

## **BAB VI**

### **KESIMPULAN DAN SARAN**

#### **6.1. Kesimpulan**

Kesimpulan yang dapat diambil dari perancangan, implementasi dan pengujian sistem SIKredit menggunakan metode FAHP untuk kasus kelayakan pemberian kredit adalah :

1. Sistem pengelolaan kredit telah berhasil dibangun dan dapat membantu pihak kopdit Remaja Hokeng dalam melakukan pengelolaan kredit berupa mengolah data anggota, mengolah simpanan anggota, mengolah pinjaman anggota, mengolah angsuran anggota dengan lebih efisien dan efektif serta menghasilkan laporan-laporan yang memberikan informasi mengenai perkembangan anggota, perkembangan simpanan anggota, perkembangan pinjaman dan perkembangan angsuran anggota dengan cepat.
2. Sistem pendukung keputusan kelayakan pemberian kredit dengan metode *Fuzzy AHP* telah berhasil dibangun untuk menghasilkan keputusan yang lebih objektif berupa daftar perankingan anggota layak, serta dapat membantu ketua kopdit dalam mengambil keputusan pemberian kredit kepada anggota.

#### **6.2. Saran**

Saran yang dapat diberikan untuk pengembangan aplikasi pengolahan kredit dan penyeleksian pemberian kredit ini lebih lanjut yakni agar dapat dikembangkan

aplikasi yang berbasis web sehingga dapat lebih meningkatkan pelayanan kepada anggota.





## DAFTAR PUSTAKA

- Abdi, M., Alireza & Fathi, M. R., 2012. Applying *Fuzzy Analytic Hierarchy Process* for Ranking of Financial Strategies. *New York Science Journal*, 5(6).
- Abur, Clement, C., Torruam & Terande, J., 2012. Microcredit As A Strategy for Poverty Reduction in Makurdi Local Government Area of Benue State, Nigeria. *International Journal of Humanities and Social Science*, Volume 2, No. 12.
- Adeniji, O. B. & Joshua, A. O., 2008. Evaluation of Loan Disbursement and Repayment of Supervised Credit Scheme of Nigeria AgriCultural Cooperative and Rural Development Bank (NACRBD) in Zaria and Kaduna North Local Government Areas of Kaduna State, Nigeria. *Journal of AgriCUlture and Social Research (JASR)*, Volume 8, No. 2.
- Adrian, P. et al., 2008. *Sistem Informasi : Sistem Pendukung Keputusan*, Yogyakarta: Fakultas Sains dan Teknologi Informasi, Universitas Teknologi Yogyakarta.
- Aktepe, A. & Ersoz, S., 2011. A *Fuzzy Analytic Hierarchy Process Model* for Supplier Selection and A Case Study. *International Journal of Research and Development*, Volume 3, No. 1.
- Anggraeni, N., Retnadi, E. & Kurniawati, R., 2012. Perancangan Sistem Informasi Simpan Pinjam di KUD Mandiri Bayongbong. *Jurnal Algoritma Sekolah Tinggi Teknologi Garut*, Volume 09, No. 05.
- Anshori, Y., 2012. Pendekatan Triangular Fuzzy Number dalam Metode Analytic Hierarchy Process. *Jurnal Ilmiah Foristik*, Volume 2, No. 1.
- Aritonang, H. M., 2009. *Analisis Keberadaan Credit Union (CU) Sebagai Lembaga Pembiayaan di Kelurahan Saribudolok Kecamatan Silimakuta, Kab. Simalungun*, Medan: Fakultas Pertanian, Universitas Sumatera Utara.
- Awan, H. M., Bukhari, K. S. & Iqbal, A., 2011. Services Quality and CUSomer Satisfaction in the Banking Sector; A Comparative Study of Conventional and Islamic Banks in Pakistan. *Journal of Islamic Marketing*, Volume 2, No. 3, pp. 203-224.
- Ayag, Z. & Ozdemir, R. G., 2006. A *Fuzzy AHP Approach* to Evaluating Machine Tool Alternatives. *Journal International Manufacture*, Volume 17, pp. 179-190.
- Azwany, F., 2010. *Sistem Pendukung Keputusan Pemberian Kredit Usaha Rakyat Pada Bank Syariah Mandiri Cabang Medan Menggunakan Metode Analytical Hierarchy Process (AHP)*, Medan: Program Studi Ilmu Komputer, Fakultas Matematika dan Ilmu Pengetahuan ALam, Universitas Sumatera Utara.

