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## **A Sustainable and Systematic Method of Engineering Strategies To Support Order Manufacturing (Kanban): An Economic Engineering System (Case Study)**

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**Abstract:** At the 2011 Annual International Industrial Engineering Theory, Application, and Practice conference, the initial work to develop a sustainable and systematic method designed to support an implemented Kanban system was presented. The purpose of this study is to report the modifications and success of the refined systematic model by examining the plant's vendor and supplier relationships within the context of improved supply chain management. This system focuses more on the supplier as being dedicated to support the needs of the company with which there is such a relationship. By aggressively applying these systematic techniques, the following cost-out was achieved: 2008 goal (\$850,000) exceeded (\$904,000), 2009 goal (\$800,000) exceeded (\$2,400,000), 2010 goal (\$1,800,000) exceeded (\$2,100,000), and 2011 goal (\$1,740,000) exceed (\$1,800,000). Currently the goal for 2012 had been set at \$2,200,000 and is currently on track to be achieved. It is evident that this systematic process is indeed sustainable and viable.

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