

Dynamics of Learning and Innovation among Sri Lankan Export Firms and their Implications for Global Competitiveness¹

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Abstract

The paper focuses on the issue of competitiveness of Sri Lankan export firms and inquires into the factors that contribute towards development of competitive capabilities based on the findings of ten case studies. The case study firms comprised an equal number from 'born global' and 'gradually globalizing' firms engaged in manufacturing and marketing of different products. Applying a modified grounded theory approach, the paper examines the relationship between organizational learning and competitive capability building among the sampled firms. According to the findings, the important dynamics of competitive capability of the firms include the capacity to integrate research and development based internal learning and the market-based external learning, which is facilitated by organizational leadership. The paper concludes that although Sri Lankan export firms have a limited capacity to introduce significant innovations, they have the potential to acquire competitive capabilities through experimentation and learning, continuous quality improvement and dynamic leadership enabling the firms to respond to global market conditions more effectively.

1. Introduction

Global competitiveness of Sri Lankan export firms and their capacity to innovatively approach products and processes to face the challenges in the global market is an issue that deserves special attention. Inquiring into this issue is considered important due to the fact that Sri Lanka has remained at a comparatively low position in the global competitiveness rankings despite having an early start in free market-oriented economic reforms while maintaining an impressive record in terms of social development indicators.

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As revealed by the Global Competitiveness Report 2002-03 compiled by the World Economic Forum, Sri Lanka ranked 61 in terms of Growth Competitiveness Index and 57 in terms of Current Competitiveness Index among 75 countries that participated in the survey. Growth Competitiveness Index is supposed to reflect a country's potential for growth and the capacity to manage the resources in a manner that enhances the competitive capability in the global market. Thus, a serious limitation in global competitiveness as reflected in Sri Lanka's low ranking raises several issues with regard to her capability to manage the country's resources while increasing the export earnings and reducing the heavy dependence on imports. It also raises the question as to why Sri Lankan manufacturing exports have lagged behind despite the favorable policy environment which prevailed during the past two decades.

Finland, which reached the number 1 position in the global competitiveness ranking, is believed to characterize the features of a well managed economy with good governance and excellent relations between public and private sectors. Thus, it is pertinent that an inquiry in to a country's global competitiveness should embrace the core issues of economic management as well as governance. In the present paper, an attempt is made to examine the issue of competitive capability of Sri Lankan export firms with emphasis on their business strategies. It will also inquire into the question of how far a firm's ability to learn and innovate would influence the competitive capability of a firm in the global market context.

2. Objectives and Methodology

The paper is based on the findings of a study of ten Sri Lankan export firms conducted in 2003 and it addresses the following objectives:

- (i) To identify the dynamics of organizational learning and their effect on innovation of products and processes,
- (ii) To explore the relationship between a firm's capability to innovate and to maintain a competitive position in the global market, and
- (iii) To examine whether there are significant differences between the 'born-global' firms and 'gradually globalizing' firms in terms of learning and innovation, which contribute to competitive capability.

The study adopted a modified grounded theory approach where a sample of ten export firms selected purposively was studied by a team of two researchers applying the method of un-structured in-depth interview covering mainly the CEOs of the case study firms. The researchers developed an interview protocol covering the issues pertaining to product and process innovation, market related learning, R&D based learning, risk taking etc. As indicated in Table 1 the case study firms comprised five 'born-global' (BG) firms that were 100% export oriented and five 'gradually-globalizing' (GG) firms that were operating in domestic as well as international markets. The GG firms in the sample exported about 20-30 % of their output under highly competitive conditions. The researchers also collected supplementary data through field visits to factories, interviews with selected managers as well as through study of company records. The transcripts of tape recorded interviews with the CEOs were analysed systematically in order to identify the key themes. Following the research procedure of the grounded theory (Glaser and Strauss, 1967), the data were categorized and grouped and the patterns of behaviour of firms that fits in to a certain theoretical framework were identified.

