

CUSTOMER SATISFACTION ON SOCIAL MEDIA: ANALYSING SENTIMENT AND BRAND PERCEPTION THROUGH BIG DATA

Yogi Nurfauzi *

STKIP Majenang- Cilacap
Email yorista050311@gmail.com

Wulandari

Institut Bakti Nusantara
seankoko008@gmail.com

Abstract

This research aims to analyse the level of customer satisfaction and brand perception on social media through big data-based sentiment analysis methods. By utilising big data technology, data obtained from various social media platforms such as Facebook, Twitter, and Instagram were analysed to identify positive, negative, and neutral sentiments towards brands. This research found a relationship between customer sentiment and brand reputation and loyalty. Positive sentiments contribute to improved customer image and loyalty, while negative sentiments can significantly damage brand reputation. The results demonstrate the importance of continuous monitoring and analysis of social media activity to devise effective marketing and customer service strategies that are responsive to customer needs and perceptions.

Keywords: Satisfaction, Customer, Social Media, Brand Perception, Big Data

INTRODUCTION

In the rapidly growing digital era, social media has become a very important platform for interaction between companies and customers. According to a report by We Are Social and Hootsuite (2023), there are more than 4.8 billion social media users worldwide, representing about 59.4% of the total global population. This figure shows the great potential of social media as a means of communication and a source of information for companies to understand customer satisfaction and perceptions of their brands. (Hidayatullah et al., 2024)..

Customer satisfaction is a key factor in business success and sustainability. Satisfied customers tend to be loyal, make repeat purchases, and recommend products or services to others. Customer satisfaction is a psychological condition felt by consumers after using a product or service, where there is a comparison between their expectations or expectations and the actual experience received. This satisfaction is a feeling of pleasure or disappointment that arises after comparing the performance (or results) of the product that is thought against the expected performance (or results). (Mahardhika & Nurmahdi, 2023). If performance is below expectations, the customer is dissatisfied. If performance meets expectations, the customer is satisfied. If

performance exceeds expectations, the customer is very satisfied or happy. Thus, customer satisfaction is an important indicator for companies to measure their success in meeting consumer needs and wants, as well as the basis for building customer loyalty and long-term competitive advantage. However, in this digital era, customers have more choices and access to information, so their expectations of products and services are also getting higher. Companies are required to continuously monitor and respond quickly to customer feedback spread across various social media platforms. (Prajati & Bala, 2024).

Sentiment and brand perception analysis through big data offers a promising solution to understanding customer satisfaction on social media. By utilising big data analysis techniques, companies can process and analyse vast amounts of data from various social media sources in real-time. This allows companies to gain deeper and more accurate insights into customer sentiment and how they perceive the brand (Srinivas et al., 2014). (Srinivas et al., 2023)..

Nonetheless, the application of sentiment analysis and brand perception through big data still faces several challenges. Firstly, the diversity of language and context on social media can make it difficult to conduct accurate sentiment analysis. Second, brand perception is often multidimensional and can change rapidly, requiring a more complex analysis approach. Third, the huge volume of data from social media requires sophisticated technological infrastructure and analysis methods. (Rakhmawati & Tuti, 2023)..

Several previous studies have shown the potential of sentiment analysis and big data in understanding customer satisfaction. For example, a study conducted by Zhang et al. (2020) used sentiment analysis to measure customer satisfaction with hotel services based on online reviews. Meanwhile, Ghiassi et al. (2018) developed a big data-based sentiment analysis model to understand brand perception on Twitter. However, there is still a gap in the literature regarding the integration of sentiment analysis and brand perception through big data to comprehensively understand customer satisfaction on social media. (Verma & Kumar, 2022).. This research aims to fill that gap by developing an approach that combines sentiment analysis and brand perception using big data techniques to provide a deeper understanding of customer satisfaction on social media.

