iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 10 **Issue:** III **Month of publication:** March 2022

DOI: https://doi.org/10.22214/ijraset.2022.41061

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue III Mar 2022- Available at www.ijraset.com

Review Paper Identify Citizens Receiving Multiple Benefits like Pensions under Different Schemes of the Centre and State

Mr. Amik Patel[1], Prof. S.B Rathod[2]
[1] *PG Scholar,* [2] *Professor, Computer Science & Engineering, Sipna College Of Engineering And Technology, Amravati, Maharashtra, INDIA*

Abstract: ***In this paper we describe a deployed recommender system to predict insurance products for new and existing beneficiary. Our main objective is to provide our customers individual suggestions depend upon what other similar people have same portfolios, in order to make sure they were adequately covered for their needs. Our system uses customer behavior in addition to customer portfolio data. Since the number of probable products is relatively small, as compared to other suggested domains, and missing data is relatively frequent, so we decide to use Bayesian Networks for designing our system. Experimental results show advantages of using probabilistic graphical models over the widely used low-rank matrix factorization model for the insurance domain.***
Keywords: Recommender systems; Bayesian Networks; Insurance domain; Structure Learning; Deployed system

I. INTRODUCTION

In this paper we predict relevant insurance products for our beneficiary based on what other same people with similar structures have. We want to predict this for both of our existing & prospective customer base. Due to the shifting nature of how people choose to buy insurance, we cannot assume that customers will always have or take time to meet with agents for this purpose. The shuffling knowledge level of each agent for different products cans also influence the customer experience. The current version of the recommender system hopes to aid our brokers in order for providing value to our customers by generating recommendations based on customer portfolio data, and then allowing agents to act on these recommendations as they see. The human interaction aspect is relied on for the best possible experience for the customer. Future versions of the system will allow for direct customer interaction & offers.

II. LITERATURE SURVEY

1) The purpose of the system for this phase is to suggest new product offers for every existing customer. “Cross-sell” means a model recommends a different product line vs. “up-sell” which means a model recommends an additional coverage in the same product line. Both the property and auto models have 3 cross-sell targets/products: for the auto models they are property, umbrella, and life, and for the property models they are auto, umbrella, and life. The recommendation for the two cross-sell targets that have predictions from both the auto and property models is made by combining both predictions in an optimal way.

2) Insurance policy is a contract in which insurer provide the assurance of financial support and security to the insured and his/her dependents in return of some assessed payment. Insurance can broadly classified as general insurance and life insurance. Life insurance further have sub- categories as Term, Unit linked, Endowment, Money back, Whole life, Retirement and Child's Plans Life insurance has achieved tremendous success in all other insurance policy types as no one wants to get family suffered due to financial crisis. The life insurance industry is experiencing a huge content being induced from various insurance companies and their customers in the form of number of companies, plans, features and customers. This exponential growth of digital data over the internet has created requirement of techniques that can manage and organize data efficiently which could result in effective information retrieval on web (Dhuria, S. et al.2016)). Information retrieval should cater the heterogeneity and dynamic nature of data (Suri, P. & Taneja, H., 2010). Life Insurance Recommender extricate the customers from confusion, agent's commissions and personal biases and wrong selection of products which in turn results in suggestions based on personalized requirements.

3) The liberalization of the Indian insurance sector has resulted in a number of insurance companies entering the market. This has led to a plethora of choices both in terms of service providers as well as products to the consumers. With the huge untapped market that still exists, the insurance market in India is expected to increase rapidly. In this paper we attempt to develop a ready reckoner to match the buyer’s requirement with the products that the insurance companies are offering. This will aid policyholders and potential investors in comparing the various policies being offered.

4) In this article, the literature related to the descriptors of MCDM has been reviewed comprehensively using academic databases of Web of Science. Following a methodological decision analysis on the whole collected articles, a total of 393 international journal articles published from 2000 to 2014 were reviewed. This article attempts to answer the following questions: (1) which decision-making (DM) techniques have been used?; (2) Which type of study has been conducted on these MCDM techniques?; (3) Which one of the 15 fields (Energy, environment and sustainability, Supply chain management, Material, Quality management, GIS, construction and project management, safety and risk management, manufacturing systems, technology management, operation research and soft computing, strategic management, knowledge management, production management, tourism management and other fields) has further used these MCDM techniques and approaches?; (4) What kinds of MCDM techniques and approaches have been employed in these years based on 15 fields?; (5) Which journal published articles related to these MCDM techniques and approaches?; and (6) In which year, the previous authors published more papers regarding MCDM techniques and approaches based on the 15 fields?.

