

**“RISK EVALUATION AND MANAGEMENT INVOLVED IN  
SUPPLY CHAIN”**

Dissertation submitted in partial fulfillment of the requirements  
for the award of the Degree of

**MASTER OF BUSINESS ADMINISTRATION**

**of**

**BANGALORE UNIVERSITY**



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### **DECLARATION BY THE STUDENT**

I hereby declare that “**RISK EVALUATION AND MANAGEMENT INVOLVED IN SUPPLY CHAIN**” is the result of the project work carried out by me under the guidance of Dr LASYA K.R. in partial fulfilment for the award of Master’s Degree in Business Administration affiliated to Bangalore University.

I also declare that this project is the outcome of my own efforts and that it has not been submitted to any other university or Institute for the award of any other degree or Diploma or Certificate.

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## **ABSTRACT**

Supply chain risk management has increasingly become a more popular research area recently. Current business trends are leading to complex and dynamic supply chains. Increasing product/service complexity, out-sourcing and globalization are the reasons that have enhanced the risk, changed its location and nature in supply chains. In this present work a review of risk definition, its classification and holistic approach of risk assessment and management have been made. An approach has been developed that help to identify, assess and manage the risks.

Supply chains are complex networks that encompass various stages, including procurement, production, transportation, warehousing, and distribution. The inherent complexity and interdependencies within supply chains give rise to numerous risks that can disrupt operations, impact profitability, and harm customer satisfaction. Therefore, it becomes imperative for organizations to proactively identify, assess, and mitigate these risks to maintain a competitive edge and sustain long-term success.

***Keywords: Supply Networks; Risk assessment; Risk management; Risk monitoring; supply risk; risk sharing; process management;***

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Introduction to the Study**

International trade leads to global supply chains, and risks are inherent in supply chain management (SCM). Globalization and trade openness have amplified the vulnerability in SCM and increased the risks. The monetary value of supply chain expenses is the highest in manufacturing organizations.

Supply Chain Management can be defined as the management of flow of products and services, which begins from the origin of products and ends at the product's consumption. It also comprises movement and storage of raw materials that are involved in work in progress, inventory and fully furnished goods.

The main objective of supply chain management is to monitor and relate production, distribution, and shipment of products and services. This can be done by companies with a very good and tight hold over internal inventories, production, distribution, internal productions and sales.

Supply Chain Risk Management (SCRM) is the process of identifying, assessing, and mitigating the risks of an organization's supply chain. Implementing global supply chain risk management strategies can help an enterprise operate more efficiently, reduce costs, and enhance customer service.

Risk management refers to the implementation of strategies and plans to manage supply chain networks through constant risk assessment and reduce vulnerabilities to ensure resilience in supply chains. All supply chains do not have the same risks, but some risks are common. The risks are also specific to an area of business, or the field of study. A supply chain is as strong as the most vulnerable member of the supply chain.

Supply-chain risk management is part of the wider process of supply-chain management, which involves managing the entire production flow of your business. It's the process of identifying risks in your supply chain, assessing the likelihood and severity of these risks and taking strategic steps to eliminate or control them.

The objective of this research is to provide a comprehensive examination of risk evaluation and management within the context of supply chains. This study aims to explore the different types of risks that can arise in supply chain operations and investigate the methodologies and practices employed to evaluate and manage these risks effectively.

The research will identify and analyze the various types of risks that organizations encounter in their supply chains. These risks may include supplier disruptions, demand volatility, transportation delays, inventory shortages, natural disasters, regulatory compliance issues, and geopolitical uncertainties. By understanding the nature and potential impact of these risks, organizations can proactively develop strategies to mitigate their adverse effects.

This research will delve into the methodologies used for risk evaluation in supply chains. It will explore both quantitative and qualitative approaches to assess risks, including statistical analysis, scenario planning, risk scoring models, and expert judgment. The strengths and limitations of each methodology will be evaluated, enabling organizations to select the most appropriate approach for their specific risk evaluation needs.

The research will also address the challenges faced by organizations in effectively evaluating and managing risks in supply chains. It will explore factors such as lack of data availability, organizational silos, limited risk management expertise, and resistance to change. Possible solutions and best practices will be identified to help organizations overcome these challenges and establish a proactive and holistic approach to risk management.

This research aims to contribute to the understanding of risk evaluation and management in supply chains. By examining different types of risks, evaluating methodologies, and exploring risk management strategies, this study will provide valuable insights to enable organizations to enhance their risk assessment capabilities and implement effective risk management practices. Ultimately, this will lead to more resilient and efficient supply chains that can withstand potential disruptions and drive sustained business success.

## **1.2 Theoretical Background of the study**

Supply Chain Risk Management (SCRM) is the process of identifying, assessing, and mitigating the risks of an organization's supply chain. Implementing global supply chain risk management strategies can help an enterprise operate more efficiently, reduce costs, and enhance customer service.

Risk evaluation and management in supply chains is based on various concepts and frameworks. Supply chains are complex networks involving multiple entities, such as suppliers, manufacturers, distributors, and customers. Risks, such as demand fluctuations, supplier disruptions, transportation delays, and natural disasters, can significantly impact supply chain performance. Therefore, understanding the theoretical foundations of risk evaluation and management is crucial for developing effective strategies to mitigate these risks. Theoretical perspectives include system theory, contingency theory, resource-based view, and concepts such as probabilistic risk assessment, failure mode and effects analysis, and supply chain resilience. These theories provide valuable insights into understanding the interconnected nature of supply chains and the importance of proactive risk management.

The study on risk assessment and management in the supply chain is supported by a number of important theoretical frameworks and concepts. To begin with, the Supply Chain Risk Management (SCRM) framework offers a basis for comprehending and mitigating risks in the context of the supply chain. This methodology places a strong emphasis on identifying, assessing, mitigating, and keeping track of risks across the whole supply chain network. It acknowledges how multiple supply chain stakeholders, processes, and activities are interrelated and dependent on one another.

The study on risk evaluation and management in supply chain is grounded in several key theoretical concepts and frameworks. Firstly, the Supply Chain Risk Management (SCRM) framework provides a foundation for understanding and addressing risks within the supply chain context.

## **CHAPTER 2**

### **RESEARCH DESIGN**

#### **2.1 REVIEW OF LITERATURE**

(**Thomas, 1990**) have defined risk from eight different perspectives. Their arguments incorporate views from finance, marketing, management, strategy, and psychology. The first three definitions—variability of returns, variance, and market risk—focus on the organization's financial return. The last two definitions of risk as disaster and as accounting risk measures relate to the risk of a company going bankrupt.

(**Shapira, 1995**) found that very few managers define risk in those terms. Instead, managers identify (1) the downside of risk, (2) its magnitude of possible losses, (3) the act of risk taking involving the use of skills, judgment and control, and (4) risk as a concept that cannot be captured with a single numb. These findings also suggest that the term “risk” can be perceived in different ways, and no single definition of risk may be appropriate in all circumstances.

(**Stone, 1992**) note that risk entails (1) the elements of loss, (2) the significance of loss, and (3) the uncertainty associated with loss. Within the elements of loss are three additional factors. First, risk is not limited to one specific loss that can occur. This is similar to the variance of outcomes discussed by March and Shapira (1987), with the exception that it focuses only on losses.

(**Gattorna, 2010**) The significance of matching supply chain strategies with overarching corporate goals is thoroughly explored in Christopher M. Gattorna's book, "Strategic Supply Chain Alignment: Best Practice in Supply Chain Management." The book's literature evaluation provides insightful information about the fundamental ideas and ideal procedures of supply chain management. Gattorna emphasizes the crucial part that strategic alignment plays in risk mitigation, efficiency optimization, and customer satisfaction enhancement. The book is a useful tool for supply chain experts and scholars since it integrates theoretical frameworks with real-world experiences.



**(Richter, 2007)**The writers of "The Impact of Demand Risks on Supply Chain Performance" by Christoph Bode and Jan H. Richter explore the significance of controlling demand risks for supply network performance. The study's literature review emphasizes how demand-related uncertainty can negatively impact supply chain operations. Bode and Richter go over the numerous demand risks that organizations face and look at ways to lessen their effects. To improve supply chain resilience, responsiveness, and overall performance, their research emphasizes the necessity for proactive demand risk management.

**(Annibal Jose Scavarda, 2018)**The study's literature research provides a complete examination of SCRM practices in Brazil's automotive and technology industries. The authors give a detailed evaluation of the implementation and impact of SCRM initiatives, providing practitioners and scholars with significant insights. The case study method improves understanding of specific difficulties and risk management strategies in these businesses.

**(Hanna, 2014)**The study's literature research delves into the examination of supply chain risks from a dependability standpoint. The writers discuss the importance of proactive risk assessment and the role of dependability in efficiently managing risks. The publication provides practical recommendations for organizations looking to improve their risk management practices by providing useful insights into evaluating and quantifying supply chain risks.

**(Gunasekaran, 2004)**The study's literature evaluation emphasizes the necessity of proactively managing risks in supply chains to improve overall performance. The authors suggest a structured method for identifying, assessing, mitigating, and monitoring risks. Their research provides important insights into the critical components of effective supply chain risk management techniques. This paper is an excellent resource for researchers and practitioners looking to create effective risk management practices in supply chain operations.

**(Sodhi, 2009)**The book's literature review offers useful insights on the identification, analysis, and mitigation of hazards in supply chains. The authors emphasize the need of taking a comprehensive approach to addressing risks throughout the supply chain. Their research investigates various risk management methodologies and frameworks, providing supply chain professionals with practical advice. This article is an excellent resource for scholars and practitioners seeking to improve their understanding and application of supply chain risk.

## **2.2 STATEMENT OF THE PROBLEM**

The supply chains introduce various risks that can significantly impact the performance and resilience of organizations. Risk evaluation and management in supply chains have emerged as critical areas of focus to identify, assess, and mitigate these risks effectively. However, despite the growing recognition of the importance of supply chain risk management, there are several key challenges and gaps that need to be addressed.

The complex and global nature of supply chains introduces a multitude of risks, including disruptions in logistics, supplier failures, demand fluctuations, and regulatory changes. Identifying and evaluating these risks in a comprehensive and systematic manner becomes a daunting task for organizations.

The lack of robust risk evaluation frameworks and methodologies Tailored to the unique characteristics of supply chains hinders organization's ability to accurately assess the potential impact and likelihood of risks. Existing risk evaluation models often overlook the interconnectedness and dependencies across supply chain partners and processes, leading to incomplete risk assessments.

The dynamic nature of supply chains requires a proactive and agile approach to risk management. However, many organizations struggle with the effective implementation of risk mitigation strategies and the ability to monitor and adapt to environmental risks in real-time.

## **2.3 NEED FOR THE STUDY**

The supply chain management concepts such as supplier selection, inventory management, demand forecasting, distribution, and logistics. Supply chain risk management (SCRM) is a systematic and phased approach for recognizing, evaluating, ranking, mitigating, and monitoring potential disruptions in supply chains SCRM is an important area due to an incident's cascading effects on logistics networks.

Supply Chain Risk Management (SCRM) is the process of identifying, assessing, and mitigating the risks of an organization's supply chain. Implementing global supply chain risk management strategies can help an enterprise operate more efficiently, reduce costs, and enhance customer service. Supply chain management (SCM) is management of the flow of goods, data, and finances related to a product or service, from the procurement of raw materialsto the delivery of the product at its destination.

## **2.4 OBJECTIVES**

- To understand the various challenges faced by organization in supply chain management.
- To identify an Effective Management of Supply Chain Risk and challenges.

## **2.5 SCOPE OF STUDY**

The supply chain risk management covers various areas that are critical for the smooth functioning of the supply chain. These areas include risk identification, assessment, mitigation, monitoring, collaboration and communication and resilience. Adequate management of these risk factors is essential to reduce the impact of disruptions and create a sustainable and robust the supply chain.

## **2.6 TOOLS FOR DATA COLLECTION**

Tools used for the questionnaire.

The analysis of data collected through research been done systematically. Simple percentage, pie chart and tables were used to represent variety of data that falls into various categories. The analysis has been done systematically and accurately to get correct and authentic.

## **2.7 RESEARCH QUESTIONS**

- What are the various challenges faced by organizations in supply chain management?
- What are the key factors for effectively managing supply chain risks and challenges?

## **2.8 RESEARCH METHODOLOGY**

Research methodology refers to the methods and techniques used to effectively portray the research. Such procedures improve the research process and make the methods of research clearer to everyone.

The research methodology for studying risk evaluation and management in supply chains will employ a comprehensive approach to gain a deeper understanding of the subject matter. The study will begin with an extensive literature review, which will involve systematically reviewing and analysing existing research, academic papers, and industry reports related to risk evaluation and management in supply chains. This literature review will provide a solid foundation and insights into the current state of knowledge in the field.

The research methodology will also include considerations for ethical practises, such as obtaining informed consent from participants, ensuring data confidentiality, and adhering to ethical guidelines for data collection and analysis.

The final output of the research will be a comprehensive research report that presents the findings, interpretations, and recommendations based on the analysis of the data. The report will contribute to the existing body of knowledge on risk evaluation and management in supply chains, providing valuable insights for supply chain practitioners, researchers, and decision-makers to enhance their understanding and implementation of effective risk management strategies.

## **2.9 LIMITATIONS OF THE STUDY**

- **Sample Size:** The size of the sample utilised for data gathering could be one of the study's limitations. Due to budget and time restrictions, including a large and diverse sample spanning various industries, locations, and supply chain topologies may not be viable
- **Response Bias:** The likelihood of answer bias in the survey questions is another potential drawback. This may have an impact on the reliability and validity of the obtained data, as well as add some measurement error.
- **Subjectivity in Qualitative Analysis:** The interpretation and coding of responses is part of the qualitative data analysis based on interviews. This approach is somewhat subjective and may involve researcher bias.
- **Timeframe Constraints:** The period for data collecting and analysis may limit the scope of the investigation. . The findings may reflect the state of risk appraisal and management at the time.
- **External Factors:** The results of the study could be affected by outside variables that are beyond of the researcher's control, such as macroeconomic conditions, governmental changes, or unforeseeable occurrences.
- **Reliance on Self-Reported Data:** Self-reported data from surveys and interviews is what the study is based on. This opens up the possibility of recollection bias or participants' arbitrary assessments of their risk assessment and management procedures.

