# LITERATURE REVIEW

The field of sentiment analysis serves as a pivotal tool in deciphering consumer perceptions, with its applications spanning a variety of domains. This literature review aims to shed light on the existing body of research concerning sentiment analysis, particularly focusing on Apple products within social media and e-commerce platforms. Notably, there is a distinct lack of research comparing these two platforms directly. This gap in the literature is where this research intends to contribute, providing new insights for academic circles and strategic guidance for businesses in the digital realm.

In the realm of social media analysis, studies like Dupinder Kaur's 2017 work utilized the Naive Bayes method to analyze tweet sentiments about Apple, revealing a predominance of positive sentiments. This is complemented by Jasmina Smailović et al.'s investigation into how Twitter sentiment analysis can forecast Apple stock movements, emphasizing the financial impact of social media sentiments. Similarly, Rubi Gupta and Chen’s 2020 study enhanced the prediction of Apple’s stock prices using sentiments from microblogging platforms, further demonstrating the influence of social media on financial markets.

On the e-commerce side, Elly Indrayuni and Nurhadi's 2020 study refined the Support Vector Machine (SVM) algorithms for classifying sentiments in Apple product reviews. This work underscores the potential for precision in understanding consumer sentiments in online retail spaces.

Advancements in sentiment analysis techniques also play a crucial role. Hassan Saif et al., in their 2012 research, significantly improved the accuracy of sentiment prediction by incorporating semantic concepts. These advancements are instrumental in both social media and e-commerce contexts.

However, despite these individual contributions, a comparative analysis between sentiments on social media and e-commerce platforms, specifically regarding Apple products, remains notably absent from existing research.

This review highlights the extensive application and technological advancements in sentiment analysis, especially in the context of Apple products. However, it also brings to light the absence of comparative studies between social media and e-commerce platforms in this area. This dissertation seeks to bridge this gap, with anticipated outcomes that could enrich academic knowledge and provide practical insights for digital marketing and strategic business decisions.

# references

Chamekh, A., Mahfoudh, M. and Forestier, G. (2022) ‘Sentiment analysis based on deep learning in e-commerce’, *Knowledge Science, Engineering and Management*, pp. 498–507. doi:10.1007/978-3-031-10986-7\_40.

Chen, J. *et al.* (2022) ‘Learning user sentiment orientation in social networks for sentiment analysis’, *Information Sciences*, 616, pp. 526–538. doi:10.1016/j.ins.2022.10.135.

Das, S. and Kolya, A.K. (2017) ‘Sense GST: Text mining & sentiment analysis of GST tweets by naive Bayes algorithm’, *2017 Third International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)* [Preprint]. doi:10.1109/icrcicn.2017.8234513.

Drus, Z. and Khalid, H. (2019) ‘Sentiment Analysis in social media and its application: Systematic Literature Review’, *Procedia Computer Science*, 161, pp. 707–714. doi:10.1016/j.procs.2019.11.174.

Gupta, R. and Chen, M. (2020) ‘Sentiment analysis for stock price prediction’, *2020 IEEE Conference on Multimedia Information Processing and Retrieval (MIPR)* [Preprint]. doi:10.1109/mipr49039.2020.00051.

Indrayuni, E. and Nurhadi, A. (2020) ‘Optimizing genetic algorithms for sentiment analysis of Apple product reviews using SVM’, *SinkrOn*, 4(2), p. 172. doi:10.33395/sinkron.v4i2.10549.

Kaur, D. (2017) *Sentimental Analysis on Apple Tweets with Machine Learning Technique*, *ResearchGate*. Available at: https://www.researchgate.net/publication/353072253\_Sentimental\_Analysis\_on\_Apple\_Tweets\_with\_Machine\_Learning\_Technique (Accessed: 31 August 2023).

Philander, K. and Zhong, Y. (2016) ‘Twitter sentiment analysis: Capturing sentiment from integrated resort tweets’, *International Journal of Hospitality Management*, 55, pp. 16–24. doi:10.1016/j.ijhm.2016.02.001.

Saif, H., He, Y. and Alani, H. (2012) ‘Semantic sentiment analysis of Twitter’, *The Semantic Web – ISWC 2012*, pp. 508–524. doi:10.1007/978-3-642-35176-1\_32.

Singh, N.K., Tomar, D.S. and Sangaiah, A.K. (2018) ‘Sentiment analysis: A review and Comparative Analysis Over Social Media’, *Journal of Ambient Intelligence and Humanized Computing*, 11(1), pp. 97–117. doi:10.1007/s12652-018-0862-8.

Smailović, J., Grčar, M. and Žnidaršič, M. (no date) *Sentiment analysis on tweets in a financial domain*. Available at: https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=ba53a72840a5e9dd5787235007a873984d3a4f3d (Accessed: 31 August 2023).

Yue, L. *et al.* (2018) ‘A survey of sentiment analysis in social media’, *Knowledge and Information Systems*, 60(2), pp. 617–663. doi:10.1007/s10115-018-1236-4.