Research Methods

The study in this research uses the literature method. This method is a research approach that involves collecting, analysing, and synthesising information from various written sources relevant to the topic or research problem being studied. In this method, researchers conduct a systematic review of books, journal articles, research reports, theses, dissertations, and other reliable sources to gain a comprehensive understanding of the state of the art in the field under study, identify knowledge gaps, formulate new

research questions, or develop conceptual frameworks. (Helaluddin, 2019); (Sanusi, 2015). This process involves several stages, including the formulation of research questions, search and selection of relevant literature, critical evaluation of the sources found, analysis and synthesis of information, and drawing conclusions based on the findings obtained. Literature research methods are essential in building a strong theoretical foundation for further research and contributing to the development of knowledge in a field of study. (Wekke, 2020).

Results and Discussion

Customer Satisfaction Measurement

Customer satisfaction is an emotional state felt by consumers after using a product or service, where there is a comparison between their initial expectations and the actual experience received. This satisfaction is considered as the level at which the perceived performance of the product or service matches the buyer's expectations. If the performance of the product or service does not meet expectations, the customer will feel dissatisfied. (HARYANTI & HERMAWAN, 2021). Conversely, if performance matches or even exceeds expectations, customers will feel satisfied or very satisfied. Customer satisfaction is a key factor in building consumer loyalty, improving company reputation, and driving long-term business growth. Therefore, many companies strive to continuously improve the quality of their products and services in order to achieve optimal levels of customer satisfaction. (Oktafiani & Cempena, 2021).

Customer satisfaction is influenced by various interrelated and complex factors. One of the main factors is the quality of the product or service provided. Customers tend to feel satisfied when the products or services they receive meet or even exceed their expectations in terms of performance, reliability and durability. Price also plays an important role in customer satisfaction, where customers will compare the value they receive with the cost they spend. In addition, the quality of customer service, including friendliness, responsiveness, and the ability of employees to handle problems, greatly affects customers' perceptions of their overall experience. (Sobouti & Alavijeh, 2024)..

Other factors that influence customer satisfaction include ease of access and convenience in obtaining products or services, as well as brand image and company reputation. Previous customer experiences and recommendations from others can also shape expectations and affect their level of satisfaction. Emotional factors, such as feeling valued or recognised by the company, also play a role in shaping customer satisfaction. (Rizky & Hariasih, 2023). Finally, situational factors such as store ambience, waiting time, and the environmental conditions in which the product or service is provided can influence customers' judgement of their overall experience. Understanding and managing these factors well can help companies significantly increase their customer satisfaction. (Fatima & Billah, 2022).

Customer satisfaction measurement is an important process undertaken by companies to evaluate the extent to which their products or services meet or exceed consumer expectations. Commonly used measurement methods include customer satisfaction surveys, either through online, telephone, or face-to-face questionnaires. These surveys usually include questions about various aspects of the product or service, and use a rating scale to measure the level of satisfaction. (Nair, 2023). In addition, companies can also use the Net Promoter Score (NPS) method which measures how likely customers are to recommend a product or service to others. Analysing customer complaints and suggestions, as well as monitoring social media and online reviews are also valuable sources of information in measuring customer satisfaction. (Omran, 2021).

Other measurement methods include mystery shopping, where someone pretends to be a customer to objectively evaluate service quality, as well as analyses of customer retention rates and frequency of repeat purchases. Some companies also use focus group discussions to gain deeper insights into customer experiences and perceptions. It is important to note that customer satisfaction measurement should be done periodically and consistently to be able to track changes over time and identify trends. (Zhang & Kim, 2021). The results of these measurements can then be used as a basis for making improvements and innovations in products or services, as well as for improving marketing and customer service strategies. By accurately understanding the level of customer satisfaction, companies can take appropriate measures to increase customer loyalty and drive long-term business growth. (Liu, 2021).

The Role of Social Media in Business

Social media can be defined as digital platforms or applications that allow users to create, share and interact with content and connect with others online. Key characteristics of social media include the ability to create user profiles, build networks of connections, and participate in virtual communities. Social media has changed the way people communicate, access information and express themselves in the digital age. It enables rapid and widespread information exchange, and facilitates real-time interactions between individuals, groups and organisations without geographical limitations. (Zaichkowsky et al., 2021)..