- Bayou, M. E., Korvin, A. d. & Reinstein, A., 2007. Using the Fuzzy-Analytic-Hierarchical-Process to Select the Optimum Mechanism for Developing Accounting Standards. *Review of Accounting and Finance*, Volume 6, No. 2, pp. 109-130.
- Bire, C. E., Ernawati & Dwiandiyanta, B. Y., 2012. *Perancangan Sistem Pendukung Keputusan Untuk Kenaikan Jabatan Pegawai Menggunakan Fuzzy Analytic Hierarchy Process*. Semarang, Seminar Nasional Ilmu Komputer, Universitas Diponegoro.
- Brannen, D. E. & Ibrahim, N. A., 2010. The Role and Level of Involvement of Credit Union Directors in Strategic Management : A Research Agenda. *International Journal of Management*, Volume 27, No. 3, Part 2.
- Cakir, E., Tozan, H. & Vayvay, O., 2009. A Methode for Selecting Third Party Logistic Service Provider Using Fuzzy AHP. *Journal of Naval Science and Engineering*, Volume 5, No. 3, pp. 38-54.
- Chatterjee, D., Chowdhury, S. & Mukherjee, B., 2010. A Study of The Application of Fuzzy Analytical Hierarchical Process (FAHP) in The Ranking of Indian Banks. *International Journal of Engineering Science and Technology*, 2(7), pp. 2511-2520.
- Chinaemerem, O. C. & E., C. E., 2012. Cointegration Analysis of Informal Credit Management : Assesing the Impact of Informal Finance on The Welfare of Rural Dwellers (A Study of Delta North Rural Communities in Delta State, Nigeria). *Arabian Journal of Business and Management Riview (OMAN Chapter)*, Volume 1, No. 11.
- Cinar, N., 2010. A Decision Support Model for Bank Branch Location Selection. *International Journal of Human and Social Sciences*, 5(13).
- Darmawan, E. H. & Risal, L., 2011. *Pemrograman Berorientasi Objek C# Yang Susah Jadi Mudah*. Pertama penyunt. Bandung: Informatika Bandung.
- Das, P., 2011. *Selection of Business Strategies For Quality Improvement Using Fuzzy Analytical Hierarchy Process*. West Bengal, India, International Quality Conference.
- Felice, F. D. & Petrillo, A., 2010. A Multiple Choice Decision Analysis : An Integrated QFD-AHP Model for The Assessment of Suctomer Needs. *International Journal of Engineering, Science and Technology*, Volume 2, No. 9, pp. 25-38.
- Gungor, Z., Serhadlioglu, G. & Keser, S. E., 2009. A Fuzzy AHP Approach to Personnel Selection Problem. *Applied Soft Computing (ELSEVIER)*, Volume 9, pp. 641-646.
- Gutierrez-Nieto, B., Serrano-Cinca, C. & Camon-Cala, J., 2011. A Credit Score System For Socially Respincible Lending. *Centre Emile Bernheim, Research Institute in Management Sciences*, Volume 11, p. 028.
- Harris, J. D., Dreher, F. F. & CUMmings, M. L., 2005. The CEO'S View of The Impact of IT SeCUrity Requirements Within Credit Union. *Journal of Information Technology Management*, Volume XVI(Number 2).

