

References

- [1] I. G. N. N. Mandalaa, C. B. Nawangpalupi and F. R. Praktikto, "Assessing Credit Risk: an Application of Data Mining in a Rural Bank," *Procedia Economics and Finance*, pp. 406-412, 2012.
- [2] S. Khemakhem, F. B. Said and Y. Boujelbene, "Credit risk assessment for unbalanced datasets based on data mining, artificial neural network and support vector machines," *Journal of Modelling in Management*, 2018.
- [3] F. Ciampi, "Corporate governance characteristics and default prediction modeling for small enterprises. An empirical analysis of Italian firms," *Journal of Business Research*, vol. 68, no. 5, pp. 1012-1025, 2015.
- [4] M. Delivand, M. Moghadam, N. Shamami and M. Taghipour, "Investigating the effective factors in measuring customers' credibility with a combined approach of data mining and multidisciplinary decision making Problem," *Journal of Military Operations Research*, vol. 1, no. 1, 2021.
- [5] Liu-yi and Z. Li-Gu, "Research and application of credit risk of small and medium-sized enterprises based on random forest model," *IEEE International Conference on Consumer Electronics and Computer Engineering*, 2021.
- [6] M. o. I. a. Commerce, National Policy Framework for SME Development, Ministry of Industry and Commerce, 2015.
- [7] H. M. K. S. Bandara, A. L. M. Jameel and H. Athambawa, "Credit Risk and Profitability of Banking Sector in Sri Lanka," *Journal of Economics, Finance and Accounting Studies*, vol. 1, p. 3, 2021.
- [8] J. Gupta, N. Wilson, A. Gregoriou and J. Healy, "The value of operating cash flow in modelling credit risk for SMEs," *Applied Financial Economics*, vol. 24, no. 9, pp. 649-660, 2014.

- [9] B. W. Yap, S. H. Ong and N. H. M. Husain, "Using data mining to improve assessment of credit worthiness via credit scoring models," *Expert Systems with Applications*, vol. 38, no. 10, 2011.
- [10] R. M. Sum, W. Ismail, Z. H. Abdullah, N. Fathihin, M. N. Shah and R. Hendradi, "A new efficient credit scoring model for personal loan using data mining technique toward for sustainability management," *Journal of Sustainability Science and Management*, vol. 17, no. 5, pp. 60-76, 2022.
- [11] W. Chen, G. Xiang, Y. Liu and K. Wang, "Credit risk Evaluation by hybrid data mining technique," *Systems Engineering Procedia*, vol. 3, 2012.
- [12] M. P. Bach, J. Zoroja, B. Jaković and N. Šarlija, "Selection of variables for credit risk data mining models: preliminary research," *40th International Convention on Information and Communication Technology, Electronics and Microelectronics*, 2017.
- [13] J. Aduda and S. Obondy, "Credit Risk Management and Efficiency of Savings and Credit Cooperative Societies: A Review of Literature," *Journal of Applied Finance & Banking*, vol. 11, no. 1, 2021.
- [14] A. Hamid and T. Ahmed, "Developing Prediction Model of Loan Risk in Banks Using Data Mining," *Machine Learning and Applications: An International Journal (MLAIJ)*, vol. 3, no. 1, 2016.
- [15] S. Department, "Credit Supply Survey," Central Bank of Sri Lanka, 2021.
- [16] D. o. S. o. N.-B. F. Institutions, "Proposed New Direction on Credit Risk Management for Liscened Finance Companies," Central Bank of Sri Lanka, 2019.
- [17] S. Kodithuwakku, "Impact of credit risk management on the performance of commercial banks in Sri Lanka.," 2015.
- [18] Hooman, A., Marthandan, G., Yusoff, W. F. W., , Omid, M. and Karamizadeh, S., "Statistical and data mining methods in credit scoring," *The Journal of Developing Areas*, vol. 50, no. 5, pp. 371-381, 2016.

