

DAFTAR PUSTAKA

- [1] J. Luis Gómez-Barroso and R. Marbán-Flores, “Telecommunications and Economic Development-The 20th Century: The Building of an Evidence Base,” 2020.
- [2] J. Mantik and W. Achmad, “Citizen and Netizen Society: The Meaning of Social Change From a Technology Point of View,” 2021.
- [3] S. Strover, B. Whitacre, C. Rhinesmith, and A. Schrubbe, “The Digital Inclusion Role of Rural Libraries: Social Inequalities Through Space and Place,” *Media Cult Soc*, vol. 42, no. 2, pp. 242–259, Mar. 2020, doi: 10.1177/0163443719853504.
- [4] Statista, “Number of Internet Ssers by Country 2023.” Accessed: Mar. 02, 2024. [Online]. Available: <https://www.statista.com/statistics/262966/number-of-internet-users-in-selected-countries/>
- [5] APJII, “Survei Internet APJII 2024.” Accessed: Mar. 02, 2024. [Online]. Available: <https://survei.apjii.or.id/>
- [6] S. Wu, W. C. Yau, T. S. Ong, and S. C. Chong, “Integrated Churn Prediction and Customer Segmentation Framework for Telco Business,” *IEEE Access*, vol. 9, pp. 62118–62136, 2021, doi: 10.1109/ACCESS.2021.3073776.
- [7] V. Jain, S. Arya, and B. Malviya, “An Overview of Electronic Commerce (e-Commerce),” *Journal of Contemporary Issues in Business and Government*, vol. 27, no. 3, Apr. 2021, doi: 10.47750/cibg.2021.27.03.090.
- [8] A. H. Ahmad *et al.*, “The Role of Perceived Benefits and Perceived Risks Towards the Consumers’ Purchase Intention Via E-Commerce: An Evidence From Indonesia Rizal ula ananta Fauzi Universitas PGRI Madiun The Role of Perceived Benefits and Perceived Risks Towards the Consumers’ Purchase Intention Via E-Commerce: An Evidence From Indonesia,” 2020. [Online]. Available: www.solidstatetechnology.us
- [9] T. Tanjung, F. Ariani, W. Susanty, and A. Y. Vandika, “Perhitungan Estimasi Upaya Pengembangan Software Pulsa Online dengan Fuzzy C-Means dan Fuzzy K-Means,” *EXPERT: Jurnal Manajemen Sistem Informasi dan Teknologi*, vol. 12, no. 1, p. 49, Jun. 2022, doi: 10.36448/expert.v12i1.2471.
- [10] A. Di Vaio, R. Palladino, A. Pezzi, and D. E. Kalisz, “The Role of Digital Innovation in Knowledge Management Systems: A Systematic Literature

- Review,” *J Bus Res*, vol. 123, pp. 220–231, Feb. 2021, doi: 10.1016/j.jbusres.2020.09.042.
- [11] R. Sarno, F. Sinaga, and K. R. Sungkono, “Anomaly Detection in Business Processes Using Process Mining and Fuzzy Association Rule Learning,” *J Big Data*, vol. 7, no. 1, Dec. 2020, doi: 10.1186/s40537-019-0277-1.
- [12] Z. Wu, C. Li, J. Cao, and Y. Ge, “On Scalability of Association-rule-based Recommendation,” *ACM Transactions on the Web*, vol. 14, no. 3, Jul. 2020, doi: 10.1145/3398202.
- [13] M. H. Santoso, “Application of Association Rule Method Using Apriori Algorithm to Find Sales Patterns Case Study of Indomaret Tanjung Anom,” *Brilliance: Research of Artificial Intelligence*, vol. 1, no. 2, pp. 54–66, Dec. 2021, doi: 10.47709/brilliance.v1i2.1228.
- [14] M. Shawkat, M. Badawi, S. El-ghamrawy, R. Arnous, and A. El-desoky, “An Optimized FP-growth Algorithm for Discovery of Association Rules,” *Journal of Supercomputing*, vol. 78, no. 4, pp. 5479–5506, Mar. 2022, doi: 10.1007/s11227-021-04066-y.
- [15] W. A. W. A. Bakar, M. Man, M. Man, and Z. Abdullah, “i-Eclat: Performance Enhancement of Eclat via Incremental Approach in Frequent Itemset Mining,” *Telkomnika (Telecommunication Computing Electronics and Control)*, vol. 18, no. 1, pp. 562–570, Feb. 2020, doi: 10.12928/TELKOMNIKA.V18I1.13497.
- [16] A. Asrorul Hidayat, N. Hendrastuty, N. Penulis Korespondensi, and A. Asrorul Hidayat Submitted, “Penerapan Algoritma Apriori pada Apotek Shaqeena untuk Memprediksi Penjualan Berbasis Android,” vol. 4, no. 3, pp. 302–312, 2023, doi: 10.33365/jtsi.
- [17] Y. Yang, N. Tian, Y. Wang, and Z. Yuan, “A Parallel FP-Growth Mining Algorithm with Load Balancing Constraints for Traffic Crash Data,” *International Journal of Computers, Communications and Control*, vol. 17, no. 4, Aug. 2022, doi: 10.15837/ijccc.2022.4.4806.
- [18] A. I. Idris *et al.*, “Comparison of Apriori, Apriori-TID and FP-Growth Algorithms in Market Basket Analysis at Grocery Stores,” *The IJICS (International Journal of Informatics and Computer Science)*, vol. 6, no. 2, p. 107, Jul. 2022, doi: 10.30865/ijics.v6i2.4535.
- [19] V. Srinadh, “Evaluation of Apriori, FP growth and Eclat Association Rule Mining Algorithms,” *Int J Health Sci (Qassim)*, pp. 7475–7485, Apr. 2022, doi: 10.53730/ijhs.v6ns2.6729.

