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## REVIEW ON APPLICATION OF DATA MINING IN INSURANCE

**Farzaneh Haghghat Nia\***; **Hossein Niavand\*\***

\*Postdoctoral Researcher, Department of Industrial Engineering,  
Amir Kabir University of Technology (Polytechnic),  
Tehran, IRAN

\*\*Researcher,  
Department of Studies in Business Administration (BIMS),  
University of Mysore, Mysore, INDIA  
Email id: niavandd@gmail.com

### ABSTRACT

*Insurance consists of providing security, old-age pensions, as an investment or saving mechanism, as collateral for loans, for tax benefits, provide protection, provide prevention of losses, small capital to cover the larger risk, risk-free trade. Data mining is the productive disclosure of profitable, non-evident data from a substantial accumulation of information. In this study, researchers reviewed 12 research articles in Data Mining application used in insurance companies and the result shows that Data mining can be seen because of the character advancement of data innovation.*

**KEYWORDS:** *Insurance, Data Mining, Application Of Data Mining, Risk.*

### REFERENCES

1. Cho, V., & Ngai, E. W. (2003). Data mining for selection of insurance sales agents. *Expert systems*, 20(3), 123-132.
2. Chae, Y. M., Ho, S. H., Cho, K. W., Lee, D. H., & Ji, S. H. (2001). Data mining approach to policy analysis in a health insurance domain. *International journal of medical informatics*, 62(2-3), 103-111.
3. Lei-da Chen, T. S., & Frolick, M. N. (2000). Data mining methods, applications, and tools. *Information systems management*, 17(1), 67-68.
4. Smith, K. A., Willis, R. J., & Brooks, M. (2000). An analysis of customer retention and insurance claim patterns using data mining: A case study. *Journal of the operational research society*, 51(5), 532-541.

5. Obenshain, M. K. (2004). Application of data mining techniques to healthcare data. *Infection Control & Hospital Epidemiology*, 25(8), 690-695.
6. T. Rivas, M.Paz, J.E.Martín, J.M.Matías, J.F.García, J.Taboada (2011). Explaining and predicting work place accidents using data-mining techniques. *Reliability Engineering and System Safety*, 9(6), 739-747.
7. Hanafizadeh, p. (2012). A model for categorizing risk groups based on risk car insurance customers using data mining techniques, *Insurance Journal*, No. 102, 55-81.
8. Kirlidog, M., &Asuk, C. (2012).A fraud detection approach with data mining in health insurance. *Procedia-Social and Behavioral Sciences*, 62, 989-994.
9. Nenonen, N. (2013). Analysing factors related to slipping, stumbling, and falling accidents at work: Application of data mining methods to Finnish occupational accidents and diseases statistics database. *Applied ergonomics*, 44(2), 215-224.
10. Sithic, H. L., &Balasubramanian, T. (2013).Survey of insurance fraud detection using data mining techniques.arXiv preprint arXiv:1309.0806.
11. Wanke, P., & Barros, C. P. (2016). Efficiency drivers in Brazilian insurance: A two-stage DEA meta frontier-data mining approach. *Economic Modelling*, 53, 8-22.
12. Viveros, M. S., Nearhos, J. P., & Rothman, M. J. (1996, September).Applying data mining techniques to a health insurance information system.In *VLDB* (Vol. 96, pp. 286-294).
13. Staudt, M., Kietz, J. U., & Reimer, U. (1998, August).A Data Mining Support Environment and its Application on Insurance Data.In *KDD* (pp. 105-111).