

Strategy for Developing MSMEs Performance Using Balanced Scorecard Model Measurement Based on Information Technology

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Abstract

The purpose of this research is to help MSMEs take the right strategies to improve their business performance. And Expert Analysis using Fuzzy Logic Tahani System can measure performance and provide convenience in its use. Fuzzy input consists of financial perspective, customer perspective, internal business process perspective and learning perspective and grocery store growth. While the next non-fuzzy variable is weighting 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: $\mu_{\text{Less}}[x] = 0; x \geq 75$, so the result is 0, $\mu_{\text{Enough}}[x] = ((85-x)) / 10; 75 \leq x \leq 85$, so the result is 0.1, $\mu_{\text{Good}}[x] = ((x-75)) / 10; 75 \leq x \leq 85$, so the result is 0.9. From the results of the above calculations, it can be concluded that the performance of Micro, Small and Medium Enterprises (MSMEs) in this respondent is "GOOD". And this is in accordance with 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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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 he 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.