Moving away from piece price cost - developing proactive Supply Risk Management for OEMs

A single case study of a global Swedish manufacturing company.

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With a globalised and connected economy, regional disruptions can have global consequences. Supply Risk Management (SRM) is the practice of limiting the negative effects of supply disruptions and can be conducted proactively and reactively. Company A, a global manufacturing company located in Sweden, has recently been affected by supply disruptions and is now seeking to develop their own proactive SRM capabilities.

For this we recommend a proactive SRM model consisting of steps: i) risk governance and organisation, ii) risk identification, iii) risk assessment, iv) risk treatment, v) risk monitoring. We also suggest an implementation plan to guide Company A on how to approach the recommended model. The enablers for the implementation are top management support, a risk aware culture and education in SRM activities.

The first step of the recommended model, risk governance and organisation, highlighted four aspects that would be necessary for Company A to reach a higher level of proactive SRM. Activities are recommended for improving these aspects, which would enable the organisation to further encourage proactive SRM activities.

The second step, risk identification is divided into two parts. Firstly, enablers were suggested to provide supply visibility and successfully build up a risk register. Then a deep bi-annual scan should be conducted and to have continuous awareness is recommended.

For the third step, risk assessment, it is recommended to calculate the risk by impact and probability of occurrence. The impact can be considered as the cost of not receiving a component, during the time it takes to switch source. The probability is the likelihood of having to switch sources and depends on environmental, network and operational risk factors of a supplier. The impact and probability assessments should then be combined to prioritise SRM work.

The fourth step, risk treatment, aims to mitigate the prioritised risk. This is done by choosing suitable treatment strategies and constructing an action plan. The cost of implementing the action plan can be compared to the potential impact of the risk to evaluate the business case. The action plan is then implemented and monitored.

This introduces the final step of the process, risk monitoring. It is done to keep track of the previous SRM steps as well as the overall SRM performance. By measuring the SRM performance it enables continuous improvement of the proactive SRM work.

The developed proactive SRM model has been adapted specifically to Company A purchasing and its needs. However, the recommendation can also be applied to other organisations if modified according to their organisational needs and structure in terms of proactive SRM.

The study includes a literature review over selected articles to map out relevant SRM theory. The analysis is based on comparing the findings of proactive SRM work at Company A with the theoretical framework, as well as analysing the organisation using a risk maturity model. The full study is presented in the report: "Improving proactive Supply Risk Management of a large purchasing department" at the Faculty of Engineering – LTH, Lund University.