Table 1
Profile of the Case Study Firms

Name and Type of firm	Core product	Nature of market
Heycarb Ltd(BG 1)	Activated carbon	Export market only
Royal Firwood Porcelain Ltd. (BG2)	Porcelain tableware	Export market only
Imperial Tea Exports (BG3)	Value added ('Impra' branded tea)	Export market only
Shadowline Apparels (BG4)	Ladies fashion garments	Export market only
Microcells Ltd. (BG5)	Industrial rubber carpets	Export market only
Jinasena Engineering Holdings (GG1)	'Centric' water pump and other agricultural machinery, heavy duty tyres	Mainly local market and expanding in to global market
Barbara Sansoni Fabrics- 'Barefoot'(GG2)	Designed handloom dresses	As above
Hettigoda Group- 'Siddhalepa' (GG3)	Ayurvedic medicinal products in ready-to-use form	As above
Samson Rubber Products Ltd (GG4)	Bicycle tyres and other value added rubber products	Export and domestic market
Ceylon Biscuits – 'Munchee' (GG5)	Biscuits	Mainly domestic market and expanding in to global market

3. A Brief Survey of Literature

Organizational learning is considered a critical antecedent of product and process innovation that leads to developing competitive capability enabling a firm to acquire and maintain an edge over its competitors. In the context of the present day global market which is characterized by a high degree of dynamism as well as change, only those firms that are capable of innovatively approaching their customers and adapting themselves to the changing markets are expected to survive (Clarke and Clegg, 2003). Thus, the firms engaged in international business are expected to introduce innovations in their value chain continuously in order to acquire competitive capability (Porter, 1999).

Literature also suggests that the global firms are engaged in both internal learning through R&D as well as external learning through networks and markets in order to enhance their competitive capability through innovation (Sinkula, 1994, Slater and Narver 1995). The firm level innovations have been found to be both technological as well as non-technological (Weerawardena, 2003). It has also been observed that the competitive advantage of a firm is dependent on its dynamic capability to adapt or adjust existing products and processes in the context of the global market, which is an outcome of organizational learning and innovation (Teece, et.al, 1997). The firms that are capable of making major technological breakthroughs are supposed to acquire greater competitive advantage which is linked to a firm's capability to create increased value addition for the customer (Markides, 1997).

The innovative firms are found to be adopting strategies that help them in acquiring internal R&D capabilities and they also take initiative in networking that support product development and marketing (AMC, 1995). In most of the innovative firms, leaders take the initiative to promote learning and innovation that leads to building competitive capability (Weerawardena, 1998, Ranasinghe, 2002). The leaders of innovative firms tend to adopt a transformational leadership style, which is conducive toward learning from experimentation as well as risk taking. These leaders also bring in an extensive experience of their own to the organizational learning process (Ranasinghe and Weerawardena, 2003).

The Sri Lankan firms engaged in manufacturing for export have not been able to benefit much from the advantages of globalization due to their un-competitive behaviour characterized by lack of strategic planning, lack of innovation and short-term profit orientation (Fonseka, 2001). However, there are a few Sri Lankan firms that have succeeded in both domestic as well as export markets and these firms have been led by entrepreneurial leaders who have been able to challenge the established mindsets as well as the myths about business (Ranasinghe, *ibid*). Recent literature also shows that entrepreneurial leaders contribute towards developing competitive capabilities of their firms through market-related innovations which are largely non-technological (Weerawardena, 2003). Thus, the literature suggests that the competitive capability of a firm is directly linked to a firm's ability to adapt their products as well as processes based on both the R & D based internal learning as well as the market- based external learning. A hallmark of those firms which are more competitive is that they continuously innovate products and processes in order to create greater customer value.

4. Conceptualization of the Problem

As the study followed the grounded theory approach, the researchers did not start the inquiry with a hypothesis about organizational learning that could be tested empirically. However, based on the recent literature on the subject, the researchers identified several important variables that could be applied for delineating the trends as well as the pattern of behaviour of the firms operating in export markets. Accordingly, the paper suggested the following argument for further exploration. The firms that are successful in effective integration of internal as well as external learning enjoy a greater advantage of introducing product and process innovations that lead to high degree of competitiveness and in this respect the CEOs play a significant role in influencing the relationship between firm level innovation and acquisition of competitive capability.

