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A FRAMEWORK FOR THE ANALYSIS OF SUPPLY CHAIN RISK MANAGEMENT IN SMALL SCALE BUSINESS ENTERPRISE

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ABSTRACT

This paper will try to discuss the effects of supply chain management on small scale business enterprise. There are different tools and technique for supply chain risk management. The model that can be used in small scale business enterprise is highlighted here. Risk is a term which can't be avoided but can be detected and avoided. The focus of this paper is just to show the basic framework of risk management and its technique to avoid it.

INTRODUCTION

Supply chain risk management is a broader concept with deficiencies particularly for small scale business enterprise. There are various models for supply chain risk management. Most of the research are done on large scale enterprise. Response and supply chain mitigation strategy are considered as critical elements of supply chain management strategy. Supply chain disruption management strategies are competitive advantage for business enterprise to adjust to the demanding market. Natural disruption and manmade disruption are threat to supply chain. Business enterprises should be alert of such type of risk.

SCRM AND SMALL ENTERPRISES

Supply chain risk management is a inter connected with its suppliers, manufacturers, wholesalers and customers that provide products or service to customers. For any business risk is unavoidable. To have a smooth flow of co-ordination activities, it becomes necessary to manage risk. Outsourcing and off-shoring has increased the attention of supply chain risk management. The growing cost of supply chain activities has demanded efficient flow of supply chain process. Supply chains are vulnerable to high levels of inter-connectedness and inter-dependencies.

OBJECTIVES OF THE STUDY

The study has the following objectives

1. To identify the obstacles of supply chain at small business enterprise
2. To study risk mitigation strategies for small business

RISK MANAGEMENT

Risk theory first came from insurance sector. Risk can be defined as uncertain outcome of specific events.

Four steps of risk management are

1. Identify potential risk sources
2. Study the levels of threats.
3. Evaluate findings
4. Implement risk treatment

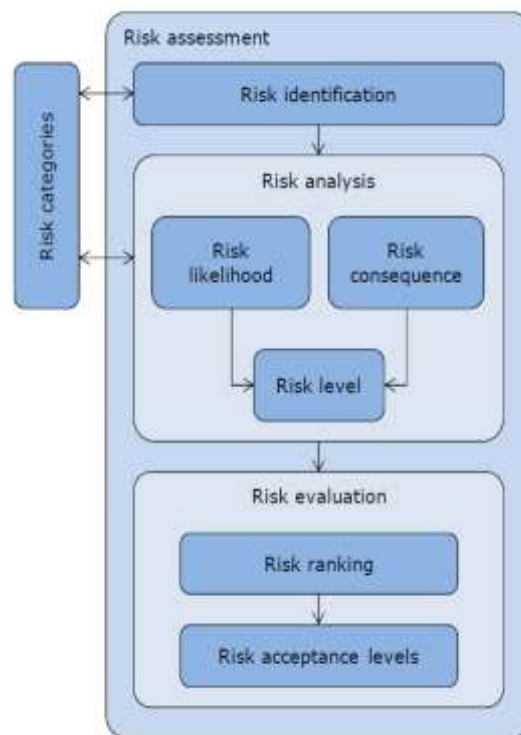


Fig: Risk Management Model

SUPPLY CHAIN DISRUPTION MANAGEMENT

SCM disruption are increasingly getting attention in business area. It has a direct impact in business performance. In the past importance was laid on efficiency and responsiveness but enterprise has shifted to robustness and reliability. Three critical characteristics describes by Craighead et al. are supply chain density, supply chain complexity, and node criticality. Spacing of nodes within the supply chain is termed as supply chain density. Supply chain complexity is the flow of materials, information in the supply chain process. Supply chain critically is termed as node in supply chain. Supply chain disruption is the uncertainty in both supply and demand. Supply chain disruptions are events like supply and demand disruptions. Supply disruptions are not only from man made or natural disaster but it can occur when there is demand for a specific item. Internal supply chain should be given priority by enterprise. Unexpected demand disruptions are due to unexpected product recalled by manufacturer or decline in demand for product. There may also be demand imbalance which has negative impact on enterprises. Enterprises are vulnerable to SC disruption. But the degree of impact can be differs from companies to companies.

SUPPLY CHAIN RISK

The following table shows the classification of supply chain risk which can be linked to any kind of organization

Supply chain risk

Types of risk	Factors
Supplier risk	Late delivery Not reliable Higher prices Can't be trusted Poor service
Transport	Damage of goods during transportation Poor quality Service No tracking system
Warehousing	Charging higher prices No storage facility Poor service
Production	Low quality product Overtime production Machine breakdown Issues in procurement
Marketing	Lack of marketing strategy Less demand Problems with sales
Disruption	Natural Calamity Labor problem Supplier problems
Delays	Excessive handling due to cross border or too much modes of transportation Poor quality at supply source Inflexibility from supply source
Systems	Ecommerce Issues in information structure
Forecast	Inaccurate in forecast Miscommunication in value chain
Procurement	Contract problems due to long and short term contract Risk in fluctuation of currency
Receivables	Strength of customers Number of clients
Capacity	Capacity cost Flexibility in handling capacity

RISK DRIVERS IN SUPPLY CHAIN

The following are the risk drivers in supply chain

1. Demand side risks

This type of risk is related to flow of product within the network and to the market. The uncertainty in market has kept supply chain driver to adopt strategies to cater to the needy market. Hewlet Packet has served Deskjet printers in many region catering to local markets.