- [20] A. Sharma and A. Ganpati, "Association Rule Mining Algorithms: A Comparative Review," *International Research Journal of Engineering and Technology*, 2021, [Online]. Available: www.irjet.net
- [21] R. Gustriansyah, N. Suhandi, and F. Antony, "Clustering Optimization in RFM Analysis Based on K-Means," *Indonesian Journal of Electrical Engineering and Computer Science*, vol. 18, no. 1, pp. 470–477, 2019, doi: 10.11591/ijeecs.v18.i1.pp470-477.
- [22] R. Nagarjuna, R. Sai, and R. Babu, "Enhanced Expectation-Maximization (EM) Clustering through Gaussian Mixture Models (GMM)," 2019.
- [23] S. R. Wakchaure, R. G. Vishwakarma, and A. P. J. Abdul, "Sequential Pattern Mining Using Apriori and FP-Growth Algorithm," *Journal of Data Acquisition and Processing*, vol. 38, no. 3, p. 1451, 2023, doi: 10.5281/zenodo.9854883.
- [24] R. Husna, Y. Hendra, and M. I. Akbar, "Comparison Between Apriori and FP-Growth Algorithms on Inventory Model of Item Availability," 2020.
- [25] H. A. Santoso and S. C. Haw, "Improvement of k-Means Clustering Performance on Disease Clustering using Gaussian Mixture Model," *Journal of System and Management Sciences*, vol. 13, no. 5, pp. 169–179, 2023, doi: 10.33168/JSMS.2023.0511.
- [26] B. Russell, "Unsupervised Seismic Facies Classification using K-means and Gaussian Mixture Modeling," 2020.
- [27] E. Patel and D. S. Kushwaha, "Clustering Cloud Workloads: K-Means vs Gaussian Mixture Model," in *Procedia Computer Science*, Elsevier B.V., 2020, pp. 158–167. doi: 10.1016/j.procs.2020.04.017.
- [28] S. Genjang Setyorini, K. Sari, L. Rahma Elita, and S. A. Putri, "Market Basket Analysis with K-Means and FP-Growth Algorithm as Citra Mustika Pandawa Company," vol. 1, pp. 41–46, 2021.
- [29] Y. Dibayar *et al.*, "Tinjauan Hukum Islam Tentang Hutang Uang yang Dibayar dengan Pulsa," 2020.
- [30] Ksandi, "Telepon Koin: Sejarah dan Relevansinya dalam Dunia yang Terhubung secara Digital." Accessed: Mar. 02, 2024. [Online]. Available: <https://jektivnews.disway.id/read/12374/telepon-koin-sejarah-dan-relevansinya-dalam-dunia-yang-terhubung-secara-digital>
- [31] M. Zaki, "Pulsa Telepon Seluler Sebagai Alat Pembayaran," *Jurist-Diction*, vol. 3, no. 2, p. 519, Mar. 2020, doi: 10.20473/jd.v3i2.18202.
- [32] Y. Xing, "Development Status, Problems and Countermeasures of E-Commerce During the Epidemic Period," 2023.

