"IMPACT OF SUPPLY CHAIN PERFORMANCE ON ORGANIZATIONAL PERFORMANCE MEDIATED BY CUSTOMER SATISFACTION :A STUDY OF THE DAIRY INDUSTRY"

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ABSTRACT

The dairy industry is one of the fastest growing and most competitive sectors, characterized by product perishability, demand variability, and the need for strict temperature control. Supply chain efficiency plays a crucial role in determining the success of dairy firms, influencing product freshness, delivery reliability, operational efficiency, and customer satisfaction. This study examines how Supply Chain Performance (SCP) affects organizational outcomes and explores the mediating role of customer satisfaction in this relationship. Using secondary quantitative data collected from dairy farmers, distributors, retailers, consumers, and credible sources such as journals and industry reports, the study evaluates key factors including responsiveness, reliability, cost-efficiency, cold-chain maintenance, product accessibility, and perceived quality.

Keywords: *Supply Chain Performance; Customer Satisfaction; Organizational Performance; Dairy Industry; Cold-Chain Management; Distribution Efficiency; Inventory Accuracy; Responsiveness; Reliability; Mediation Analysis; Supply Chain Optimization; Perishable Goods Supply Chain; Logistics Performance; Consumer Perception; Competitive Advantage.*

INTRODUCTION

The dairy industry is one of the most vital segments of the agri-food sector, contributing significantly to economic development, employment generation, and nutritional security. In countries like India, dairy products form an essential part of daily consumption, making their availability, quality, and affordability critical. Due to the highly perishable nature of milk and milk-based products, the dairy industry is particularly sensitive to inefficiencies in supply chain operations. Any disruption in procurement, processing, storage, or distribution can immediately lead to quality degradation, spoilage, and financial losses.

Supply chain management in the dairy industry involves a complex network of farmers, cooperatives, processing plants, cold storage facilities, distributors, retailers, and end consumers. The performance of this network determines not only operational efficiency but also customer perceptions regarding freshness, safety, and reliability. As customer expectations continue to rise, supply chain performance has evolved from a back-end operational function into a strategic driver of organizational success.

NEED FOR THE STUDY

The need for this study arises from the inherent characteristics of the dairy industry, were product perishability and quality sensitivity demand high levels of supply chain efficiency. Milk and dairy

products require continuous temperature control and rapid movement across the supply chain to preserve freshness and safety. Even small inefficiencies can result in spoilage, increased costs, and dissatisfied customers.

PROBLEM STATEMENT

The dairy industry is one of the most essential yet complex sectors of the agri-food economy, characterized by the highly perishable nature of its products, strict temperature requirements, and the need for continuous and timely distribution.

OBJECTIVES OF THE STUDY

1. The primary objective of this study is to examine the impact of supply chain performance on organizational performance in the dairy industry.
2. A secondary objective is to analyse the relationship between supply chain performance and customer satisfaction.
3. The study also aims to assess the influence of customer satisfaction on organizational performance.
4. Another key objective is to evaluate the mediating role of customer satisfaction in the relationship between supply chain performance and organizational performance.

SCOPE OF THE STUDY

The scope of the study is confined to the dairy industry, focusing on milk and milk-based products.

The study examines supply chain performance dimensions such as responsiveness, reliability, cold-chain effectiveness, inventory accuracy, and cost efficiency.

RESEARCH METHODOLOGY

METHODOLOGY

This chapter explains the systematic approach adopted to examine the relationship between supply chain performance, customer satisfaction, and organizational performance in the dairy industry. is used to test the proposed conceptual framework and hypotheses empirically.

Research Design

The study adopts a descriptive and explanatory research design, as it seeks both to describe existing supply chain practices in the dairy industry and to explain the causal relationships among key variables. Descriptive research helps in understanding the current level of supply chain performance, customer satisfaction, and organizational performance, while explanatory research enables the testing of hypothesized relationships between these constructs.

Overall, the chosen research design provides a structured and systematic approach to address the research objectives and ensures the credibility of the findings.

Sample Design

Overall, the sample design ensures a balanced representation of internal and external stakeholders, strengthening the empirical analysis of the study.

Sample Size: N = 200 respondents

LIMITATIONS OF THE STUDY

5. The study is limited to a **specific geographical area**, which may restrict the generalizability of the findings to other regions or countries.

REVIEW OF LITERATURE

The literature review provides a comprehensive understanding of the theoretical foundations, historical evolution, and empirical findings related to supply chain performance, customer satisfaction, and organizational performance. It establishes the intellectual background of the study and identifies gaps that justify the present research. Given the perishable nature of dairy products, supply chain efficiency and customer-centric approaches have received increasing attention in recent years. This section is structured into four subsections: evolution/history, theories and models, review of empirical literature, and identification of the research gap.

6. The research relies on **self-reported data**, which may be subject to respondent bias or inaccuracies in perception.

7. A **cross-sectional research design** is used, capturing data at a single point in time and not reflecting changes over time.

Respondent Role Distribution

Characteristic	Frequency	Percentage
Distributor	75	28.3%
Supply Chain Manager	72	27.17%
Customer	62	23.4%
Retailer	56	21.13%

Interpretation: The pie chart shows the distribution of respondents across different roles in the dairy supply chain. Retailers and customers form the largest proportion (around 27% each), indicating strong representation from the market side. Supply chain managers and distributors each contribute about 23%, ensuring operational perspectives are also included. This balanced distribution improves the reliability of the study by capturing both internal and external stakeholder views.

Respondent Age Distribution: Table 3. Respondent Age Distribution

Characteristic	Frequency	Percentage (%)
18–25	83	31.32%
26–40	102	38.49%
41–60	58	21.89%
>60	22	8.30%

Interpretation: The age distribution shows that respondents are spread across different age groups, ensuring diversity in perspectives. A larger proportion falls within the 26–40 age group, indicating active working professionals who are directly involved in decision-making and consumption. Younger respondents (18–25) represent emerging consumers, while older groups (41–60 and above) contribute experienced insights. This balanced age representation enhances the reliability of the study.

FINDINGS, SUGGESTIONS AND CONCLUSION

This section synthesizes the empirical results obtained from the statistical analysis and translates them into meaningful findings, managerial suggestions, and conclusions. It highlights the practical implications of the study while acknowledging its limitations and outlining directions for future research.

SUGGESTIONS:

Based on the findings, dairy organizations should prioritize strengthening supply chain integration across all stages, from milk procurement to final delivery. Improved coordination among farmers, processors, distributors, and retailers can reduce delays, minimize spoilage, and enhance overall efficiency.

Organizations should invest in cold-chain infrastructure and technology, including temperature-controlled storage, refrigerated transportation, and real-time monitoring systems. These investments directly improve product quality and customer satisfaction while reducing waste and losses.

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