To prevail in this highly dynamic and intensely competitive global business world, organizations are striving hard to establish their supply chains to timely satisfy customer's demands and strategically collaborate to ameliorate the work efficiency of supply chain associates. To accomplish this objective, integration of supply chain is reckoned as a leading approach to mitigate variety of costs, losses, risks, disruptions, wastages and to maximize the net revenue. Owing to market development, product diversification, shorter product life cycles, technological boosts , and advances in manufacturing processes which are the aftermaths of globalization, the rivalry is no longer amid businesses but amidst supply chains. Developing competition arouses autonomous organizations to collaborate in a supply chain that permits them to achieve mutual benefits and it is usually contended that dynamic organization is one which has an efficient and leading supply chain. Accordingly the global integration of supply chain is essential to ascertain competitiveness and quickly respond to rapidly emerging demands. Furthermore, in today's fiercely global competition amongst organizations, dealing with the common conundrum with regards to net profit maximization is a matter of survival for almost every organization. To address the problem explicitly, this dissertation sets out to establish a vertically and horizontally integrated profit seeking optimization model for supply chain integration (SCI) in a four-echelon supply chain network. The study encompasses many suppliers, manufacturers, distribution centers and vendors synchronized with a set of several kinds of raw materials and a set of different sorts of finished

products. A demonstration and analysis are argued which experience preceding aspects. The study reckons and classifies several kinds of costs namely transportation cost, integration cost, wastage cost, distribution cost, raw material cost, production cost and setup cost. Through historical point of view regarding SCI literature we observed that authors mostly focused on vertical aspects while functional aspects on the other hand are given minimal attention. Therefore, In order to make a contribution to the research area, the current study reckons both the vertical and horizontal aspects of integration. The key intention of the model is to optimize the net revenue through network integration and cutting down of variety of costs as mentioned above. And ultimately an illustration was presented to further manifest and testify the feasibility and effectiveness of the model. Consequently a concordance amidst computational outcomes and evaluated results asserts that the efficiency and effectiveness of the proposed model is not in doubt. The model is expected to be employed by supply chain executives to have a significant appraisal for controlling the impact of variety of costs and to optimize net revenue. Keywords: Supply Chain Management; Supply Chain Integration; Optimization Model; Supply Chain Integration And Network Configuration.