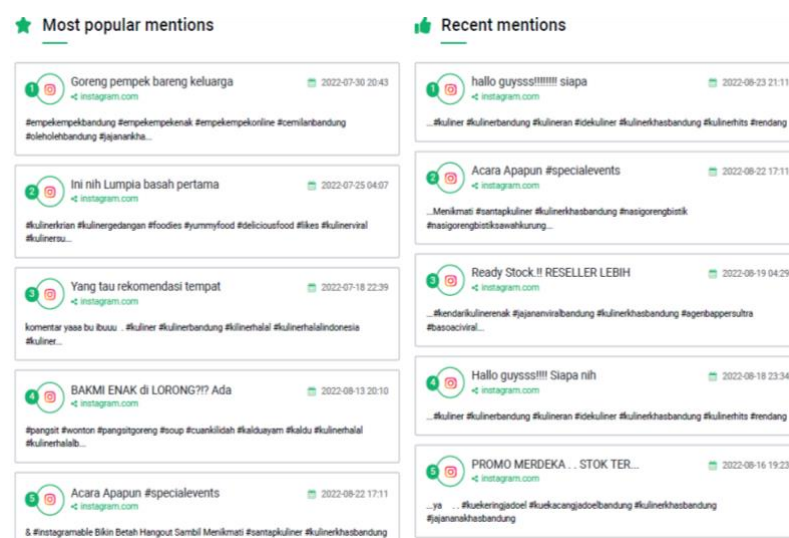


**Fig. 5.** Perbincangan #kulinerkhasbandung

In Figure 5 there is the word culinary Halal Bandung by consumers. Although it has not become the main point of consumer conversation with #kulinerhalal, it can be a consideration that consumers are aware of consuming halal food. The results of research conducted by Nurhasah said that the higher consumer awareness of halal products, the more it encourages consumers to buy halal food products (Nurhasah, Munandar, & Syamsun, 2018).

### 3.2. Consumer Conversation on #kulinerhalalbandung

Scraping data from the main contexts of #kulinerkhas and #kulinerhalalbandung in Figure 5 shows the most popular conversations and recent mentions on Instagram. Consumers who have consumed comments on food results also provide information and recommendations to consumers regarding halal and distinctive Bandung culinary in Bandung, namely mpek-mpek, wet lumpiah, recommending places to eat in Bandung, informing promos and stock availability.



**Fig. 6.** Recap Most Popular Mentions and Recent Mentions

After seeing consumer conversations on Instagram, the result of scrapping trending topics hashtags was that #kulinerbandung got 16 mentions while #kulinerhalalbandung got 4 mentions (figure 7).

Trending hashtags

HASHTAG	MENTIONS
1 #kulinerkhasbandung	16
2 #kulinerbandung	6
3 #kulineralalbandung	4
4 #kulinier	4
5 #kulinierhits	4
6 #bikinketagihan	3
7 #idekulinier	3
8 #masakansunda	3
9 #rendang	3
10 #rumahmakan	3
11 #sotobandung	3
12 #tempatchill	3
13 #jajanankekinian	3
14 #lukumandes	3
15 #ayambalado	3
16 #caffe	3
17 #caffe	3
18 #bandung	3

Fig. 7. Trending Hashtags

#### 4. Conclusion

The use of hashtags aims to easily find market share for business people. Because, from the use of these hashtags, it is easy to group posts into one content topic on social media. As a result, social media users can quickly search for topics using only hashtags. The use of hashtags or hashtags can indirectly function as a trending topic maker if the hashtags are heavily commented on by every user on social media. So that the content of #kulinerkhasbandung products will be viral and selling well.

The graph of sentiment movement on the hashtags #kulinerkhasbandung and #kulineralalbandung from 2019 2022 has fluctuated. Which in 2019 there was a movement of talks that were not intense which resulted in positive, negative, and neutral comments. Moreover, in 2020 the sentiment over the hashtag decreased in the movement of conversations accompanied by negative comments.

In 2021, it began with an intense movement of conversation about the hashtag accompanied by neutral, positive, and negative comments. In 2022, the movement of talks increased considerably, said to be very good accompanied by neutral comments. As for the hashtag, it can be concluded that batagor, baso, and surabi are Bandung's culinary specialties that are most sought after and in demand by people.

The discussion about #kulineralalbandung became one of the fourth trending hashtags from #kulinerkhasbandung. This has at least gotten the attention of consumers in the search for #kulinerkhasbandung.

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