



## STRATEGY DEVELOPMENT BY SMES' WHILE PRACTICING SUPPLY CHAIN WITH RESPECT TO SOUTH INDIAN TEXTILE SECTORS

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### ABSTRACT

This paper aims at empirical study of strategy development by Small Medium Enterprises (SMEs) while implementing the supply chain. This paper attempts to address problems, risks faced by small medium enterprises of textile units in their supply chain and their consequences of business performance. To have an efficient supply chain management globally, all organizations in the arena are to meet International requirements in terms of quality, cost, delivery and services. Primary data was collected through a structured questionnaire based survey and the numbers of responses were 163 out of 210 people are classified by job title and respondents are categorized by their job functions are Chief Executive Officer, Purchasing Manger, Production Manager and Logistics Manager from South Indian Textile Manufacturing units. The major problems are faced by SMEs while practicing the supply chain- absence of assets, non availability of skilled labor, decreasing product life cycle, supplier vulnerability, absence of competency in utilizing the cutting edge technology and lack of trust among the supply chain members. This paper also explored the SMEs feel risks while implementing supply chain which are sharing sensitive information, fluctuating cost of raw materials, evolving the world market and transportation delay. The consequences of strategy development positively impacts on the business performance of SMEs. SMEs shall plan their future practices and strategies based on present position and possibilities. While Strategizing, due Importance is to be given to issues they possess and the risks they would need to take up. There a lot other issues which are exempted in this study like the work culture among Employees across all supply chain partners in an SCM, green practices, proper utilization of their representative organizations to get maximum benefits from the government etc. The results of this paper shall be used by the SMEs to plan their Strategies for an efficient Supply Chain Management and the Academic World shall also go further researching the stated issues and solutions.

**Keywords:** Supply Chain Management, SMEs and Strategy development.

### 1. INTRODUCTION

Globalization and free trade of the world economy has levelled the field for all contenders around the world. In the Indian perspective, small and medium enterprises (SMEs) are under exceptional weight on the grounds that the business sectors are presently confronting rivalry

from everywhere throughout the world. The innovation and information technology upheaval of the 1990s and the quick multiplication of Internet has to a vast degree given equivalent opportunities to all contenders by uninhibited stream of communication, paying little mind to the topographical limits, and opened new vistas of chances (Ritchie and Brindley, 2000). In India, 95 for each penny of mechanical units are in little scale division with 40 for each penny esteem expansion in the assembling segment and 6.29 for every penny commitment to the Indian gross domestic product (GDP) (Singh *et al.*, 2008b, 2010, 2012). Globalization has brought expanded weight on Indian assembling SMEs, who need to constantly lessen costs against scenery of enhancing quality and administration, and for some SMEs, the use on merchandise and administrations represent a high generation of turnover and it is persuasive in the accomplishment of business goals. Other significant difficulties for SMEs are to persistently give imaginative and tweaked items utilizing the best accessible process advances. Enhancements in contenders' capacities have abbreviated item life cycles, raised item multifaceted nature and extended availability to new specialized leaps forward.

To confront worldwide rivalry effectively and to internationalize successfully, SMEs need to break seclusion of their suppliers and different elements in the supply chain. As organizations look to create associations and more successful data joins with exchanging accomplices, inside forms get to be interlinked and traverse the customary limits of firms. SMEs are more powerless against natural changes of business sector in the light of their restricted assets, innovative abilities, less dealing power – one-way handle (Quayle, 2003) – furthermore, less probability to extend in contrast with large enterprises. This further eases under the sudden changes offered by large enterprises that maintain their organizations on worldwide methodologies. Long term survival of SMEs relies upon their supply chain relationship position and operational center ought to be vital (Hong and Jeong, 2006). However, globalization has likewise given numerous open doors for SMEs to work in association with numerous vast associations centering on their center business, scaling back and outsourcing from everywhere throughout the world. To confront challenges and to profit on the advantages of globalization, SMEs must have viable coordination methodologies to make an appropriate equalization among all individuals. The clashing goals and absence of coordination between supply chain individuals may regularly bring about vulnerabilities in supply and demand. Successful coordination procedures may help in overseeing between conditions and diminishing vulnerabilities. Inferable from constrained assets, little firms are not ready to dedicate adequate assets, time for creating methodologies for reasonable development. By and large, business achievement of production network relies upon the detailing and usage of feasible coordination procedures.

