

Review of: "Enhancing Supply Chain Management Risk Mitigation: A House of Risk Methodology Applied to Brick Manufacturing in Aceh Besar Regency"

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Potential competing interests: No potential competing interests to declare.

Introduction

The present manuscript reports a study of the supply chain risk and its management applied to the brick manufacturing industry in Aceh Besar Regency. The "House of Risk" methodology is applied for identifying the risk events and agents in the concerned supply chain, involving interviews and questionnaires for a select set of respondents from the industry and consumers, and subsequent application of quantitative assessment of the risk in terms of severity and frequency. Based on the identification of the risk levels associated with various risk events, a select set of mitigation measures is suggested.

Comments:

1. While the intent of the study is appreciable, the overall manuscript devotes a considerable space in the literature review section to discussing general principles of supply chain management, risk management, and supply chain operation reference model without linking them to the core problem at hand. There is no discussion of any existent work in the domain. Even in the section on "Construction Supply Chain," there is little attempt by the authors to elucidate in requisite detail the essential supply chain risks and any prior research reported in the literature, and any significant gap therein. In essence, the section on literature review does not provide a critical review of the associated literature. As a consequence, the reader is unable to judge the state-of-the-art in the area of interest for the authors.
2. There are extended discussions on the methodology of House of Risk in the literature review section which are elementary and constitute standard information that may have been briefly subsumed under the Methodology section.
3. The authors have adopted a survey-based approach to collect the requisite qualitative data based on which the estimate of supply chain risk elements is quantified. However, the sample size of the study constitutes only 12 respondents, a number that is too low for requisite statistical analysis of the data.
4. The authors have not provided any justification about the chosen respondent characteristics, and whether they constitute an adequate set towards obtaining a representative body of response data.
5. The authors provide three research locations, naming them plant X, Y, and Z. The reason for choosing these three locations is not stated, and if they constitute a representative set, and if so, why?
6. The authors have not included the questionnaire used for collecting the data; it is, therefore, not evident how exhaustive or accurate the method of collecting the requisite information is.

7. No statistical analysis of the collected data is explicitly reported towards verification of the statistical reliability of the responses and / or any possible correlation between the risk factors and / or risk agents.
8. In section 3.5, the authors mention FMEA as a risk identification technique. Have the authors applied this technique? Is the technique relevant to the problem at hand? If so, in what form may FMEA be applied in the present context?
9. The authors do not explicitly report the requisite data that allows the application of the SCOR Model. How has this model been utilized actually?
10. The authors do not elucidate with the due rigour how the suggested “Treatment Strategies” can help address the supply chain risks effectively.
11. The risk treatment strategies suggested by the authors are again relatively general in nature and may apply to the supply chain for a large variety of products. The authors do not establish the specificity of the recommendations with regards to the brick manufacturing industry. Nor are the learnings generalized, which may potentially benefit other industries.
12. Overall, the work is relatively elementary in actual scope, and the ultimate conclusions are rather self-evident. The authors need to highlight more convincingly the uniqueness of the study, of the approach, and that of the findings for the manuscript to be considered for publication.