### CHAPTER 3

#### FRAMEWORK (DATA ANALYSIS)

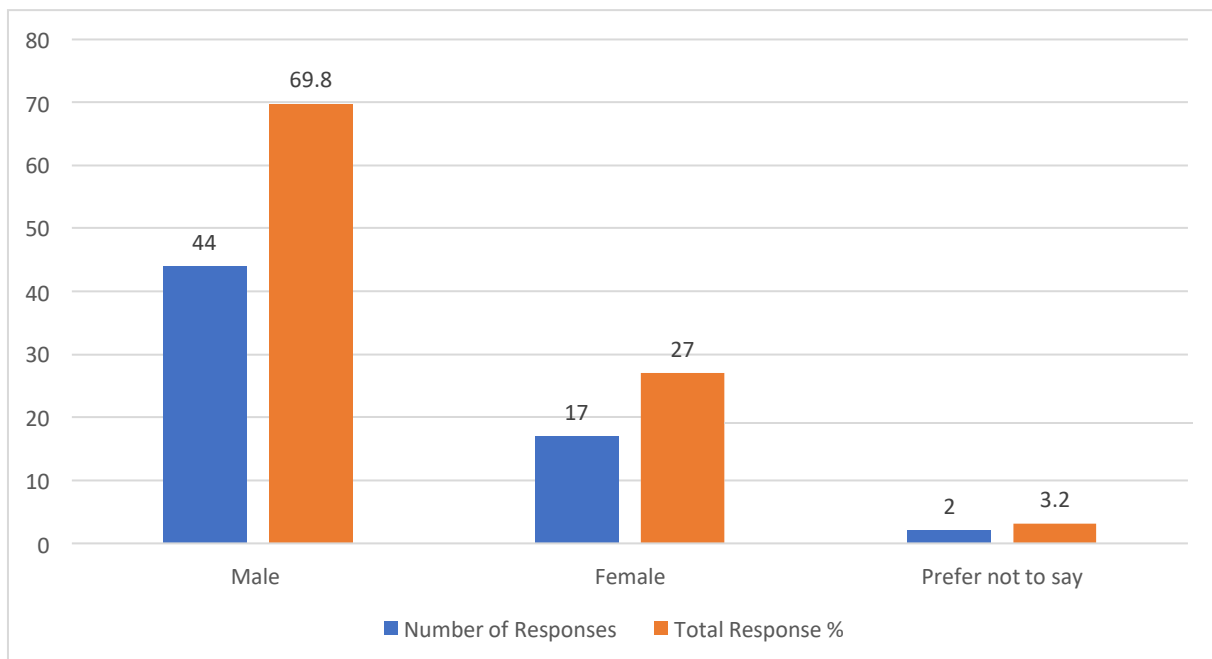
**Table 3.1 Gender**

Particular	Number of Responses	Total Response %
Male	44	69.8
Female	17	27
Prefer not to say	2	3.2
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** In the analysis, out of the 63 responses received, 44 respondents were male, 17 respondents were female, and 2 respondents chose not to disclose their gender.

**Graph 3.1 Gender**



**Interpretation:** The graph data shows that 44 respondents, the majority respondents are male.

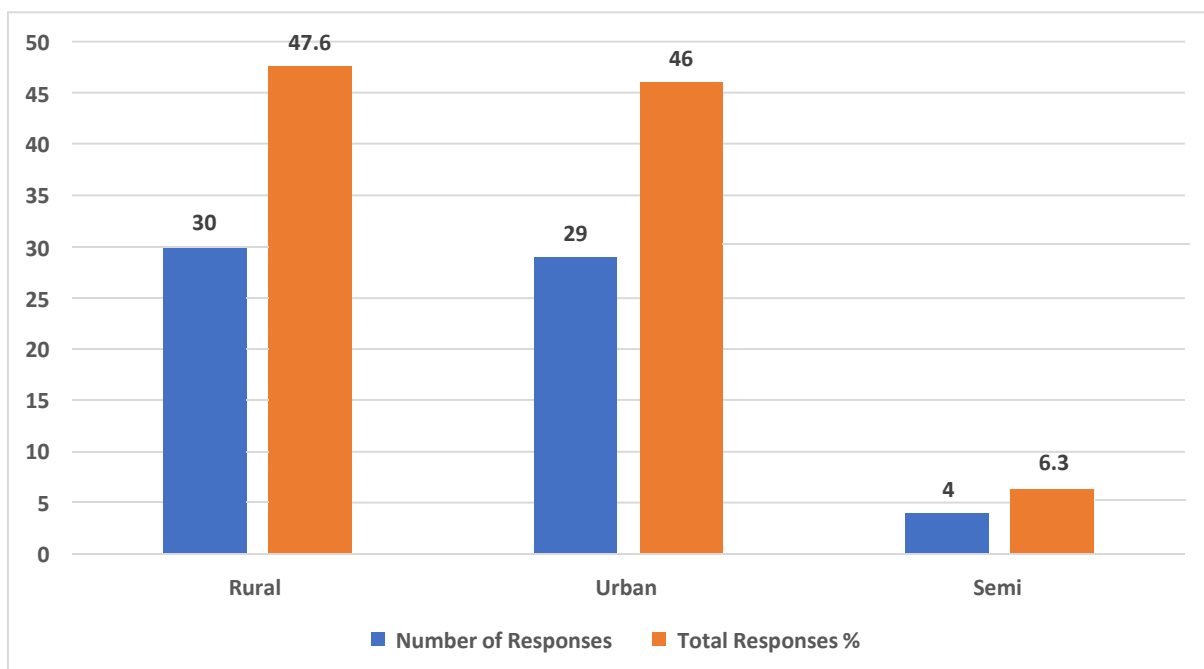
**Table 3.2 Domicile**

Particular	Number of Responses	Total Responses %
Rural	30	47.6
Urban	29	46
Semi	4	6.3
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** Out of the 63 respondents, 47.6% reported living in rural areas, 46% claimed to live in urban areas, and 6.3% mentioned residing in semi-urban settings.

**Graph 3.2 Domicile**



Source: Primary Data

**Interpretation:** The survey findings indicate a fairly even distribution of respondents, the majority respondents are rural.

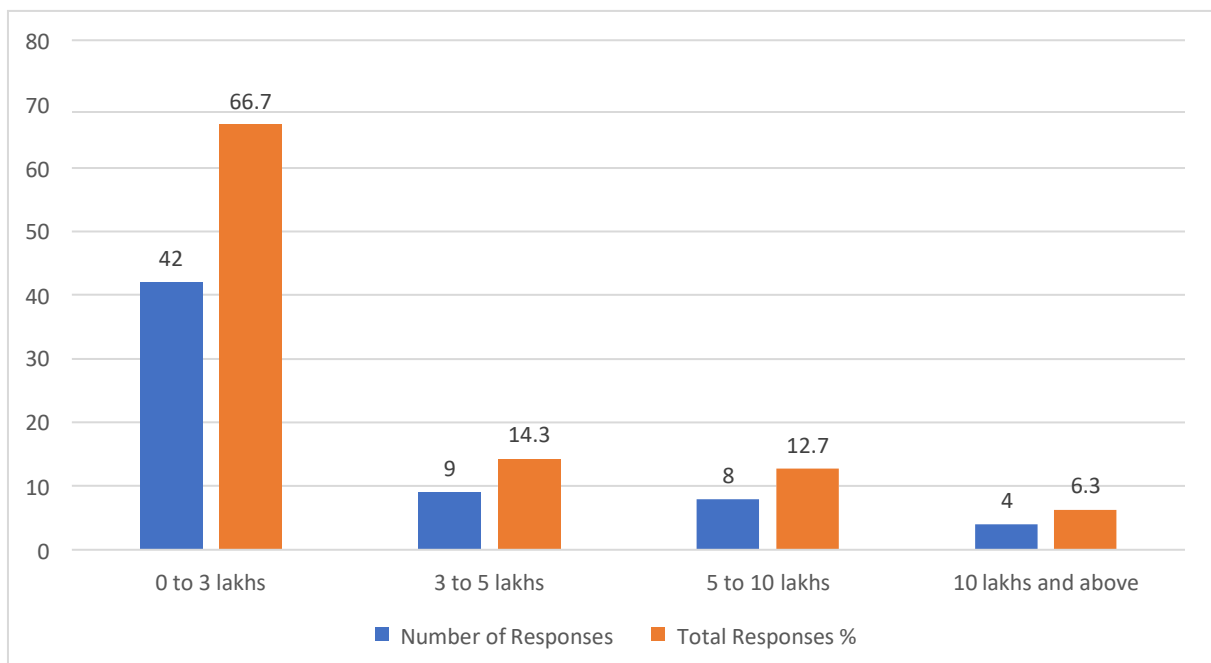
**Table 3.3 Income**

Particular	Number of Responses	Total Responses %
0 to 3 lakhs	42	66.7
3 to 5 lakhs	9	14.3
5 to 10 lakhs	8	12.7
10 lakhs and above	4	6.3
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The income analysis shows that the majority of respondents 66.7% reported an annual income of 0 to 3 lakhs.14.3% reported an income of 3 to 5 lakhs, 12.7% reported 5 to 10 lakhs, and only 6.3% reported an income of 10 lakhs and above.

**Graph 3.3 Income**



Source: Primary Data

**Interpretation:** The majority of respondents reported an income between 0 to 3 lakhs.

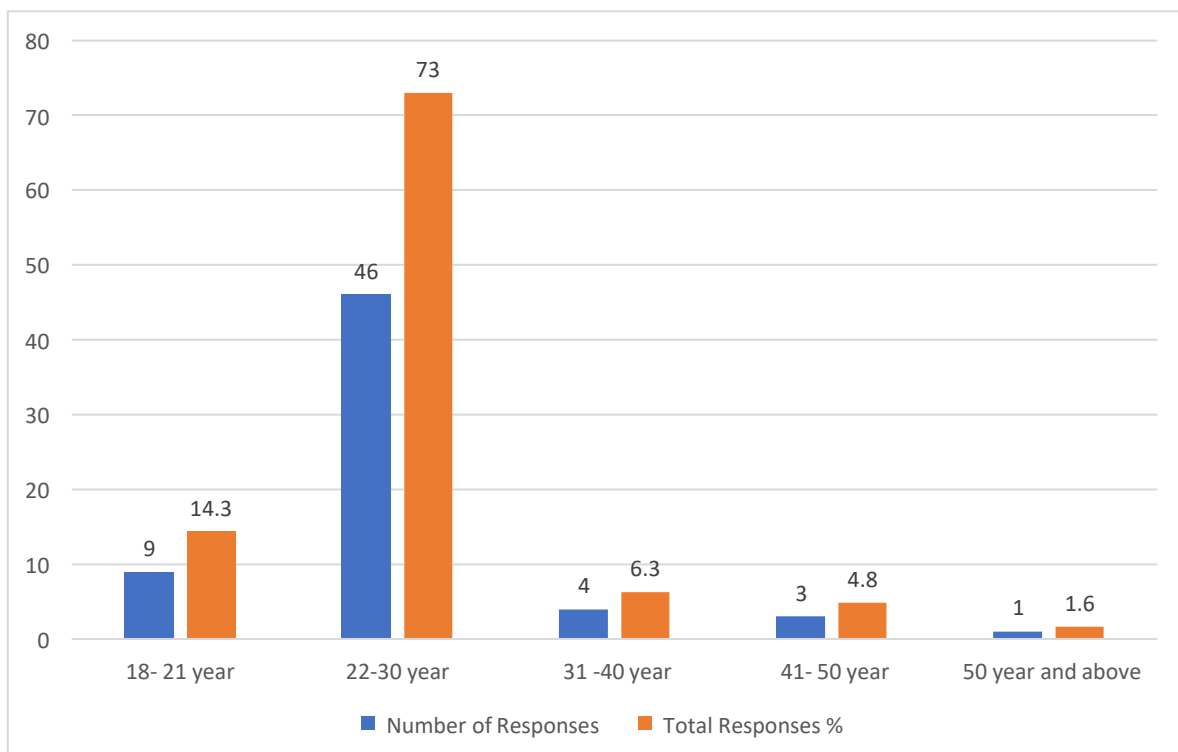
**Table 3.4 Age**

Particular	Number of Responses	Total Responses %
18- 21 year	9	14.3
22-30 year	46	73
31 -40 year	4	6.3
41- 50 year	3	4.8
50 year and above	1	1.6
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The majority of respondents in the survey, 46 out of the total, belong to the 22-30 age range, indicating a strong representation of young adults, 9 for 18-21 years, 4 for 31-40 years, 3 for 41-50 years, and only 1 response for 50 years and above.

**Graph 3.4 Age**



Source: Primary Data

**Interpretation:** The graph data shows that majority of respondents, fall within the age range of 22 to 30 years.



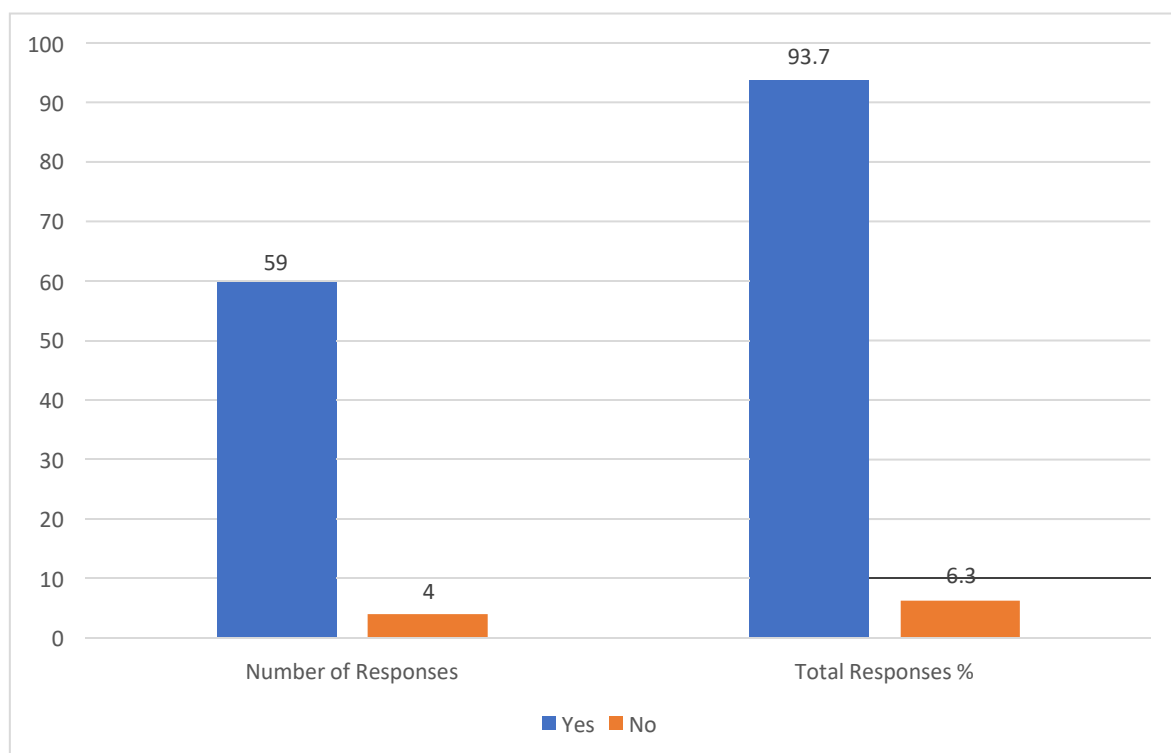
**Table 3.5; Are you aware of supply chain management Concept?**

Particular	Number of Responses	Total Responses %
Yes	59	93.7
No	4	6.3
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of respondents 93.7% is in agreement, with 59 out of 63 respondents saying "Yes." Only a small percentage 6.3% responded with "No,".

