

PEMERINGKATAN KEUTAMAAN SYARIKAT INSURANS DENGAN PEMBUATAN KEPUTUSAN MULTI-KRITERIUM

(Priority Ranking of Insurance Company by Multi-Criteria Decision Making)

LEONG LEE SHIN & NORIZA MAJID

ABSTRAK

Insurans perubatan dan kesihatan kini menjadi satu keperluan bagi rakyat Malaysia disebabkan oleh kos rawatan dan ubat-ubatan yang semakin meningkat. Kini, terdapat banyak syarikat insurans di pasaran yang mengeluarkan pelbagai jenis polisi insurans perubatan dan kesihatan. Hal ini mengakibatkan pengguna menghadapi masalah dalam membuat keputusan untuk memilih syarikat insurans yang bersesuaian. Kajian ini bertujuan untuk mengenal pasti faktor demografi yang mendorong pengguna Wilayah Persekutuan Kuala Lumpur membuat keputusan semasa memilih syarikat insurans. Soal selidik dijalankan dan ujian Mann Whitney serta Kruskal-Wallis digunakan untuk melihat faktor demografi yang mendorong pengguna memilih syarikat insurans. Kaedah Teknik Keutamaan Tertib Mengikut Persamaan dengan Penyelesaian Ideal (TOPSIS) juga digunakan untuk mengkaji pemeringkatan keutamaan syarikat insurans yang digemari oleh pengguna berdasarkan lima kriteria, iaitu premium, jenis dan nama syarikat, perkhidmatan, pengaruh persekitaran dan kesetiaan jenama. Pada akhir kajian ini, didapati bahawa bangsa dan pekerjaan merupakan antara faktor demografi dikenal pasti yang akan mendorong pengguna membuat keputusan dalam pemilihan syarikat insurans semasa pembelian insurans. Di samping itu, Syarikat Takaful Malaysia Berhad adalah syarikat insurans yang paling digemari oleh pengguna dan diikuti oleh syarikat insurans Great Eastern, Prudential dan AIA. Hasil kajian ini boleh dijadikan sebagai panduan oleh operator insurans bagi mengenal pasti kehendak pengguna dan pasaran yang berpotensi untuk ditembusi.

Kata kunci: pembuatan keputusan multi-kriteria; syarikat insurans; pemeringkatan keutamaan

ABSTRACT

Medical and health insurance has become a necessity for the Malaysians due to the rising costs of treatment and medication. Nowadays, there are many insurance companies in the market that provide a wide range of medical and health insurance policies. Therefore, the consumers are having difficulties in making decision in selecting the appropriate insurance company. This study aimed to identify the demographic factors that influence the consumers in the Federal Territory of Kuala Lumpur to make their decision in selecting an insurance company. A questionnaire was conducted and Mann-Whitney and the Kruskal-Wallis tests were applied to determine the demographic factors that encourage consumers in selecting an insurance company. Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS) was also used to investigate the priority ranking of insurance companies that are preferred by the consumers based on five criteria, namely premium, type and name of the company, service, influence of the environment and brand loyalty. At the end of this study, the results showed that race and occupation are among the identified demographic factors that will affect the decision of the consumers in the selection of insurance companies when purchasing an insurance. Besides that, Syarikat Takaful Malaysia Berhad is the most preferred insurance company by the consumers, followed by the Great Eastern, Prudential and AIA. The findings of this study can be used by insurance operators as a guidance to identify customer needs and potential markets that can be penetrated.

