TECHNOLOGY CLIMATE AND ELECTRE II APPROACH FOR INDUSTRY DEVELOPMENT IN INTEGRATED SHIPPING INDUSTRIAL AREA OF LAMONGAN DISTRICT

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Abstract

Lamongan district has a development program of Integrated Shipping Industrial Zone. In order to support the development of this industrial zone, investors are promoted to invest their industrial activity. To do so, government city council of Lamongan aims to prioritize which one of the industries should be selected. This research proposed Technology Climate Index (TCI) approach for recognized study of industrial development potential in Lamongan. To determine which industries are prospered and matched with the technology climate of Lamongan, ELECTRE II is proposed to utilize.

The calculation of Technology Climate Index of Lamongan district consists of Subjective Factor Index (SFI) and Objective Factor Index (OFI). Based on TCI, it is calculated that SFI is 0,79349 in 2004/2005 and 0,79481 in 2008/2009 and OFI is 0,33251 in 2004/2005 and 0,66749 in 2008/2009. ELECTRE II utilized an output from the previously step of TCI. The both of methods utilized, take in to account many criteria of evaluation for certain available alternative industries. Result of this research shows that wood industry, rubber industry, glass industry, textile industry, furniture industry, and sloop industry are potential supporting industries at the highest priority.

Key word: ELECTRE II, integrated zone development, priority of potential supporting industries, shipping industry, technology climate