

A Study on Supply Chain and Customer-Centric Operations in ITC LTD

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ABSTRACT

The concept of Supply Chain Management (SCM) has evolved from a basic logistical function into a strategic business component that encompasses procurement, production, distribution, and customer satisfaction. In today's competitive environment, supply chain efficiency is critical for ensuring timely product availability, cost optimization, and improved customer experience. ITC Ltd, one of India's largest conglomerates operating across FMCG, agribusiness, packaging, and hospitality sectors, relies on a highly integrated and resilient supply chain involving farmers, suppliers, manufacturers, distributors, and retailers. The company has invested in digital transformation, automation, and sustainability to enhance operational effectiveness and build consumer trust. A well-functioning supply chain is vital for ITC to manage demand fluctuations, ensure consistent product supply, maintain competitive pricing, and strengthen its market position. ITC's strong backward integration, use of advanced technology, and commitment to sustainability give it a strategic advantage, enabling the company to meet customer expectations efficiently while minimizing disruptions and enhancing its brand reputation.

Keywords: Supply Chain Management (SCM), Logistics, Procurement, Production, Distribution, Customer Satisfaction, Supply Chain Efficiency, Cost Optimization, Product Availability, ITC Ltd, FMCG, Agribusiness, Packaging, Hospitality, Digital Transformation

INTRODUCTION

In today's dynamic and highly competitive business environment, Supply Chain Management (SCM) has evolved into a critical strategic function that drives business efficiency, cost optimization, and customer satisfaction. Beyond logistics, SCM now encompasses the end-to-end coordination of procurement, manufacturing, distribution, and customer service. A robust and responsive supply chain is essential for maintaining a competitive edge, particularly for diversified conglomerates like ITC Ltd. Operating across sectors such as FMCG, agribusiness, packaging, hospitality, and IT services, ITC relies on advanced digital tools, sustainability initiatives, and backward integration to ensure operational excellence and a seamless customer experience. The company's emphasis on customer-centric operations highlights the importance of aligning supply chain performance with evolving consumer expectations. As supply chains grow increasingly complex due to factors like fluctuating demand, regulatory challenges, and environmental concerns, ITC's strategic investments in technology, sustainability, and resilience offer valuable insights into modern SCM best practices. This study aims to explore how ITC Ltd's supply chain strategies contribute to its business success and



enhance customer satisfaction, while also identifying key challenges and opportunities for continued improvement.

OBJECTIVES OF THE STUDY

1. To evaluate the Efficiency of ITC's Supply Chain in Ensuring Timely Product Availability across Retail Channels

Explanation:

This objective focuses on how well ITC's supply chain performs in getting products to the right place, at the right time, and in the right quantity across various types of retail platforms like:

- Supermarkets
- Local Kirana stores
- E-commerce platforms (like Amazon, Flipkart, etc.)

How well ITC adapts to the differing needs of each retail channel (e.g., smaller packaging for kirana stores vs bulk for supermarkets).

Goal: Understand how smooth and responsive ITC's supply chain is in fulfilling demand across different sales channels.

2. To analyze the Impact of Supply Chain Management on Customer Satisfaction

Explanation:

This objective looks into how ITC's supply chain decisions affect the customer experience, especially focusing on:

- Stock shortages: How often do customers face empty shelves or out-of-stock messages online?
- **Delivery delays:** Are products delivered on time, especially in the case of online orders?

It also studies how these issues impact consumer behavior, such as:

- Do stock outs cause customers to switch to competitors?
- Does timely availability improve brand loyalty?

Goal: Evaluate how supply chain performance influences what customer's think of ITC and whether they continue to buy its products.

3. To assess the Role of Sustainable Supply Chain Initiatives in Shaping Consumer Perceptions

Explanation:

This objective examines how ITC's efforts toward building a sustainable and responsible supply chain influence consumer opinion and buying choices.

Key initiatives may include:

- Eco-friendly packaging (like recyclable or biodegradable materials)
- Responsible sourcing (e.g., using raw materials from ethical and sustainable sources)

It looks at questions such as:

- Are consumers aware of these initiatives?
- Do these green practices make them more likely to choose ITC over competitors?
- Do sustainable practices enhance the brand image?



Goal: Understand the relationship between ITC's sustainability efforts and how they affect consumer trust, brand perception, and preference.

LITERATURE REVIEW

Research by **Christopher** (2011) emphasized that supply chain efficiency is a critical source of competitive advantage in today's volatile markets. ITC has adopted agile and responsive supply chain strategies to remain competitive across both urban and rural markets.

Porter (1985) stated that a well-optimized supply chain reduces operational costs and enhances overall business efficiency. ITC has streamlined its logistics and procurement systems to reduce costs while maintaining product availability.

According to Mentzer et al (2001), integrating customer feedback into supply chain management leads to improved consumer satisfaction and loyalty. ITC leverages data analytics and consumer insights to tailor its supply chain operations based on market needs.