In this paper, the authors have concentrated on problems and risks faced by Indian SMEs while implementing supply chain. In addition to, find the strategies to handle those problems and risks and its consequences on their business performance. This paper contains segment 2 discussed about literature review. Segment 3 discussed about research methodology. Area 4 talks about findings and analysis from a structured questionnaire based survey in light of Indian SMEs. At last, finishing up comments is introduced in Section 5. Segment 6 gives future scope and further study.

## 2. LITERATURE REVIEW

Today's greatest test in the supply chain network is to oversee different however reliant individuals from the store network. Supply chain network individuals are reliant on each other and these individuals should be composed by productively overseeing conditions between each other (Arshinder *et al.*, 2009). An incorporated inventory network has a reasonable favourable position on the competitiveness of the individual organizations. Accordingly, the chain– chain rivalry has begun to take once again the enterprise– undertaking rivalry, despite the fact that numerous enterprise– undertaking rivalries do exist especially in the less created economies (Koh and Tan, 2006). Jain *et al.* (2009) examined a wide audit of the principle ways to deal with supplier-related issues, for example, supplier choice, supplier– purchaser relationship in a planned supply chain network. Incorporation of supply chain network exercises result in better coordination. Lee (2000) gave a fascinating idea of supply chain mix that comprises of data sharing, logistics coordination and authoritative relationship. Soroor *et al.* (2009) and Sawik (2009) has watched that coordination assumes a basic part in incorporating distinctive divisions in an association along the supply chain to improve execution. Coordination can be accomplished by the incorporated planning of assembling and supplies of raw materials and get together of completed items.

Today's dynamic competitive market demands that SMEs have to bring excellence in all the areas irrespective of various regions, including creativity in manufacturing section and responsiveness to their clients (Ravindra Kumar *et.al* 2014). Ascend in global business competition has forced the SMEs to increase the standard in terms of, for example, quality, reduce operation cost, efficiency, reduce delivery time, reduce lead time and smooth-streaming operations. SMEs face the different pressure on to maintain the six sigma quality in their operations, production of product and delivery of services (Corbett and Campbell-Hunt, 2002).

Study addressed that SMEs give considerably more money related and authoritative productivity that empower advancement of advances and markets key in to accomplish "feasible advancement" (Moore and Manring (2009).

Soni and Kodali (2011) investigated in their study that overcoming customary practices is the greatest obstacle in actualizing Supply Chain Management practices (SCM) in Indian Manufacturing sectors. Building core capabilities get to be vital for long haul upper hand since focal points exuding from the product– price–performance exchange off are short term (Kak and Sushil, 2002). Chaston *et al.* (2001) have addressed that the ranges of capability worried with new product development, human asset administration hones, hierarchical efficiency and the administration of value and data. In such a testing domain, the limit of a firm to keep up its dependable and persistently enhancing business and fabricating forms gives off an impression of being a key condition for guaranteeing its manageability in the long run (Denis and Bourgault, 2003). SMEs, which connect operations to their business procedures, beat the opposition. As indicated by Corbett and Campbell-Hunt (2002), organizations ought to center their vitality and assets on inventive item and its corner. As SMEs are confronted with new items and procedures on a genuinely consistent premise, they

should create imaginative methodologies to meet the changing client desires. Huin et al. (2002) noticed that SME CEOs are vigorously included in vital and exceedingly operational issues of logistics, which incorporate top of the line (costly things) buy choices, deals account administration capacities, and so forth. The closeness of SMEs administration to their clients and suppliers accomplishes higher unwavering quality of production network.

A few studies (Lal, 2004; Hodgkinson and McPhee, 2002) have found that clients of cutting edge e-business innovation perform superior to non-client in the fare market. Nonetheless, interests in e-business innovation alone are not adequate to enhance business execution of SMEs, particularly on the off chance that they are definitely not rational with their coordination and business techniques (Morgan et al., 2006). To this end, these undertakings must enhance their innovation administration capacity, and in this way they should get support from specialists and information exchange operators. Globalization has brought about the quick inflow of outside direct speculation over the globe, especially into recently industrialized nations (UNCTAD, 2005). It has given great open doors for SMEs to be a piece of worldwide system and accomplice with bigger organizations. To profit these open doors, SMEs need to promote and reinforce their supply chain network coordination methodologies.

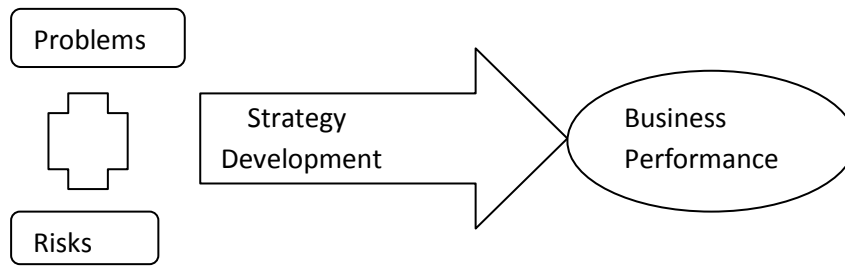
### **3. RESEARCH OBJECTIVES AND METHODOLOGY**

This paper aims at studying the strategy development by Small Medium Enterprises (SMES) while adopting the supply chain. The present study is being an empirical study for Indian SMEs, specifically in textile manufacturing units. This paper attempts to address problems, risks faced by small medium enterprises of textile units in their supply chain and their consequences for business performance. Under problem area, study will attempt to recognize significant issues confronted by SMEs while implementing supply chain. Under risk area, it will attempt to distinguish real risks which SMEs feel while working in supply chain network. In the Business Performance segment chiefly financial related business parameters have been investigated in the present study.

Data were collected a structured questionnaire among Indian SMEs from textile segments. Larger part of them was situated in semi-urban zones. Every one of them had interests in plant and apparatus not exactly Rs.100 crore, according to them earning of SMEs in connection with India. Authors had led a pilot study of 40 SMEs of distinctive segments for concluding the poll. Of the 25 SMEs that took an interest in the study, 14 were from the home textile part area, 2 from hosiery division and 9 from knitted garment area. Despite the fact that questionnaire was sent by post or email.

In this study, respondents were solicited to rate the power from every property for their individual association on a five-point Likert scale (1 – most minimal, 5 – most astounding). Around 210 SMEs from parts of Karur, Tirupur and Coimbatore were reached for gathering reactions. These associations were chosen from registries accessible at Confederation of Indian Commercial ventures and respective Textile Associations, For this study, respondents were chosen satisfying the criteria of SMEs, what's more, those fitting in with the Textile Industry. Regardless of telephones, updates and researcher visits to firms, just 148 completed the responses. The greater parts of the respondents were at the level of Chief Executive

Officer, Purchasing Manger, Production Manager and Logistics Manager. Towards the end of the survey, respondents were asked for to fill their profile points of interest, however it was discretionary.

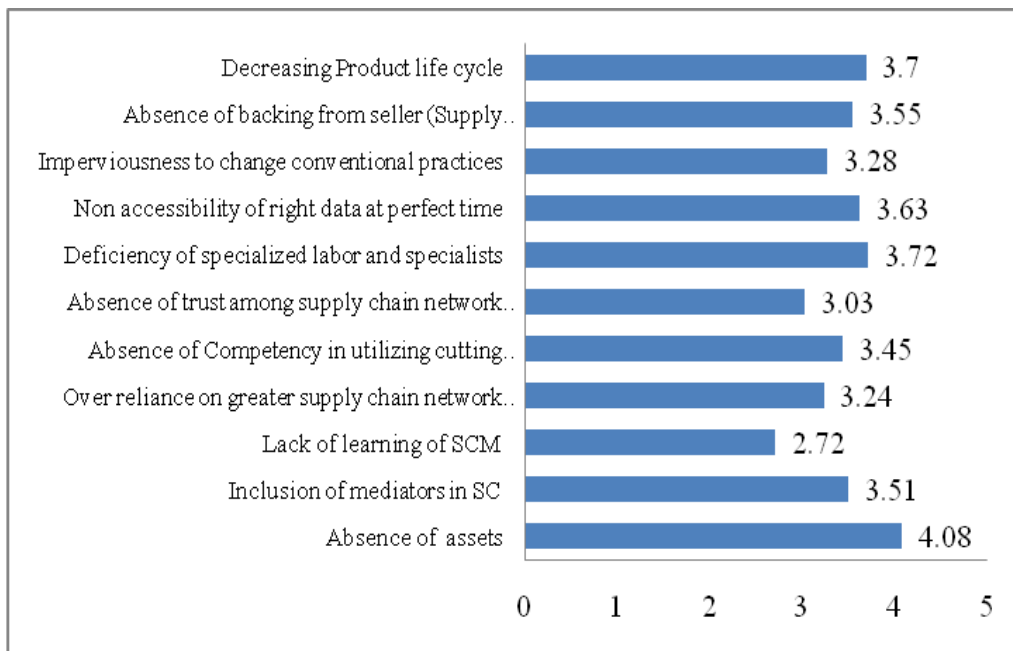


**Fig. 1: Conceptual model**

**4. RESULTS AND FINDINGS**

**4.1 Problems confronted by Indian SMEs amid usage of SCM**

On the basis of literature review and pilot study, 11 issues are distinguished which Indian textile SMEs face amid usage of SCM. These problems are decrease in product life cycle, supplier vulnerability, imperviousness to change conventional practices, non-accessibility of right data at right time, lack of specialized labor and specialists, absence of trust among the supply chain partners, absence of competency in utilizing cutting edge advancements, greater dependence on supply chain partners, lack of learning SCM, inclusion of mediators supply chain and absence of submitted assets. The after effects of this study for different issues being confronted by Indian textile SMEs on a Likert size of five (1 – most minimal, 5 – most astounding) are appeared in Figure 2. It is addressed that the most concerning issue is absence of assets (4.08), lack of specialized of labor (3.72). The following issue confronted by SMEs is decreasing product life cycle (3.70). Non accessibility of data at right time (3.63) is next enormous issues.