**Graph 3.5**



Source: Primary Data

**Interpretation:** The majority of responses indicate agreement answering "Yes."

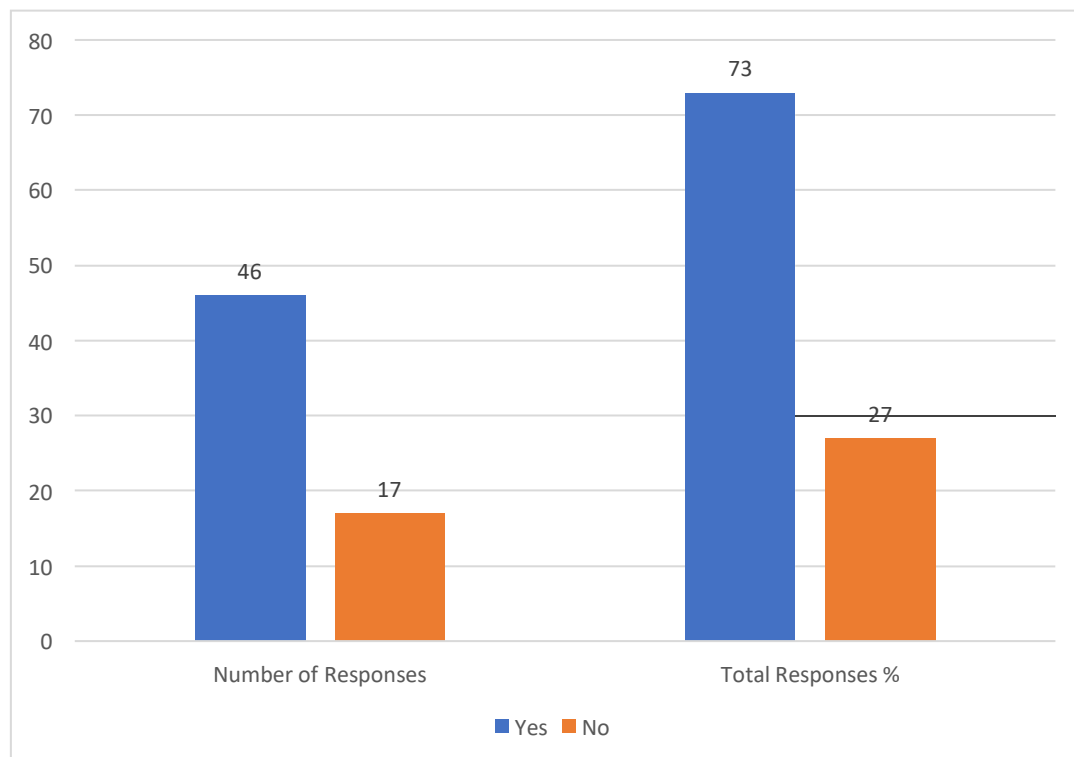
**Table 3.6; Does your company have a separate logistics department?**

Particular	Number of Responses	Total Responses %
Yes	46	73
No	17	27
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of respondents 46 out of 63 answered "Yes," indicating a higher level of agreement or positive response. A smaller portion of respondents 17 out of 63 answered "No,".

**Graph 3.6**



Source: Primary Data

**Interpretation:** The majority of respondents answered "Yes", indicating a strong affirmative response.

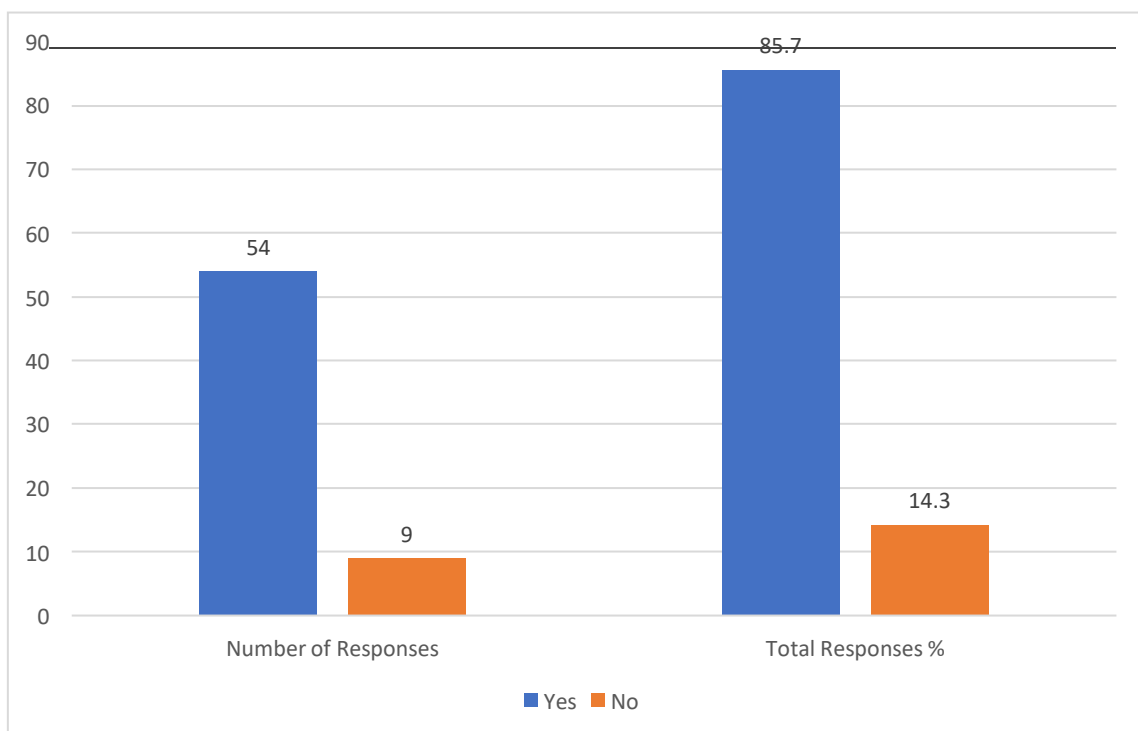
**Table 3.7; Does your company have a clear logistics strategic plan?**

Particular	Number of Responses	Total Responses %
Yes	54	85.7
No	9	14.3
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The data indicates that out of the 63 respondents, 54 answered "Yes" when asked if their company has a clear logistics strategic plan. Conversely, 9 respondents answered "No,".

**Graph 3.7**



Source: Primary Data

**Interpretation:** The majority of respondents yes reported that their organizations have a clearly defined logistics strategy plan.

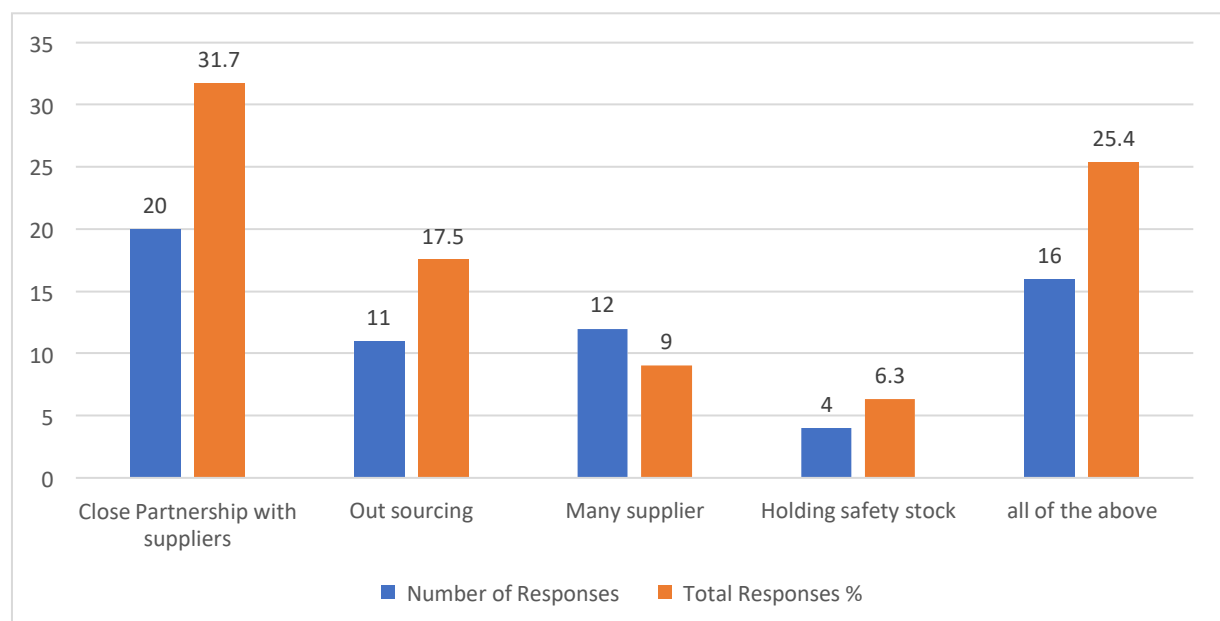
**Table 3.8; How is supply chain managing on your company?**

Particular	Number of Responses	Total Responses %
Close Partnership with suppliers	20	31.7
Out sourcing	11	17.5
Many supplier	12	9
Holding safety stock	4	6.3
all of the above	16	25.4
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** Among the 63 respondents, close partnerships with suppliers were highlighted as important by 31.7%, while 17.5% mentioned outsourcing, and 19% emphasized having multiple suppliers. Holding safety stock was mentioned by only 6.3%, and 25.4% indicated implementing a combination of these strategies.

**Graph 3.8**



Source: Primary Data

**Interpretation:** The majority of the respondents indicated a preference for close partnership with suppliers, making it the most favored choice among the respondents.

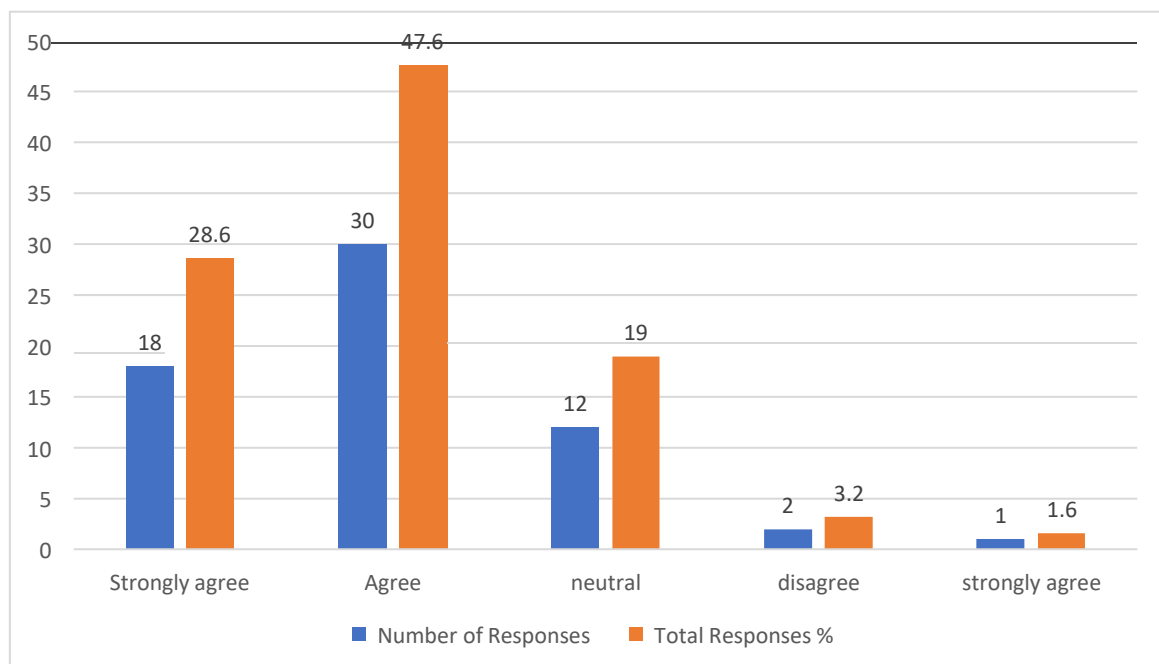
**Table 3.9; Does your Supply chain management department has sufficient transportation?**

Particular	Number of Responses	Total Responses %
Strongly agree	18	28.6
Agree	30	47.6
neutral	12	19
disagree	2	3.2
strongly disagree	1	1.6
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of respondents 76.2% expressed agreement, with 28.6% strongly agreeing and 47.6% agreeing. Additionally, 19% of respondents chose a neutral stance, while a small percentage disagreed 3.2% or strongly disagreed 1.6%.

**Graph 3.9**



Source: Primary Data

**Interpretation:** The majority of respondents, A considerable number of respondents agreed with the statement, while only a few disagreed.

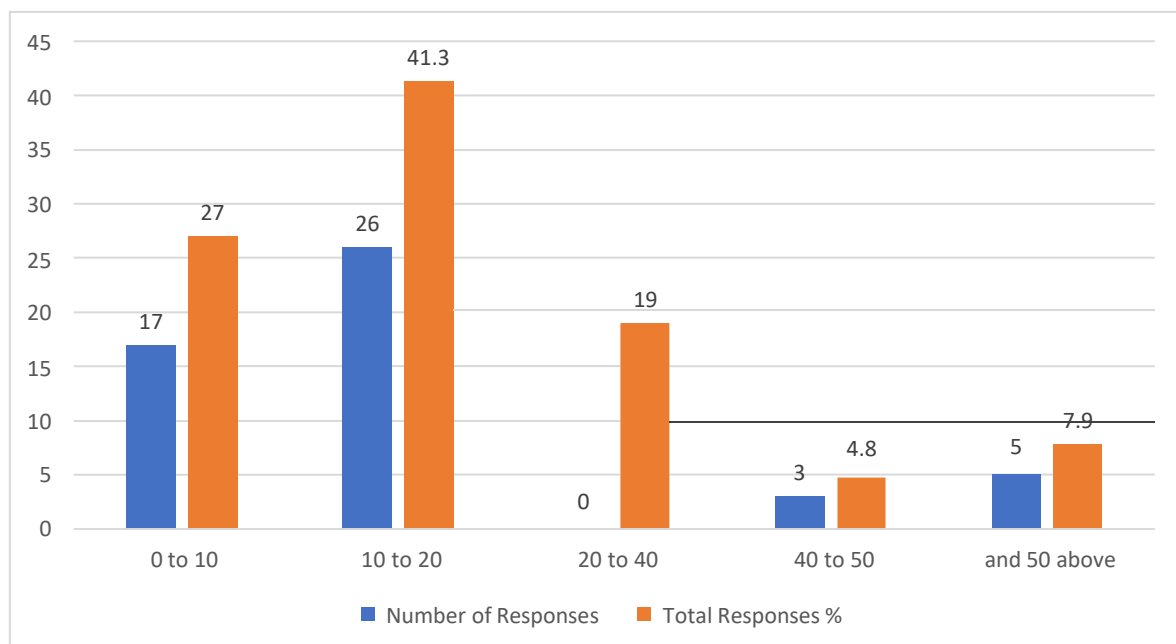
**Table 3.10; How many suppliers do you have?**

Particular	Number of Responses	Total Responses %
0 to 10	17	27
10 to 20	26	41.3
20 to 40	12	19
40 to 50	3	4.8
and 50 above	5	7.9
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of 0 to 20 units, with 27% having 0 to 10 units and 41.3% having 10 to 20 units. A smaller portion of respondents 32.5% reported higher transportation capacity, with 19% having 20 to 40 units, 4.8% having 40 to 50 units, and 7.9% having 50 units or more.

**Graph 3.10**



Source: Primary Data

**Interpretation:** A considerable number of respondents fall into the range of 10 to 20, with a majority in this category.

