

DAFTAR PUSTAKA

- [1] H. K. L. Chau, T. T. A. Ngo, C. T. Bui, and N. P. N. Tran, "Human-AI interaction in E-Commerce: The impact of AI-powered customer service on user experience and decision-making," *Computers in Human Behavior Reports*, vol. 19, p. 100725, Aug. 2025, doi: 10.1016/J.CHBR.2025.100725.
- [2] Yusrin A, "Ai-Powered E-Commerce: Elevating E-Service Quality Through Utilitarian And Hedonic With E-Satisfaction As The Bridge To E-Loyalty | Jurnal Multidisiplin Sahombu." Accessed: Sep. 27, 2025. [Online]. Available: <https://ejournal.seaninstitute.or.id/index.php/JMS/article/view/6202>
- [3] S. Aljarboa, "Factors influencing the adoption of artificial intelligence in e-commerce by small and medium-sized enterprises," *International Journal of Information Management Data Insights*, vol. 4, no. 2, p. 100285, Nov. 2024, doi: 10.1016/J.JJIMEI.2024.100285.
- [4] H. Beyari, "Assessing artificial intelligence's impact on e-customer loyalty in the Saudi Arabian market," *Front Artif Intell*, vol. 8, p. 1541678, Apr. 2025, doi: 10.3389/FRAI.2025.1541678/BIBTEX.
- [5] Sathya. P, A. .V, and E. .M, "Sentiment Analysis Of E-Commerce Product Reviews Using An Attnetion Based Deep Learning Model," *J Neonatal Surg*, vol. 14, no. 32S, pp. 1507–1515, Jun. 2025, Accessed: Sep. 27, 2025. [Online]. Available: <https://www.jneonatsurg.com/index.php/jns/article/view/7602>
- [6] Q. Wu, C. Xia, and S. Tian, "AI-Driven Sentiment Analytics: Unlocking Business Value in the E-Commerce Landscape," Jun. 2025, Accessed: Sep. 27, 2025. [Online]. Available: <https://arxiv.org/pdf/2504.08738v3>
- [7] Q. Wu, C. Xia, and S. Tian, "AI-Driven Sentiment Analytics: Unlocking Business Value in the E-Commerce Landscape," Jun. 2025, Accessed: Sep. 27, 2025. [Online]. Available: <https://arxiv.org/pdf/2504.08738v3>
- [8] R. B. Ingriana A, "REVOLUTIONING+E-COMMERCE+INVESTIGATING+THE+EFFECTIVENESS+OF+AI-DRIVEN+PERSONALIZATION+IN+INFLUENCING+CONSUMER+PURCHASING+BEHAVIOR".

- [9] H. Ali and N. Hendrastuty, "COMPARISON OF NAÏVE BAYES CLASSIFIER, SUPPORT VECTOR MACHINE, RANDOM FOREST ALGORITHMS FOR PUBLIC SENTIMENT ANALYSIS OF KIP-K PROGRAM ON TWITTER," *Jurnal Teknik Informatika (Jutif)*, vol. 5, no. 6, pp. 1701–1712, Dec. 2024, doi: 10.52436/1.JUTIF.2024.5.6.4030.
- [10] C. K. Wang, "Sentiment Analysis Using Support Vector Machines, Neural Networks, and Random Forests," 2023, pp. 23–34. doi: 10.2991/978-94-6463-300-9_4.
- [11] Q. W. Anadia and A. Meiriza, "Performance Comparison of Sentiment Classification Algorithms on SIGNAL Reviews Using SMOTE," *Journal of Information Systems and Informatics*, vol. 7, no. 3, pp. 2407–2423, Sep. 2025, doi: 10.51519/JOURNALISI.V7I3.1196.
- [12] B. M. D. Abighail, Fachrifansyah, M. R. Firmanda, M. S. Anggreainy, Harvianto, and Gintoro, "Sentiment Analysis E-commerce Review," *Procedia Comput Sci*, vol. 227, pp. 1039–1045, Jan. 2023, doi: 10.1016/J.PROCS.2023.10.613.
- [13] G. K. An and T. T. A. Ngo, "AI-powered personalized advertising and purchase intention in Vietnam's digital landscape: The role of trust, relevance, and usefulness," *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 11, no. 3, p. 100580, Sep. 2025, doi: 10.1016/J.JOITMC.2025.100580.
- [14] W. Candra Mandagie and R. Kristaung, "The power of AI personalization: Mediated moderation in social & e-commerce," vol. 18, no. 1, pp. 35–58, 2025, doi: 10.25105/jmpj.v18i1.21587.
- [15] H. Gunawan, A. Suroso, and K. Malang, "THE IMPACT OF AI DRIVEN PERSONALIZATION ON CUSTOMER ENGAGEMENT AND LOYALTY," *Management Studies and Business Journal (PRODUCTIVITY)*, vol. 2, no. 4, pp. 2511–2525, Apr. 2025, doi: 10.62207/ZK1YS496.
- [16] A. Saful Falah, L. Sari Dewi, and S. Latifah Mubarokiyah, "YUME : Journal of Management Leveraging AI-Driven Personalization: The Future of Customer Experience in Digital Marketing," 2025.