III. SYSTEM DIAGRAMS

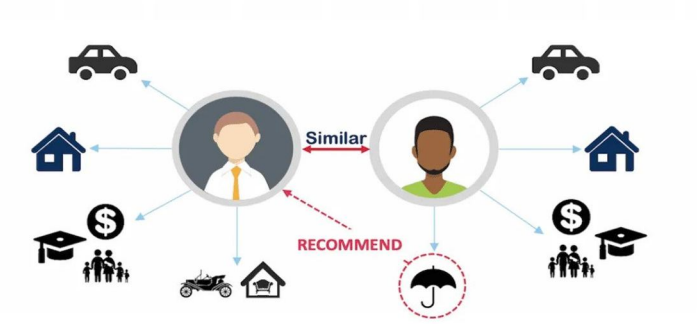


Fig. scheme recommendation system

IV. CONCLUSION

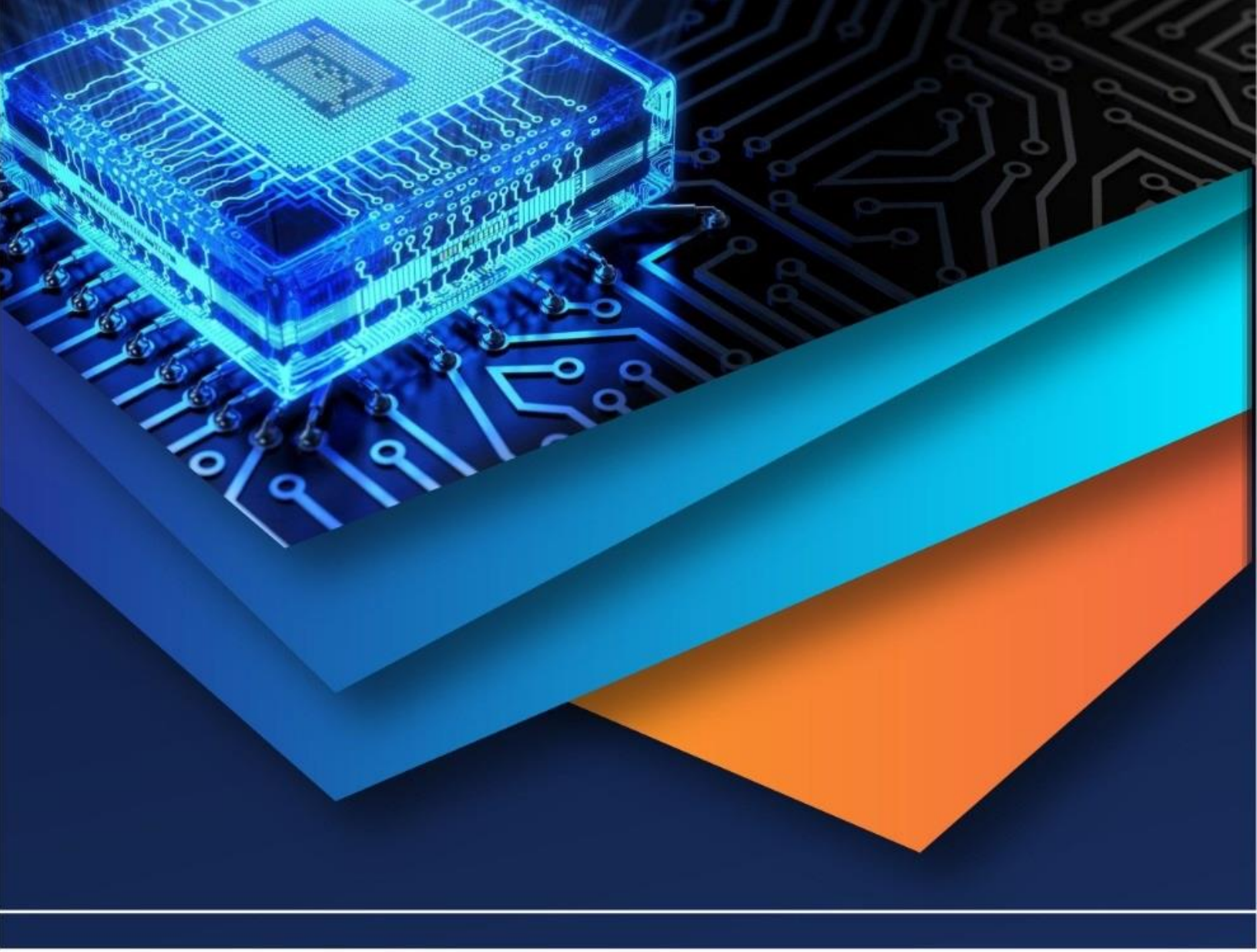
Hence we conclude the recommender system which helps the entire customer by uniformly bringing coverage options to make attention of agents so that our customers are adequately covered for their needs. Clearly an agent tailors the recommendation coverage for each customer, but the system helps prompt this action, whereas before there were no prompts for agents. We learned that business rules were very important.

