





# Sentiment Analysis and Thematic Exploration of 1-Star Google Reviews for Local Coffee Shops

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**Abstract.** A high overall review rating (>4.5 stars) on Google does not guarantee zero 1-star reviews on local coffee shops in Yogyakarta. A number of these 1-star reviews reveal that there are still significant areas of dissatisfaction among customers. This research aims to understand the specific sentiments and concerns customers express in their negative reviews. Using qualitative data analysis utilizing ATLAS.ti software, this research identifies existing sentiment and areas of customer dissatisfaction, which is valuable information for local coffee shop businesses to improve their services and address customer concerns. Overall, the research findings reveal that 1-star reviews of highly rated coffee shops in Yogyakarta express a mix of positive, neutral, and negative sentiments, with dissatisfaction mainly centered around service quality, employee behavior, product issues, and ambiance. These insights highlight key areas for improvement despite the coffee shops' high overall Google ratings.

**Keywords:** coffee shops, customer dissatisfaction, google reviews, sentiment, thematic analysis

## 1 Introduction

Indonesia, with its rich history and diverse cultural heritage, has long been renowned for its unique coffee culture. From the traditional *tubruk* coffee to the globally renowned “kopi luwak”, coffee has a special place in the hearts of Indonesian people and has become an integral part of the nation's identity [28]. Yogyakarta, known for its vibrant arts scene, historic buildings, and bustling streets, is no exception. In this city, coffee culture is more than just a trend—it is a cornerstone of local identity, contributing to economic growth, sustainable development, and cultural exchange [29]. Yogyakarta's local coffee shops, some of which have ratings of more than 4.5 stars on Google, have emerged as symbols of this rapidly growing coffee culture. However, even behind these high overall Google ratings there are still 1-star reviews that reveal underlying issues and areas of dissatisfaction that are important to address for continued business growth and increased customer satisfaction.

The coffee industry has witnessed significant growth globally, with coffee culture deeply embedded in various societies, including Indonesia. Coffee consumption is more

than just drinking: an experience, a social ritual, and a cultural phenomenon [23]. Indonesia's unique coffee culture, characterized by traditional brewing methods and the cultivation of signature coffee varieties such as “kopi luwak,” plays an important role in shaping local identity and contributing to economic development [13].

Customer satisfaction is an important determinant of business success in the coffee industry [25]. A number of aspects that influence customer satisfaction include service quality, product variety, and atmosphere in the coffee shop [2, 27]. In the context of Yogyakarta, understanding and fulfilling customer expectations is very important for local coffee shops to maintain their existence amidst the saturation of businesses offering similar products and services. This is important considering the number of local coffee shops which reached more than 3000 in 2023 [14].

Reviews on Google My Business (GMB) have become a leading platform for customers to express their opinions, share experiences, and rate local businesses, including coffee shops. In this digital era, it seems like it has become a necessity for businesses to register themselves on GMB [24]. Online reviews, particularly on the GMB platform, have been shown to impact consumers' decision-making processes, highlighting the importance of managing and responding to reviews effectively to maintain the branding of a business [16]. A high overall GMB rating (>4.5 stars) may indicate credibility in running the business, offering excellent products, services, and facilities. However, the presence of 1-star reviews out of their overall Google reviews underlines the importance of digging deeper into customer feedback to identify areas for business improvement, regardless of the reputation.

## 2 Theoretical Framework

One of the initial efforts to examine customer reviews of a business while extracting important themes that are the focus of dissatisfaction is to use sentiment analysis and thematic analysis. Sentiment analysis aims to categorize the sentiment expressed in reviews (positive, negative, neutral), while thematic analysis focuses on identifying recurring themes and patterns in the data [3, 6, 10].

In relation to industry and business, several studies have utilized sentiment and thematic analysis to explore customer perceptions, preferences and areas of dissatisfaction in the areas of hospitality [33], health [32], as well as the coffee industry [12]. This methodology offers a comprehensive approach to understanding the specific sentiments and concerns that customers express in their reviews, providing valuable information for a variety of businesses, including local coffee shops, to improve their service and address customer concerns effectively.