- [17] Y. Filahi *et al.*, “Enhanced E-commerce decision-making through sentiment analysis using machine learning-based approaches and IoT,” *PLoS One*, vol. 20, no. 6, p. e0326744, Jun. 2025, doi: 10.1371/JOURNAL.PONE.0326744.
- [18] H. K. L. Chau, T. T. A. Ngo, C. T. Bui, and N. P. N. Tran, “Human-AI interaction in E-Commerce: The impact of AI-powered customer service on user experience and decision-making,” *Computers in Human Behavior Reports*, vol. 19, p. 100725, Aug. 2025, doi: 10.1016/J.CHBR.2025.100725.
- [19] A. Valencia-Arias, H. Uribe-Bedoya, J. D. González-Ruiz, G. S. Santos, E. C. Ramírez, and E. M. Rojas, “Artificial intelligence and recommender systems in e-commerce. Trends and research agenda,” *Intelligent Systems with Applications*, vol. 24, p. 200435, Dec. 2024, doi: 10.1016/J.ISWA.2024.200435.
- [20] A. Deekshith and A. Deekshith, “AI-Driven Sentiment Analysis for Enhancing Customer Experience in E-Commerce,” *International Journal of Machine Learning for Sustainable Development*, vol. 3, no. 2, Sep. 2021, Accessed: Sep. 27, 2025. [Online]. Available: <https://ijsdcs.com/index.php/IJMLSD/article/view/631>
- [21] Sathya. P, A. .V, and E. .M, “Sentiment Analysis Of E-Commerce Product Reviews Using An Attnetion Based Deep Learning Model,” *J Neonatal Surg*, vol. 14, no. 32S, pp. 1507–1515, Jun. 2025, Accessed: Sep. 27, 2025. [OnlineAvailable : <https://www.jneonatalurg.com/index.php/jns/article/view/7602>]
- [22] N. M. Al Ghazali and Y. Sibaroni, “Sentiment Classification in E-Commerce Using Naïve Bayes and Combined Lexicon - N-Gram Features,” *JIPi (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika)*, vol. 10, no. 2, pp. 1257–1271, Mar. 2025, doi: 10.29100/jipi.v10i2.6157.
- [23] I. S. Stie and P. Banjarmasin, “THE ROLE OF AI-DRIVEN PERSONALIZATION IN SHAPING CONSUMER LOYALTY IN E-COMMERCE,” *Management Studies and Business Journal (PRODUCTIVITY)*, vol. 2, no. 4, pp. 2374–2388, Apr. 2025, doi: 10.62207/XBVH6T64.
- [24] A. M. Rizki, B. Bustami, and S. F. Anshari, “Comparison of Support Vector

