Assessment of the Indian and US Technical Textile Industries: Application of SWOT Analysis

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Abstract
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Keywords
Technical textiles, India, USA, SWOT analysis

Disciplines
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Assessment of the Indian and US Technical Textile Industries: Application of SWOT Analysis

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It was forecasted that the world market for technical textiles will increase by 4% per annum between 2005 and 2010 in volume terms, with a value reaching $126 billion (Czajka, 2005). Even though India’s share of the global technical textiles market is close to 10%, the sector has not received required attention (Borneman, 2006; Siores, 2007). Traditionally, developed countries, like the USA or Germany, have dominated the technical textile market compared to developing Asian countries, like India (Technical Textiles Industry, 2010). However, recent developments suggest that Asian countries are becoming major players in this sector (Borneman, 2007). To date, little research has been done on technical textile industries in developing countries as opposed to developed nations. The USA and India were chosen for this study based on the fact that the USA has a comparative advantage in technical textiles (Chi, Kilduff, & Dyer, 2005), whereas India has a great potential to emerge as one of the leaders in the global technical textile industry (Siores, 2007). The purpose of this study was to examine the current state of the Indian and US technical textile industries. The findings were used to develop strategies for boosting future industries’ development. The study provided insights to the following issues: (a) strengths and weaknesses of the Indian and the U.S. technical textile industries; (b) opportunities and threats for both industries; and (c) strategies for the two industries to successfully compete in the technical textile global market.

This study used SWOT (strengths, weaknesses, opportunities, and threats) analysis as a guiding framework because it can lead to proposing strategies, which the Indian and U.S. technical textiles industries can implement to increase the industry competitiveness. An extensive review of literature revealed six important indicators pertinent to technical textile industry performance: industry structure, cost competitiveness, capital investment, regulatory legislation, human resources, and R&D and marketing of technical textiles. Secondary data were collected to conduct a comparative analysis of these indicators for the two industries using the SWOT framework. Various sources were used for the data collection, including: the Indian and the US governments’ websites and reports, scholarly journal articles, trade publications, and technical textile related websites.

This study provided a detailed description of strengths/weaknesses and opportunities/threats for the U.S. and Indian technical textile industries. Based on the detailed analyses of all six indicators, it was found that strong and organized industry structure is a boon for the US, whereas unorganized and decentralized sector in India is a bane for the Indian industry. Cost competitiveness: lowering costs by achieving higher economies of scale is one of the major strengths for the US industry, whereas low economies of scale along with poor infrastructure and costly machineries and raw materials are the major weaknesses of the Indian industry. The only cost advantage India has is low labor cost. Capital investment: because the technical textile
industry requires high capital investment, it is a great strength of the U.S. industry. In contrast, India is far behind which deters the growth of the sector. However, India is now allowing foreign direct investment, which might be a major opportunity for growth of the industry through joint ventures, but at the same time might be a threat to domestic SMEs. Regulatory legislations: stricter safety regulations in the USA (e.g., use of fire retardants materials in public places) support demand for technical textiles, whereas lax legislation in India have been undermining it. Changes in public safety regulations in the country can be a great opportunity for the industry. Both industries have opportunities to emphasize sustainable environmental practices. Human resources: as technical textile industry requires highly skilled labor, there is an opportunity for the Indian industry to increase the education and skill level of its labor force. This in turn will result in greater innovation and productivity to increase the industry competitiveness. R&D and marketing: U.S. industry enjoys strengths in this area, whereas the Indian industry is weakened by low levels of investments in R&D. At the same time, this can be considered the key opportunity for the industry to catch up with major players in the global technical textile industry and increase its competitiveness.

Based on the results, specific recommendations for strategies for the Indian and US technical textile industries were proposed. In today’s global economy, collaboration is the key to increase profits and achieve success. Through collaboration, both industries can take advantage of opportunities: by initiating joint ventures, US companies can benefit from low cost Indian labor, while Indian companies can strengthen their position through adopting advanced technology and processes used by US partners. In the coming years, demand for technical textiles from the emerging economies is going to be unprecedented and this demand can be jointly satisfied by the U.S. and Indian technical textile partnerships. Findings of the study based on the SWOT analyses of the two textile industries located in a developed and a developing country might not only help the Indian and the U.S. industries but may also be useful for other industries in developed and developing countries that are a part of the race for technical textile world market share.

References