Existing literature underlined the importance of customer satisfaction, online reviews, and appropriate analysis methodologies such as sentiment and thematic analysis. Past studies have discussed customer sentiment in the business, specifically in hospitality [33] and retail [12]. Research specifically exploring bad review of reputable local coffee shops remains limited. Considering that understanding customer input is significant for businesses to encourage continuous improvement, innovation, and sustainable development, this research then aims to: (1) identify the dominant sentiments depicted

in 1-star Google reviews of highly rated local coffee shops (rated >4.5) in Yogyakarta and (2) identify the key themes expressed through these negative reviews. Through this aim, this research seeks to contribute to existing knowledge by exploring the sentiment and thematic areas of dissatisfaction expressed in 1-star Google reviews of reputable coffee shops, aiming to bridge the gap between customer expectations and the local coffee shop business.

### 3 Research Methods

The focus to study only 1-star reviews from respectable local coffee shops is intentional. Literature shows no business is immune to customer dissatisfaction [18, 26, 30]. This phenomenon also happened throughout coffee shop businesses. Reputable local coffee shops in Yogyakarta still receive a number of negative reviews. While high rating coffee shops are expected to have exceptional products, services, and facilities, examining their negative reviews can reveal areas which have not met customers' expectation.

The data is a collection of 1-star reviews from ten local coffee shops in Yogyakarta with a high overall rating of >4.5 on Google reviews. The high rating review shows the local coffee shops being studied have good reputation among the public whilst also believed providing high-quality products and services. Further, this study selected coffee shops with significant number on Google reviews (>500 reviews), ensuring active customer and varied feedback as well as making it more impactful for the industry.

The virtual data for this study was collected manually during January and February 2023. Those 1-star review from each local coffee shop were extracted and translated to English from their original language which were mainly in *bahasa* Indonesia and some in local language (*bahasa Jawa*). The raw data were then processed using ATLAS.ti software to see the reactions, evaluations and ratings of customers who had visited the coffee shop. ATLAS.ti is software for qualitative data analysis that can be used to view positive, negative, and neutral sentiment. ATLAS.ti also provides a word frequency feature that can be used to see a map of customer ratings and what topics or areas are targeted by reviews.

In this research, ATLAS.ti was specifically used to see whether negative sentiment is truly a representation of customer disappointment and see what areas or topics coffee shops can improve to get better reviews. The sentiments were classified using a lexicon-based approach. Manual coding was conducted to see emerging themes in the raw data. Inductive thematic analysis [3] were used to identify the themes of customers' concerns shown through their reviews. After the data has been coded and the sub-themes are visible, a theme network is created to show the relationship between themes in the data. In general, the research flow is depicted in Fig. 1 as follows.

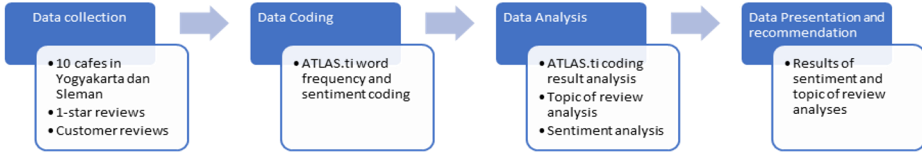


Fig. 1. Research flow

To enhance the credibility and rigour of the qualitative analysis, a systematic coding validation process was applied. The sentiment classification was initially supported by ATLAS.ti's lexicon-based sentiment tools, followed by manual verification to ensure contextual accuracy, particularly for sarcastic and indirect expressions.

For thematic analysis, an inductive coding approach was employed following Braun and Clarke's guidelines [3]. Initial codes were generated from repeated readings of the data and were then grouped into sub-themes and overarching themes. To ensure consistency, the coding scheme was iteratively refined, with codes reviewed and rechecked across the dataset.

To minimize subjective bias, a peer debriefing process was conducted in which emerging codes and themes were discussed among the researchers until agreement was reached. This process strengthened the reliability of theme identification and ensured that the findings accurately reflected the patterns present in the data.