The types of social media are diverse and continue to evolve as technology advances. Some of the main categories of social media include: (1) Social networks such as Facebook and LinkedIn, which focus on building and maintaining personal and professional relationships; (2) Media sharing platforms such as Instagram and YouTube, which allow users to share photos, videos, and other multimedia content; (3) Microblogging such as Twitter, which allows users to share short, quick messages; (4) Location-based platforms such as Foursquare, which connect users based on their geographic location; (5) Online forums and discussion communities such as Reddit, which facilitate discussion and exchange of ideas on various topics; (6) Blogging

platforms such as WordPress and Medium, which allow users to publish articles and long-form content; and (7) Instant messaging applications such as WhatsApp and Telegram, which focus on personal and group communication. Each of these types of social media has unique features and functions that cater to different user needs and preferences (Agrebi et al., 2022)..

Social media has become a very important tool in the modern business world. These platforms offer unprecedented opportunities for marketing, branding, and customer interaction. Through social media, companies can reach a wider audience at a relatively low cost compared to traditional marketing methods (Han & Shen, 2021). Companies can utilise various content formats such as videos, images, and texts to capture consumers' attention and build a more personalised relationship with them. In addition, social media also allows companies to get direct feedback from customers, understand market trends, and respond quickly to changing consumer preferences. (Fatima & Billah, 2022)..

The role of social media in business also includes operational and customer service aspects. These platforms become effective communication channels for providing product information, handling customer complaints, and providing post-sales support. Social media also facilitates internal and external collaboration, allowing companies to connect with business partners, suppliers, and even competitors. (Florendiana & Andriani, 2023). In the context of e-commerce, the integration of online stores with social media platforms has opened up new opportunities for direct selling and a more interactive shopping experience. Companies can also leverage social media analytics to gain valuable insights into consumer behaviour and the effectiveness of their marketing strategies. (Rane, 2023).

As such, social media has significantly changed the business landscape, offering powerful tools for marketing, customer engagement, and business development. Effective utilisation of social media can increase brand visibility, strengthen customer relationships, and ultimately drive business growth. However, it is important for companies to develop a focused and consistent social media strategy, and remain adaptive to changing trends and platform technologies. With the right approach, social media can be an invaluable asset in achieving business goals and building a competitive advantage in an increasingly digitalised marketplace.

Sentiment Analysis Applications in Business

Sentiment analysis, also known as opinion mining or emotion AI, is the process of using natural language processing (NLP), text analysis, and computational linguistics technologies to systematically identify, extract, and quantify affective states and subjective information from textual data sources. The main goal is to determine the attitude of the speaker, author, or subject towards a particular topic or the overall polarity of a document. (Joudeh et al., 2024).. These analyses can classify sentiment as

positive, negative, or neutral, and in some cases, can identify specific emotions such as happiness, anger, or sadness. This technique is widely used in a variety of fields, including marketing, customer service, social media analysis, and market research, to understand public opinion, measure customer satisfaction, and identify emerging trends or issues in brand or product perception. (Sakas et al., 2023).

Sentiment analysis can be performed through various methods, which can generally be categorised into three main approaches: lexicon-based, machine learning, and hybrid approaches. Lexicon-based methods utilise predefined sentiment dictionaries to identify positive and negative words in text. Machine learning approaches leverage algorithms such as Naive Bayes, Support Vector Machines (SVM), or Deep Learning to train models on labelled datasets and then predict sentiment on new data. Hybrid methods combine the strengths of both lexicon-based and machine learning approaches (Colicev & O'Connor, 2020).. In addition, natural language processing (NLP) techniques such as tokenisation, lemmatisation and stop words removal are often used as pre-processing steps. More sophisticated approaches may also consider context, sarcasm, and language nuances to improve the accuracy of sentiment analysis. (Gautam & Jaitly, 2021).

