

# Supply Chain Focus dependant ‘Supplier Selection Problem’

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Increasing globalization, diversity of the product range, and increasing customer awareness are making the market(s) highly competitive thereby forcing different supply chains to adapt to different stimuli on a continuous basis. It is also a recognized fact that overall supply chain focus should be given an overriding priority over the individual goals of the players. Among all the possible order-winners, cost and responsiveness turn out to be the most significant ones based on which supply chains compete with each other. But typically, a supply chain’s focus will lie somewhere on this cost-responsiveness spectrum. There is lot of technical literature that deals with supply chain analysis with respect to either of these order-winners. Even though the existing body of knowledge offers useful insights with respect to the functioning of supply chains, they are typically restricted by the model related assumptions and the consequent replicatability related problems. Supplier selection problem is one of the crucial problems that need to be addressed by a typical supply chain manager, which could make the difference between winning and losing the order. We would like to address this problem in a generic way so that irrespective of the focus of the supply chain on the cost –responsiveness spectrum, a typical supply manager should be able make a informed decision with respect to supplier selection problem. Inventory related costs and response related costs are the two primary costs that are considered in this model. We are also introducing a dimensionless quantity called the ‘coefficient of processing time’ to simplify the analysis and interpretation of the results. By empirical modeling, we offer some very interesting insights into the working of a supply chain with respect to the supplier selection problem depending on the location of the supply chain focus on the ‘cost-responsiveness’ spectrum.

Keywords: Supply chain focus, cost-responsiveness spectrum, supplier selection, Coefficient of processing time.

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