V. ACKNOWLEDGEMENT

First and foremost, I would like to express my sincere gratitude to my **Prof. S.B. Rathod** who has in the literal sense, guided and supervised me. I am indebted with a deep sense of gratitude for the constant inspiration and valuable guidance throughout the work.

REFERENCES

[1] Qazi, M., Fung, G. M., Meissner, K. J., & Fontes, E. R. (2017). An insurance recommendation system using Bayesian networks. RecSys 2017 - Proceedings of the 11th ACM Conference on Recommender Systems, 274–278. https://doi.org/10.1145/3109859.3109907
[2] Asha Rani , Kavita Taneja , Harmunish Taneja Vol.12 No.2 (2021), 1848-1858 Multi Criteria Decision Making (MCDM) based preference elicitation framework for life insurance recommendation system.
[3] Dutta, G., Basu, S., & John, J. (2010). Development of utility function for life insurance buyers in the Indian market. Journal of the Operational Research Society, 61(4), 585–593. https://doi.org/10.1057/jors.2009.26
[4] Mardani, A., Jusoh, A., Nor, K. M. D., Khalifah, Z., Zakwan, N., & Valipour, A. (2015). Multiple criteria decision-making techniques and their applications - A review of the literature from 2000 to 2014. Economic Research-Ekonomska Istrazivanja , 28(1), 516–571. https://doi.org/10.1080/1331677X.2015.1075139
[5] Bayesialab. http://www.bayesia.com/. Versions: 5.4.3 & 6.0.2; Accessed: 1-Feb2017.
[6] IMC software. http://bigdata.ices.utexas.edu/software/ inductive-matrix-completion/. Online; Accessed 1-Feb-2017.
[7] Netica application. https://www.norsys.com/netica.html. Accessed: 1-Feb-2017.
[8] J. S. Breese, D. Heckerman, and C. Kadie. Empirical analysis of predictive algorithms for collaborative ltering. In Proceedings of the Fourteenth Conference on Uncertainty in Articial Intelligence, UAI'98, pages 43–52, San Francisco, CA, USA, 1998. Morgan Kaufmann Publishers Inc.
[9] H.-T. Cheng, L. Koc, J. Harmsen, T. Shaked, T. Chandra, H. Aradhye, G. Anderson, G. Corrado, W. Chai, M. Ispir, R. Anil, Z. Haque, L. Hong, V. Jain, X. Liu, and H. Shah. Wide and deep learning for recommender systems. arXiv:1606.07792, 2016.
[10] T. Fawcett. An introduction to roc analysis. Pattern Recogn. Lett., 27(8):861–874, June 2006.
[11] A. Felfernig and A. Kiener. Knowledge-based interactive selling of financial services with fsadvisor. In Proceedings of the 17th Conference on Innovative Applications of Artifcial Intelligence - Volume 3, IAAI'05, pages 1475–1482. AAAI Press, 2005.
[12] A. Gupta and A. Jain. Life insurance recommender system based on association rule mining and dual clustering method for solving cold-start problem. International Journal of Advanced Research in Computer Science and Software Engineering, 3, Oct 2013.



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY