

Risk Management in Supply Chain (KD Hospital)

Organization- KD Hospital

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About Hospital

KD Hospital (Kusum Dhirajlal Hospital) is a multi/super speciality hospital located at the prime location of Vaishnodevi Circle, SG Road, Ahmedabad; with state-of-the-art facilities & treatments at an affordable cost, encompassing wide spectrum of accurate diagnostics and elegant therapeutics created on the philosophical edifice of patient and ethical centrality ensuring humanistic dispensation.

Under the aegis of Shri Harihar Maharaj Charitable Trust, KD Hospital is spread over a massive 6 acre campus providing 300+ beds and catering for nearly 45 super-specialties, all under one roof. A multispeciality approach enables each speciality to have the comfort of collaborating on complex cases thereby ensuring a comprehensive assessment/ treatment of the patient. Patients are provided with multiple options for treatment, the most suitable of which are arrived at through a collaborative case assessment approach that decides the best course of treatment for the best outcomes.



Study 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.

Methodology

- **Study Area** – KD Hospital
- **Sample Size** – 100
- **Inclusion** – Database, Staffs of inventory and supply chain management.
- **Exclusion** – Incomplete information regarding risk factors.
- **Data Collection** – Primary and Secondary Data Collection.
- **Data Analysis Plan** – The collected data was analyzed by using MS-Excel.
- **Research Questions** - How can effective SCRM practices enhance a company's resilience against disruptions within the supply chain?

Methodology

- **Procedures-**

- a) A total of 100 Items were taken as as Sample and after verifying consumption reports, Required, Not Required and Adequate or In-adequate stock was determined.
- b) VED Item wise Labelling and 3 months consumption reports.
- c) VED-FSN Analysis of Data
- d) Whether Stock is Required, Not Required or Insufficient.

Literature Review

Sl. No.	Title	Author	Features
I.	Promising research fields in supply chain risk management and supply chain resilience and the gaps concerning human factors	Pedro Senna, Augusto da Cunha Reis, Alexandre Castro, Ana Claudia Dias	This study was happened with the goal of conducting research to identify the human factors that impact to supply chain management and the systematic review and meta-analysis method were applied for this study. Mainly this study was included with minimum bias and at end of the study, it was discovered that human related risk and resilience factors were responsible for risk in supply chain management.

Literature Review

Sl. No.	Title	Author	Features
2.	Healthcare supply chain risk management in Rio de Janeiro, Brazil: What is the current situation?	Pedro Senna, Augusto da Cunha Reis, Igor Leão Santos, Ana Claudia Dias	The main goal of this research study was to investigate the supply chain risk management which is being applied in healthcare sector in Brazil. The four methods were followed for this research which were research design, case selection, data collection and data analysis with appropriate results. The result was discovered like the managers had empirical knowledge of risk and they could easily detect the hazardous risks but they did not have authority or proper manpower to implement the solutions which might be solved the risks related to supply chain.

Data Analysis

- A total of 100 Items were taken as as Sample and after verifying consumption reports, Required, Not Required and Adequate or In-adequate stock was determined.

Category	Fast	Slow	Non-Moving	Total
Vital	26	5	13	44
Essential	27	7	12	46
Desirable	10	0	0	10
Total	63	12	25	100

Results & Findings

- All the above tables and figures, finally conclude to results that:
 - ❑ Around 25 line of items shows no consumption pattern and hence shows no movement, thus stock is not required.
 - ❑ Around 12 line of items, shows Slow Movement, where consumption pattern is slow and can be ordered depending upon the requirement, needed sometimes.
 - ❑ Around 63 line of items shows Fast Movement, which might be in regular use but with the help of VED-FSN Matrix, which items are of most requirement can be mapped out and their stock can be kept in hold for some more days in the inventory and rest can be returned to vendor and can be ordered when required.
 - ❑ This results and discussion can be applied to inventory for Optimization of Inventory

Recommendations

❑ Non-Moving Items:

- i. 25 line items show no consumption pattern, indicating no movement.
- ii. Action: These items are identified as unnecessary for stock. Removing them from inventory can reduce holding costs and free up storage space.

❑ Slow-Moving Items:

- i. 12 line items display slow movement patterns.
- ii. Action: These items can be ordered based on specific requirements rather than being stocked continuously. This approach reduces excess inventory and minimizes holding costs.

Recommendations

❑ Fast-Moving Items:

- i. 63 line items are identified as fast-moving, regularly used in hospital operations.
- ii. Action: Through the VED-FSN matrix, the most critical items among these can be pinpointed. Critical items should be kept in sufficient stock to avoid shortages. Non-critical fast-moving items can be returned to the vendor and reordered as needed, reducing unnecessary inventory holding.

Conclusion

The findings from this study confirm that the strategic use of VED and FSN analysis in inventory management can lead to significant improvements in stock optimization. By focusing on critical items and adjusting stock levels based on movement patterns, the hospital can achieve a balance between cost efficiency and operational readiness. This approach can serve as a model for other healthcare facilities aiming to optimize their inventory management practices and ensure high-quality patient care.

Thank You