- Haryanto, E., 2008. *Konsep Sistem Pendukung Keputusan (Decision Support System)*, Yogyakarta: Fakultas Teknik, Universitas Janabadra.
- Kabir, G. & Hasin, A. A., 2011. Comparative Analysis of AHP and Fuzzy AHP Models for Multi Criteria Inventory Classification. *International Journal of Fuzzy Logic Systems (IJFLS)*, Volume 1, No. 1.
- Kabir, G., Jahan, I., Chisty, H. & Akhtar, A., 2010. Credit Risk Assessment and Evaluation System for Industrial Project. *International Journal of Trade Economics and Finance*, Volume 1, No. 4.
- Kamus Bahasa Indonesia, T. P., 2008. *Kamus Bahasa Indonesia*. Jakarta: Pusat Bahasa, Departemen Pendidikan Nasional.
- Kerjasama Andi Yogyakarta dan Wahana Komputer Semarang, 2010. *Visual Basic 2010 Programming*. I penyunt. Yogyakarta: CV. Andi Offset.
- Kerjasama ANDI Yogyakarta dengan WAHANA KOMPUTER Semarang, 2008. *Belajar Pemrograman C#*. I penyunt. Yogyakarta: CV. ANDI OFFSET.
- Kiraly, J. & Mero, K., 2011. The Missing Credit Information System in Hungary. *Journal of Internet Banking and Commerce*, Volume 16, No. 1.
- Knight, L. V. & Steindach, T. A., 2008. Selecting an Appropriate Publication Outlet : A Comprehensive Model of Journal Selection Criteria for Researchers in A Broad Range of Academic Disciplines. *International Journal of Doctoral Studies*, Volume 3.
- Lakshmi, V. S., 2013. Decision Making in Academic Institutions-A Fuzzy AHP Approach. *International Journal of Engineering Science and Technology*, Volume 5, No. 02.
- Lopez-Ortega, O. & Rosales, M.-A., 2011. An Agent-Oriented Decision Support System Combining Fuzzy Clustering and The AHP. *An International Journal, Expert Systems With Application*, Volume 38, pp. 8275-8284.
- McKillop, D. & Quinn, B., 2012. Internet Banking and Irish Credit Union. *International Journal of Co-operative Management*, Volume 6, No. 1.1.
- Moti, H. O., Masinde, J. S., Mugenda, N. G. & Sindani, M. N., 2012. Effectiveness of Credit Management System on Loan Performance : Empirical Evidence From Micro Finance Sector in Kenya. *International Journal of Business, Humanities and Technology*, Volume 2, No. 6.
- Muljono, D., 2012. *Buku Pintar Strategi Bisnis Koperasi Simpan Pinjam*. I penyunt. Yogyakarta: ANDI.
- Mulyana, Y. K., 2010. *Aplikasi Sistem Pendukung Keputusan Pemberian KPR Berbasis Web*, Jakarta: Jurnal UMB, Fakultas Ilmu Komputer, Universitas MerCU Buana.
- Nadali, A., Pourdaran, S. & Nostrabadi, H. E., 2012. Class Labeling of Bank Credit's Customer Using AHP and SWA for Credit Scoring With Data Mining Algorithms. *International Journal of Computer, Theory and Engineering*, Volume 4, No. 3.
- Najafi, A. & Frazeh, A. A., 2010. Productivity Strategic Ranking of Knowledge Workers. *Journal of Applied Sciences and Environment Management*, 14(4), pp. 131-134.

- Okerenta, S. I. & Orebiyi, J. S., 2005. Determinants of AgriCULTural Credit Supply to Farmers in The Niger Delta Area of Nigeria. *Journal of AgriCULTure and Social Research (JASR)*, Volume 5, No. 1.
- Orebiyi, J. S., Tasie, C. M., Offor, U. S. & Uche, F. B., 2013. Effects of International Fund for AgriCULTural (IFAD) Credit Supply on Rural Farmers in Rivers State Nigeria. *New York Science Journal*, 6(1).
- O'Sullivan, T., 2012. Measuring Board Performance in A Credit Union. *International Journal of Co-operative Management*, Volume 6, No. 1.1.
- Power, C., O'Connor, R., McCharthy, O. & Ward, M., 2012. Credit Unions and Community in Ireland : Towards Optimising the Principle of Social Responsibility. *International Journal of Co-operative Management*, Volume 6, No.1.1.
- Secme, N. Y., Bayrakdaroglu, A. & Kahraman, C., 2009. Fuzzy Performance Evaluation in Turkish Banking Sector Using Analytic Hierarchy Process and TOPSIS. *Expert Systems With Application*, Volume 36, pp. 11699-11709.
- Segui-Alcaraz, A., 2012. Development of a Classification of Spanish Credit Institutions Based on the Concept of Stakeholder. *Inzinerine Ekonomika-Engineering Economics*, 23(5), pp. 442-451.
- Sharma, H. P., Sharma, D. K. & Jana, R. K., 2009. Credit Union Protfolio Management-An Additive Fuzzy Goal Programming Approach. *International Research Journal of Finance and Economics*, pp. Issue 30, ISSN : 1450-2887.
- Shega, H. N. H., Rahmawati, R. & Yasin, H., 2012. *Penentuan Faktor Prioritas Mahasiswa Dalam Memilih Telepon Seluler Merk Blackberry Dengan Fuzzy AHP*. Semarang, Seminar Nasional Ilmu Komputer, Universitas Diponegoro.
- Singh, R. & Sharma, S. K., 2011. Title-Supplier Selection : Fuzzy-AHP Approach. *International Journal of Engineering Science and Technology*, Volume 3, No. 10.
- Suhari, Y., Sukur, M. & Eniyanti, S., 2009. Sistem Pendukung Keputusan Pemberian Kredit Pada PT. BPR Artamanunggal Abadi Mranggen. *Dinamika Informatika*, Volume I, No. 1.
- Talebnia, G., 2012. The Major Perpectives Weighted Model for Balanced Scoreced System in The Case of Auto Industries. *Indian Journal of Science and Technology*, 5(10).
- Tas, A., 2012. A Fuzzy AHP Approach for Selecting A Global Supplier in Pharmaceutical Industy. *African Journal of Business Management*, 6(14), pp. 5073-5084.
- Tesfamariam, S. & Sadig, R., 2006. Risk-Based Environmental Decision-Making Using Fuzzy Analytic Hierarchy Process (AHP). *Stoch Environ Res Risk Asses*, Volume 21, pp. 35-50.
- Turban, E., Aronson, J. E. & Liang, T.-P., 2005. Karakteristik dan Kapabilitas Kunci dari DSS. Dalam: D. Prabantini, penyunt. *Decision Support Systems and Intelligent Systems*. Yogyakarta: ANDI, p. 142.