## 4 Findings and Discussion

Instead of only showing negative sentiments, 1-star Google reviews show all the sentiments expressed by local coffee shop customers in Yogyakarta: positive, neutral, and negative. Among 66 analysed reviews, 68% showed strictly negative sentiment, 22% had neutral sentiment, and around 10% of the 1-star reviews had positive sentiment. This positive sentiment contained either positive sarcasm or indirect criticism.

### 4.1 Local Coffee Shop Customer Sentiment on Google Reviews

**Negative Sentiment.** The essence of a 1-star review, not surprisingly, consists of negative expressions. These reviews reflect dissatisfaction, with customers often expressing their frustration with various aspects of the coffee shop experience. Some reviews truly illustrate customer dissatisfaction with coffee shops, such as the following.

*"HUGE disappointment; staff become rigid because they have to follow illogical rules. "*

*"Service was zero, damn it. "*

These comments directly reflect customer dissatisfaction, usually targeting specific service or product issues.

Negative online reviews can influence consumer behavior, leading to business revenue loss. Consumers are less likely purchasing some products or services after reading negative reviews [5, 33]. These findings underline the urgency of business owners, including local coffee shops, to actively manage the negative feedback they get to mitigate such potential revenue loss.

**Neutral Sentiment.** Some reviews sound neutral, showing an opinion or description of the coffee shop the customer visited. These neutral comments usually reflect observations or describe experiences objectively, without strong emotions, as follows.

*“It is impolite to photograph customers secretly, let alone interfere with the customer's personal affairs”.*

*“There are no seats available. The waiters were not responsive enough to say that there were no more seats available inside.”*

The reviews provide descriptive feedback, pointing out operational problems or inconveniences without showing anger or frustration.

Regardless of the sentiment, managing negative feedback effectively needs empathetic responses. Those responses, when delivered accurately, can improve businesses' brand equity [1] which can positively influence potential purchasers. Further, showing responsiveness and engagement with dissatisfied customers will save businesses from a service failure in the future [17].

**Positive Sentiment.** Some 1-star reviews, unexpectedly, contain positive comments like the following.

*“Nice restaurant, but it seems too arrogant to ask customers to pick up their own orders,”*

Customers may express appreciation for certain aspects of the coffee shop, although often in a sarcastic or indirect way. Some use sarcasm, so that it sounds 'positive' like the following.

*“Five-star price coffee”*

*“Highly recommended for Alay kids who want to look stylish.”*

These comments highlight an interesting mix of humor and criticism, where customers acknowledge positive elements but emphasize their dissatisfaction in subtle ways.

Despite sounded positive, business owners should not see sarcastic reviews as purely positive. Recognizing the underlying dissatisfaction is crucial to decide the appropriate responses. Instead of being defensive, showing concern and empathy is suggested whilst maintaining a careful execution to avoid appearing demeaning [8].

### 4.2 Themes of Customer Dissatisfaction in Google Reviews of Local Coffee Shops in Yogyakarta

From the manual coding process carried out, two major themes were obtained: disappointment and suggestions. Aligned with studies on customer experience and service quality on several business [4, 12] theme of dissatisfaction has several related sub-themes: service, employees, products, place or ambiance which can be seen in Fig. 2.