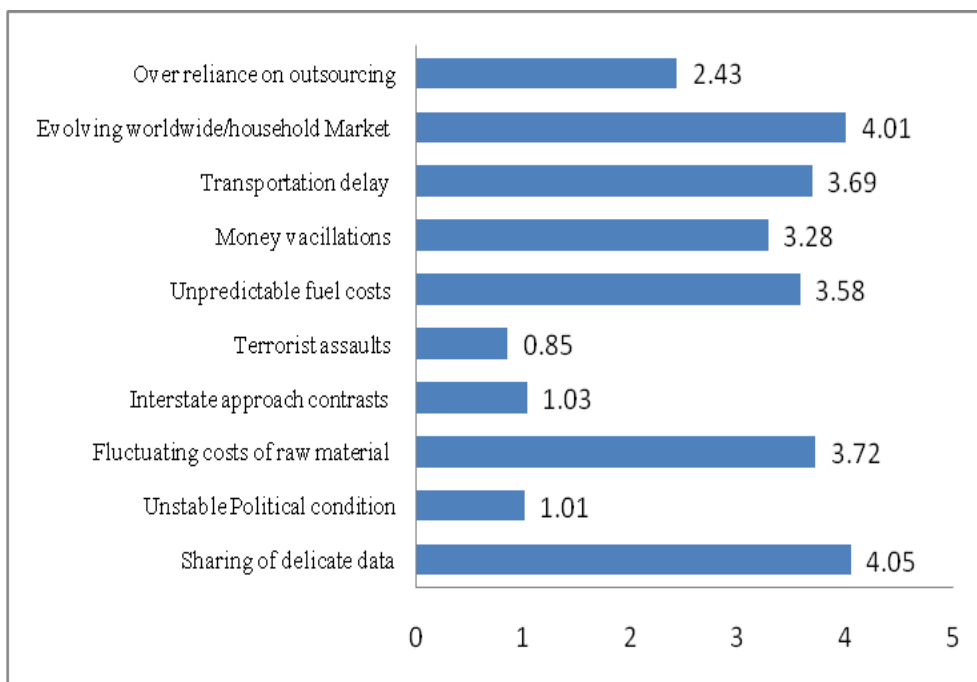


**Fig. 2: Figure of issues confronted by Indian SMEs**

Supply vulnerability (3.55) or absence of backing from sellers is another major issue that SMEs face. To meet clients' requests at shorter lead time, SMEs need to convey additional stock as wellbeing stock. Absence of Competency in utilizing cutting edge (3.45) is another significant issue that SMEs face. This issue is chiefly due to insufficient advancements as well as deficient in-house human aptitude and poor budgetary assets. Other issues confronted by SMEs are absence of trust among supply chain partners (3.03), because of absence of security feeling, SMEs loose trust among suppliers and troubles in Lack of learning of SCM (2.72).

**4.2 Risk confronted by SMEs in Supply chain**

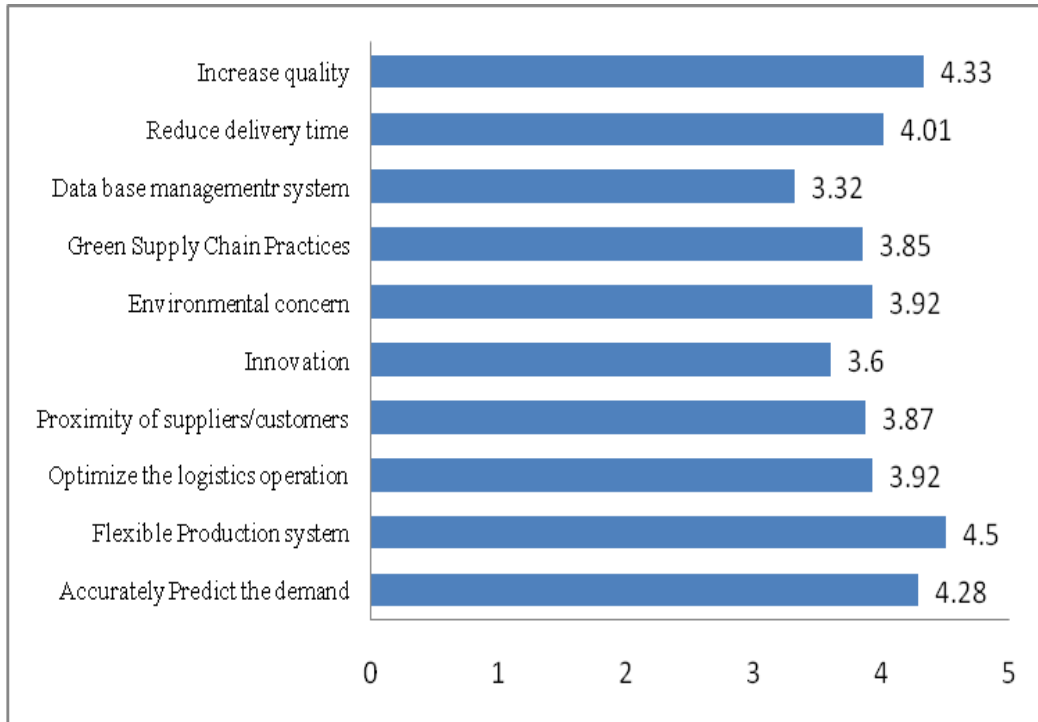
On the basis of literature review and pilot study, 10 risks are Indian textile SMEs feels while implementing SCM. These are sharing of delicate data, over reliance on outsourcing, evolving worldwide/ house hold market, transportation delay, money vacillations, unpredictable fuel costs, terrorist assaults, interstate arrangement contrasts, fluctuating costs of raw material and political unsteadiness. Respondents were requested that they rate the risks in Likert size of five (1 – low, 5 – high). Results appear in the following figure. It is watched that most astounding risk is of sharing of delicate data (4.05) trailed by evolving world wide/household market (4.01), fluctuating costs of raw material (3.72). SMEs are constantly under intense pressure to deliver top notch minimal effort things. In this air, SMEs face the greatest risk of fluctuating costs of raw material. Raw material costs are straightforwardly connected to expense of things delivered. The following significant risk confronted by SMEs is transport delay (3.69). The following significant risk to SMEs is Money vacillations (3.28). SMEs find unstable Political condition (1.01) as a risk. Different risks confronted by SMEs are over reliance on outsourcing (2.43), interstate approach contrasts (1.03) and terrorist assault (0.85). These risks are not extremely critical. Be that as it may, they can happen once in a while.