2. Supply chain risks

This is a kind of risk that relates to flow of product in a network.

3. Regulatory

This types of risk are associated with policies of specific country. This risk varies among country in supply chain network

4. Infrastructural risks

This type of risk are associated with infrastructure

5. Catastrophic risks

This can occur due to sudden changes due to external factors like natural calamity, recession etc..

SMALL ENTERPRISE AND ENTREPRENEURSHIP

Small enterprise and entrepreneurship are often viewed as same .

The main objectives of entrepreneurship are

Identifying new business opportunities

Innovation

Resource management,

Expand business,

Risk management,

Business management

SMALL SCALE INDUSTRY IN INDIA

The small scale industry is highly dynamic and vibrant sector of Indian economy. About 95 percent of industrial units are from small scale industry More than 34 lakh units are spread all over the country producing over 7503 items and providing employment to more than 192 lakh persons

The official definition of small scale industry came into existence in the year 1950 based on size of gross investment in fixed assets (plant and machinery, land, building etc.).The industry is divided into two categories

1.Manufacturing sector

2.Service Sector

Nomenclature and Classification of small Industries under the MSME act 2006

Enterprise	Manufacturing enterprises (investment on plan and machinery)	Services enterprises (investment on equipment)
Micro	Does not exceed twenty five lakh rupees	Does not exceed ten lakh rupees:
Small	More than twenty five lakh rupees but does not exceed five crore rupees	More than ten lakh rupees but does not exceed two crore rupees
Medium	More than five crore rupees but does not exceed ten crore rupees	More than two crore rupees but does not exceed five crore rupees

Classifications of SSI

Traditional Industries include: -

1) Khadi and Village Industries

2) Handlooms

3) Handicrafts

4) Coir

5) Sericulture

Modern Units

1) Small-scale industrial undertakings

2) Export oriented SSI units

3) Ancillary industrial undertakings

4) Small-scale service and business enterprises

5) Power looms.

Basis of frame work

Small business may have many risk.The powers and functions are within the business owners.There may be less number of employees.Business enterprise can delegate the responsibilities to specific person and can create business risk profile.Supply chain risk for small business owner classified as follows

Risk Avoidance – Use technique to remove it.

Risk Transference – Give duty to one person

Risk Mitigation – Action should be taken when needed



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Risk Acceptance – Accept the risk

CONCLUSION

Risk in business cannot be eliminated. It is a part and parcel of any business. The challenges and uncertainty are never before rather it is increasing. As business grows it tends to experience new risk in business. Risk management is like a tool where it can identify risk and can try to evaluate kinds of negative aspects of risk. Small business enterprise cannot escape risk. It has to formulate risk methodology to prevent disruption. Service providers are developing tools to detect risk for smooth flow supply chain among its value members.

REFERENCES

1. Berg, E., Knudsen, D. and Norrman, A. (2008), "Assessing performance of supply chain risk management programmes: a tentative approach", *International Journal of Risk Assessment and Management*, Vol. 9, no. 3, pp. 288-310.
2. Abbas, F., Marvin, A. and Mehmet, K. (2006), "Perspectives on Global Supply Chain Supply- Side Risk Management", *PICMET 2006 Proceedings*, 9-13 July, Istanbul, Turkey, pp. 2732-2740.
3. Jüttner, U. (2005), "Supply chain risk management: understanding the business requirements from practitioners perspective", *The International Journal of Logistics Management*, vol. 16, no. 1, pp. 120-141.
4. Kleindorfer, P.R. and Saad, G. H. (2005), "Managing Disruption Risks in Supply Chains", *Production and Operations Management*, vol. 14, no. 1, pp. 53-68.
5. Vanany, I., Zailani, S. and Pujawan, N. (2009). "Supply chain risk management: Literature review and future research." *International Journal of Information Systems and Supply Chain Management*, 2(1): 16-33.
6. Manuj, I. and Mentzer, J.T. (2008a). "Global supply chain risk management." *Journal of Business Logistics*, 29(1): 133-155.
7. Miller, K. (1992). A framework for integrated risk management in international business, *Journal of International Business Studies*, Second Quarter, P. 311-331.
8. Finch, P. 2004, "Case Study: Supply chain risk management", *Supply Chain Management: An International Journal*, Vol. 9, No. 2, pp. 183-196
9. Chopra, S. and Meindl, P. 2001. *Supply chain management*. Cliffs, NJ: Prentice-Hall.
10. U. Jüttner, H. Peck, M. Christopher, Supply chain risk management: outlining an agenda for future research, *International Journal of Logistics: Research and Applications* 6 (4) (2003) 197-210.
11. U. Jüttner, Supply chain risk management, *International Journal of Logistics Management* 16 (1) (2005) 120-141.
12. P. Kleindorfer, G. Saad, Managing disruption risks in supply chains, *Production and Operations Management* 14 (1) (2005) 53-68.
13. Ghadge, A., Dani, S., & Kalawsky, R. (2012). Supply Chain Risk Management: Present and Future Scope. *The International Journal of Logistics Management*, 23(3).
14. FLORIAN, Gyula Laszlo and CONSTANGIOARA, Alexandru (2014). The Impact of Risks in Supply Chain on Organizational Performances: Evidence from Romania, *Economia. Seria Management* Volume 17, Issue 2