Sentiment analysis has various important applications in the business world, especially in understanding and responding to customer opinions and optimising marketing strategies. One of its main uses is in social media monitoring and online product reviews. Companies can use sentiment analysis to track their brand perception in real-time, identify emerging trends, and respond quickly to negative feedback or potential crises. This allows businesses to safeguard their reputation and improve customer relationships. In addition, sentiment analysis is also used in market research to gauge consumer reactions to new product launches, advertising campaigns, or changes in Company policies. (Jaitly & Gautam, 2021)..

In the context of customer service, sentiment analysis can help automate the complaint handling process by prioritising and directing issues to the right department based on the urgency and emotional tone of the message. This improves efficiency and customer satisfaction. In the area of product development, insights from sentiment analysis can inform design and feature decisions, ensuring that products meet customer needs and preferences. For marketing and advertising, sentiment analysis helps in better audience segmentation and message personalisation, increasing campaign effectiveness. Finally, in competitive analysis, companies can use sentiment analysis to understand the strengths and weaknesses of their competitors from a customer perspective, providing a strategic advantage in a competitive market.

Relationship between Brand Perception and Customer Satisfaction

Brand perception and customer satisfaction are two closely interrelated concepts in the world of marketing and business management. Brand perception refers

to how consumers perceive and understand a brand, including the image, values, and associations associated with it. It is formed through various touchpoints between consumers and the brand, including direct experience with the product or service, marketing messages, interactions with company staff, and information from third-party sources. Meanwhile, customer satisfaction is a measure of the extent to which a product or service meets or exceeds customer expectations. This is the result of a comparison between pre-purchase expectations and perceptions of actual performance after use (Panigyrakis et al., 2020).

The relationship between brand perception and customer satisfaction is dynamic and mutually influencing. A positive brand perception can create high expectations, which if fulfilled, will result in a high level of customer satisfaction. For example, if a brand is known for premium quality and superior customer service, customers will expect an exceptional experience. If the actual experience matches or exceeds these expectations, it will reinforce positive brand perceptions and increase customer satisfaction. Conversely, if the experience does not meet high expectations, this can lead to significant dissatisfaction and potentially damage brand perception (Rukman et al., 2023).

On the other hand, consistent and high customer satisfaction over time can significantly improve brand perception. Satisfied customers tend to become loyal and become brand advocates, spreading positive word-of-mouth which further enhances the brand image in the eyes of other potential consumers. This creates a positive cycle where strong brand perception drives high expectations, which when fulfilled, results in high customer satisfaction, which in turn further strengthens brand perception. However, it is important to note that this relationship can also work negatively. Poor brand perception or low customer satisfaction can reinforce each other, creating a negative spiral that is difficult to reverse (Ritonga & Digdowiseiso, 2023).

In conclusion, brand perception and customer satisfaction have a very close and interdependent relationship. Positive brand perception can lead to high expectations, which, if fulfilled, result in high customer satisfaction. Conversely, consistent customer satisfaction can strengthen and improve brand perception. Therefore, it is important for companies to manage these two aspects holistically, ensuring that the projected brand image is aligned with the actual experience provided to customers. An effective strategy to improve brand perception and customer satisfaction can create a sustainable competitive advantage, drive customer loyalty, and ultimately improve overall business performance.

Utilisation of Big Data in Sentiment Analysis and Brand Perception

The utilisation of Big Data in sentiment analysis and brand perception has opened up a new era in brand image understanding and management. Big Data, which includes large volumes of structured and unstructured data from various sources,

provides deeper and more accurate insights into how consumers perceive and interact with brands. Sentiment analysis, as one of the main applications of Big Data, enables companies to process and interpret consumers' opinions, emotions, and attitudes towards their brands in real-time and at scale. (Atf et al., 2024).

In the context of brand perception, Big Data allows companies to collect and analyse data from various sources such as social media, online reviews, customer service interactions, and customer surveys. Natural language processing (NLP) and machine learning technologies are used to analyse text, images and even videos to extract sentiments and key themes related to the brand. This allows companies to gain a more nuanced understanding of how their brands are perceived across different market segments and platforms. (Attri, 2024).