**Fig. 3: Figure of risks confronted by Indian SMEs while adopting supply chain**

### 4.3 Strategies to handle the Problems and Risks while implementing SCM

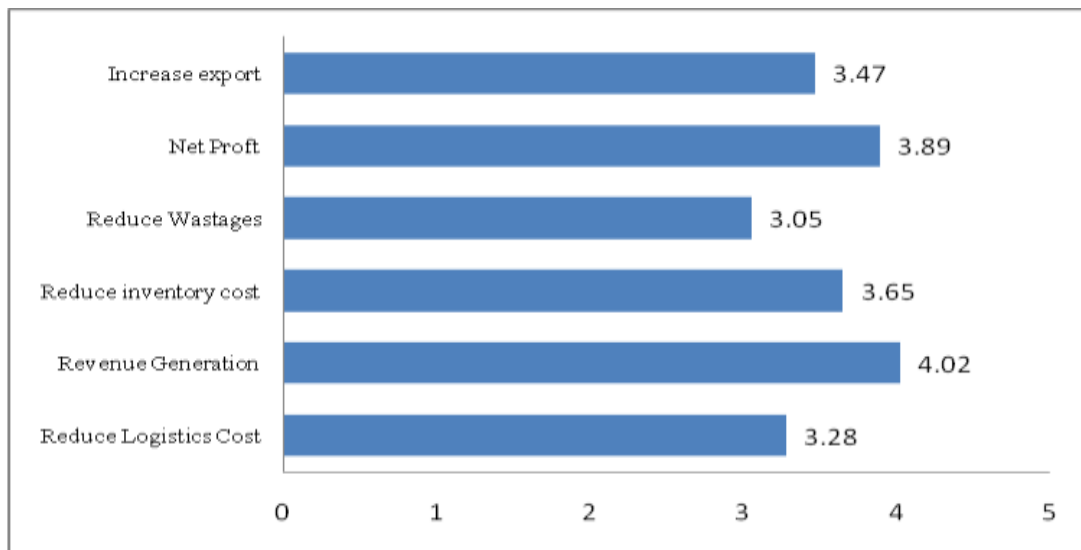
On the premise of writing audit and pilot study of business sector, 10 strategies were identified. These are increasing quality, reduce delivery time, integrated data base management system, green supply chain management practices, environmental concern, innovation, proximity of suppliers/customers, optimize the logistics operation, flexible production system and accurately predict the demand. Respondents were requested that rate the significance of these needs in likert size of five (1 – low, 5 – high). Results are appeared in Figure 4.