- Turgut, B. T. et al., 2011. A Fuzzy AHP Based Decision Support System for Disaster Center Location Selection and A Case Study for Istanbul. *Disaster Prevention and Management*, Volume 20, No. 5, pp. 499-520.
- Uyun, S. & Riadi, I., 2011. A Fuzzy Topsis Multiple-Attribute Decision Making for Scholarship Selection. *Telkomnika*, Volume 9, No. 1, pp. 37-46.
- Wahab, R. A., 2010. *Sistem Pendukung Keputusan Pemberian Pinjaman Kredit Menggunakan The Satisficing Model (Studi Kasus di Bank Mega Kota Sukabumi)*, Bandung: Program Studi Teknik Informatika, Universitas Komputer Indonesia.
- Wahyuni, H. S., 2009. *Sistem Informasi Simpan Pinjam di DINAS Koperasi UKM dan Perindag Kota Bandung*, Bandung: Jurusan Manajemen Informatika, Fakultas Teknik Ilmu Komputer, Universitas Komputer Indonesia.
- Wibowo, E., 2012. *Rancang Bangun Sistem Pengolahan Data Simpan Pinjam Koperasi (Studi Kasusu : Koperasi Simpan Pinjam "KSP. Bhina Raharja" Rembang Cabang Klaten, Jawa Tengah)*, Yogyakarta: Jurusan Teknik Informatika, Sekolah Tinggi Manajemen Informatika dan Komputer, AMIKOM.
- Wu, H.-Y., Tzeng, G.-H. & Chen, Y.-H., 2009. A Fuzzy MCDM Approach for Evaluating Banking Performance Based on Balanced Scorecard. *Expert Systems With Application*, Volume 36, pp. 10135-10147.
- Wu, J. & Xu, Y., 2011. A Decision Support System for Borrower's Loan in P2P Lending. *Journal of Computer*, Volume 6, No. 6.
- Yakub, 2012. *Pengantar Sistem Informasi*. Pertama penyunt. Yogyakarta: Graja Ilmu.
- Yanar, L., Tozan, H. & Hloch, S., 2012. *Selection of Equipment for Soft Tissue CUTting Using Fuzzy AHP and Fuzzy ANP With A Proposed Decision Support System*. Turkish, Manufacturing Engineering & Management The Proceedings, pp. 192-197.
- Yang, J., 2009. Integrated Performance Evaluation for Supply Chain System Based on Logarithm Triangular Fuzzy Number-AHP Method. *Kybernetes*, Volume 38, No. 10, pp. 1760-1770.
- Yu-Cheng & Beynon, M. J., 2005. Application and Development of A Fuzzy Analytic Hierarchy Process Within A Capital Investment Study. *Journal of Economics and Management*, Volume 1, No. 2, pp. 207-230.



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