CHAPTER VI

SUMMARY AND RECOMMENDATIONS

6.1. Summary

A contemporary model of logistic performance integrating the focal construct of logistics effectiveness with competitive capability as a key resource to provide an explanation for a firm’s enhanced business performance has been theorized in this research.

The suggested model states that there is a need to consider the effects of new variables which have not received adequate attention in previous studies. The model succeeds in isolating these variables based on an iterative and interpretative survey of the literature followed by rigorous examination of the reliability and validity. The research has also clearly demonstrated that performance analysis studies can be enhanced with the inclusion of other explanatory variables and discovering new interactions between existing variables. By introducing the variable of competitive capability in the analytical framework, this study has demonstrated that the linkage between logistic performance and organizational performance can be enhanced.

In this sense, the Model developed in this Research is entirely new in comparison to earlier models developed in the literature. Applying the concept of logistic effectiveness as a theoretical foundation this study also responds to the contentions that strategic logistic performance needs more theory. The study findings offer empirical support and validation for a conceptual framework that proposes competitive capability as a mediator and distinctive competency that can create superior value for research that examines the lateral influence of logistics effectiveness and firm performance.

The logistic performance model proposed in this research incorporates logistics effectiveness as a focal construct with competitive capability as a mediator and organizational performance as a consequence. As far as can be recalled, from an iterative and interpretative reading of the literature, there is no other empirical research that has investigated the real association between logistic performance as reflected in logistic effectiveness or otherwise and competitive capability and their influence on organizational performance. Therefore in this research, an attempt has been made for the first time to specify the linkage amongst these constructs.
Accordingly, measurement scales were developed for the study to meet the theoretical requirement of the variables in the study viz. logistic effectiveness, competitive capability and organizational performance. Scale items were developed through an iterative, interpretative literature review. Initially a multi-dimensional concept of Logistic Performance consisting of Logistics Effectiveness, Logistics Efficiency and Logistics Differentiation was proposed for study in line with Fugate et al (2010). Subsequently as per advice of the Research and Referral Committee (RRC), only one of the dimension of Logistic Performance viz. Logistic Effectiveness was selected for detailed analysis.

Initially, twelve items were developed for logistic effectiveness, eleven items were developed for competitive capability and fifteen items were developed for organizational performance. All the items were developed after an exhaustive engagement with the literature. All the items in the scale reflected the latent variable they represent.

After the pilot study, exploratory factor analysis was carried out to retain measures with higher measurement attributes and remove items which were less potent in terms of fit with the underlying factor being measured. Thus, the final instrument was designed with 8 items for Logistic Effectiveness, 9 items for Competitive Capability and 10 items for Organizational Performance.

A 7 point Likert scale was adopted in the study and responses ranging from very strongly to disagree (1) to very strongly agree (7) were solicited from the respondents. The items were phrased to reflect a clear understanding of all the variables from the perspective of executives and CEOs.

In total electronic mails were sent to 200 companies from the drawn sample. Total of 113 respondents representing 63 enterprises responded to the survey questionnaire after vigorous follow-up over e-mail and repeated telephone calls.

In some of the enterprises 2 or 3 different functionaries representing logistic division/ export division & the CEO were the respondents.

Many of the respondents expressed reservations about revealing information citing business confidentiality.
Data was thus eventually collected from 113 executives working in diverse Home Textiles enterprises across the country. 32% of the respondents were located in Western India, and an equal number (32%) were located in Southern India. 31% were located in Northern India. A small number (5%) were located in Eastern India.

The respondent profile in terms of annual sales revenue for the fiscal year 2012-2013 shows that 37% of the respondents had sales above Rs.75 Crores. 19% of the respondents had a sales revenue of less than Rs. 75 Crores; 13% of the respondents had sales revenue of less than Rs. 50 Crores and 31% of the respondents had sales revenue of less than Rs. 25 Crores.

Majority of the respondents were men (95%). The respondents profile by management position shows that senior management personnel (Partner/ Director President/CEO) formed more than half of the respondents (53%) followed by middle level managers (VP/AGM/Manager). As regards the age category 50% belonged to the Age group of 36-50 years and 46% were in the age group of 51-60 years.

