ANALYSIS OF TECHNOLOGY BASED DEVELOPMENT OF A MANUFACTURING COMPANY: A CASE STUDY OF LOADSTAR

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Abstract

Loadstar(pvt)Ltd is one of the leading industrial tire, wheel and track manufacturers in Sri Lanka which started as a small company and became the number one solid tire exporter in the world today. This study was carried out to identify the growth of the company as a result of efficient acquisition and assimilation of technology in line with business strategies. Measuring instruments were designed to assess acquisition of technology knowledge in products and processes as well as the growth stage of acquired technologies and its transfer status to Loadstar. In addition, study focused on assessing acquisition of capabilities such as Design Engineering, R&D, Production and Selling and Servicing. Furthermore, balanced scorecard management tool was used to study the behavior of key business parameters such as Turnover growth, Internal growth in product and technologies, Level of customer satisfaction and growth in employment and training.

Literature survey shows the analysis of technology based development of a manufacturing company mainly requires proper understanding of technology components. It also indicates that successful acquisition of identified technologies heavily relies on the level of acquiring core capabilities as well as supporting capabilities. Concepts such as "Technology ball" and "Technology based development of a firm" indicate the acquisition of knowledge and level of technology transfer with time respectively.

Study revealed that Loadstar has successfully acquired process technology capabilities from its inception and moved on to acquiring R&D capabilities, especially in material development and bias ply pneumatic tire design after 1998. It was also found that Loadstar's capability in Solid tire product development is quite low,' even though it carries the considerable market share compared to pneumatic tires. Further, study revealed that Loadstar lacks Selling and servicing capability which is one of the core capabilities to add value to the product.

Based on analysis and conclusions, it is recommended that Loadstar need to strengthen its R&D \capabilities in Solid tire products, as well as company should boost its involvement of innovation and development of radical technologies in its all product groups. Further, process technology should be strengthened by improving work facilitation and modification capabilities. In addition, company should focus on acquiring Selling and Servicing capabilities to work closely with customers to add more value to the product.