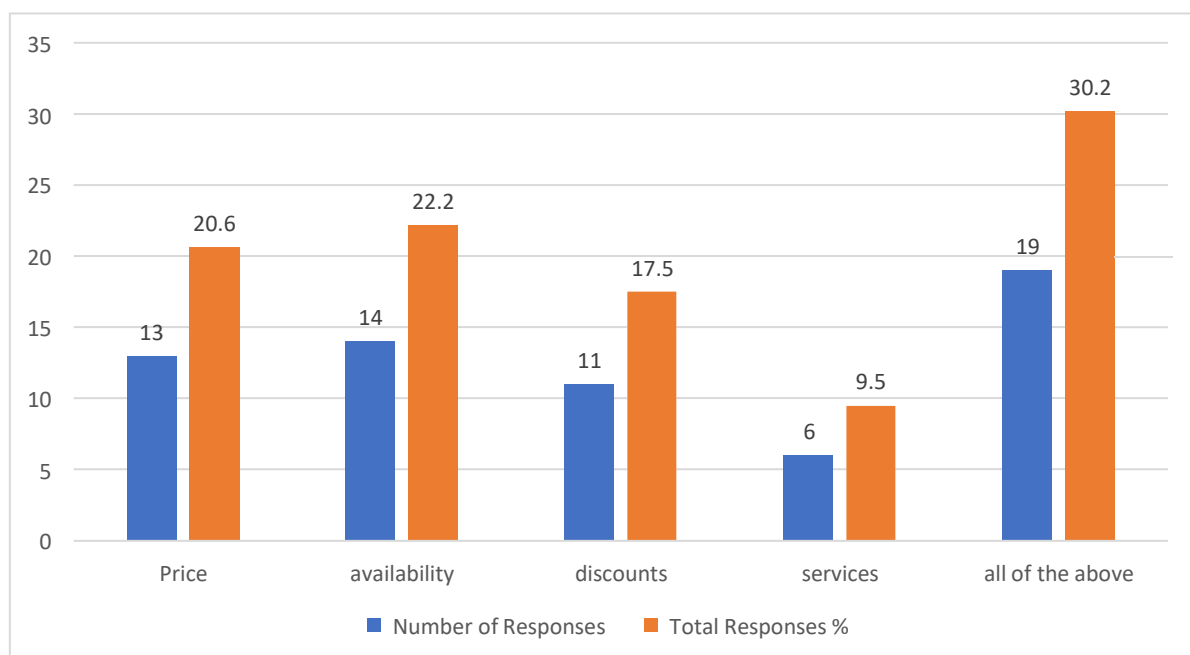
**Table 3.11; How do you select and evaluate your suppliers?**

Particular	Number of Responses	Total Responses %
Price	13	20.6
availability	14	22.2
discounts	11	17.5
services	6	9.5
all of the above	19	30.2
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The data shows that out of the 63 respondents, 13 prioritize price when selecting suppliers, 14 emphasize availability, 11 consider discounts, and 6 value services offered by suppliers. 19 respondents selected "all of the above,".

**Graph 3.11**



Source: Primary Data

**Interpretation:** The Maximum number of respondents, chose "all of the above" as their preference.

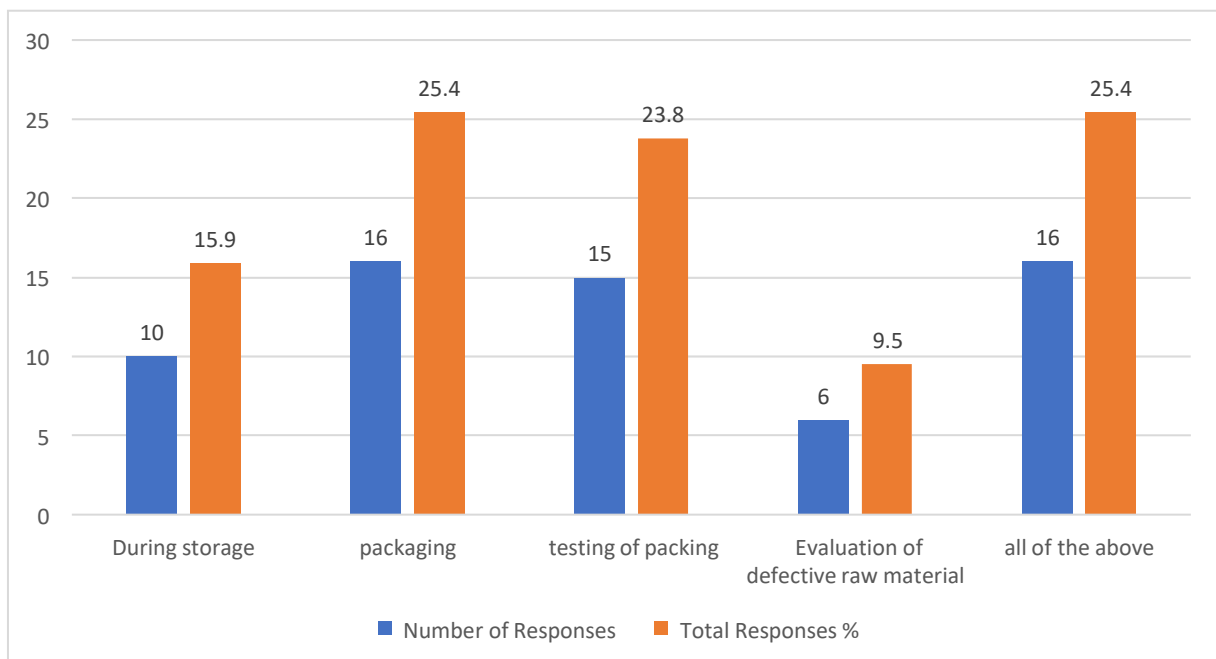
**Table 3.12; Where the supply chain department is facing problem in taking care of the raw material?**

Particular	Number of Responses	Total Responses %
During storage	10	15.9
packaging	16	25.4
testing of packing	15	23.8
Evaluation of defective raw material	6	9.5
all of the above	16	25.4
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of responses reveals that 15.9% focusing on storage, 25.4% on packaging, 23.8% on testing of packing, and 9.5% on evaluation of defective raw material. Additionally, 25.4% of respondents selected "all of the above,".

**Graph 3.12**



Source: Primary Data

**Interpretation:** Among the respondents, "packaging" emerged as the predominant response category, with an equal number of respondents selecting "all of the above".



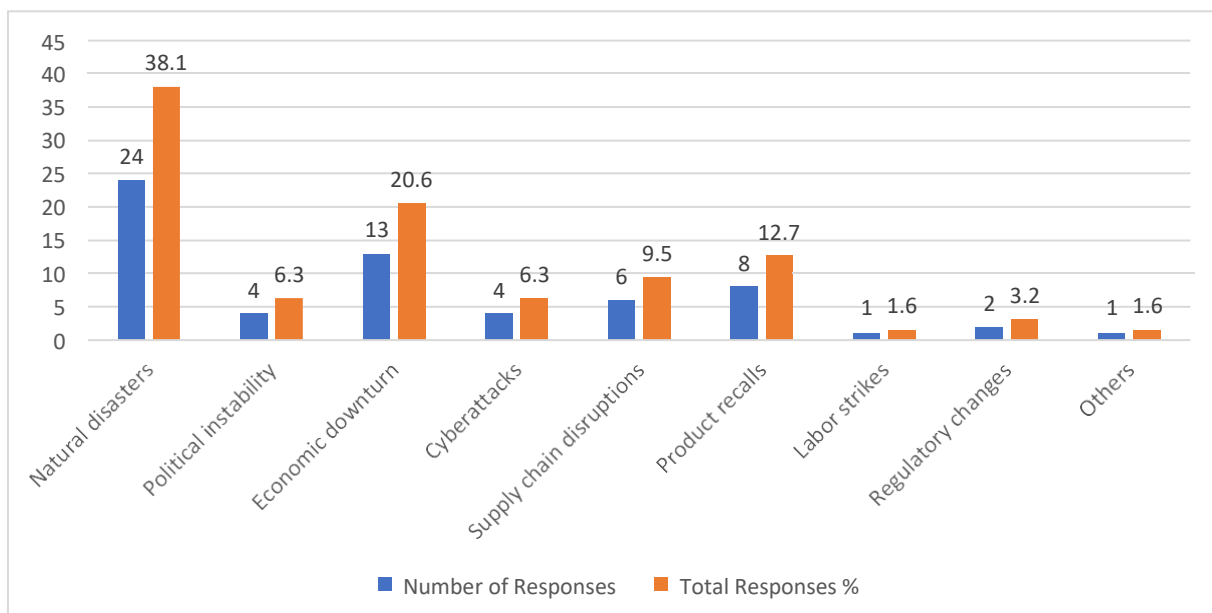
**Table 3.13; What are the main supply chain risks your company faces?**

Particular	Number of Responses	Total Responses %
Natural disasters	24	38.1
Political instability	4	6.3
Economic downturn	13	20.6
Cyberattacks	4	6.3
Supply chain disruptions	6	9.5
Product recalls	8	12.7
Labor strikes	1	1.6
Regulatory changes	2	3.2
Others	1	1.6
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of responses natural disasters 38.1%, economic downturn 20.6%, supply chain disruptions 9.5%, and product recalls 12.7%. Other challenges such as political instability, cyberattacks, labor strikes, regulatory changes, and other factors were mentioned by a smaller number of respondents.

**Graph 3.13**



Source: Primary Data

**Interpretation:** Respondents expressed a range of concerns, with natural disasters being the most commonly mentioned.

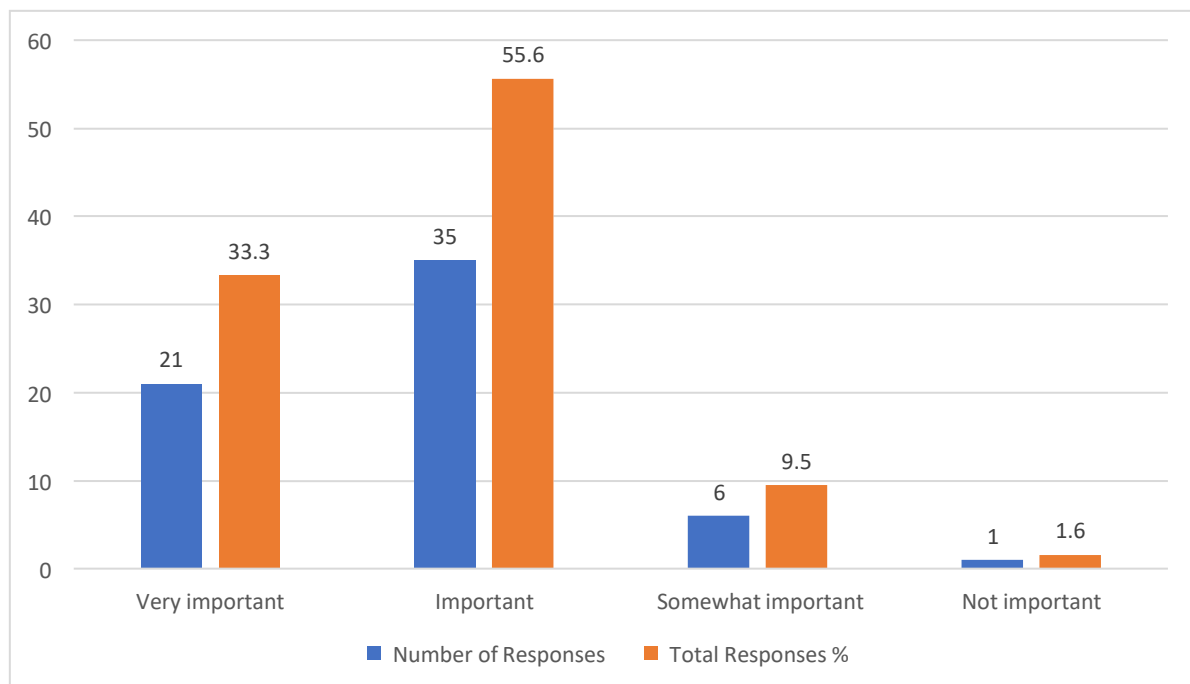
**Table 3.14; How important do you consider the impact of these risks to be?**

Particular	Number of Responses	Total Responses %
Very important	21	33.3
Important	35	55.6
Somewhat important	6	9.5
Not important	1	1.6
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The data shows that out of the 63 respondents, 21 considered the supply chain risks to be very important, 35 deemed them important, 6 regarded them as somewhat important, and only 1 respondent stated that they were not important.

**Graph 3.14**



Source: Primary Data

**Interpretation:** The majority of respondents considered the particular aspect to be important, someone says “very important” and mostly highest says “important”.

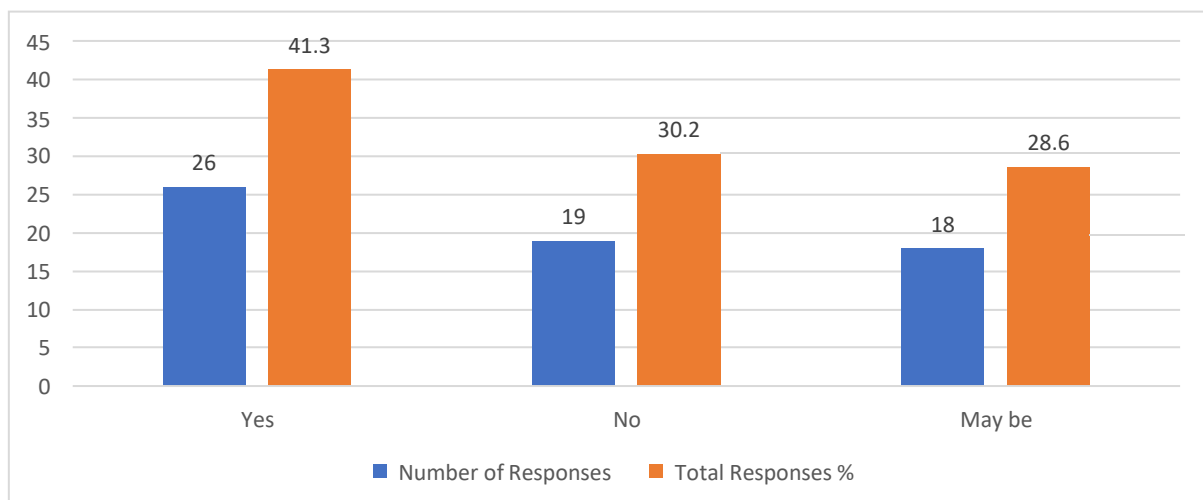
**Table 3.15; Does the company adopt double sourcing strategy?**

Particular	Number of Responses	Total Responses %
Yes	26	41.3
No	19	30.2
May be	18	28.6
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of responses indicates that out of the 63 respondents, 26 answered "Yes," 19 answered "No," and 18 responded with "Maybe".

**Graph 3.15**



Source: Primary Data

**Interpretation:** The majority of the respondents says "Yes".

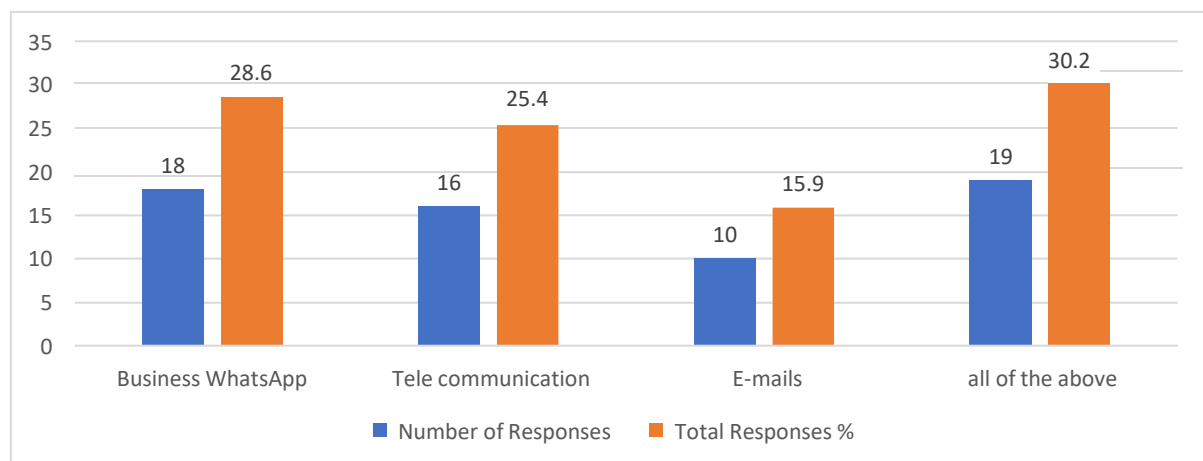
**Table 3.16; How do you collaborate and communicate with your suppliers During a crisis or disruption?**

Particular	Number of Responses	Total Responses %
Business WhatsApp	18	28.6
Tele communication	16	25.4
E-mails	10	15.9
all of the above	19	30.2
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of responses shows that out of the 63 respondents, 28.6% use Business WhatsApp, 25.4% use Telecommunication, and 15.9% use E-mails as their communication channels. Additionally, 19 respondents 30.2% selected "all of the above,".