**Fig. 4: Figure of Strategies to handle the Problems and Risks while implementing supply chain**

It is noticed that flexible production system (4.5) has the most significant strategy while practicing supply chain. Another strategy is to increase the quality of the finished goods (4.33) to give the best to their customers in order to retain and attract more customers. Followed by accurately predict the demand i.e better forecasting method (4.28). Textile unit focus on environmental concern (3.92) and the green supply chain management practice (3.85) properly handle the waste water effluents. Hariharan and Suresh P (2015) addressed that dying industry normally don't dry the waste because of more space allocation and so they use to land fill or burnt it. The drained water from the pressure filter is 60% contaminated water i.e. only 40% of the impurities can be removed in the Effluent Treatment Process (ETP). In addition, researchers noticed that dyeing industry clearly explained that they need to install Reverse Osmosis (RO) plant for purifying the effluent water after ETP, but the problem is that the cost of installing RO plant is more than the capital invested on the company. Other strategy development by SMEs is the closeness of suppliers/customers (3.87) and integrated data base management system (3.32).

#### 4.4 Business Performance Parameters



**Fig. 5: Figure of business performance parameters**

Various business performance parameters six were identified from wide literature review and pilot study. These are increase export market, net profit of the company, reduce wastages, reduce inventory cost, revenue generation and reduce logistics cost. It is found that supply chain strategies gives positive impact on the revenue generation (4.02) of the organization followed by increase the net profit of the company (3.89). It is trailed by reduce the inventory cost (3.65), the increasing textile product export to international market (3.47) and lowest value is wastage reduction (3.05). It indicates the poor performance of textile units to handle the waste reduction. Without sufficient resources, trained manpower, skilled labors, adequate financial investments, knowledge in supply chain management and upgrading of technology Indian SMEs of textile units could not stand against the International organization in developed countries or especially emerging and newly developing industrializing economies. Therefore, major challenges for the textile units are to wider their product range and make their quality world class.

#### 5. CONCLUSION

The goal of this study was to identify the problems, risks of SMEs of textile units while adopting the supply chain practices. In addition, strategies were identified to handle the problems and risks while practicing the supply chain. It is additionally watched that to confront these difficulties of a worldwide business sector, SMEs in Tamilnadu, India are receiving multi-faceted systems as opposed to relying on any single methodology. On the premise of this concentrate, a percentage of the finishing up perceptions is as per the following:

- Absence of submitted assets, skilled labors, backing from seller (Supply vulnerability), inclusion of go between in supply chain network and decreasing product life cycle are the principle issues confronted by Indian SMEs amid usage of SCM.
- Sharing of sensitive data with suppliers, changing world market, absence of trust among supply chain partners, money vacillations and political flimsiness are fundamental risks which Indian SMEs feel while working in supply chain.



- Strategies to handle the problems and risks are the accurately predict the demand, flexible production system, quality improvement in operation and production, closeness to suppliers and customers, and optimize the logistics operation are much more priorities of SMEs of textile units to handle the issues and risks.
- The consequences of this strategy development positively impacts on the business performance of SMEs which are exporting the products, revenue generation, growth of net profit, reduce inventory cost and waste reduction.

## 6. FUTURE SCOPE AND FURTHER STUDY

Discoveries of the study have numerous vital ramifications for SMEs and the scholarly world. Major suggestion is that SMEs ought to build up their techniques successfully in the wake of breaking down business environment and tentative arrangements. While creating procedures for enhancing coordination in supply chain network of SMEs, they ought to give due significance to issues and dangers they confront. In addition to, this study further explore into green supply chain practices by SMEs of different sectors.