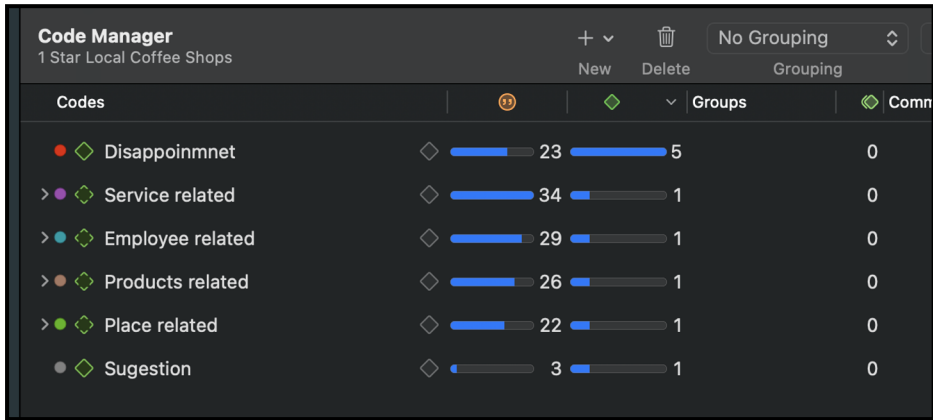


Fig 2. Themes from 1-star Google reviews data

**Dissatisfaction.** Disappointment shows an expression of dissatisfaction with local coffee shop customers. Apart from the implied disappointment seen in the use of negative words, this theme summarizes direct complaints from expressions of dissatisfaction which also include the use of sarcasm and so on.

*Service-related Dissatisfaction.* This theme represents reviews that mentioned concerns regarding local coffee shop service: general service, preparation time, online options, payment methods, take-out orders.

*"I just ordered a drink and it took so long..."*  
*"Online purchasing service is very poor."*  
*"Oh yeah, you can't use cash, only QRIS"*

Many of these complaints reflect operational inefficiencies that directly impact customer satisfaction. They expect prominent services from highly rated business. Service-related concerns, like long wait times and payment issues, emerged as one prominent theme in 1-star reviews analysed. Addressing these problem is important to improve customer retention and gaining positive e-word-of-mouth [9].

*Dissatisfaction with Employees.* Some reviews specifically criticized the behavior of coffee shop employees, including baristas, cashiers, servers, and parking attendants.

*“The worst thing about this restaurant is the cashier who handles orders. He spoke harshly to me, in a high-pitched voice several times...”*

*“The baristas are not very friendly :(”*

Some feedback highlighted rudeness and lack of attentiveness from the coffee shop employees. These frontliners are crucial in shaping brand equity as well as the customers' loyalty [15]. These negative experiences related to staff interactions can be memorable [22] despite the good product offered, discouraging repeat visit. As suggested by the customers, customer service training can be improved to improve customer experience [7].

*Product Related Dissatisfaction.* Customers also expressed their displeasure with the coffee and food products offered by the coffee shop, especially in terms of quality, packaging and price.

*“The coffee was a bit cold and the wait was long, the donuts weren't fresh either.”*

*“There's no plastic even though I bought donuts that were only packaged in a paper box.”*

*“The price is quite expensive compared to other coffee shops”.*

The mismatch between quality and price is a crucial problem, especially for coffee shops with premium prices but inconsistent product quality. In choosing reputable business, customers mostly do not mind with the high price as long as the quality is consistent, fulfilling their expectation [21]. When the products do not come as expected, disappointment occurs [11].

*Dissatisfaction with place.* This theme represents reviews that complain about things a local coffee shop has to offer: facilities, cleanliness, place, rules, queues, environment, other visitors.

*“No seats available”*

*“Wi-Fi not connected.”*

*“The place is also a mess. It's kind of dirty.”*

*“Closed room filled with cigarette smoke”.*

Place and ambiance are some among many of customers' concerns in choosing FnB business [19]. This suggests that details such as seating arrangements, and cleanliness can influence customer satisfaction. Other than that, Wi-Fi which has become a staple for modern coffee shops is also crucial to be available for the business [34].

**Suggestions for Local Coffee Shops.** Suggestions show a customer's willingness to help a business. Interestingly, this research found that a number of customers provided suggestions for improvements in addition to their complaints in the 1-star reviews they gave on Google reviews. This shows that even though customers are disappointed, they still have the desire to see the coffee shop they visit succeed in the future.

*"Dear Mas Bimo, you have to be more selective in choosing employees."  
"But please train the employees".*

These comments reflect a willingness to support the business if it addresses key areas of concern, such as employee behavior and the quality of service provided. Customers who give effort to give detailed recommendation might have been loyal patrons but were disappointed with their latest experiences [20] or might as well merely want their voices to be heard [31].

