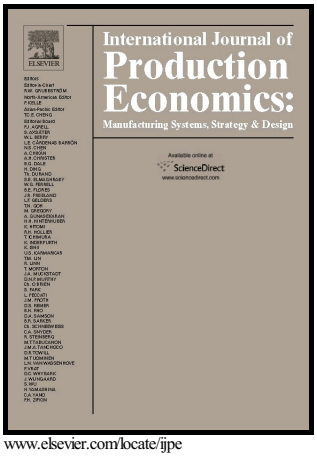

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Development of a Fraud Risk Decision Model for Prioritizing Fraud Risk Cases in Manufacturing Firms

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ABSTRACT

Among the different risks a manufacturing firm faces, one of the most devastating may be caused by internal fraud. Corporate Fraud Investigation Units receive dozens of reports about possible fraud allegations annually. While all allegations should be addressed, it is not possible to investigate all cases immediately due to resource limitations. However, fraud may cause serious production and financial losses at any stage in the supply chain. Thus, it is necessary to find a method to prioritize the fraud risk of cases for the purpose of allocating resources and to determine how quickly they must be addressed. The Analytic Hierarchy Process (AHP) stands out as the most widely used prioritization methodology due to its intuitive simplicity and mathematical rigor. This study combines current SCM risk frameworks with extant fraud investigation literature and best-practices to develop an AHP ratings model for the prioritization of alleged fraud reports in a corporate setting, more specifically in the context of a large metals and mining manufacturing company.

A 3-5 page paper proposal was presented in the 13th International Symposium on the Analytic Hierarchy Process (ISAHP 2014), Washington D.C., U.S.A., June 29 – July 2, 2014; and selected to be fully