

SUMMARY

The Impact of Information Technology Application to the Enterprise Design Factors and Competitive Advantage of Manufacturing Industries in Indonesia

The efforts improving competitive advantage of various manufacturing products requires strategies that cover various processes in setting how manufacturing industries will achieve its future business objectives. Competitive advantage of manufacturing industries of a nation will be first built up on the competitive advantage at the enterprise level.

Information technology has been considered by industrialist as enabler to achieve the sustainable competitive advantage of manufacturing industries.

The competitive advantage of manufacturing industries, which will be achieved through the implementation of Information Technology are improving manufacturing efficiency, expediting products differentiation process, improving products quality and creating opportunity in spawning new business. Further description of Information Technology Competitive Advantages are as follows (1) Operating efficiency is an expected condition to lower the operating cost and increasing profit margin of the manufacturing enterprises. (2) Expediting products differentiation, Information Technology will enable enterprise to switch the manufacturing process from a certain product to another products with very minimum effect to operating cost and time delay and having ability to produce any products in a small scale, (3) Improving products quality, Information Technology increases ability to response customer requirements with minimum lead-time. Information technology is also able to improve the manufacturing products quality to maintain customer and market share. (4) Spawning new business, Information technology will also increase ability in spawning new business and create extra benefit and positive image of the manufacturing enterprise in creating any new products.

The enterprise design factors, which share a certain extent influence to the success of information technology application, are training in information technology, business process reengineering, system design, technology management and production planning within the enterprise. Further description of enterprise design factors, which contribute positive influence to achieve the competitive advantage are as follows (1) Business process reengineering in an enterprise is important to improve intensity and effectively in using information technology based equipment. The application of information technology based equipment need to be handled consistently through various adjustment of the manufacturing business process, (2) System design is a very important process to determine the success of implementation of information technology based equipment to