- [19] L. Liu, "A Self-Learning BP Neural Network Assessment Algorithm for Credit Risk of Commercial Bank," *Wireless Communications and Mobile Computing*, 2022.
- [20] S. Klotz and A. Lindermeir, "Multivariate credit portfolio management using cluster analysis," *The Journal of Risk Finance*, vol. 16, no. 2, pp. 145-163, 2015.
- [21] S. Khemakhem and Y. Boujelbene, "Predicting credit risk on the basis of financial and non-financial variables and data mining," *Review of Accounting and Finance*, vol. 17, no. 3, 2018.
- [22] S. Moradi and F. M. Rafiei, "A dynamic credit risk assessment model with data mining techniques: evidence from Iranian banks," *Financial Innovation*, vol. 5, no. 1, pp. 1-27, 2019.
- [23] Koyuncugil, A. S. and OZgulbas, N., "Financial early warning system model and data mining application for risk detection," *Expert systems with Applications*, vol. 39, no. 6, pp. 6238-6253, 2012.
- [24] Abedin, M. Z., Guotai, C., Hajek, P. and Zhang, T. , "Combining weighted SMOTE with ensemble learning for the class-imbalanced prediction of small business credit risk," *Complex & Intelligent Systems*, pp. 1-21, 2022.
- [25] A. Islam, S. Yousuf and I. Rahman, "SME Financing in Bangladesh: A Comparative Analysis of Conventional and Islamic Banks," *Journal of Islamic Banking and Finance*, vol. 2, no. 1, pp. 79-92, 2014.
- [26] V. Rivai, A. P. Veithzal and N. I. Ferry, "Bank dan Financial Institution Management konvensional dan Syariah System.," 2007.
- [27] S. M. Sadatrasoul, M. R. Gholamian, M. Siami and Z. Hajimohammadi, "Credit scoring in banks and financial institutions via data mining techniques: A literature review," *Journal of AI and Data Mining*, vol. 1, no. 2, 2013.
- [28] J. Dobrovic, M. Lambovska, Gallo and Timkova, "Non-financial indicators and their importance in small and medium-sized enterprises," *Journal of Competitiveness*, vol. 10, no. 2, 2018.

- [29] C. Huang, M. Chen and C. Wang, "Credit scoring with a data mining approach based on support vector machines," *Expert Systems with Applications*, vol. 33, no. 4, pp. 847-856, 2007.
- [30] D. T. Larose, *An introduction to data mining*, John Wiley & Sons, 2005.
- [31] Chen, Tsung-Kang, H.-H. Liao and W.-H. Chen, "CEO ability heterogeneity, board's recruiting ability and credit risk," *Review of Quantitative Finance and Accounting*, vol. 49, no. 4, pp. 1005-1039, 2017.
- [32] J. Han and M. Kamber, *Data Mining: Concepts and Techniques*, San Francisco: Morgan Kaufmann, 2001.
- [33] S. Strohmeier and F. Piazza, "Domain driven data mining in human resource management: A review of current research," *Expert Systems with Applications*, vol. 40, no. 7, 2013.
- [34] Berry, M. J. and Linoff, G. S., *Data mining techniques: for marketing, sales, and customer relationship management*, John Wiley & Sons, 2004.
- [35] A. K. Abdelmoula, "Bank credit risk analysis with k-nearestneighbor classifier: Case of Tunisian banks," *Accounting and Management Information Systems*, vol. 14, no. 1, 2015.
- [36] M. A. Mukid, T. Widiharih, A. Rusgiyono and A. Prahutama, "Credit scoring analysis using weighted k nearest neighbor," *IOP Conf. Series: Journal of Physics*, 2018.
- [37] P. Danenasa, G. Garsva and S. Gudas, "Credit Risk Evaluation Model Development Using Support Vector Based Classifiers," *International Conference on Computational Science*, 2011.
- [38] A. Khashman, "Credit risk evaluation using neural networks: Emotional versus conventional models," *Applied Soft Computing*, vol. 11, no. 8, pp. 5477-5484, 2011.