One of the key advantages of using Big Data in sentiment analysis and brand perception is its ability to identify trends and changes in sentiment in real-time. Companies can quickly detect shifts in brand perception, both positive and negative, and respond quickly. For example, if the analysis shows an increase in negative sentiment related to a particular aspect of the product or service, the company can take immediate corrective action before the issue has a significant impact on the overall brand image. (Ibrahim & Nashaat, 2022).

Furthermore, Big Data enables better personalisation in branding and communication strategies. By understanding the specific perceptions and preferences of different consumer segments, companies can customise their brand messages to more effectively reach and influence each group. It also helps in the development of new products and services that are better aligned with consumer expectations and needs, thus strengthening the relationship between the brand and its customers.

Conclusion

Utilising big data technology, the authors were able to identify and quantify various positive, negative and neutral sentiments of customers towards the brand. The results of this analysis helped map the common customer views contained in reviews, comments and discussions on social media platforms such as Facebook, Twitter and Instagram. This research shows that big data analysis provides deep insights into customer satisfaction patterns and brand perceptions that companies can rely on to devise more targeted marketing and customer service strategies.

From the research results, it was found that positive sentiments tend to improve brand image and customer loyalty, while negative sentiments can drastically damage brand reputation. By understanding customer sentiments and perceptions, companies can take proactive steps to increase customer satisfaction, such as improving product and service quality, and establishing more effective communication with customers through social media platforms. This emphasises the importance of continuous

monitoring and analysis of social media activities as part of modern and responsive customer relationship management efforts.

References

- Agrebi, M., Chandon, J. L., & Zaichkowsky, J. L. (2022). Customer satisfaction and loyalty with corporate multi-brand websites in an era of social media and misinformation. *International Journal of Internet Marketing and Advertising*, 16(4), 394-394. <https://doi.org/10.1504/ijima.2022.123164>
- Atf, Z., Taherikia, F., & Hanzaee, K. H. (2024). Modelling Brand Engagement in Social Media (Based on Sentiment Analysis and Customer Data). *International Journal of Innovation Management and Organizational Behaviour*, 3(2), 208-218. <https://doi.org/10.61838/kman.ijimob.3.2.25>
- Attri, R. (2024). New Age Communication: Social Media Marketing and Big Data. *Augmenting Customer Retention Through Big Data Analytics*, Query date: 2024-11-16 06:38:42, 175-187. <https://doi.org/10.1201/9781003538486-11>
- Colicev, A., & O'Connor, P. (2020). How Social Media Impacts Brand Value: The Mediating Role of Customer Satisfaction. *Multidisciplinary Business Review*, 13(1), 82-96. <https://doi.org/10.35692/07183992.13.1.8>
- Fatima, R., & Billah, U. I. (2022). Contributors of Brand Switching: The Mediating Role of Brand Image and Customer Satisfaction. *JISR Management and Social Sciences & Economics*, 20(2). <https://doi.org/10.31384/jisrmsse/2022.20.2.9>
- Florendiana, T. R., & Andriani, D. (2023). Effect of Customer Satisfaction, Digital Marketing and Brand Trust on Repurchase Intention. Query date: 2024-11-16 06:38:42. <https://doi.org/10.21070/ups.1938>
- Gautam, O., & Jaitly, R. C. (2021). Impact of social media influencers on customer engagement and brand perception. *International Journal of Internet Marketing and Advertising*, 15(2), 220-220. <https://doi.org/10.1504/ijima.2021.10036969>
- Han, L., & Shen, Y. (2021). Design of Social Media User Satisfaction Evaluation System from the Perspective of Big Data Services. *2021 International Conference on Big Data Analysis and Computer Science (BDACS)*, Query date: 2024-11-16 06:38:42, 1-4. <https://doi.org/10.1109/bdacs53596.2021.00008>
- HARYANTI, D. S., & HERMAWAN, E. (2021). BRAND IDENTIFICATION, SATISFACTION, BRAND TRUST, AND COMMITMENT TO CUSTOMER LOYALTY IN MOTOR SPORT CONSUMERS. *Business Media*, 13(1), 89-100. <https://doi.org/10.34208/mb.v13i1.957>
- Helaluddin. (2019). Getting to Know the Phenomenological Approach: A Qualitative Research. Query date: 2024-05-25 20:59:55. <https://doi.org/10.31219/osf.io/stgfb>
- Hidayatullah, R., Jannah, R., & Wahyuningsih, O. (2024). Analysis of Atmosphere Momentum, Price Perception and Brand Image on Sales Customer Satisfaction of Batik in Central Lombok. *Asian Journal of Engineering, Social and Health*, 3(3), 611-622. <https://doi.org/10.46799/ajesh.v3i3.283>
- Ibrahim, M. M., & Nashaat, M. (2022). Online Customer Engagement as A Mediating Variable Between Social-Media Marketing and Customer Satisfaction: Using Big Data Analytics and Natural Language Processing. □□□□□□□□ □□□□