- Machine and Naïve Bayes Algorithms in Sentiment Analysis of Tiktokshop Application User Reviews,” *Journal of Renewable Energy, Electrical, and Computer Engineering*, vol. 5, no. 1, pp. 18–29, Mar. 2025, doi: 10.29103/JREECE.V5I1.21342.
- [25] M. U. Javeed, M. Akram, S. M. Aslam, S. Hussain, M. M. Nazakat, and M. Nauman, “Predicting Customer Loyalty from E-Commerce Reviews Using Aspect-Based Sentiment Analysis and ANN,” *The Asian Bulletin of Big Data Management*, vol. 5, no. 3, pp. 49–61, Jul. 2025, doi: 10.62019/3AKT6733.
- [26] Y. Filahi *et al.*, “Enhanced E-commerce decision-making through sentiment analysis using machine learning-based approaches and IoT,” *PLoS One*, vol. 20, no. 6, p. e0326744, Jun. 2025, doi: 10.1371/JOURNAL.PONE.0326744.
- [27] T. Dewi, Asrianda, and Y. Afrillia, “Sentiment Analysis of Customer Satisfaction Towards Shopee and Lazada E-commerce Platform Using the Random Forest Algorithm Classifier,” *International Journal of Engineering, Science and Information Technology*, vol. 5, no. 1, pp. 229–235, 2025, doi: 10.52088/ijesty.v5i1.692.
- [28] A. M. Rizki, B. Bustami, and S. F. Anshari, “Comparison of Support Vector Machine and Naive Bayes Algorithms in Sentiment Analysis of Tiktokshop Application User Reviews,” *Journal of Renewable Energy, Electrical, and Computer Engineering*, vol. 5, no. 1, pp. 18–29, Mar. 2025, doi: 10.29103/jreece.v5i1.21342.
- [29] D. Haliza and M. Ikhsan, “Sentiment Analysis on Public Perception of the Nusantara Capital on Social Media X Using Support Vector Machine (SVM) and K-Nearest Neighbor (K-NN) Methods,” *Journal of Applied Informatics and Computing*, vol. 9, no. 3, pp. 716–723, Jun. 2025, doi: 10.30871/JAIC.V9I3.9318.
- [30] O. O. Amusan and A. M. Udefi, “AI-powered sentiment analysis for classifying harmful content on social media: A case study with ChatGPT Integration,” 2024, doi: 10.30574/wjarr.2024.24.3.3710.
- [31] A. Tirta, P. Subandono, and D. Ariatmanto, “Optimalisasi Seleksi Fitur dalam Analisis Sentimen Bank Saqu: Studi Perbandingan SVM dan Random Forest Menggunakan Information Gain dan Chi-Square Optimizing Feature

- Selection in Sentiment Analysis of Bank Saqu: A Comparative Study of SVM and Random Forest using Information Gain and Chi-Square,” Mar. 2025. [Online]. Available: <http://sistemasi.ftik.unisi.ac.id>
- [32] M. Haroon, Z. Alam, R. Kousar, J. Ahmad, and F. Nasim, “Sentiment Analysis of Customer Reviews on E-commerce Platforms: A Machine Learning Approach,” *Bulletin of Business and Economics (BBE)*, vol. 13, no. 3, pp. 230–238, Aug. 2024, doi: 10.61506/01.00480.
- [33] N. A. Rice, N. Mustakim, and M. Afdal, “Sentiment Analysis on the Impact of Artificial Intelligence (AI) Development to Determine Technology Needs,” 2024.
- [34] A. A. A. Ahmed, S. Agarwal, Im. G. A. Kurniawan, S. P. D. Anantadjaya, and C. Krishnan, “Business boosting through sentiment analysis using Artificial Intelligence approach,” *International Journal of System Assurance Engineering and Management*, vol. 13, pp. 699–709, Mar. 2022, doi: 10.1007/s13198-021-01594-x.
- [35] C. Destitus, “Support Vector Machine VS Information Gain: Analisis Sentimen Cyberbullying di Twitter Indonesia,” *ULTIMA InfoSys*, vol. XI, no. 2, p. 107, 2020.
- [36] N. N. Wilim and R. S. Oetama, “Sentiment Analysis about Indonesian Lawyers Club Television Program Using K-Nearest Neighbor, Naïve Bayes Classifier, and Decision Tree,” *International Journal of New Media Technology*, vol. 8, no. 1, p. 50, 2021, [Online]. Available: www.kriminalberita.com
- [37] B. M. D. Abighail, Fachrifansyah, M. R. Firmanda, M. S. Anggreainy, Harvianto, and Gintoro, “Sentiment Analysis E-commerce Review,” *Procedia Comput Sci*, vol. 227, pp. 1039–1045, Jan. 2023, doi: 10.1016/J.PROCS.2023.10.613.
- [38] Y. Mao, Q. Liu, and Y. Zhang, “Sentiment analysis methods, applications, and challenges: A systematic literature review,” *Journal of King Saud University - Computer and Information Sciences*, vol. 36, no. 4, p. 102048, Apr. 2024, doi: 10.1016/J.JKSUCI.2024.102048.
- [39] P. Vijayaragavan *et al.*, “Sustainable sentiment analysis on E-commerce