**Graph 3.16**



Source: Primary Data

**Interpretation:** The graph data indicates that Various communication methods were mentioned, with "all of the above" being the most common choice.

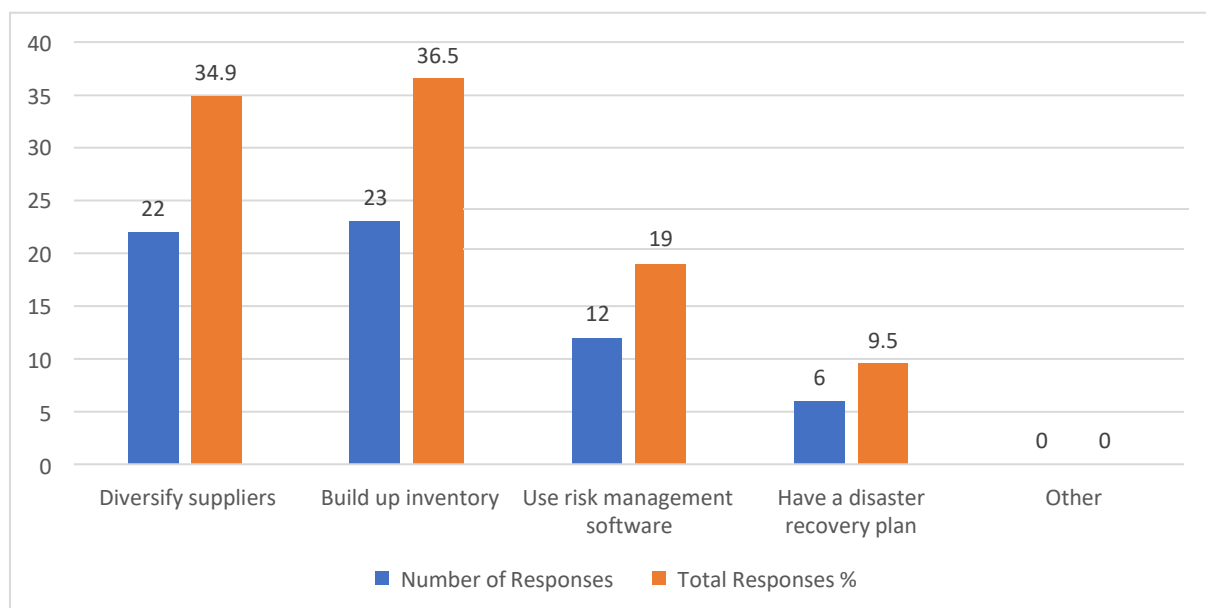
**Table 3.17; What are the main steps your company takes to mitigate supply chain risks?**

Particular	Number of Responses	Total Responses %
Diversify suppliers	22	34.9
Build up inventory	23	36.5
Use risk management software	12	19
Have a disaster recovery plan	6	9.5
Other	0	0
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of responses shows that out of the 63 respondents, 34.9% prioritize diversifying suppliers, 36.5% emphasize building up inventory, 19.0% utilize risk management software, and 9.5% have a disaster recovery plan in place. Notably, no respondents selected "Other" as their chosen strategy.

**Graph 3.17**



Source: Primary Data

**Interpretation:** The graph data indicates that Respondents suggested diversifying suppliers, building up inventory, are get highest responses.

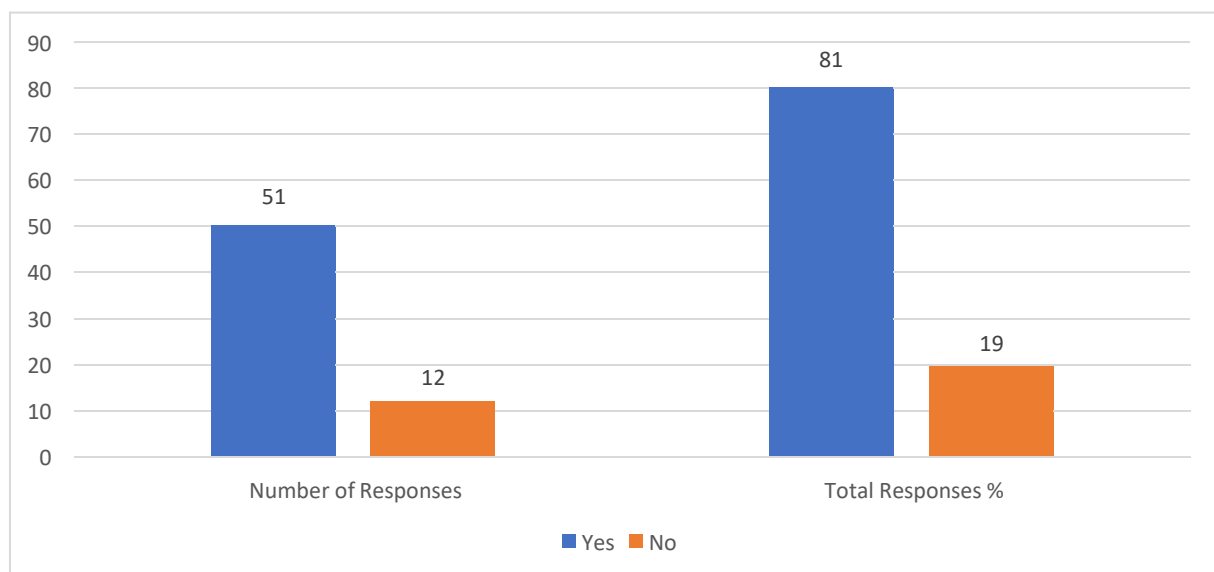
**Table 3.18; Do you use any technology or software to manage your supply chain risk?**

Particular	Number of Responses	Total Responses %
Yes	51	81
No	12	19
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of responses indicates that out of the 63 respondents, 51 answered "Yes" when asked a specific question, while 12 answered "No," suggesting a majority agreement or positive response.

**Graph 3.18**



Source: Primary Data

**Interpretation:** The majority of the respondents says "Yes".

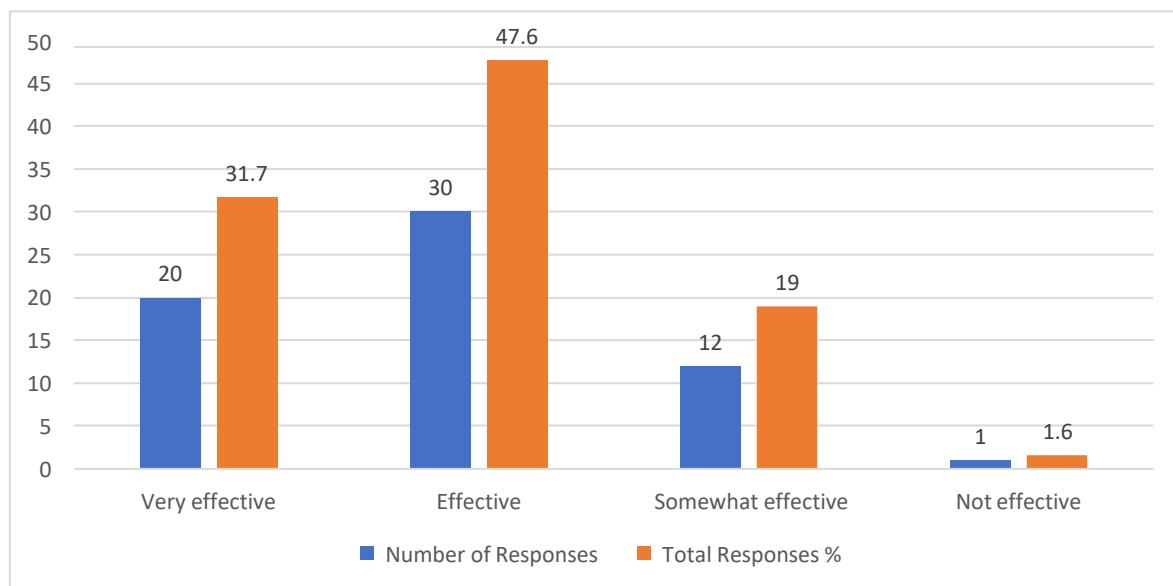
**Table 3.19; How effective do you think your company's supply chain risk management is?**

Particular	Number of Responses	Total Responses %
Very effective	20	31.7
Effective	30	47.6
Somewhat effective	12	19
Not effective	1	1.6
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of replies, 20 of the 63 respondents thought the implemented procedures were extremely effective in managing supply chain risk, while 30 thought they were effective. Furthermore, 12 respondents thought the measures were moderately effective, whereas only 1 respondent thought they were ineffective.

**Graph 3.19**



Source: Primary Data

**Interpretation:** The responses indicate that a majority found the approach effective, with some considering it very effective.

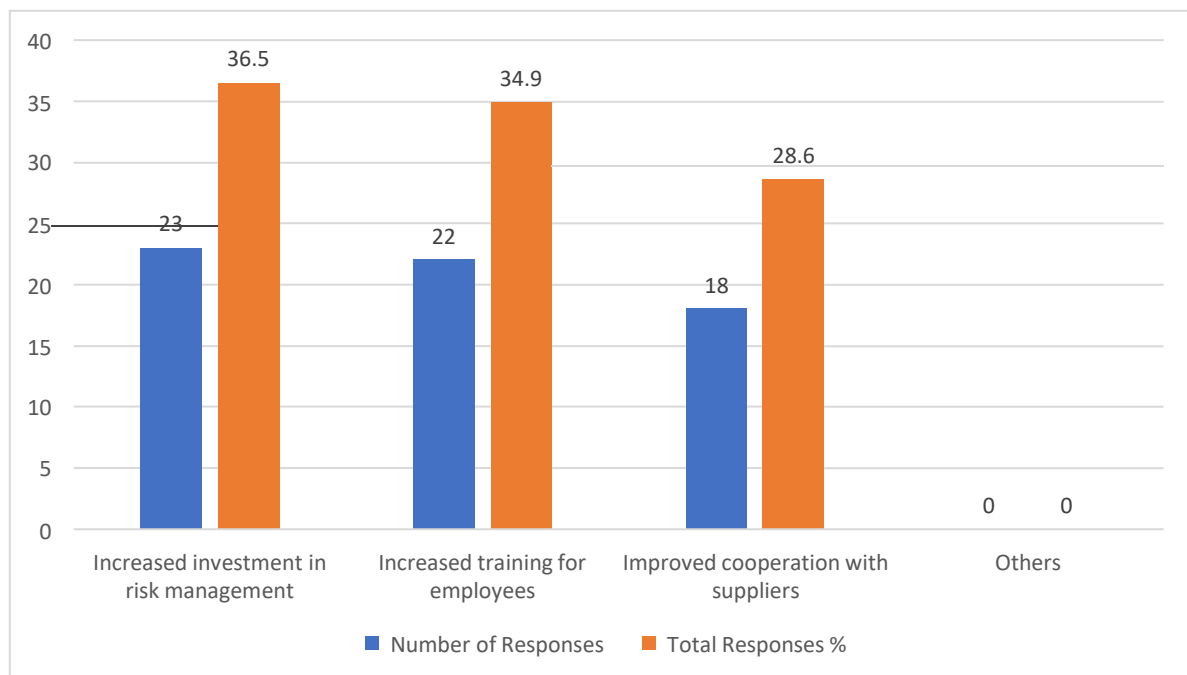
**Table 3.20; What are the main opportunities for improving your company's supply chain risk management?**

Particular	Number of Responses	Total Responses %
Increased investment in risk management	23	36.5
Increased training for employees	22	34.9
Improved cooperation with suppliers	18	28.6
Others	0	0
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis respondents 69.9% focus on enhancing risk management capabilities by either increasing investment 36.5% or providing training for employees 34.9%. Additionally, 28.6% of respondents emphasize the importance of improving cooperation with suppliers. No specific respondents in the "Others" category.

**Graph 3.20**



Source: Primary Data

**Interpretation:** The responses indicate a focus on increased investment in risk management, enhanced employee training.



**Table 3.21; How was the success/failure of supply chain management initiatives measured?**

Particular	Number of Responses	Total Responses %
financial metrics	16	25.4
Customer satisfaction metrics	25	39.7
Operational metrics	16	25.4
Risk metrics	6	9.5
Innovation metrics	0	0
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis shows that out of the 63 respondents, 25 (39.7%) prioritize customer satisfaction metrics, 16 (25.4%) focus on financial metrics and operational metrics, and 6 (9.5%) consider risk metrics. However, none of the respondents mentioned innovation metrics as a priority.

**Graph 3.21**



Source: Primary Data

**Interpretation:** The success or failure of supply chain management projects is primarily judged using customer satisfaction measures.

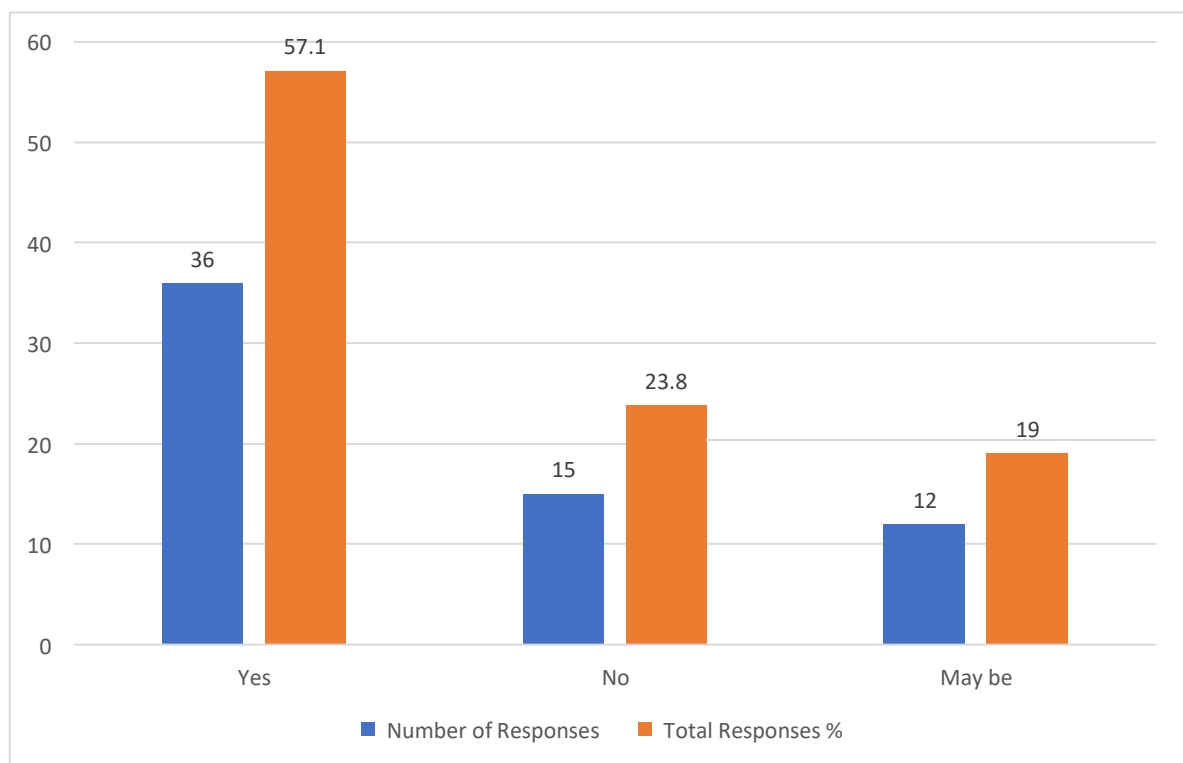
**Table 3.22; Do you provide the training to your employees on supply chain risk management?**

Particular	Number of Responses	Total Responses %
Yes	36	57.1
No	15	23.8
May be	12	19
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of responses indicates that out of the 63 respondents, 57.1% answered "Yes", 23.8% answered "No," and 19% responded with "May be."