5. Findings of the Study

The findings of the study were organized around six themes which included organizational learning and capacity building, market oriented innovation, networking, competitive strategy, leadership and organizational culture, and human resources management. The study findings around these six themes are presented briefly in the following section.

5.1 Organizational Learning and Capacity Building

According to the findings, the leaders of both types of firms believed that it was critical to learn through R&D, market intelligence as well as networks in order to remain competitive. The product and process innovation efforts of these firms were found to have been influenced to a considerable extent by their learning from market-related sources. The decisions made by Haycarb (BG1) to invest in acquiring internal R&D capability and to set up a coconut shell burning plant to produce the required charcoal while generating energy, can be considered as a consequence of learning from the market as well as accumulated experience regarding quality requirements and the scope for reducing cost of production. Also Haycarb has been successful in achieving a competitive edge over its rivals by developing a new product supported by internal R&D based learning. Similarly, Royal Firnwood Porcelain (BG2) was making continuous efforts to improve product quality and reduce the cost of production in order to remain competitive. These efforts have been supported by learning from the market through participation in international trade fairs and also from information gathered through networking. The leader of Imperial Tea Exports (BG3) emphasized that his learning from the customers as well as the network helped the firm in developing a branded product which was successful in the global market. Shadowline Apparels (BG4), which was supplying ready made garments to some of the world's leading chains of super markets was regularly getting feedback from its customers and improving the quality standards of the products accordingly. Microcells (BG5), which supplies its products to a few customers in USA and Europe, focused on continuous process improvement based on market information as well as internal learning.

The learning style of the gradually globalizing firms in the sample did not differ much from the born global firms. Among both types of firms, the learning of the leader through trial and error method as well as continuous experimentation had laid the initial foundation for acquiring *organizational learning capability*. Among the GG firms in the sample it was found that the initial breakthroughs in the market have been achieved through integration of internal experimentation-based knowledge with information gathered from the market by maintaining continuous interactions with customers, dealers, suppliers etc. This tendency was present among firms like Jinasena Engineering Holdings (GG1), Hettigoda Group (GG3) and Samson Rubber Products (GG4). These three firms have taken steps to integrate the learning from experimentation as well as market based information leading to building internal capability for research and development and designing of products.

5.2 Market - oriented Innovation

Building competencies for market oriented innovation was considered highly important by the leaders of case study firms. Product and process innovation based on internal R&D capability was found among Heycarb (BG 1), Royal Firnwood Porcelain (BG2), Jinesena Engineering Holdings (GG 1), Hettigoda Group (GG3), Samson Rubber Products (GG4), and Ceylon Biscuits Limited (GG 5). It was revealed that these firms have gone through an arduous process of experimentation and learning over a long period of time.

The experiences narrated by the leaders of these firms showed that various challenges faced by their firms due to market competition, increased cost of inputs, uncertainties of raw material supply etc, have made them look for innovative solutions to problems faced by their firms. According to the views expressed by the leaders of some of the case study firms, the ability to produce a high quality product and sustain its position in the market would not have been possible if they did not achieve the capability to innovate products as well as processes through continuous learning.

According to the CEO of Ceylon Biscuits Limited (GG5), the successful entry of the firm to the Indian market was possible due to process innovations leading to improvements in product quality. The CEO of Royal Firnwood Porcelain (BG2) observed that R&D based product innovations helped the firm to introduce special product features leading to customer value addition giving a competitive edge for the company products in the global market. Similarly, Heycarb was able to design a special type of activated carbon to meet a need in the gold mining industry in South Africa, which the company was able to accomplish due to internal capability for initiating R&D based innovation. Hettigoda Group (GG3), which was engaged in the business of manufacturing Ayurvedic medicinal products, had been successful in launching a new product for diabetics in the form of tea bags aiming at the Western markets. Barbara Sansoni Fabrics (GG2), a firm engaged in the marketing of handloom products has been successful in establishing its brand 'Bare-foot' in both local as well as international markets by introducing a range of dress design innovations using unique color combinations.