Keywords: multi-criteria decision making; insurance companies; priority ranking

Rujukan

- Ansari S., Kazemi M.A. & Eshlaghy A.T. 2014. An application of fuzzy TOPSIS for ranking strategies. *Management Science Letters* **4**: 663-668.
- Aruldoss M., Lakshmi T.M. & Venkatesan V.P. 2013. A survey on multi criteria decision making methods and its applications. *American Journal of Information Systems* **1**(1): 31-43.
- Bank Negara Malaysia. 2005. *Laporan Tahunan Insurans 2005*. Kuala Lumpur: Bank Negara Malaysia.
- Bank Negara Malaysia. 2008. List of licensed insurance companies & Takaful operators in Malaysia. <http://www.bnm.gov.my/index.php?ch=13&cat=insurance> (9 Mac 2014).
- Bhutia P.W. & Phipon R. 2012. Application of AHP and TOPSIS method for supplier selection problem. *Journal of Engineering* **2**(10): 43-50.
- Bulgurcu B. 2012. Application of TOPSIS technique for financial performance evaluation of technology firms in Istanbul stock exchange market. *Procedia- Social and Behavioral Sciences* **62**: 1033-1040.
- Giannoulis C. & Ishizaka A. 2010. A web-based decision support system with ELECTRE III for a personalised ranking of British universities. *Decision Support Systems* **48**: 488-497.
- Hatami-Marbini A. & Tavana M. 2011. An extension of the Electre I method for group decision-making under a fuzzy environment. *Omega* **39**: 373-386.
- Hatami-Marbini A., Tavana M., Moradi M. & Kangi F. 2013. A fuzzy group Electre method for safety and health assessment in hazardous waste recycling facilities. *Safety Science* **51**: 414-426.
- Hwang C. & Yoon K. 1981. *Multiple Attribute Decision Making Methods and Applications: A State of the Art Survey*. New York: Springer-Verlag.
- Kementerian Kewangan Malaysia. 2007. *Laporan Ekonomi 2007/2008*: 26-28.
- Kim G., Park C. & Yoon K. 1997. Identifying investment opportunities for advanced manufacturing systems with comparative-integrated performance measurement. *International Journal of Production Economics* **50**(1): 23-33.
- Ma J., Lu J., & Zhang G. 2010. Decider: A fuzzy multi-criteria group decision support system. *Knowledge-Based Systems* **23**: 23-31.
- Marković Z. 2010. Modification of TOPSIS method for solving of multicriteria tasks. *Yugoslav Journal of Operations Research* **20**(1): 117-143.
- Nasruddin H., Norfaieqah A. & Wan Malissa W.A. 2013. Selection of mobile network operator using analytic hierarchy process (AHP). *Advances in Natural and Applied Sciences* **7**(1): 1-5.
- Naw Naw R.S. 2013. Kos perubatan negara meningkat 10 peratus setiap tahun- Dr Hilmi. *Bernama News*. <http://blis.bernama.com/getArticle.do?id=76655&tid=102&cid=2> (31 Mei 2014).
- Ratnayake P. & Padumadasa E. 2013. Insurance tender selection using multiple criteria decision making. *Proceedings of the International Symposium on the Analytic Hierarchy Process 2013*, hlm. 1-10.
- Sproles, G.B. & Kendall, E.L., 2013. A methodology for profiling consumers' decision making styles. *The Journal of Consumer Affairs* **24**: 134-147.
- Wan Khadijah W.I. & Lazim A. 2012. A new environmental performance index using analytic hierarchy process: A case of ASEAN countries. *Environmental Skeptics and Critics* **1**(3): 39-47.
- Yücenur G.N. & Demirel N.C. 2012. Group decision making process for insurance company selection problem with extended VIKOR method under fuzzy environment. *Expert Systems with Applications* **39**: 3702-3707
- Zulkiple I. 2013. Insurans perubatan bantu kurangkan kos rawatan. *Bernama News*. <http://blis.bernama.com/getArticle.do?id=54989&tid=102&cid=2> (31 Mei 2014).

Pusat Pengajian Sains Matematik
Fakulti Sains dan Teknologi
Universiti Kebangsaan Malaysia
43600 UKM Bangi
Selangor DE, MALAYSIA
Mel-e: leeshin44@yahoo.com* nm@ukm.edu.my

*corresponding author