**Graph 3.22**



Source: Primary Data

**Interpretation:** The majority of respondents says "Yes".

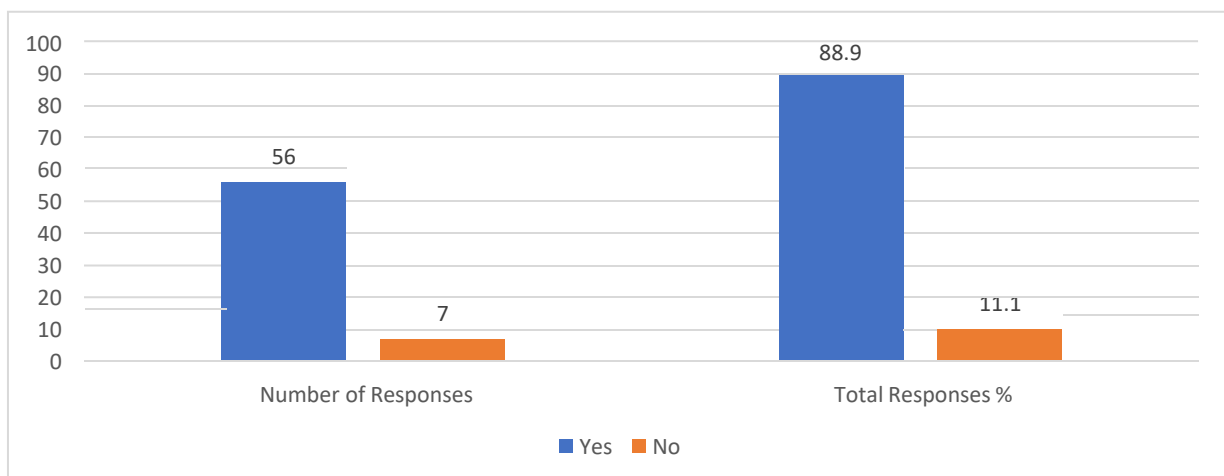
**Table 3.23; Do you have a communication plan to inform your customers about supply chain issues?**

Particular	Number of Responses	Total Responses %
Yes	56	88.9
No	7	11.1
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** It appears that out of the 63 respondents, 88.9% answered "Yes" to a certain question, while only 7 11.1% responded with "No."

**Graph 3.23**



Source: Primary Data

**Interpretation:** The graph data shows that the majority of respondents have a communication plan in place to inform customers about supply chain issues.

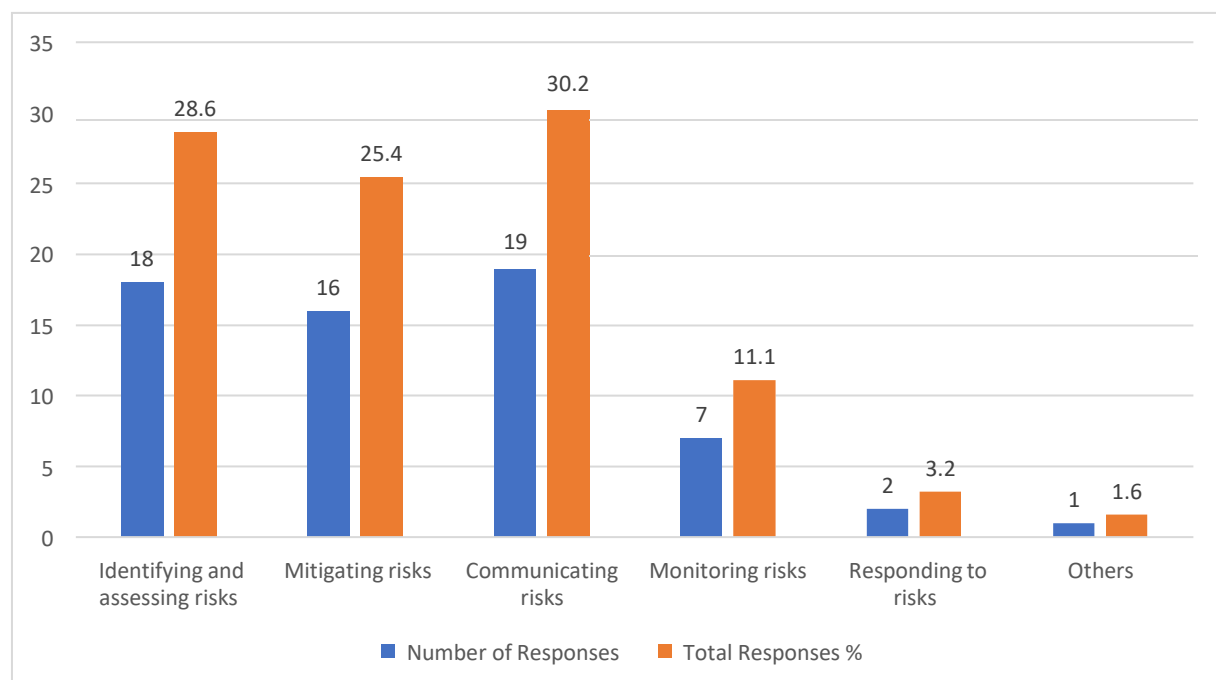
**Table 3.24; What are the main challenges you face in managing supply chain risks?**

Particular	Number of Responses	Total Responses %
Identifying and assessing risks	18	28.6
Mitigating risks	16	25.4
Communicating risks	19	30.2
Monitoring risks	7	11.1
Responding to risks	2	3.2
Others	1	1.6
<b>Total</b>	<b>63</b>	<b>100 %</b>

Source: Primary Data

**Analysis:** The analysis reveals that out of 63 respondents, 28.6% prioritize identifying and assessing risks, 25.4% focus on mitigating risks, 30.2% emphasize communicating risks, 11.1% concentrate on monitoring risks, 3.2% prioritize responding to risks, and 1.6% selected "others" as their main approach.

**Graph 3.24**



Source: Primary Data

**Interpretation:** According to the respondents, the main challenges in managing supply chain risks encompass identifying and assessing risks, and communicating risks.

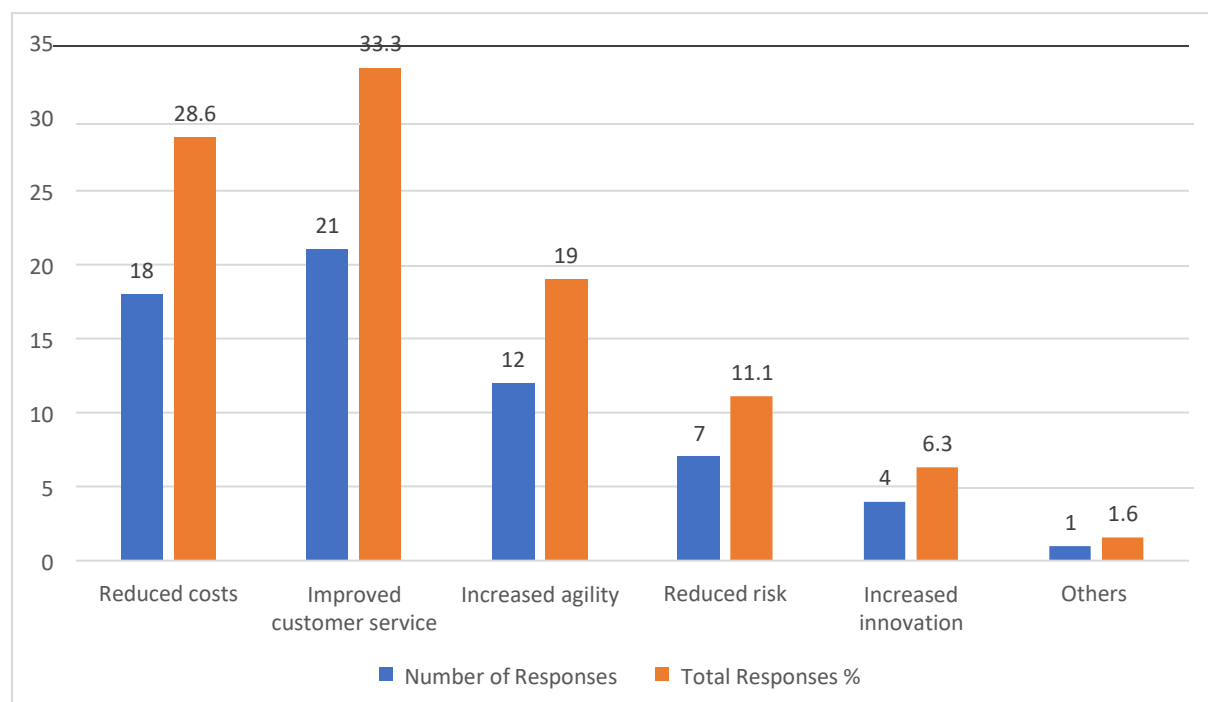
**Table 3.25; What are the main benefits of managing supply chain risks?**

Particular	Number of Responses	Total Responses %
Reduced costs	18	28.6
Improved customer service	21	33.3
Increased agility	12	19
Reduced risk	7	11.1
Increased innovation	4	6.3
Others	1	1.6
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis indicates that the main benefits reported by respondents in supply chain management include improved customer service 33.3%, reduced costs 28.6%, increased agility 19%, reduced risk 11.1%, and increased innovation 6.3%.

**Graph 3.25**



Source: Primary Data

**Interpretation:** The primary benefits of managing supply chain risks include reduced costs, improved customer service as reported by respondents.

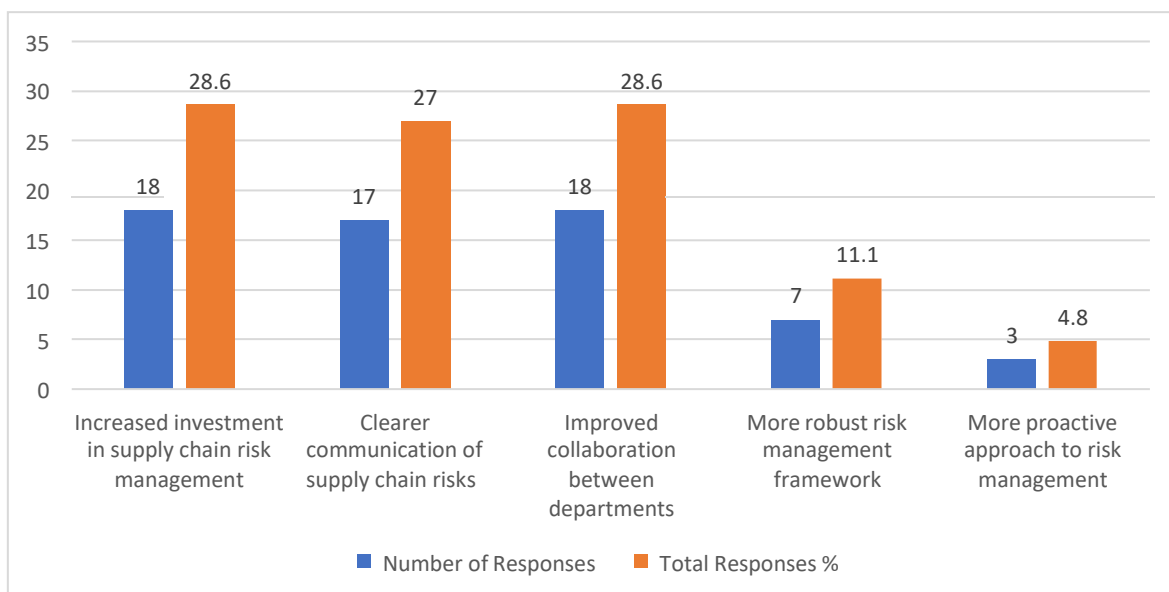
**Table 3.26; What are your recommendations for improving supply chain risk management in your organization?**

Particular	Number of Responses	Total Responses %
Increased investment in supply chain risk management	18	28.6
Clearer communication of supply chain risks	17	27
Improved collaboration between departments	18	28.6
More robust risk management framework	7	11.1
More proactive approach to risk management	3	4.8
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** Increased investment in supply chain risk management 28.6%, clearer communication of supply chain risks 26.9%, improved collaboration between departments 28.6%, more robust risk management framework 11.1%, a more proactive approach to risk management 4.8%.

**Graph 3.26**



Source: Primary Data

**Interpretation:** The Supply chain risk management in the organization include prioritizing increased investment in risk management and, fostering better collaboration between departments.

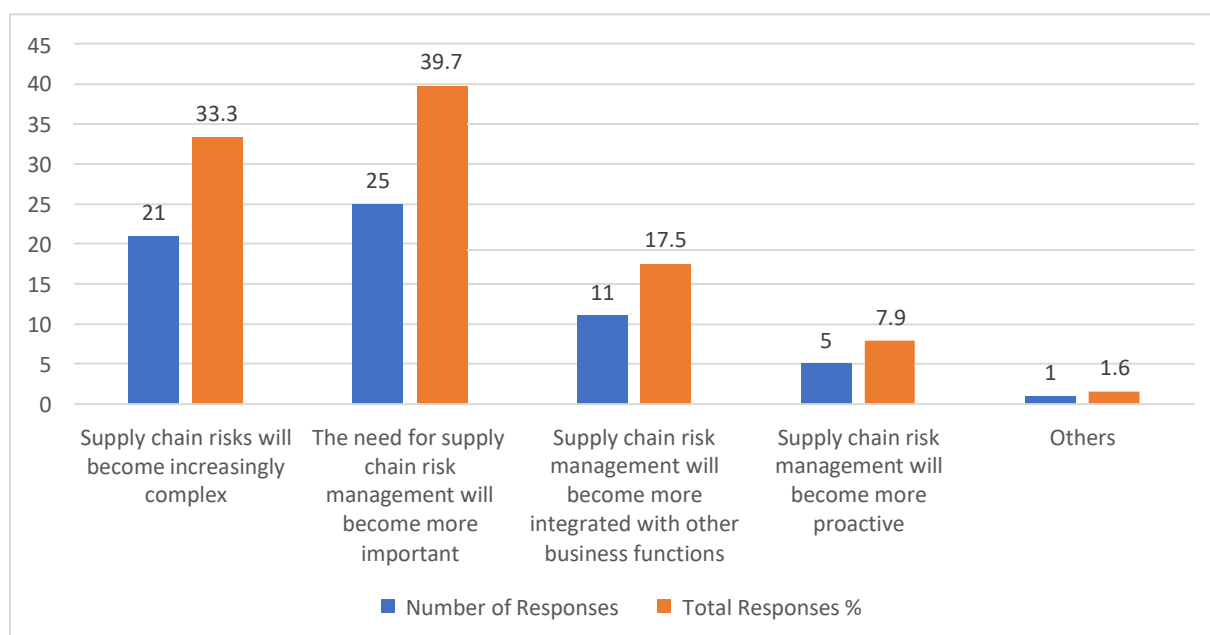
**Table 3.27; What are your thoughts on the future of supply chain risk management?**

Particular	Number of Responses	Total Responses %
Supply chain risks will become increasingly complex	21	33.3
The need for supply chain risk management will become more important	25	39.7
Supply chain risk management will become more integrated with other business functions	11	17.5
Supply chain risk management will become more proactive	5	7.9
Others	1	1.6
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis supply chain risks will become increasingly complex 33.3% and the need for supply chain risk management will become more important 39.7%. there is an acknowledgement that supply chain risk management will become more integrated with other business functions 17.5% and more proactive 7.9% in the future.

