Developing MSMEs' Businesses Performance Using Balanced Scorecard Model Measurement Based on Information Technology

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Abstract

The purpose of this research is to help Micro, Small and Medium Enterprises (MSMEs) take the right strategies to improve their business performance. Expert Analysis use Fuzzy Logic Tahani System which measure performance and provide convenience. Fuzzy input consists of financial, customer, internal business process and learning perspective, also grocery store growth. While the non-fuzzy variable fill each perspective determined by the domain expert. From the simulation results based on the data on respondents number 1 (one) for the final value (Na) of 84.0625 by using rounding integers to 84, then when using the rules of membership functions, the calculation is as follows: $\mu\_(Less)[x] = 0$; $x \geq 75$, so the result is 0, $\mu\_(Enough)[x] = ((85-x))/10$; $75 \leq x \leq 85$, so the result is 0.1, $\mu\_(Good)[x] = ((x-75))/10$; $75 \leq x \leq 85$, so the result is 0.9. The results concluded that the performance of MSMEs in this respondent is "GOOD", and this is accordance to the results of the liner regression calculation which also shows the "GOOD" category results.

Strategy, Business, MSMEs, Fuzzy Logic and Balanced Scorecard

Biography / Biographies

Achmad Zakki Falani is a senior lecturer, and IT Development Manager at Narotama University. He has completed a grant research project in the field of fuzzy logic and MSME strategies funded by the ministry of research and higher education. His research interests include management information systems and artificial intelligence.

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Elok Damayanti is is a lecturer in the field of management with a concentration on MSME business management at Narotama University. Her research interests include Business Startup, MSMEs and management information systems.

Abdul Talib Bon is a professor of Production and Operations Management in the Faculty of Technology Management and Business at the Universiti Tun Hussein Onn Malaysia since 1999. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France in the year 2008. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration in the Universiti Kebangsaan Malaysia for which he was awarded the MBA in the year 1998. He's bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom in 1997. He had published more 150 International Proceedings and International Journals and 8 books. He is a member of MSORSM, IIF, IEOM, IIE, INFORMS, TAM and MIM.