- platforms using a weighted parallel hybrid deep learning approach for smart cities applications,” *Sci Rep*, vol. 14, no. 1, pp. 1–19, Dec. 2024, doi: 10.1038/S41598-024-78318-1;SUBJMETA.
- [40] M. Kumar, L. Khan, and H. T. Chang, “Evolving techniques in sentiment analysis: a comprehensive review,” *PeerJ Comput Sci*, vol. 11, p. e2592, Jan. 2025, doi: 10.7717/PEERJ-CS.2592.
- [41] A. Romadhony, S. Al Faraby, R. Rismala, U. N. Wisesti, and A. Arifianto, “Sentiment Analysis on a Large Indonesian Product Review Dataset,” *Journal of Information Systems Engineering and Business Intelligence*, vol. 10, no. 1, pp. 167–178, Feb. 2024, doi: 10.20473/JISEBI.10.1.167-178.
- [42] S. Riyadi, F. Daffa, C. Damarjati, M. Syahirul Amin Megat Ali, and S. Riyadi, “Sentiment Analysis on Social Media Using CNN-RNN Hybrid: A Case Study of Indonesian Presidential Candidate,” *Kinetik: Game Technology, Information System, Computer Network, Computing, Electronics, and Control*, vol. 10, no. 2, pp. 175–186, May 2025, doi: 10.22219/KINETIK.V10I2.2125.
- [43] T. Handra, N. P. Lestari Santoso, O. Wilson, and T. Ramadhan, “The Implementation of Artificial Intelligence in Electronic Commerce,” *CCIT Journal*, vol. 17, no. 2, pp. 229–236, Aug. 2024, doi: 10.33050/CCIT.V17I2.3167.
- [44] R. P. Efendi, I. Qolbi, S. Z. A. Afandi, I. R. Kusumasari, and R. H. Nugroho, “The Role of Artificial Intelligence in Decision Making: Improving E-Commerce Business Efficiency and Innovation,” *Jurnal Bisnis dan Komunikasi Digital*, vol. 2, no. 2, p. 10, Dec. 2024, doi: 10.47134/jbkd.v2i2.3479.
- [45] V. Sowri Babu Krishna Banana, “A STUDY ON NARROW ARTIFICIAL INTELLIGENCE-AN OVERVIEW,” *International Journal of Engineering Science and Advanced Technology (IJESAT)*, vol. 24, 2024, Accessed: Oct. 24, 2025. [Online]. Available: www.ijesat.com
- [46] T. L. Ang, M. Choolani, K. C. See, and K. K. Poh, “The rise of artificial intelligence: addressing the impact of large language models such as ChatGPT on scientific publications,” *Singapore Med J*, vol. 64, no. 4, p. 219,

Apr. 2023, doi: 10.4103/SINGAPOREMEDJ.SMJ-2023-055.