**Graph 3.27**



Source: Primary Data

**Interpretation:** The future of supply chain risk management entails the expectation of increasing complexity in supply chain risks and emphasizing the growing importance of risk management as indicated by respondents.

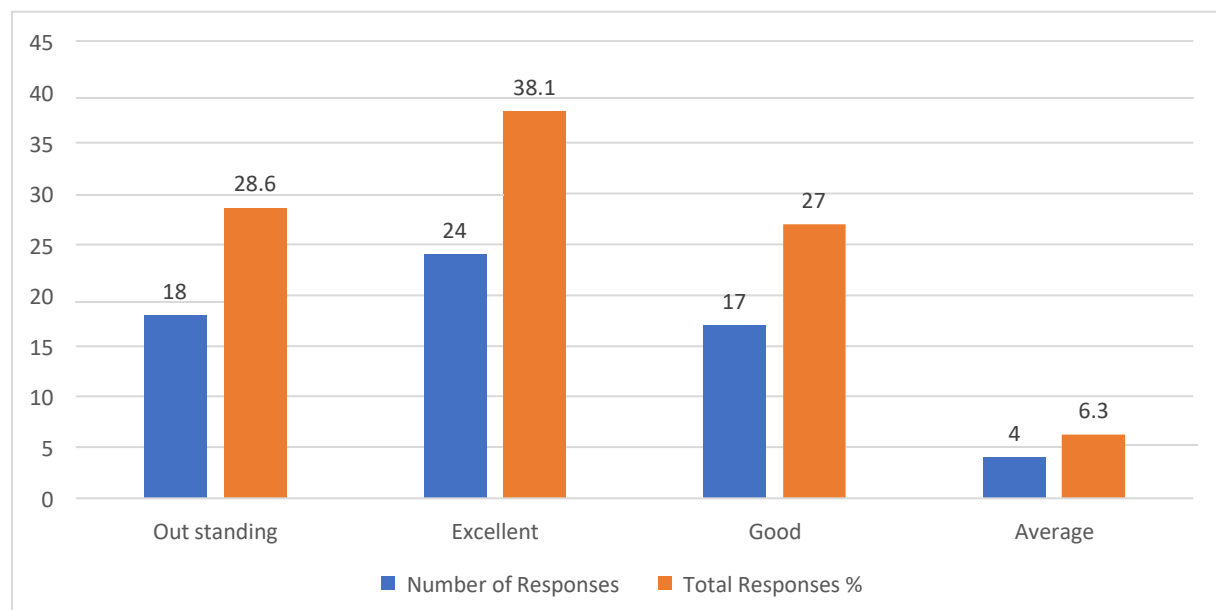
**Table 3.28; Rate the working strategies of supply chain management department on the basis of the current program?**

Particular	Number of Responses	Total Responses %
Out standing	18	28.6
Excellent	24	38.1
Good	17	27
Average	4	6.3
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of the responses shows that the majority of participants rated the performance as outstanding or excellent, accounting for 42 out of the total 63 responses. However, there is a relatively small number of participants who rated it as average, with only 4 responses. Overall, the feedback indicates a highly positive perception of the performance.

**Graph 3.28**



Source: Primary Data

**Interpretation:** The supply chain management department are highly rated based on the number of respondents excellent.



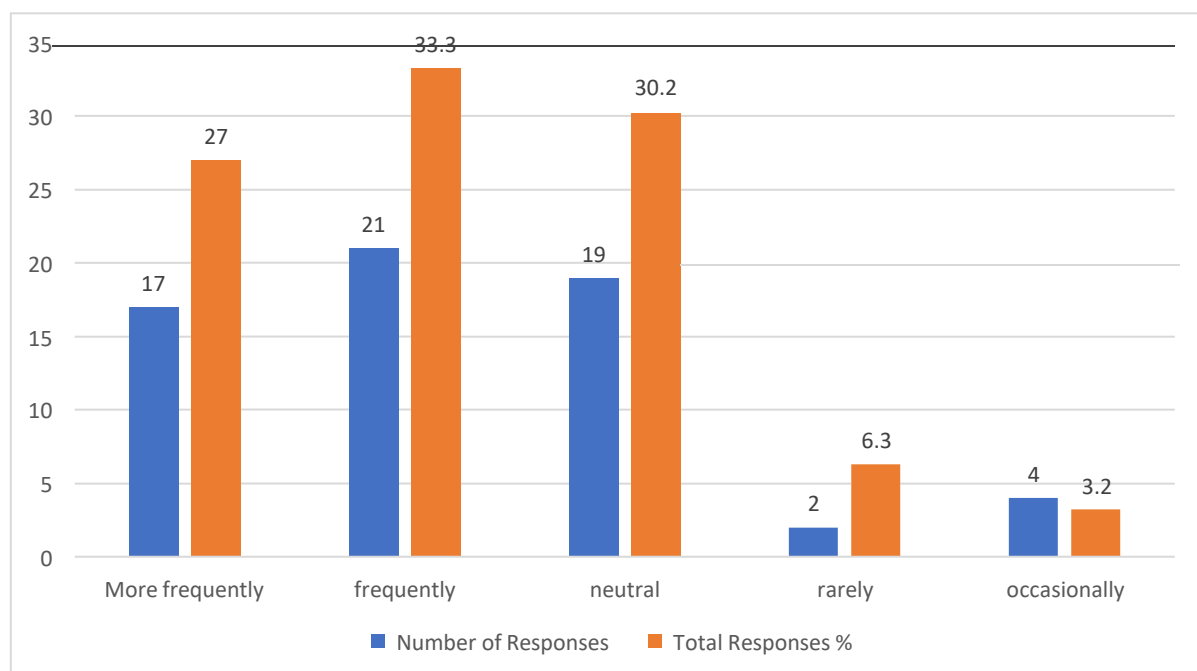
**Table 3.29; Do you monitor the performance and reliability of your suppliers?**

Particular	Number of Responses	Total Responses %
More frequently	17	27
frequently	21	33.3
neutral	19	30.2
rarely	2	6.3
occasionally	4	3.2
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of the responses 52.4% responded with "more frequently" or "frequently." On the other hand, only a small proportion 6.3% indicated a rare occurrence. The majority of participants 67.5% provided neutral or occasional responses.

**Graph 3.29**



Source: Primary Data

**Interpretation:** The majority of responses indicate that suppliers' performance and reliability are monitored "more frequently" most of them "frequently".

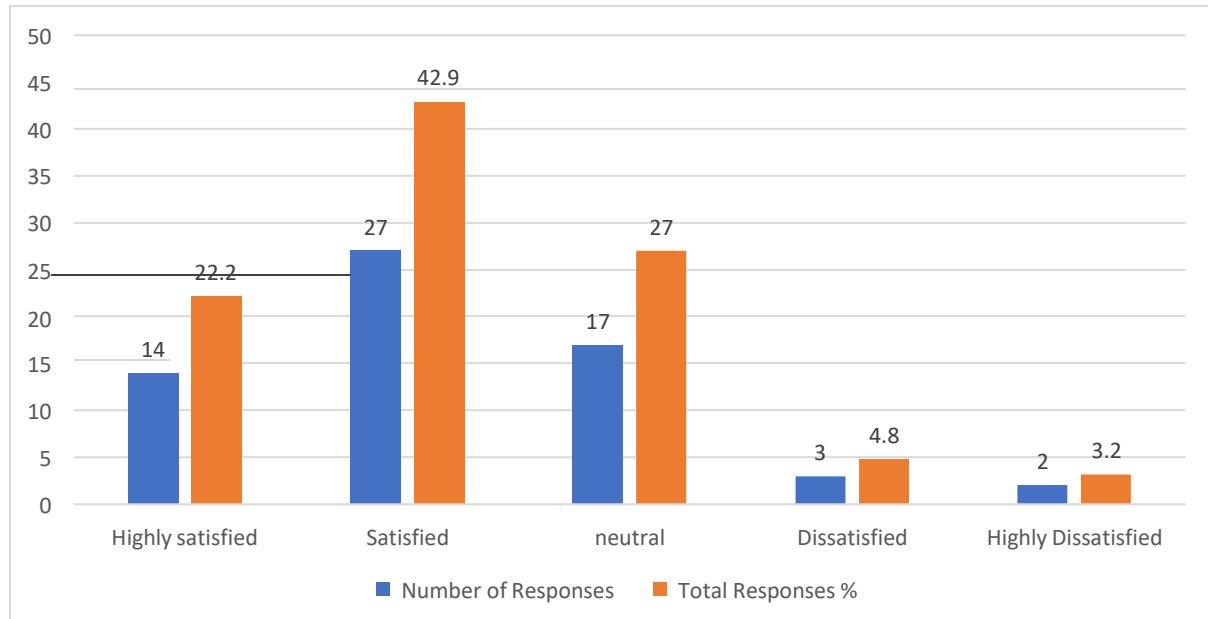
**Table 3.30; How do you rate the delivery activity of the department?**

Particular	Number of Responses	Total Responses %
Highly satisfied	14	22.2
Satisfied	27	42.9
neutral	17	27
Dissatisfied	3	4.8
Highly Dissatisfied	2	3.2
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of participants 65.1% expressed satisfaction with the subject matter, with 42.9% stating they were satisfied and 22.2% stating they were highly satisfied. However, a small proportion 8% expressed dissatisfaction, with 4.8% being dissatisfied and 3.2% being highly dissatisfied.

**Graph 3.30**



Source: Primary Data

**Interpretation:** The majority of participants expressed satisfaction with the delivery activity of the department.

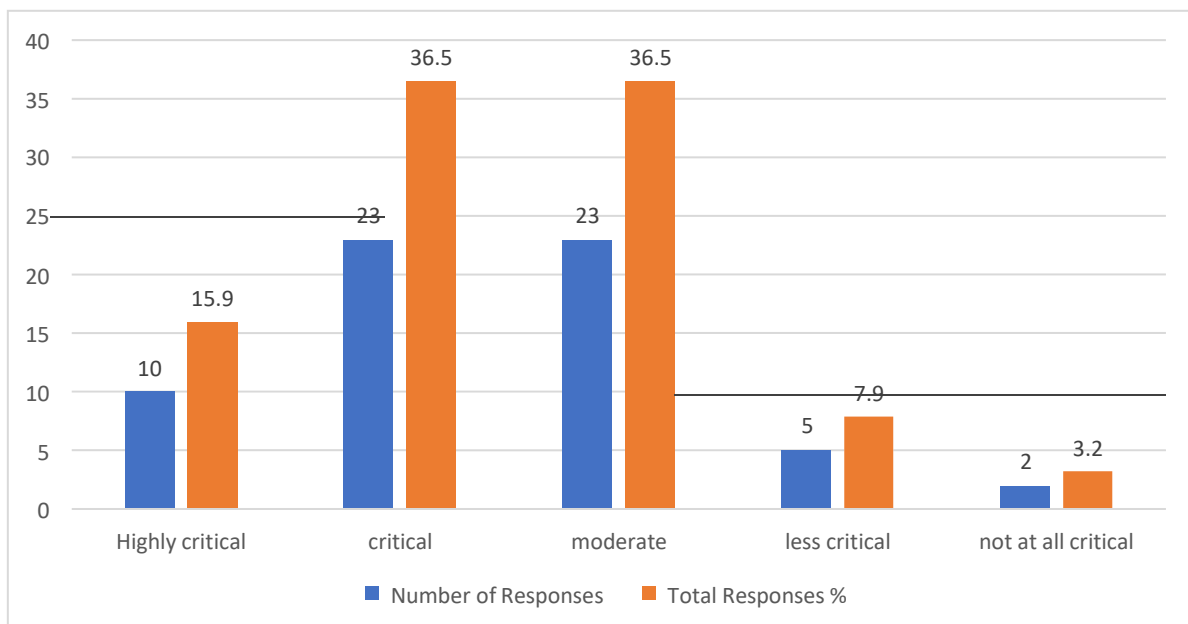
**Table 3.31; How critical is the supply chain to your overall business strategy?**

Particular	Number of Responses	Total Responses %
Highly critical	10	15.9
critical	23	36.5
moderate	23	36.5
less critical	5	7.9
not at all critical	2	3.2
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of the responses number of participants 63.5% provided critical feedback, with 36.5% expressing either a highly critical or critical viewpoint. An equal number of participants 36.5% provided a moderate rating, while a smaller proportion 11.1% considered the matter to be less critical or not critical at all.

**Graph 3.31**



Source: Primary Data

**Interpretation:** The responses that a majority of participants “critical and moderate”.

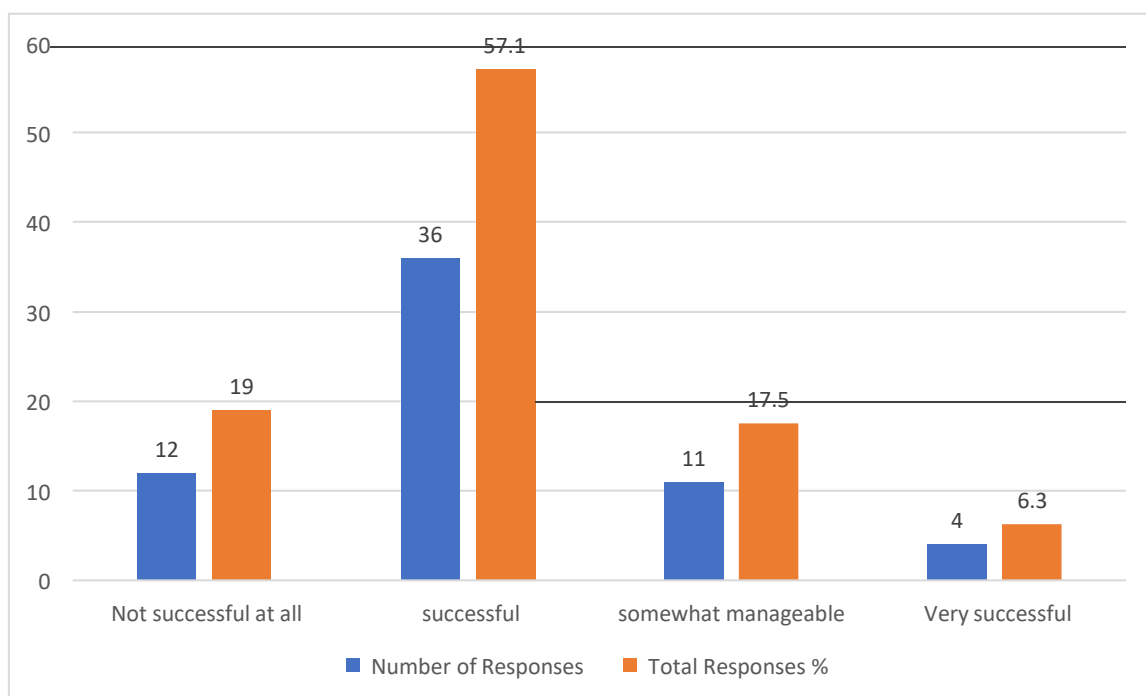
**Table 3.32 How successful do you think is your company in managing its supply chain in general?**

Particular	Number of Responses	Total Responses %
Not successful at all	12	19
successful	36	57.1
somewhat manageable	11	17.5
Very successful	4	6.3
<b>Total</b>	<b>63</b>	<b>100</b>

Source: Primary Data

**Analysis:** The analysis of the responses (57.1%) rated the endeavor as successful, with 36 respondents indicating it was successful and an additional 4 considering it very successful. However, a notable portion (19.0%) found it not successful at all, while 11 respondents found it somewhat manageable.