- [33] A. S. Lodhi and S. N. Sharma, "Contemporary Trends in Commerce-The Rise of Ecommerce Industries," *BCP Business & Management*, vol. 39, 2023, doi: 10.5281/zenodo.10376933.
- [34] R. S. Ch, M. Chodisetty, and M. S. Sreekanth, "The Role of Consumer Behaviour Towards Online Shopping (A Case Study on Amazon, Flipkart., E-Bay, Myntra)," *High Technology Letters*, vol. 27, no. 1, p. 2021, 2022, [Online]. Available: <https://www.researchgate.net/publication/363761322>
- [35] C. Crampsie and K. Morris, "Meeting Strategic Communication Goals Through a Sustainable Library Newsletter," 2021.
- [36] M. Lahdenkauppi, "Developing an Effective Email Marketing Strategy Through a Newsletter for the Case Company," 2021.
- [37] S. E. Brotherson and M. S. Hoffman, "The History and Usage of Parenting Newsletter Interventions in Family Life Education," *Education Sciences*, vol. 10, no. 11. MDPI AG, pp. 1–21, Nov. 01, 2020. doi: 10.3390/educsci10110326.
- [38] Q. Liu, H. Wan, and H. Yu, "Frontiers in Business, Economics and Management Application and Influence of Big data Analysis in Marketing Strategy," 2023.
- [39] D. Theodorus, S. Defit, and G. W. Nurchayo, "Rekomendasi Produk dalam Penjualan Menggunakan Metode Item-Based Collaborative Filtering," 2021, doi: 10.37034/jidt.v3i4.151202.
- [40] J. Chand Bansal and A. K. Nagar, "Algorithms for Intelligent Systems Series Editors," Delhi, 2019. [Online]. Available: <http://www.springer.com/series/16171>
- [41] Y. J. Purnomo, "Digital Marketing Strategy to Increase Sales Conversion on E-commerce Platforms," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 2, pp. 54–62, Aug. 2023, doi: 10.61100/adman.v1i2.23.
- [42] E. Hikmawati, N. U. Maulidevi, and K. Surendro, "Minimum Threshold Determination Method Based on Dataset Characteristics in Association Rule Mining," *J Big Data*, vol. 8, no. 1, Dec. 2021, doi: 10.1186/s40537-021-00538-3.
- [43] I. Prasetya, "Proposed Marketing Strategy to Increase Sales Performance (Case Study: PT. Laku Emas Indonesia)," vol. 3, 2023, [Online]. Available: <http://eduvest.greenvest.co.id>
- [44] A. Setiawan and F. P. Putri, "Implementasi Algoritma Apriori untuk Rekomendasi Kombinasi Produk Penjualan," *66 ULTIMATICS*, vol. XII, no. 1, 2020.