- [47] Q. Wu, C. Xia, and S. Tian, “AI-Driven Sentiment Analytics: Unlocking Business Value in the E-Commerce Landscape,” Mar. 2025, Accessed: Oct. 24, 2025. [Online]. Available: <https://arxiv.org/pdf/2504.08738>
- [48] S. Aljarboa, “Factors influencing the adoption of artificial intelligence in e-commerce by small and medium-sized enterprises,” *International Journal of Information Management Data Insights*, vol. 4, no. 2, p. 100285, Nov. 2024, doi: 10.1016/J.JJIMEI.2024.100285.
- [49] C. Schröer, F. Kruse, and J. M. Gómez, “A Systematic Literature Review on Applying CRISP-DM Process Model,” *Procedia Comput Sci*, vol. 181, pp. 526–534, Jan. 2021, doi: 10.1016/J.PROCS.2021.01.199.
- [50] C. E. Durango Vanegas *et al.*, “A Representation Based on Essence for the CRISP-DM Methodology,” *Computación y Sistemas*, vol. 27, no. 3, pp. 675–689, 2023, doi: 10.13053/CYS-27-3-3446.
- [51] Y. A. Singgalen, “Comparative Analysis of DT and SVM Model Performance with SMOTE in Sentiment Classification,” *KLIK: Kajian Ilmiah Informatika dan Komputer*, vol. 4, no. 5, pp. 2485–2494, Apr. 2024, doi: 10.30865/KLIK.V4I5.1828.
- [52] D. Kurniawan and D. M. Yasir, “Optimization Sentimen Analysis using CRISP-DM and Naive Bayes Methods Implemented on Social Media,” *Cyberspace: Jurnal Pendidikan Teknologi Informasi*, vol. 6, no. 2, pp. 74–85, Oct. 2022, doi: 10.22373/CJ.V6I2.12793.
- [53] “A Comparative Study of Data Mining Process Models (KDD, CRISP-DM and SEMMA) (2014) | PDF | Data Mining | Conceptual Model.” Accessed: Oct. 24, 2025. [Online]. Available: <https://www.scribd.com/document/483048455/A-Comparative-Study-of-Data-Mining-Process-Models-KDD-CRISP-DM-and-SEMMA-2014>
- [54] N. H. Ovirianti, M. Zarlis, and H. Mawengkang, “Support Vector Machine Using A Classification Algorithm,” *Sinkron : jurnal dan penelitian teknik informatika*, vol. 6, no. 3, pp. 2103–2107, Aug. 2022, doi: 10.33395/SINKRON.V7I3.11597.
- [55] P. Ukey and G. Katkar, “A Review on Support Vector Machine (SVM) In

