
SYNOPSIS

**Dissertation Topic:
Risk Management in Supply Chain**

Guided By:

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1. **Title:** Risk Management in Supply Chain.
2. **Abstract:** In today's globally interconnected business environment, smooth supply chain operations are critical for business success. However, these complex networks are inherently vulnerable to a wide range of disruptions. Supply chain risk management (SCRM) emerges as a strategic approach to proactively identify, assess, and mitigate these potential risks, ensuring business continuity and a competitive edge.
3. **Introduction:** In the complex landscape of healthcare, effective supply chain management is crucial for ensuring the availability of essential resources and mitigating potential risks. This study explores the significance of risk management within hospital supply chains, highlighting its relevance, importance, and practical applicability. With the intricate network of suppliers, distributors, and internal processes involved, understanding and managing risks is essential for

maintaining the uninterrupted flow of supplies critical for patient care. The purpose of this study is to delve into the various aspects of risk management in hospital supply chains, elucidating its importance in ensuring operational resilience and patient safety.

4. Research Questions:

How can effective SCRM practices enhance a company's resilience against disruptions within the supply chain?

5. Objectives:

- (i) Analyse the various types of risks inherent in modern supply chains.
- (ii) Evaluate existing SCRM frameworks and mitigation strategies.
- (iii) Investigate the impact of SCRM on business continuity and performance.

6. Literature Review:

- (i) The evolution of SCRM practices in response to globalization and technological advancements.
- (ii) Frameworks for risk identification, assessment, and mitigation within the supply chain.
- (iii) The effectiveness of various SCRM strategies in mitigating specific types of disruptions (e.g., natural disasters, political instability).

7. Research Methodology:

- (i) **Study Design:** Cross-sectional Study

This study aims to assess and mitigate risks in the supply chain of a hospital setting. It involves analyzing various potential risks such as supply shortages, logistics issues, and quality control failures, and implementing strategies to manage and minimize these risks to ensure smooth operations and patient care.

- (ii) **Study Population:** Hospital supply chain managers and staff involved in procurement, inventory management, and logistics.
 - **Inclusion Criteria:** Participants will be included based on their direct involvement in supply chain management within the hospital setting.
 - **Exclusion Criteria:** Participants will be excluded if they are not directly involved in supply chain management or if they are unwilling to participate.
 - **Study Tools:** The study will utilize interview schedules and questionnaires to gather data on risk management practices within the hospital supply chain.
- (iii) **DURATION OF STUDY:** 3 months.
- (iv) **Sample Size:** Risk management in hospital supply chains will involve determining the appropriate sample size for the study. This will depend on the specific research design, objectives, and methodology. If using quantitative methods, sample size formulas will be applied to ensure statistical validity.

(v) **Sample Technique:** This study aims to investigate the risk management strategies employed in the supply chain of hospitals. Specifically, it focuses on identifying potential risks and evaluating the effectiveness of risk mitigation measures. The study will employ a convenience sampling technique, selecting participants based on their accessibility and willingness to participate. Data will be collected through surveys and interviews with key stakeholders involved in hospital supply chain management. The findings will contribute to enhancing risk management practices in hospital supply chains, thereby improving overall operational efficiency and patient care quality.

(vi) **Data Collection Procedure:**

- (a) Conduct interviews with hospital staff involved in supply chain management to understand current risk management practices.
- (b) Administer surveys to gather quantitative data on risk perception and management strategies.
- (c) Analyze hospital records and reports to assess past incidents and their impact on the supply chain.
- (d) Utilize observational methods to observe supply chain processes in real-time and identify potential risks.
- (e) Employ data mining techniques on relevant databases to extract insights on supply chain performance and risk factors.

(vii) **Operational Definitions:**

- **Exposure variable:** Supply chain disruptions; Frequency and severity of disruptions in the procurement and distribution of medical supplies, including delays, shortages, quality issues, and transportation problems.
- **Outcome variable:** Operational efficiency and patient care; Metrics such as inventory turnover, stockouts, on-time delivery, resource utilization, patient wait times, and clinical outcomes (e.g., infection rates, readmission rates).

8. **Data Analysis Plan:** This study aims to analyze risk management in the supply chain of a hospital. Using SPSS, descriptive statistics will be conducted to analyze variables such as inventory levels, supplier performance, and demand variability. Bivariate analysis, including correlation tests, will be employed to explore relationships between variables. Additionally, multivariate analysis, such as regression analysis, will be utilized to identify significant factors impacting supply chain risks. A significance level of $\alpha = 0.05$ will be applied throughout the analysis.

9. **Ethical Consideration:** Implementing risk management in hospital supply chains involves ensuring ethical considerations, such as obtaining informed consent from all study participants. Additionally, measures must be outlined to ensure data security, privacy, and confidentiality throughout the process.

10. **Implications of Research:** This research explores risk management in hospital supply chains, aiming to enhance resilience and efficiency. The implications lie in bolstering patient care by

ensuring timely access to critical supplies while optimizing resource utilization, ultimately benefiting both the population through improved healthcare outcomes and the industry through cost savings and operational effectiveness.

11. REFERENCES:

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