## REFERENCES

- [1] Arshinder K, Kanda A, Deshmukh SG. A framework for evaluation of coordination by contracts: a case of two-level supply chains. *Computers and Industrial Engineering an International Journal* 2009; 56(4): 1177-1191.
- [2] Chaston I, Badger B, Mangles T, Sadler-Smith E. Organizational learning style, competencies and learning systems in small, UK manufacturing firms”, *International Journal of Operations & Production Management* 2001; 21(11); 1417-1432.
- [3] Corbett LM, Campbell-Hunt C. Grappling with a gusher! Manufacturing’s response to business success in small and medium enterprises. *Journal of Operations Management* 2002; 20(5): 495-501.
- [4] Denis L, Bourgault M. Linking manufacturing improvement programs to the competitive priorities of Canadian SMEs. *Technovation* 2003; 23(8): 705-715.
- [5] Hariharan G, Suresh P. Implementation of Green Supply Chain in Small Scale Industries. *International Journal of Applied Engineering Research* 2015; 10(19).
- [6] Hodgkinson A, McPhee P. SME information sourcing for innovation and export market developments: from local or external networks. WP 02-08, Department of Economics, University of Wollongong, Wollongong, 2002.
- [7] Hong P, Jeong J. Supply chain management practices of SMEs: from a business growth perspective. *Journal of Enterprise Information Management* 2006; 19(3): 292-302.
- [8] Huin SF, Luong LHS, Abhay K. Internal supply chain planning detriments in small and medium sized manufacturers. *International Journal of Physical Distribution & Logistics Management* 2002; 32(9): 771-782.
- [9] Jain V, Wadhwa S, Deshmukh SG. Select supplier-related issues in modeling a dynamic supply chain: potential, challenges and direction for future research. *International Journal of Production Research* 2009; 47(11): 3013-3039.

- [10] Kak A, Sushil. Sustainable competitive advantage with core competence: a review. *Global Journal of Flexible Systems Management* 2002; 3(4): 23-38.
- [11] Koh SCL, Tan KH. Operational intelligence discovery and knowledge mapping approach in a supply network with uncertainty. *Journal of Manufacturing Technology Management* 2006; 17(6): 687-699.
- [12] Lal K. E-business and export behaviour: evidence from Indian firms. *World Development* 2004; 32(3): 505-517.
- [13] Lee HL. Creating value through supply chain integration. *Supply Chain Management Review* 2000; 4(4): 30-36.
- [14] Moore SB, Manring SL. Strategy development in small and medium sized enterprises for sustainability and increased value creation. *Journal of Cleaner Production* 2009; 17(2): 276-282.
- [15] Morgan A, Colebourne D, Thomas B. The development of ICT advisors for SMEs business: an innovative approach. *Technovation*, 2006. available at: [www.sciencedirect.com](http://www.sciencedirect.com)
- [16] Quayle M. A study of supply chain management practices in UK industrial SMEs. *Supply Chain Management – An International Journal* 2003; 8(1): 79-86.
- [17] Kumar R, Singh RK, Shankar R. Strategy development by Indian SMEs for improving coordination in supply chain an empirical study. *Competitiveness Review an International Business Journal incorporating Journal of Global Competitiveness* 2014; 24(5): 414-432.
- [18] Ritchie D, Brindley C. Disintermediation, disintegration and risk in the SME global supply chain. *Management Decision* 2000; 38(8): 575-583.
- [19] Sawik T. Coordinated supply chain scheduling. *International Journal of Production Economics* 2009; 120(2): 437-451.
- [20] Singh RK, Garg SK, Deshmukh SG. Implementation of information technology: evidences from Indian SMEs. *International Journal of Enterprise Network Management* 2008; 2(3): 248-267.
- [21] Singh RK, Garg SK, Deshmukh SG. Strategy development by small scale industries in India. *Industrial Management & Data Systems* 2010; 110(7): 1073-1093.
- [22] Singh RK, Kumar R, Shankar R. Supply chain management in SMEs: a case study. *International Journal of Manufacturing research* 2012; 7(3).
- [23] Soni G, Kodali R. The strategic fit between ‘competitive strategy’ and ‘supply chain strategy’ in Indian manufacturing industry: an empirical approach. *Measuring Business Excellence* 2011; 15(2): 70-89.
- [24] Soroor J, Tarokh JM, Shemshadi A. Theoretical and practical study of supply chain Coordination. *Journal of Business and Industrial Marketing* 2009; 24(2): 131-142.
- [25] UNCTAD. *World Investment Report 2005*, United Nations Centre for Trade and Development, Geneva, 2005.