- Machine Learning,” 2025, Accessed: Oct. 24, 2025. [Online]. Available: www.ijcstjournal.org
- [56] M. Khairul Anam, T. P. Lestari, L. Efrizoni, N. S. Handayani, and I. Andhika, “Sentiment Analysis Optimization Using Ensemble of Multiple SVM Kernel Functions,” *Jurnal RESTI (Rekayasa Sistem dan Teknologi Informasi)*, vol. 9, no. 4, pp. 905–914, Aug. 2025, doi: 10.29207/RESTI.V9I4.6708.
 - [57] C. Dewi, R. C. Chen, H. J. Christanto, and F. Cauteruccio, “Multinomial Naïve Bayes Classifier for Sentiment Analysis of Internet Movie Database,” <https://doi.org/10.1142/S2196888823500100>, vol. 10, no. 4, pp. 485–498, Aug. 2023, doi: 10.1142/S2196888823500100.
 - [58] A. Tri Rizkya and A. Irham Gufroni, “Implementation of the Naive Bayes Classifier for Sentiment Analysis of Shopee E-Commerce Application Review Data on the Google Play Store.”
 - [59] A. Tri Rizkya and A. Irham Gufroni, “Implementation of the Naive Bayes Classifier for Sentiment Analysis of Shopee E-Commerce Application Review Data on the Google Play Store.”
 - [60] I. V. Pantic, J. Paunovic Pantic, S. Valjarevic, P. R. Corridon, and N. Topalovic, “Artificial intelligence – based approaches based on random forest algorithm for signal analysis: Potential applications in detection of chemico - biological interactions,” *Chem Biol Interact*, vol. 418, p. 111624, Sep. 2025, doi: 10.1016/J.CBI.2025.111624.
 - [61] C. I. Allen Akselrud, “Random forest regression models in ecology: Accounting for messy biological data and producing predictions with uncertainty,” *Fish Res*, vol. 280, p. 107161, Dec. 2024, doi: 10.1016/J.FISHRES.2024.107161.
 - [62] O. Castro, P. Bruneau, J. S. Sottet, and D. Torregrossa, “Landscape of High-Performance Python to Develop Data Science and Machine Learning Applications,” *ACM Comput Surv*, vol. 56, no. 3, Oct. 2023, doi: 10.1145/3617588.
 - [63] M. A. Kabir, F. Ahmed, M. M. Islam, and Md. R. Ahmed, “Python for Data Analytics: A Systematic Literature Review of Tools, Techniques, and

- Applications,” *ACADEMIC JOURNAL ON SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS EDUCATION*, vol. 4, no. 04, pp. 134–154, Nov. 2024, doi: 10.69593/AJSTEME.V4I04.146.
- [64] M. Choetkiertikul *et al.*, “Mining the Characteristics of Jupyter Notebooks in Data Science Projects,” *Proceedings of 20th International Conference on Mining Software Repositories (MSR '23)*, vol. 1, 2025, doi: 10.1145/nnnnnnnn.nnnnnnnn.
- [65] L. Z.S. Sudar, J. L. Imbenay, I. Budi, A. Ramadiah, P. K. Putra, and A. B. Santoso, “Textual Analysis for Public Sentiment Toward National Police Using CRISP-DM Framework,” *Revue d’Intelligence Artificielle*, vol. 38, no. 1, pp. 63–72, Feb. 2024, doi: 10.18280/RIA.380107.
- [66] N. Natalia, E. Krisdianti Astikarani, M. A. Khairul, and N. Sjamsuddin, “Sentiment Analysis Of The Shopee Marketplace On Twitter Using The Naive Bayes Classifier Method,” Oct. 2025. [Online]. Available: <https://t.co/yLKgFA5aOw>
- [67] M. AminiMotlagh, H. S. Shahhoseini, and N. Fatehi, “A reliable sentiment analysis for classification of tweets in social networks,” *Soc Netw Anal Min*, vol. 13, no. 1, p. 7, Dec. 2022, doi: 10.1007/S13278-022-00998-2.
- [68] Y. Qi and Z. Shabrina, “Sentiment analysis using Twitter data: a comparative application of lexicon- and machine-learning-based approach,” *Soc Netw Anal Min*, vol. 13, no. 1, p. 31, Dec. 2023, doi: 10.1007/S13278-023-01030-X.
- [69] A. Nazarkar, H. Kuchulakanti, C. S. Paidimarry, and S. Kulkarni, “Impact of Various Data Splitting Ratios on the Performance of Machine Learning Models in the Classification of Lung Cancer,” 2023, pp. 96–104. doi: 10.2991/978-94-6463-252-1_12.
- [70] M. Sivakumar, S. Parthasarathy, and T. Padmapriya, “Trade-off between training and testing ratio in machine learning for medical image processing,” *PeerJ Comput Sci*, vol. 10, 2024, doi: 10.7717/PEERJ-CS.2245.
- [71] E. Haerani, F. Syafria, F. Lestari, and I. Marzuki, “CLASSIFICATION ACADEMIC DATA USING MACHINE LEARNING FOR DECISION MAKING PROCESS,” 2022.