- [45] C. Lacey and A. Beattie, "Clusters of Dark Patterns Across Popular Websites in New Zealand," 2023. [Online]. Available: <http://ijoc.org>.
- [46] L. P. Maguluri and R. Rengaswamy, "An Efficient Stock Market Trend Prediction Using The Real-Time Stock Technical Data and Stock Social Media Data," *International Journal of Intelligent Engineering and Systems*, vol. 13, no. 4, pp. 316–332, 2020, doi: 10.22266/IJIES2020.0831.28.
- [47] W. Wibowo, N. P. Sari, R. N. Wilantari, and S. Abdul-Rahman, "Association Rule Mining Method for the Identification of Internet Use," in *Journal of Physics: Conference Series*, IOP Publishing Ltd, Jun. 2021. doi: 10.1088/1742-6596/1874/1/012009.
- [48] L. Ma, S. Cheng, and Y. Shi, "Enhancing Learning Efficiency of Brain Storm Optimization via Orthogonal Learning Design," *IEEE Trans Syst Man Cybern Syst*, vol. 51, no. 11, pp. 6723–6742, Nov. 2021, doi: 10.1109/TSMC.2020.2963943.
- [49] A. M. Ella Hassanien Ashraf Darwish Sherine Abd El-Kader Dabiah Ahmed Alboaneen Editors, "Enabling Machine Learning Applications in Data Science," Arab, 2020. [Online]. Available: <http://www.springer.com/series/16171>
- [50] O. Krianto Sulaiman, I. Purnama Sari, and A. Satria, "Implementation Data Mining For Level Analysis Traffic Violation By Algorithm Association Rule," *International of Computer Science and Information Technology (AloCSIT) Journal*, vol. 2, no. 2, pp. 128–135, 2021.
- [51] A. Calin, A. Gligor, V. Nylas, and R. Dumitru, "Efficient Algorithms for Patterns Identification in Medical Data," *Acta Marisiensis. Seria Technologica*, vol. 20, no. 1, pp. 32–36, Jun. 2023, doi: 10.2478/amset-2023-0006.
- [52] M. M. Hlaing, "ECLAT Based Market Basket Analysis for Electronic Showroom," 2019. [Online]. Available: www.IJARND.com
- [53] "Market Basket Analysis: Understanding Customer Behaviour - Select Statistical Consultants." Accessed: May 29, 2024. [Online]. Available: <https://select-statistics.co.uk/blog/market-basket-analysis-understanding-customer-behaviour/>
- [54] D. Aggarwal and D. Sharma, "Application of Clustering for Student Result Analysis," 2019. [Online]. Available: <https://www.researchgate.net/publication/333115249>
- [55] S. Brown and D. C. Simcock, "On the Use of the Akaike information Criterion to Identify the 'Best' Model," 2022, doi: 10.5281/zenodo.8122972.

- [56] W. Hendra Wijaya, R. Sunardi Oetama, and F. A. Halim, "Implementation of Backpropagation Method with MLPClassifier to Face Mask Detection Model," *International Journal of New Media Technology*, vol. 9, no. 2, p. 48, 2022.
- [57] Y. Zakur and L. Flaih, "Apriori Algorithm and Hybrid Apriori Algorithm in the Data Mining: A Comprehensive Review," in *E3S Web of Conferences*, EDP Sciences, Nov. 2023. doi: 10.1051/e3sconf/202344802021.
- [58] F. Fauzan, D. Nurjanah, and R. Rismala, "Apriori Association Rule for Course Recommender system," *E3S Web of Conferences*, vol. 448, no. 02021, 2023, doi: 10.21108/indojc.2020.5.2.434.
- [59] "Apriori — Association Rule Mining In-depth Explanation and Python Implementation | by Chonyy | Towards Data Science." Accessed: May 29, 2024. [Online]. Available: <https://towardsdatascience.com/apriori-association-rule-mining-explanation-and-python-implementation-290b42afdfc6>
- [60] D. Rizaldi and A. Adnan, "Market Basket Analysis Menggunakan Algoritma Apriori: Kasus Transaksi 212 Mart Soebrantas Pekanbaru," *Jurnal Statistika dan Aplikasinya*, vol. 5, no. 1, 2021.
- [61] "Search process of Eclat algorithm. | Download Scientific Diagram." Accessed: May 29, 2024. [Online]. Available: https://www.researchgate.net/figure/Search-process-of-Eclat-algorithm_fig1_355875276
- [62] P. Mardatillah *et al.*, "Penerapan Algoritma Equivalence Class Transformation (ECLAT) dalam Pencarian Adverse Event Obat Diphenhydramine," vol. 2, no. 3, pp. 143–155, 2020, [Online]. Available: <https://restikom.nusaputra.ac.id>
- [63] A. Anggrawan, M. Mayadi, and C. Satria, "Menentukan Akurasi Tata Letak Barang dengan Menggunakan Algoritma Apriori dan Algoritma FP-Growth," *MATRIK : Jurnal Manajemen, Teknik Informatika dan Rekayasa Komputer*, vol. 21, no. 1, pp. 125–138, Nov. 2021, doi: 10.30812/matrik.v21i1.1260.
- [64] "K-Means Clustering using Scikit-learn in Python | by Kurnia Sari Pratiwi | Medium." Accessed: May 29, 2024. [Online]. Available: <https://medium.com/@kurniasp/k-means-clustering-using-scikit-learn-in-python-51073b6f51e5>
- [65] S. A. Prabawa, "Perbandingan Algoritma K-Means dan Gaussian Mixture Model untuk Pengelompokan Berita Pada Kompas.com," Tangerang,