- [39] Brown, I. and Mues, C., "An experimental comparison of classification algorithms for imbalanced credit scoring data sets," *Expert Systems with Applications*, vol. 39, no. 3, pp. 3446-3453, 2012.
- [40] Mukid, M. A., Widiharh, T., Rusgiyono, A. and Prahutama, A., "Credit scoring analysis using weighted k nearest neighbor," *Journal of Physics: Conference Series*, 2018.
- [41] Yu, L., Yue, W., Wang, S. and Lai, K. K., "Support vector machine based multiagent ensemble learning for credit risk evaluation," *Expert Systems with Applications*, vol. 37, no. 2, pp. 1351-1360, 2010.
- [42] Arora, N. and Kaur, P. D., "A Bolasso based consistent feature selection enabled random forest classification algorithm: An application to credit risk assessment," *Applied Soft Computing*, 2020.
- [43] Uddin, M. S., Chi, G., Al Janabi, M. A. and Habib, T., "Leveraging random forest in micro-enterprises credit risk modelling for accuracy and interpretability," *International Journal of Finance & Economics*, 2020.
- [44] Wang,, Yuelin, , Yihan Zhang, , Yan Lu, and Xinran Yu, "A Comparative Assessment of Credit Risk Model Based on Machine Learning - a case study of bank loan data," *Procedia Computer Science*, pp. 141-149, 2020.
- [45] Z. Tian, Xiao, J., , Feng, H. and Wei, Y., "Credit risk assessment based on gradient boosting decision tree," *Procedia Computer Science*, pp. 150-160, 2020.
- [46] J. Zurada, "Rule Induction Methods for Credit Scoring," *Review of Business Information Systems (RBIS)*, vol. 11, no. 2, pp. 11-22, 2007.
- [47] G. T. Albanis, " Implementing neural networks, classification trees, and rule induction classification techniques: an application to credit risk," *Applied quantitative methods for trading and investment*, pp. 213-237, 2003.
- [48] Chen, Z., Li, Y. and Li, H. , "Rule Induction in the credit risk management of Inventory financing based on rough set," *7th International Conference on*

Education, Management, Information and Mechanical Engineering, pp. 938-942, 2017.

- [49] Baesens, B., Van Gestel, T., Viaene, S., Stepanova, M., Suykens, J. and Vanthienen, J., "Benchmarking state-of-the-art classification algorithms for credit scoring," *Journal of the operational research society*, vol. 54, no. 6, pp. 627-635, 2003.
- [50] A. Krichene, "Using a naive Bayesian classifier methodology for loan risk assessment: Evidence from a Tunisian commercial bank," *Journal of Economics, Finance and Administrative Science*, vol. 22, no. 42, pp. 3-24, 2017.
- [51] Pandey, T. N., Jagadev, A. K., , Mohapatra, S. K. and Dehuri, S., "Credit risk analysis using machine learning classifiers," *International Conference on Energy, Communication, Data Analytics and Soft Computing* , pp. 1850-1854, 2017.
- [52] Kou, G., Peng, Y. and Wang, G. , "Evaluation of clustering algorithms for financial risk analysis using MCDM methods," *Information sciences*, pp. 1-12, 2014.
- [53] I. H. Witten and E. Frank, *Data Mining - Practical Machine Learning Tools and Techniques*, San Francisco: Morgan Kaufmann, 2005.
- [54] G. Paolo, "Bayesian data mining, with application to benchmarking and credit scoring," *Applied*, vol. 17, no. 1, pp. 69-81, 2001.
- [55] H.-C. Wu, Y.-H. Hu and Y.-H. Huang, "Two-stage credit rating prediction using machine learning techniques," *Kybernetes*, vol. 43, no. 7, pp. 1098-1113, 2014.
- [56] D. T. Larose and Larose, C. D, *Discovering knowledge in data: an introduction to data mining*, John Wiley & Sons., 2014.
- [57] B. Liu, *Supervised learning*. In *Web data mining*, Berlin, Heidelberg: Springer, 2011.
- [58] Han, J., Pei, J. and Kamber, M, *Data mining: concepts and techniques*, Elsevier, 2011.

- [59] M. A. Mukid, T. Widiharih, A. Rusgiyono and P. A., "Credit scoring analysis using weighted k nearest neighbor," *Journal of Physics*, 2018.
- [60] "RapidMiner Documentation," RapidMiner, 2021. [Online]. Available: <https://docs.rapidminer.com/>. [Accessed 06 12 2021].
- [61] Crook, J. N., Edelman, D. B. and Thomas, L. C., "Recent developments in consumer credit risk assessment," *European Journal of Operational Research*, vol. 183, no. 3, pp. 1447-1465, 2007.