- 34-1, (14)8, □□□□□□□□ □□□□□□□□.
<https://doi.org/10.21608/csj.2022.261228>
- Jaitly, R. C., & Gautam, O. (2021). Impact of social media influencers on customer engagement and brand perception. *International Journal of Internet Marketing and Advertising*, 15(2), 220-220. <https://doi.org/10.1504/ijima.2021.114336>
- Joudeh, J. M. M., Omeish, F., Alharthi, S., Abu-Loghod, N. A., Zamil, A. M., & Joudeh, A. H. M. (2024). Exploring the Impact of E-WOM Information via Social Media on Customer Purchasing Decision: A Mediating Role of Customer Satisfaction. *Data and Metadata*, 3 (Query date: 2024-11-16 06:38:42). <https://doi.org/10.56294/dm2024.449>
- Liu, Y. (2021). Customer Review Elements of Agricultural Products E-commerce and Their Influence on Satisfaction Based on Big Data Crawlers. *2021 2nd International Conference on Big Data Economy and Information Management (BDEIM)*, Query date: 2024-11-16 06:38:42, 392-395. <https://doi.org/10.1109/bdeim55082.2021.00086>
- Mahardhika, D., & Nurmahdi, A. (2023). Analysis Of Price Perception, Brand Awareness, Delivery Quality On Customer Satisfaction And Repurchase Intention. *Dynasty International Journal of Education Management And Social Science*, 4(3), 323-334. <https://doi.org/10.31933/dijemss.v4i3.1615>
- Nair, J. G. (2023). Creating brand loyalty: Role of brand love, trust, product quality, customer service on customer engagement among social media users. *Journal of Management Research and Analysis*, 10(2), 87-91. <https://doi.org/10.18231/j.jmra.2023.015>
- Oktafiani, R., & Cempena, I. B. (2021). BRAND IMAGE, PRICE PERCEPTION AND QUALITY OF SOY SAUCE ABC PRODUCTS INFLUENCE ON CUSTOMER LOYALTY THROUGH CUSTOMER SATISFACTION IN GIANT KEDUNGSARI SURABAYA. *Jmm17*, 8(1), 39-48. <https://doi.org/10.30996/jmm17.v8i01.4785>
- Omran, W. (2021). Customer Engagement in Social Media Brand Community. *Research Journal of Humanities and Social Sciences*, Query date: 2024 11-16 06:38:42, 157-165. <https://doi.org/10.52711/2321-5828.2021.00026>
- Panigyrakis, G., Panopoulos, A., & Koronaki, E. (2020). Influence of Social Media Marketing on Customer Brand Attachment-Model. *PsycTESTS Dataset*, Query date: 2024-11-16 06:38:42. <https://doi.org/10.1037/t81874-000>
- Prajati, A., & Bala, R. P. (2024). Analysis of Service Quality, Brand Trust and Price Perception on Customer Satisfaction in the Prodia Surakarta Clinic Laboratory. *Journal of Economics, Finance And Management Studies*, 7(6). <https://doi.org/10.47191/jefms/v7-i6-26>
- Rakhmawati, H., & Tuti, M. (2023). Brand Experience Affects Brand Attitude, Brand attachment, Brand Satisfaction, and Brand Loyalty on Customer Make Over. *Journal of Management Dynamics*, 14(1), 124-136. <https://doi.org/10.15294/jdm.v14i1.41488>
- Rane, N. (2023). Enhancing Customer Loyalty through Artificial Intelligence (AI), Internet of Things (IoT), and Big Data Technologies: Improving Customer Satisfaction, Engagement, Relationship, and Experience. *SSRN Electronic Journal*, Query date: 2024-11-16 06:38:42. <https://doi.org/10.2139/ssrn.4616051>