Aug. 2021. Accessed: Mar. 18, 2024. [Online]. Available:
<https://kc.umn.ac.id/id/eprint/15750/>

- [66] “Gaussian Mixture Models: What are they & when to use? - Analytics Yogi.” Accessed: May 29, 2024. [Online]. Available:
<https://vitalflux.com/gaussian-mixture-models-what-are-they-when-to-use/>
- [67] M. Hosni, “Encoding Techniques for Handling Categorical Data in Machine Learning-Based Software Development Effort Estimation,” in *International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management, IC3K - Proceedings*, Science and Technology Publications, Lda, 2023, pp. 460–467. doi: 10.5220/0012259400003598.
- [68] Z. L. Thakker and S. H. Buch, “Effect of Feature Scaling Pre-processing Techniques on Machine Learning Algorithms to Predict Particulate Matter Concentration for Gandhinagar, Gujarat, India,” *Int J Sci Res Sci Technol*, pp. 410–419, Feb. 2024, doi: 10.32628/ijrst52411150.
- [69] Hareram Sahoo and Aditya Kumar, “Study of genetic divergence among Eucalyptus tereticornis clones through principal component analysis (PCA),” *International Journal of Science and Research Archive*, vol. 6, no. 1, pp. 063–067, May 2022, doi: 10.30574/ijrsra.2022.6.1.0103.
- [70] N. Nisa Habibah and B. Prasetya Adhi, “Proses Association Rule untuk Mengetahui Kecenderungan Belanja pada KOPMA UNJ Menggunakan Algoritma Apriori dan ECLAT,” 2022.
- [71] F. Bao, L. Mao, Y. Zhu, C. Xiao, and C. Xu, “An Improved Evaluation Methodology for Mining Association Rules,” *Axioms*, vol. 11, no. 1, Jan. 2022, doi: 10.3390/axioms11010017.
- [72] J. D’Silva and U. Sharma, “Unsupervised Automatic Text Summarization of Konkani Texts using K-means with Elbow Method,” *International Journal of Engineering Research and Technology*, vol. 13, no. 9, pp. 2380–2384, 2020, doi: 10.37624/ijert/13.9.2020.2380-2384.
- [73] N. Hendriks and M. Khismatullina, “Optimal Combination of Clustering and Dimensionality Reduction for Complex Datasets: A Case Study on Joke Ratings,” 2023.
- [74] D. Hellhake, J. Bogner, T. Schmid, and S. Wagner, “Towards Using Coupling Measures to Guide Black-Box Integration Testing in Component-Based Systems,” *Software Testing Verification and Reliability*, vol. 32, no. 4, Jun. 2022, doi: 10.1002/stvr.1811.
- [75] D. Rademacher, J. Valdez, E. Memeti, K. Samant, A. Santra, and S. Chakravarthy, “ModViz: A Modular and Extensible Architecture for Drill-

- Down and Visualization of Complex Data,” 2022. [Online]. Available: <https://itlab.uta.edu/cowiz/>,
- [76] H. MSi, J. Ustiawaty, and D. Juliana Sukmana, “Buku Metode Penelitian Kualitatif & Kuantitatif,” 2020. [Online]. Available: <https://www.researchgate.net/publication/340021548>
- [77] J. Lourenco and A. S. Varde, “Item-Based Collaborative Filtering and Association Rules for a Baseline Recommender in E-Commerce,” in *Proceedings - 2020 IEEE International Conference on Big Data, Big Data 2020*, Institute of Electrical and Electronics Engineers Inc., Dec. 2020, pp. 4636–4645. doi: 10.1109/BigData50022.2020.9377807.
- [78] A. M. Husein, D. Setiawan, A. R. K. Sumangunsong, A. Simatupang, and S. A. Yasmin, “Combination Grouping Techniques and Association Rules For Marketing Analysis based Customer Segmentation,” *Sinkron*, vol. 7, no. 3, pp. 1998–2007, Aug. 2022, doi: 10.33395/sinkron.v7i3.11571.
- [79] W. Y. Ayele, “Adapting CRISP-DM for Idea Mining A Data Mining Process for Generating Ideas Using a Textual Dataset,” 2020. [Online]. Available: www.ijacsa.thesai.org
- [80] T. Phuong, “Comparison Between Two Programming Languages R and Python,” 2020.

