

Technological Innovations as a Potential Vehicle for Supply Chain Integration on Basic Metal Industries

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Abstract : This study investigated the roles of technological innovation on basic metal industries and then developed technological innovation framework for enhancing sustainable competitive advantage in the basic metal industries. The previous research work indicates that technological innovation has critical impact in promoting local industries to improve their performance and achieve sustainable competitive environments. The field observation, questionnaire and expert interview result from basic metal industries indicate that the technological capability of local industries to invention, adoption, modification, improving and use a given innovative technology is very poor. As the result, this poor technological innovation was occurred due to improper innovation and technology transfer framework, non-collaborative operating environment between foreign and local industries, very weak national technology policies, problems research and innovation centers, the common miss points on basic metal industry innovation systems were investigated in this study. One of the conclusions of the article is that, through using the developed technological innovation framework in this study, basic metal industries improve innovation process and support an innovative culture for sector capabilities and achieve sustainable competitive advantage.

Keywords : technological innovation, competitive advantage, sustainable, basic metal industry, conceptual model, sustainability, supply chain integration

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