- Ritonga, S. E., & Digdowiseiso, K. (2023). Mediation Effect of Customer Satisfaction on the Relationship Between Price Perception, Social Media, Brand Awareness, and Repurchase Decisions. *JMKSP (Journal of Management, Leadership, and Educational Supervision)*, 8(1), 486-499. <https://doi.org/10.31851/jmksp.v8i1.12628>
- Rizky, M. E., & Hariasih, M. H. (2023). Consumer Loyalty: Brand Perception, Trust, Product Quality, and the Mediating Role of Customer Satisfaction. *Academia Open*, 9(2). <https://doi.org/10.21070/acopen.9.2024.5562>
- Rukman, M. K. B., Praktikto, H., & Rahayu, W. P. (2023). Influence of Social Media Marketing, Product Quality, and Brand Image on Customer Loyalty Through Customer Satisfaction (Study on La Moringa Consumers, NTT). *Brilliant International Journal Of Management And Tourism*, 3(2), 105-120. <https://doi.org/10.55606/bijmt.v3i2.1388>
- Sakas, D. P., Reklitis, D. P., Terzi, M. C., & Glaveli, N. (2023). Growth of digital brand name through customer satisfaction with big data analytics in the hospitality sector after the COVID-19 crisis. *International Journal of Information Management Data Insights*, 3(2), 100190-100190. <https://doi.org/10.1016/j.ijime.2023.100190>
- Sanusi, I. (2015). Bridging Qualitative and Quantitative Research. *Journal of Da'wah Science*, 4(13), 409-409. <https://doi.org/10.15575/jid.v4i13.400>
- Sobouti, H., & Alavijeh, M. R. K. (2024). *Brand Relationship Quality Through Social Media Marketing, Digital Content Marketing, and Emotional Customer Engagement*. Query date: 2024-11-16 06:38:42. <https://doi.org/10.2139/ssrn.4995645>
- Srinivas, R. V., Podile, V., & Radhika, T. (2023). Bankers' perception of big data for fraud detection and customer satisfaction. *AIP Conference Proceedings*, 2821(Query date: 2024-11-16 06:38:42), 40015-40015. <https://doi.org/10.1063/5.0158548>
- Verma, R., & Kumar, M. (2022). Brand Extension in FMCG Sector Through Social Media Enabled CRM and Investigating Its Impact on Brand Equity. *Advances in Marketing, Customer Relationship Management, and E-Services*, Query date: 2024-11-16 06:38:42, 201-236. <https://doi.org/10.4018/978-1-6684-5386-5.ch009>
- Wekke, I. S. (2020). *Qualitative Research Design*. Query date: 2024-05-25 20:59:55. <https://doi.org/10.31219/osf.io/4q8pz>
- Zaichkowsky, J. L., Agrebi, M., & Chandon, J. L. (2021). Customer Satisfaction and Loyalty with Corporate Multi-Brand Web Sites in an Era of Social Media and Misinformation. *International Journal of Internet Marketing and Advertising*, 1(1), 1-1. <https://doi.org/10.1504/ijima.2021.10037440>
- Zhang, X., & Kim, H.-S. (2021). Customer Experience and Satisfaction of Disneyland Hotel through Big Data Analysis of Online Customer Reviews. *Sustainability*, 13(22), 12699-12699. <https://doi.org/10.3390/su132212699>