Throughout the data collection period, electronic mails not only served as a reminder, they were also a two-way communication channel for respondents to seek clarity about the survey questionnaire and for the researcher to understand the complexities of logistics operations and their effectiveness in achieving the objectives of the firms.

Three main hypothesis and 15 sub-hypotheses were formulated with the components of competitive capabilities and organizational performance.

The hypothesis were tested using Structural Equation Modelling and all the 3 main hypothesis and 14 of the sub-hypothesis were accepted indicating the empirical validity of the theoretical assumptions in this research.

Structural Equation Modelling was used as a tool to determine the model fit.

The x²/df statistics, and fit indexes like Goodness of fit (GFI) index, Comparative Fit (CFI) index, Tucker and Lewis Index (TLI) Normed Fit Index (NFI), Standardised Root Mean Square Residual (SRMR) and Root Mean Square Error of Approximation (RMSEA) values were used to find out the fit of the model.

The findings of the study are discussed in the subsequent paragraphs.
6.2. Summary of findings

The findings in the present research clearly brings out the importance of effectively managing logistics performance so as to enable a manufacturing firm to achieve higher levels of organizational performance. Towards this end, the main objectives of this research have been fulfilled. An important objective of this study was to understand logistics performance in terms of logistics effectiveness in the Home Textile sector of the textile industry in India. Accordingly, the construct of Logistics Effectiveness was developed after an iterative and interpretative reading of the literature as a reflective construct. The construct was validated by Exploratory and Confirmatory Factor Analysis. The Cronbach value was calculated to establish the internal consistency of the construct. The Model fit of the constructs was also measured by against the Goodness of fit Indexes. Data was collected by using a survey instrument from 113 Executives (including CEO’s) representing 63 companies.

The findings bring out essential features of logistic performance in the home textile sector in India in terms of the impact of various observed variables on their organizational performance enabling a clearer comprehension of the logistic needs of the sector to enhance their competitiveness.

Another objective of this research was to study the impact of logistics effectiveness as a dimension of logistic performance on competitive capability of organizations. The findings of the study support the impact of logistics effectiveness as a dimension of logistic performance on competitive capability.

The study has succeeded in isolating logistic effectiveness as a distinct variable after rigorous examination of validity and established its positive relationship with competitive capability both at the aggregate and individual component levels. The impact of logistics effectiveness has been found to be positive on all the dimensions of competitive capability included in this research viz. cost leadership, organizational flexibility and customer service. It has also emerged from the study that competitive capabilities do not reside in situ in logistics function but are external to it and a product of management decisions.

The findings of this research also provide empirically validated evidence in support of a positive relationship between competitive capabilities and organizational performance in fulfilment of the third objective of the study. The study clearly establishes by empirical
evidence that enhancing capabilities to utilize resources like logistics with which organizations are differently endowed can lead to improving performance of the organizations. The findings are also in line with previous studies which have sought to establish a link between competitive capabilities and firm performances.

A final objective of the research was to develop a framework for a greater understanding of the relationship between logistic performance and organizational performance.

In fulfillment of this objective, we found evidence of the important mediating role played by competitive capability between logistic performance as reflected in logistic effectiveness and organizational performance. The squared multiple correlation shows that 56.5% of the total variance of organization performance is explained by logistics performance and competitive capabilities. On its own, logistic performance as reflected in logistic effectiveness explains 28% of the variance of organizational performance.

Thus, there is clear evidence to show that competitive capability acts as a catalyst in enhancing the relationship between logistic performance and organizational performance. It is like a “black box” or a contraption representing a set of processes by which the input of logistic performance transforms into the output of higher level of organization performance.

Not only possession of assets but the capabilities to deploy them confer competitive advantage and higher organizational performance is the main finding of this study. Logistic performance in this research is seen as reflecting logistic effectiveness and as such it is surmised that even though the results are in relation to logistic effectiveness they are a strong indicator of overall logistic performance.

Further in order to validate the main findings in the Research arrived at on the basis of subjective assessment method, viz. measuring the perceptions of the respondents through a survey instrument, post factor objective assessment method placing reliance on secondary source of data like Annual Reports was also invoked.