**Graph 3.32**



Source: Primary Data

**Interpretation:** The analysis suggests that a majority of participants perceive their company as successful in managing its supply chain.

## Reliability Test

Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	63	100.0
	Excluded <sup>a</sup>	0	.0
	Total	63	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	N of Items
.845	34

## Chi-square Test

H<sub>0</sub> :There is no relationship between various supply chain risks and challenges faced.

H<sub>1</sub> :There is relationship between various supply chain risks and challenges faced.

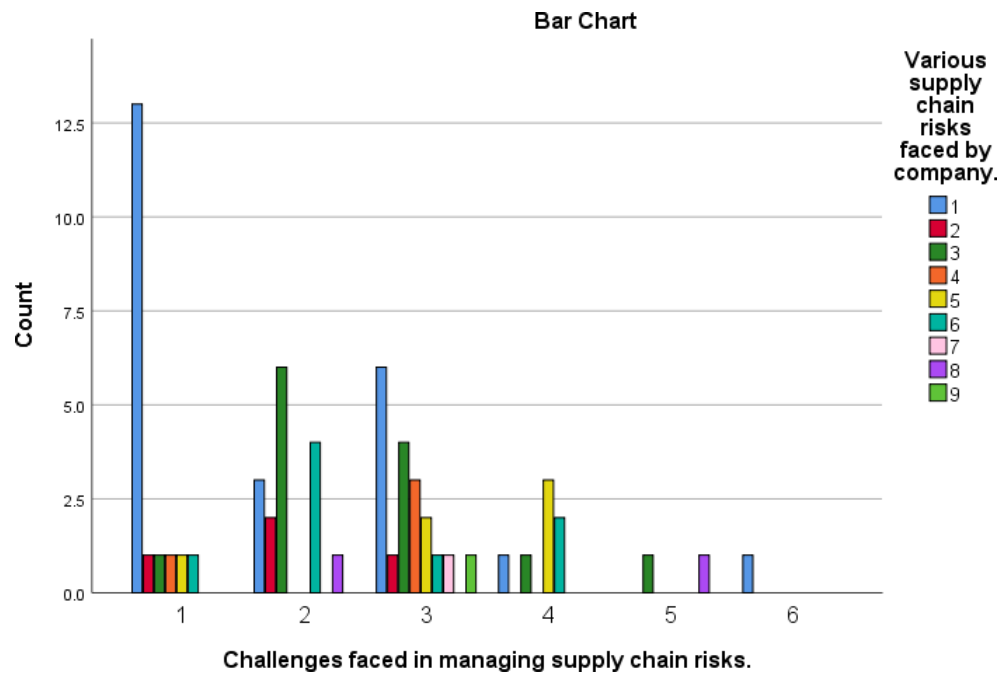
Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Challenges faced in managing supply chain risks. * Various supply chain risks faced by company.	63	100.0%	0	0.0%	63	100.0%

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Challenges faced in managing supply chain risks. * Various supply chain risks faced by company.	63	100.0%	0	0.0%	63	100.0%

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.954	.037
	Cramer's V	.427	.037
N of Valid Cases		63	

**Interpretation:** From the analysis done using Chi-square, the null hypothesis is rejected, as the P- value is lesser than 0.05, i. e only 3 times out of 100 is true and there is no enough evidence to accept the null hypothesis.

Hence, alternative hypothesis is accepted which says, there is relationship between various supply chain risks and challenges faced.



## **CHAPTER 4**

### **SUMMARY OF FINDINGS, CONCLUSION, RECOMMENDATIONS**

#### **4.1 SUMMARY OF FINDINGS :**

- The majority of respondents in the analysis were male.
- The survey findings suggest a balanced distribution of respondents, with a majority residing in rural areas.
- The data suggests that a majority of respondents prefer close partnership with suppliers as their preferred approach.
- The Maximum number of respondents, chose "all of the above" as their preference.
- The majority of respondents identified "packaging" as the most prevalent challenge in managing supply chain risks, with an equal number selecting "all of the above" as well.
- The most commonly mentioned concern among respondents was natural disasters.
- The data suggests that diversifying suppliers and building up inventory are the most recommended strategies by respondents to mitigate supply chain risks.
- The data suggests that the majority of respondents found the approach effective in managing supply chain risks.
- The data suggests a focus on increased investment in risk management and enhanced employee training for effective supply chain risk management.
- Customer satisfaction measures play a primary role in assessing the success or failure of supply chain management projects.
- The majority of respondents have a communication plan to inform customers about supply chain issues.
- The respondents' main challenges in managing supply chain risks involve identification, assessment, and communication of risks.
- Effective supply chain risk management provides benefits such as cost reduction and improved customer service.
- The organization emphasizes increased investment in risk management and improved collaboration between departments to enhance supply chain risk management.
- The future of supply chain risk management will face increasing complexity, highlighting the growing importance of risk management.



- The supply chain management department are highly rated based on the number of respondents excellent.
- The data suggests that suppliers' performance and reliability are monitored regularly by a majority of respondents.
- The majority of responses are satisfied with the department's delivery activity.
- The study reveals that rated the supply chain's importance as "critical" and supplier monitoring as "moderate."
- The majority of responses perceive their company's supply chain management as successful.

## 4.2 CONCLUSION

In conclusion, risk assessment and management are critical to guaranteeing the smooth operation of supply chains and driving overall corporate success. Because of the linked nature of today's global supply networks, a proactive approach to identifying, assessing, and mitigating risks that may disrupt operations and damage performance is required. Organizations can get important insights into possible vulnerabilities and implement targeted measures to improve supply chain resilience through effective risk evaluation.

The cost-effective way to manage the impact of supplier risk to an organization is to implement a strategic risk-based approach. The proactive assessment of risks associated with the supply chain aims to reduce vulnerability and ensure continuity.

It is critical to incorporate risk assessment and management into the larger business strategy. Companies can prioritize investments, improve departmental collaboration, and develop a culture of risk-aware decision-making by recognizing the importance of supply chain management and integrating it with broader organizational goals. By using an integrated strategy, it is ensured that risk assessment and management become ingrained parts of the organizational culture rather than standalone tasks.

It is important to keep in mind that the path to successful supply chain risk management is a continuous one. To accommodate shifting market dynamics and new dangers, risk mitigation techniques must be continuously monitored, evaluated, and adjusted. Additionally, making use of technology and data analytics can help businesses obtain real-time visibility into their supply chains, spot possible hazards, and take proactive measures to lessen their effects.

The supply chain strategy is an integral part of any business's operations. It provides businesses with the necessary tools to optimize their processes, reduce costs and increase productivity.

In conclusion, organizations that prioritize risk evaluation and management in their supply chains are better equipped to handle uncertainties, build resilience, and drive sustainable success. By recognizing the importance of proactive risk assessment, implementing robust risk management strategies, and fostering a risk-aware culture, companies can navigate challenges, seize opportunities, and create a competitive advantage in today's dynamic business environment.

## 4.3 RECOMMENDATIONS

Risk evaluation and management in supply chain operations, recommendations are suggested to enhance the effectiveness of risk management practices:

**Establish a comprehensive risk assessment framework:** Develop a structured approach to identify, assess, and prioritize risks specific to the supply chain. This framework should consider various risk categories such as operational, financial, geopolitical, and environmental risks. Regularly review and update the risk assessment to align with evolving market conditions.

**Foster a risk-aware culture:** Promote a culture of risk awareness and accountability across the organization. Encourage employees at all levels to proactively identify and report potential risks. Provide training and education programs to enhance risk management knowledge and skills within the workforce.

**Strengthen supplier relationships:** Establish strong partnerships with suppliers and encourage collaboration to manage risks collectively. Regularly evaluate supplier performance and reliability, and consider diversifying the supplier base to reduce dependency and mitigate risks associated with single-source suppliers.

**Leverage technology and data analytics:** Invest in advanced technologies and data analytics tools to enhance risk detection, monitoring, and mitigation capabilities. Implement real-time monitoring systems to track key supply chain metrics and enable proactive risk management.

**Develop contingency and continuity plans:** Create robust contingency plans to address potential disruptions in the supply chain. These plans should include alternative sourcing strategies, backup inventory management, and alternative transportation routes.

**Enhance communication and collaboration:** Establish effective communication channels both internally and externally to facilitate timely information sharing and collaboration. Foster open lines of communication with suppliers, customers, and other stakeholders to proactively address risks and mitigate their impact.

**Regularly review and update risk mitigation strategies:** Continuously monitor the effectiveness of risk mitigation strategies and adjust them as needed. Regularly evaluate the performance of risk management initiatives and learn from past experiences to improve future risk management efforts.

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## **Annexures**

**1. Name of the Employee:**

**2. Name of the Company:**

**3. Email ID:**

**4. Gender**

- a) Male
- b) female
- c) Prefer not to say

**5. Domicile**

- a) Rural
- b) Urban
- c) Semi urban

**6. Income**

- a) 0 to 3 lakhs
- b) 3 to 5 lakhs
- c) 5 to 10 lakhs
- d) 10 lakhs and above

**7. Age**

- a) 18- 21 year
- b) 22-30 year
- c) 31 -40 year
- d) 41- 50 year
- e) 50 year and above

**8. Are you aware of supply chain management Concept?**

- a) Yes
- b) No

**9. Does your company have a separate logistics department?**

- a) Yes
- b) No

**10. Does your company have a clear logistics strategic plan?**

- a) Yes
- b) No

**11. How is supply chain managing on your company?**

- a) Close Partnership with suppliers
- b) Out sourcing
- c) Many supplier
- d) Holding safety stock
- e) all of the above

**12. Does your Supply chain management department has sufficient transportation?**

- a) Strongly agree
- b) Agree
- c) neutral
- d) disagree
- e) strongly disagree

**13. How many suppliers do you have?**

- a) 0 to 10
- b) 10 to 20
- c) 20 to 40
- d) 40 to 50
- e) and 50 above

**14. How do you select and evaluate your suppliers?**

- a) Price
- b) availability
- c) discounts
- d) services
- e) all of the above

**15. Where the supply chain department is facing problem in taking care of the raw material?**

- a) During storage
- b) packaging
- c) testing of packing
- d) Evaluation of defective raw material
- e) all of the above

**16. What are the main supply chain risks your company faces?**

- a) Natural disasters
- b) Political instability
- c) Economic downturn
- d) Cyberattacks
- e) Supply chain disruptions
- f) Product recalls
- g) Labor strikes
- h) Regulatory changes
- i) Others

**17. How important do you consider the impact of these risks to be?**

- a) Very important
- b) Important
- c) Somewhat important
- d) Not important

**18. Does the company adopt double sourcing strategy?**

- a) Yes
- b) No
- c) May be

**19. How do you collaborate and communicate with your suppliers During a crisis or disruption?**

- a) Business WhatsApp
- b) Tele communication
- c) E-mails
- d) all of the above

**20. What are the main steps your company takes to mitigate supply chain risks?**

- a) Diversify suppliers
- b) Build up inventory
- c) Use risk management software
- d) Have a disaster recovery plan
- e) Other

**21. Do you use any technology or software to manage your supply chain risk?**

- a) Yes
- b) No

**22. How effective do you think your company's supply chain risk management is?**

- a) Very effective
- b) Effective
- c) Somewhat effective
- d) Not effective

**23. What are the main opportunities for improving your company's supply chain risk management?**

- a) Increased investment in risk management
- b) Increased training for employees
- c) Improved cooperation with suppliers
- d) Others

**23. How was the success/failure of supply chain management initiatives measured?**

- a) financial metrics
- b) Customer satisfaction metrics
- c) Operational metrics
- d) Risk metrics
- e) Innovation metrics

**24. Do you provide the training to your employees on supply chain risk management?**

- a) Yes
- b) No
- c) May be

**25. Do you have a communication plan to inform your customers about supply chain issues?**

- a) Yes
- b) No

**26. What are the main challenges you face in managing supply chain risks?**

- a) Identifying and assessing risks
- b) Mitigating risks
- c) Communicating risks
- d) Monitoring risks
- e) Responding to risks
- f) Others

**27. What are the main benefits of managing supply chain risks?**

- a) Reduced costs
- b) Improved customer service
- c) Increased agility
- d) Reduced risk
- e) Increased innovation
- f) Others

**28. What are your recommendations for improving supply chain risk management in your organization?**

- a) Increased investment in supply chain risk management
- b) Clearer communication of supply chain risks
- c) Improved collaboration between departments
- d) More robust risk management framework
- e) More proactive approach to risk management



**29. What are your thoughts on the future of supply chain risk management?**

- a) Supply chain risks will become increasingly complex
- b) The need for supply chain risk management will become more important
- c) Supply chain risk management will become more integrated with other business functions
- d) Supply chain risk management will become more proactive
- e) Others

**30. Rate the working strategies of supply chain management department on the basis of the current program?**

- a) Outstanding
- b) Excellent
- c) Good
- d) Average

**31. Do you monitor the performance and reliability of your suppliers?**

- a) More frequently
- b) frequently
- c) neutral
- d) rarely
- e) occasionally

**32. How do you rate the delivery activity of the department?**

- a) Highly satisfied
- b) Satisfied
- c) neutral
- d) Dissatisfied
- e) Highly Dissatisfied
- f) Total

**33. How critical is the supply chain to your overall business strategy?**

- a) Highly critical
- b) critical
- c) moderate
- d) less critical
- e) not at all critical


**34. How successful do you think is your company in managing its supply chain in general?**

- a) Not successful at all
- b) successful
- c) somewhat manageable
- d) Very successful

**Surana College (Autonomous)**  
**Department of MBA & Research Centre**  
**Progress report- I**

Sl. No	Particulars	
1	Name of the student	Sagara K
2	Registration No	P03ME21M0033
3	Name of the Guide	Dr Lasya K R
4	Title of the project	"Risk evaluation and management involved in supply chain"
5	Progress Report	Finalizing topic and framing the objective. 1) Met the project guide and reviewed the project title and objective 2) Submission of the synopsis document.

Date: 07/06/2023

  
Signature of the Candidate

  
Signature of the Guide

**Surana College (AUTONOMOUS)**  
**Department of MBA & Research Centre**  
**Progress report- II**

Sl. No	Particulars	
1	Name of the student	Sagara K
2	Registration No	P03ME21M0033
3	Name of the Guide	Dr Lasya K R
4	Title of the project	"Risk evaluation and management involved in supply chain"
5	Progress Report	<ul style="list-style-type: none"><li>- Research methodology &amp; Designing the Questionnaire</li><li>- Completed the review of draft questionnaire.</li></ul>

Date: 14/06/2023


  
Signature of the Candidate

  
Signature of the Guide

**Surana College (Autonomous)**  
**Department of MBA & Research Centre**  
**Progress report- III**

Sl. No	Particulars	
1	Name of the student	Sagara K
2	Registration No	P03ME21M0033
3	Name of the Guide	Dr Lasya K R
4	Title of the project	"Risk evaluation and management involved in supply chain"
5	Progress Report	Data collection 1) Collected supporting literature for project 2) Completed collection of primary data

Date: 24/06/2023

  
Signature of the Candidate

  
Signature of the Guide

**Surana College (Autonomous)**  
**Department of MBA & Research Centre**  
**Progress report- IV**

Sl. No	Particulars	
1	Name of the student	Sagara K
2	Registration No	P03ME21M0033
3	Name of the Guide	Dr Lasya K R
4	Title of the project	"Risk evaluation and management involved in supply chain"
5	Progress Report	- Completed the Data Analysis and Interpretation. - Final report preparation.

Date: 29/06/2023

  
Signature of the Candidate

  
Signature of the Guide



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