5.3 Networking

Networking has been a source of learning as well as a means of consolidating the market prospects of the case study firms. It was revealed that both types of firms were relying on their global network for gathering market intelligence, finding new markets and at times in facilitating product related research. Heycarb (BG1) made strategic use of its network in the leading markets to collect market information and to stock, package and distribute the company products. Imperial Tea Exports (BG3) depended on its network of agents and distributors mainly in Russia for the purpose of promoting the company's brand 'Impra Tea'. Shadowline Apparels (BG4) on the other hand depended heavily on its leading buyers for product design and marketing. The relationship between the company and its buyers in this case was similar to a strategic alliance. Samson Rubber Products (GG4), which had developed a close working relationship with a network of buyers, has got some of the buyers involved in product development and also testing such products in foreign markets. Among the GG firms in the sample, companies like Jinasena Engineering and Ceylon Biscuits relied heavily on their local network of dealers and distributors for collecting market information and promotion of sales. Jinesena Engineering in particular, had an island-wide network of dealers and service personnel who played a critical role in marketing the 'Centric' water pump and other agricultural machinery manufactured by the company. Barbara Sansoni Fabrics (GG2) worked closely with a network of handloom weavers spread over the island to manufacture the fabric according to strict quality standards. The company also networked with a group of sales agents abroad to promote exports.

5.4 Competitive Strategy

The strategies followed by the case study firms varied according to the products they were manufacturing as well as the nature of markets that were being served. Almost all the firms focused on a single product strategy and attempted to achieve competitive advantage through continuous improvements in product quality as well as process improvements that contributed towards reducing production costs. Attempting to achieve competitive advantage on the strength of unique product features or superior quality of products appeared to be the strategy of BG firms like Heycarb, Imperial Tea Exports and Royal Firnwood Porcelain. Similar strategies were adopted by some of the GG firms like Hettigoda Group, which offered a range of Ayurvedic medicinal products, and Jinesena Engineering Holdings, which specialized in manufacturing and marketing of water pumps, agricultural machinery and heavy duty tyres targeted at export markets.

The strategy followed by Heycarb was more distinct in the sense that the company had made a significant investment for developing internal R&D capability which had been used to manufacture superior products that could compete well in the global market. Compared with Heycarb, other firms in the sample appeared to have adopted an incremental approach towards making significant capital investments for acquiring internal R&D capability.

It was found that some of the case study firms have adopted a strategy of vertical integration, which helped in minimizing certain risks in marketing of products as these firms have been successful in developing strategic alliances with international buyers. For instance, Shadowline Apparels (BG4) manufactured and supplied high quality garments to a selected few super market chains adhering to the designs supplied by the buyers. The CEO of Shadowline Apparels observed that the competitive advantage of his firm depended on two factors, cost and lead time. Samson Rubber Products (GG4) also followed a similar strategy as the company had entered into strategic alliances with major buyers. These buyers also assisted the firm in product design and testing and developing the products according to international standards. This strategy had enabled the firm to share market risks with its partners while consolidating the manufacturing and marketing operations. Microcells (BG5), which specialized in manufacturing industrial rubber carpets, had an arrangement with a group of buyers in USA and Europe to supply the product in bulk. This arrangement helped the company in minimizing risks in the marketing of products.

5.5 Leadership and Organizational Culture

Achievement-oriented leadership and teamwork-based organizational culture characterized the pattern of behavior of the majority of BG firms studied. The leaders of these firms adopted the style of 'leading from the front' and they got fully involved in setting medium to long term goals and developing strategies for achieving those goals. In the case of GG firms, the dominant leadership style appeared to be paternalistic as most of them were family owned companies. However, the leaders of GG firms too were found to be fully immersed with their businesses and most of them got personally involved in making all the important decisions. The urge to achieve and the relentless perseverance of goals characterized the behavior of the leaders of all the case study firms.