The results of the objective assessment also confirm a positive relationship between factors like sales growth used as proxy for Logistic Performance and Return on Asset used as a measure of organizational performance, thereby further validating the positive relationship between logistic performance and organisational performance. Consistent with the above
discussions our study also makes a contribution to understanding logistic performance in the manufacturing sector on theoretical and managerial fronts.

6.3. Contribution to Theory

On the theoretical front the present study ties the benefits and rationale for recognizing logistics performance as an asset of strategic value to be leveraged by developing capabilities to deploy them as envisaged by the Resource Based Theory (RBT) of the organization. To this extent it reinforces the belief that by focusing on the strategic aspects of their businesses, organizations can gain competitive advantage and improve their overall business performance. In this study, cost leadership, organizational flexibility and customer service were identified as the key elements of competitive capabilities and were found to enhance logistics performance to a significant extent. It also reinforces the underlying premise of the RMT as argued by Sirmon et al (2007) that possessing valuable, rare, inimitable and non-substitutable resources is a necessary but insufficient condition for value creation. The research also contributes by providing insights in to the fundamental processes by which vital resources like logistics can be transformed into value for the customer. It is also observed that capabilities are dynamic and can enhance competitiveness through reconfiguring of existing resources in the organisation. The study also clearly demonstrates that new interactions between existing variables can be developed thereby leading to greater understanding of performance analysis. The study also demonstrates the efficacy of including additional explanatory variables to further the understanding of existing conceptual frameworks in order to attain greater theoretical rigour.

The findings of the study further state that not only innovative products (M.L Fisher), functional products like Home Textiles would require a responsive supply chain in terms of cost leadership, organizational flexibility and customer service and not only an efficient supply chain.

6.4. Contribution to Practice

On the practical front, the findings of this study show that managers need to understand that the limited resources available to organizations need to be deployed in a manner as to enhance competitive capability achieving higher levels of customer service in terms of speedy delivery of customized product lines will lead to higher sales growth
The managers must pay special attention to identifying the competitive capabilities of the organisation and develop the ability to deliver products quickly to the customers.

Further, the delivery mechanisms need to be maximized as they have an important impact on the financial performance of the company. ‘Assets need to be made to sweat’ as they would lead to higher financial gains.

Effective logistics practices enhances the cost competitiveness of the company and timely deliveries can lead to premium prices. Higher levels of customer service in terms of speedy delivery of customized product lines lead to sales growth. Even for functional products, competitive pricing continues to provide high levels of customer satisfaction.

With information technology and communication capabilities such as the Internet and e-commerce, firms can forge relationships that yield dramatic performance benefits in terms of end-customer satisfaction and reduced cost due to the elimination of operational duplication and resource waste.

6.5. Limitation of the Study

The study has a few limitations which need to be noted.

The study is restricted to the focal firms and not to other stakeholders external to it.

Further, the study is also limited to outbound logistics as a segment of the logistic process and does not take in to account the dynamics of the total length of the supply chain.

It is also focussed on a segment of the textile industry viz. Home Textiles and not the entire textile supply chain.

6.6. Future Research

Future research must extend this study to other manufacturing sectors and see whether the scales developed in this study demonstrate validity and reliability in their application.

The logistic performance model developed in this research with logistic effectiveness as a focal construct should be further expanded to include other dimensions of logistic performance like logistic efficiency and logistic differentiation so that a multi-dimensional operational measure
can be validated for a more comprehensive understanding of the overall performance of organization in achieving their stated objectives.

Future research should study the impact of the company size and structure on the relationships between logistic performance, competitive capabilities and organizational performance.

The logistic performance model developed in this research for the manufacturing sector and should also be applied to the E-commerce sector where the delivery process is the very raison d'être of the business enterprise.

**Conclusion**

The present study advances Logistics Performance research by developing a model and providing empirical evidence to explain the effects of logistics effectiveness on organizational performance and the mediating role of competitive capability in this relationship. Relying on the Resource Based Theory (RBT), this study develops a novel approach to enhancing organizational performance. The mediating effect of competitive capability on logistics performance has been clearly demonstrated in our structural path analysis. Merely being in possession of tangible assets like logistics services is not adequate. Managements must know how to leverage them to their advantage. Findings from this study provide guidelines for managers to direct their management actions on improving capabilities through logistics performance.

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