The relationship between these themes and sub-themes is depicted in Fig. 3.

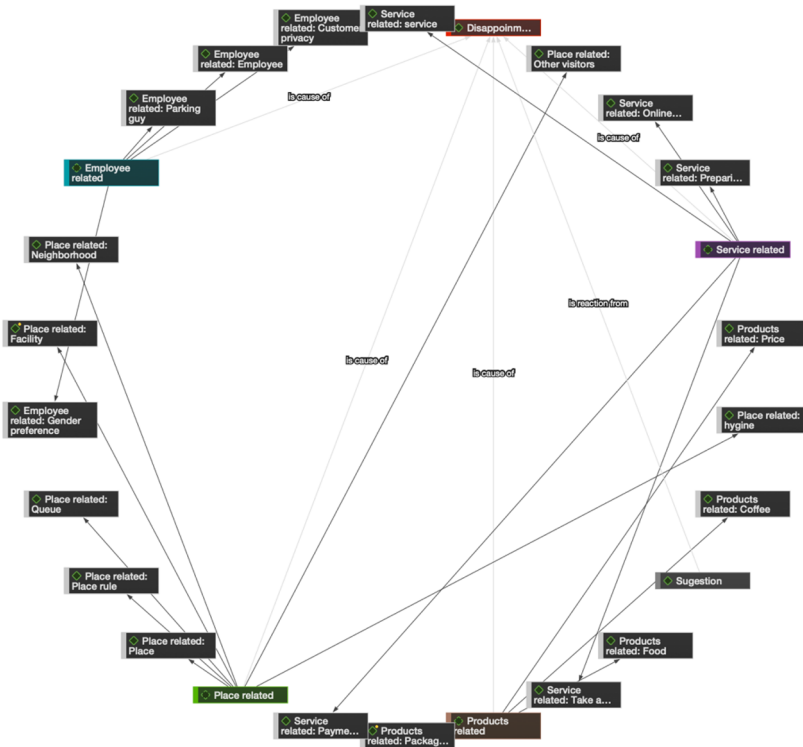


Fig 3. Relationship between themes and sub-themes of 1-star Google reviews data

## 5 Conclusion

Through detailed analysis, this research reveals that 1-star reviews, although generally considered negative, contain a variety of sentiments, including positive, neutral, and negative tones. Some customers offer praise for certain aspects of the coffee shop experience, although this is often accompanied by sarcasm or humor. Additionally, neutral reviews provide descriptive feedback without strong emotions, reflecting customer

observations. However, most reviews expressed dissatisfaction, highlighting areas where the coffee shop could improve.

This research identified several themes related to the dissatisfaction of local coffee shop customers in Yogyakarta which they conveyed through Google reviews. Service-related issues are often a concern, with many customers expressing frustration over long wait times, unresponsive staff, and unsatisfactory online service and payments. Employee behavior has also drawn criticism, with reviews citing unprofessional or rude interactions with baristas, cashiers, and servers. Another significant source of dissatisfaction is product quality, with customers often complaining of inconsistent coffee and food quality, as well as packaging that does not meet their expectations. Some reviews also reflect dissatisfaction with the atmosphere and facilities, such as seating arrangements and cleanliness.

Despite offering valuable insights, this study has several limitations that should be acknowledged. First, the dataset is relatively limited, consisting of limited one-star reviews from ten coffee shops, which may not fully represent the diversity of customer dissatisfaction experiences. Second, the study focuses exclusively on local coffee shops in Yogyakarta, limiting the generalizability of the findings to other cities or cultural contexts. Additionally, this research examines only 1-star reviews, which capture extreme dissatisfaction but do not account for comparative perspectives from moderate or positive reviews. Including multiple rating categories in future research may offer a more comprehensive understanding of customer sentiment dynamics.

Future studies could expand the dataset across different regions, include longitudinal data, or integrate mixed-method approaches, such as combining sentiment analysis with interviews or surveys. Such approaches would allow deeper exploration of how online dissatisfaction relates to customer loyalty and business recovery strategies.

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