It was clear that leader's prior experience and knowledge as well as learning had played a key role either in setting up the business or in expanding the business. This feature was clearly seen among BG firms like Heycarb, Imperial Tea Exports, Royal Firnwood Porcelain and Microcells and also among GG firms like Hettigoda Group, Jinesena Engineering and Samson Rubber Products. In cases like Heycarb, Royal Firnwood Porcelain, Imperial Tea, Shadowline, Samson Rubber Products, and Ceylon Biscuits, it was found that decision making authority was more decentralized and the leaders assigned specific responsibilities to the functional heads of their companies. It was also found that leaders of all case study firms were concerned in maintaining a flat organizational structure which could facilitate decision making as well as communication.

According to the findings there were similarities between 'born-global' firms and 'gradually globalizing' firms with regard to the role played by the organizational leaders in creating organizational culture and steering the companies towards acquiring competitive capabilities through learning and innovation. It was found that the experience as well as the knowledge accumulated by the leaders over a period of time in relation to the core business of the firm had played a critical role in the development process of these firms.

The leaders also influenced the process of learning and innovation by integrating internal as well as external learning. The leaders conducted regular meetings with the senior management team where new ideas regarding products, processes and the markets were discussed, and decisions were made regarding the changes or improvements that were considered necessary. The internal learning based on R&D and external learning associated with markets have both played a critical role in developing new products or adapting the existing products in response to market demands. The organizational culture of the case study firms was found to be conducive towards responding to changing conditions in the global market. "If we want to do something, we will somehow do it" this statement made by the CEO of Shadowline Apparels, epitomized the organizational culture of most of the case study firms.

5.6 Human Resource Management

The human resource management practices of the case study firms were found to be similar to each other in many respects and they were geared towards harnessing the potential of the employees to perform at an optimum level. Most firms adopted the practice of recruiting, training and developing young school leavers to take up greater responsibilities as executives in the future. Some CEOs involved themselves not only in selection and recruitment of employees but also designing motivational strategies. It was found that monetary incentives and other extrinsic rewards have been effectively used by the management of case study firms to motivate the employees. The practice of team work was found to be more pronounced among the born-global firms. However, there was evidence to suggest that some of the GG firms in the sample have adopted participatory management practices in order to promote employee involvement in quality improvement, house keeping etc.

The paternalistic management style of the CEOs of some of the GG firms seems to have influenced the human resource management practices of those firms. The practices such as providing subsidized meals, compulsory saving schemes, loan schemes, medical schemes etc. adopted by the leaders of these companies appeared to have influenced the level of employee involvement and commitment. The fact that there were no employee trade unions among the case study firms except in one, probably explains the extent of loyalty that the employees demonstrate towards their employers. "If you look after your employees well, they will do a good job and will never let you down"- this view expressed by the CEO of Jinasena Engineering Holdings, appeared to be a shared view among the leaders of the case study firms.

6. Discussion

The findings of this study suggests that the learning curve of the born global firms differ significantly from that of the gradually globalizing firms because these firms did not have the advantage of experience-based prior learning as in the case of gradually globalizing firms. The BG firms have apparently gone through experimentation-based learning processes while facing various risks. For example, in the case of Heycarb which had entered the global market with a new product, the learning process had gone through a series of experimentation and testing of products in the global market. Although the

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company had to face certain risks in this process, it had contributed to develop a learning and innovation culture within the company while helping in the development of in-house R&D capability.

According to the findings, only a few firms in the sample were competing in the global market on the strength of the product itself or by relying mainly on their own marketing capability. The fact that most firms did not have strong in-house R&D capability or marketing capability may have influenced the current strategy of partnering with global actors, which has been adopted by some of the case study firms in order to remain competitive.

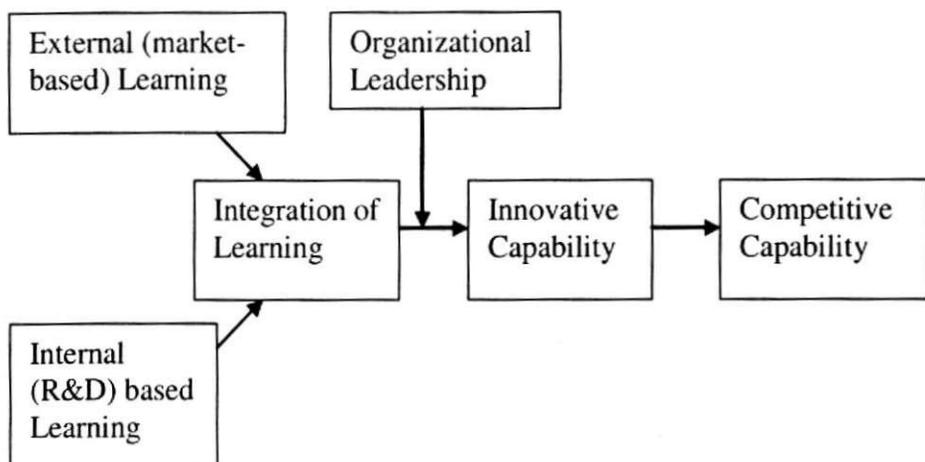
As discussed in the literature, the competitive advantage depended on the ability of a firm to make significant technical breakthroughs leading to development of new products or in enhancing a firm's capacity to introduce innovations in the value chain. The findings showed that except in the cases of Heycarb, Royal Firnwood Porcelain, Samson Rubber Products, Hettigoda Group and Ceylon Biscuits Limited, other case study firms lacked the internal R & D capability to develop new products or introduce significant innovations in the value chain in order to compete well in the global market. However, most firms were found to be placing a heavy emphasis on improving the quality of existing products and introducing improvements in the value chain leading to cost and efficiency advantages.

The findings also revealed that the strategies followed by the case study firms for sustaining competitive capability did not appear to be unique. Because, similar strategies (e.g. networking) are found to be applied by the export firms that do not have the capacity to compete on the strength of their own products or unique marketing capabilities possessed by the firms. One might therefore argue that this type of strategy may not ensure long term benefits as they tend to develop a dependency relationship between the firm and its global partners.

The findings of the study supported the views expressed in the current literature regarding organizational learning, innovation and competitiveness. There was evidence in favor of the argument which we presented at the outset. Because the findings clearly showed that integration of internal as well as external learning had been a critical factor in improving a firm's competitive capability. We suggested that leadership plays an important role as it influences the relationship between organizational learning and the capacity of a firm to innovatively approach the issues relating to product and process innovation and, the global marketing of products. The findings of the study supported that proposition.

The findings also showed that in those cases where the leader played a dominant role as a facilitator of learning and innovation, the leadership role was found to be a critical antecedent of building organizational capability. This situation prevailed largely in those companies where the leader decided the level of risk that the company was prepared to take in the market. A tentative theory that emerges from the study findings is presented in the following figure:

Figure 1
A Conceptual Model of Global Competitiveness of Export Firms



As suggested in the literature, innovation in the value chain has helped the case study firms to influence cost as well as quality which, in turn, had enabled them to enhance competitive capabilities. Although the researchers expected marked differences in management practices and business strategies adopted by the born- global and gradually- globalizing firms, the study findings did not show such differences except where the born-global firms demonstrated a higher risk taking tendency as well as a concern for developing in-house capabilities including research and development capability compared with the gradually globalizing firms.

7. Conclusion

The level of success achieved by the case study firms in the global market can be attributed largely to the capability developed within the firms through integration of learning from the external market as well as the internal research and experimentation, which had enhanced the capacity of the firms to introduce product and process innovations in order to remain competitive. It was found that organizational leadership with a high degree of learning orientation had played a critical role in this process.

Although Sri Lankan export firms do not have adequate internal R&D capability that can contribute to developing globally competitive products, the achievements of some of the case study firms show that once a firm acquires the dynamic capability to respond to global market demands through developing in-house capabilities, there is a greater possibility of sustaining the competitiveness of a firm in the international market. The findings of the study points to the conclusion that an appropriate mix of right leadership, learning environment and motivated and competent employees seems to be a prerequisite for sustainable competitiveness of export firms.

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