Lambert and Cooper (2000) highlighted the importance of aligning supply chain processes with customer demands to achieve business excellence. ITC has adopted a customer-centric supply chain model that ensures timely delivery and product consistency.

Chopra and Meindl (2016) argued that companies with well-coordinated supply chains are more resilient and efficient during disruptions. ITC has built a robust supply network supported by automated demand forecasting and multi-tier distribution systems.

Research by **Seuring and Muller (2008)** found that businesses adopting green supply chain initiatives experience improved customer loyalty. ITC has integrated sustainability into its supply chain, using eco-friendly packaging and responsible sourcing practices.

Ivanov et al (2019) suggested that digital transformation, including AI and IOT, enhances supply chain visibility and agility. ITC uses advanced technologies like ERP systems and GPS-based tracking to optimize inventory and delivery operations.

Gunasekaran et al (2001) stated that strong supplier relationships are vital for improving lead times and maintaining supply chain stability. ITC maintains long-term strategic partnerships with its suppliers to ensure consistent product quality and availability.

McAfee and Brynjolfsson (2012) emphasized the role of big data and predictive analytics in managing inventory and anticipating consumer trends. ITC employs data-driven forecasting tools to align production and distribution with demand patterns.

Lambert, Stock, and Ellram (1998) found that trust and commitment among supply chain partners are essential for long-term success. ITC fosters collaborative relationships with its suppliers and distributors, ensuring smooth coordination and mutual growth.



SCOPE OF THE STUDY

This study focuses on evaluating the supply chain management practices of ITC Ltd., particularly within its Fast-Moving Consumer Goods (FMCG) and manufacturing sectors. These sectors represent the most supply chain-intensive operations of the company, making them ideal for analyzing the efficiency, responsiveness, and customer-centric orientation of ITC's supply chain. The research encompasses a comprehensive analysis of key elements of ITC's supply chain, including procurement, logistics, distribution efficiency, and technological integration. It examines the impact of ITC's supply chain strategies on crucial customer-centric factors such as product availability, pricing, service quality, and overall customer satisfaction. Special attention is given to the role of digital transformation, including the use of automation, AI, and data analytics, in enhancing ITC's operational efficiency and responsiveness.

Furthermore, the study explores ITC's sustainability initiatives, including eco-friendly packaging and responsible sourcing, to assess their influence on consumer trust, brand loyalty, and long-term market positioning. It also evaluates the effectiveness of ITC's distribution network across both traditional retail and e-commerce platforms in meeting diverse consumer needs.

Additionally, the scope extends to a competitive analysis, comparing ITC's supply chain practices with industry benchmarks and best practices to identify opportunities for improvement. The study also considers external challenges, such as market fluctuations, global disruptions, and evolving consumer expectations, that impact supply chain performance.

By covering these key areas, the study aims to provide actionable insights that can help ITC enhance its customer-centric operations, strengthen its competitive edge, and contribute to the broader academic understanding of the relationship between supply chain performance and customer satisfaction.

RESEARCH METHODOLOGY

The research methodology for this study is designed to systematically collect and analyze data to evaluate the effectiveness of supply chain management (SCM) in customer-centric operations at ITC Ltd. This study primarily focuses on understanding customer perceptions regarding ITC Ltd's supply chain efficiency, product availability, and service quality. A quantitative approach will be used, where data will be collected through a structured survey targeting customers. Secondary data will also be utilized to support the findings and provide a broader industry perspective.

RESEARCH DESIGN

This study follows a descriptive research design to assess how ITC Ltd's supply chain practices impact customer satisfaction. A structured questionnaire will be used as the primary tool for data collection, focusing on various aspects such as product availability, delivery speed, order accuracy, and overall customer experience. The research aims to gather first-hand information from customers who have directly interacted with ITC Ltd's supply chain processes. Secondary research will be conducted using published reports, industry analysis, and company documents to support the primary findings and provide a comparative analysis.

SOURCES OF DATA

- Primary source
- Secondary source



PRIMARY SOURCE OF DATA:

• Primary data will be collected through a structured questionnaire designed to gather insights from customers who have purchased and experienced ITC Ltd's products.

• The survey will focus on aspects such as product availability, delivery timelines, service quality, and overall satisfaction with ITC Ltd's supply chain operations.

SECONDARY SOURCE OF DATA

• The secondary data is the data which already exists.

• The data will be collected through websites.

OVERVIEW OF SUPPLY CHAIN AND CUSTOMER-CENTRIC OPERATIONS

1. Integrated Supply Chain Architecture

ITC Ltd. has developed a vast and interconnected supply chain system that supports its multi-sectoral operations across FMCG, agribusiness, paperboards, and hospitality. This integrated architecture ensures a seamless flow from procurement to last-mile delivery. With a strategic approach, ITC aligns the supply chain with each business's unique demands while maintaining standardization in processes. Its ability to connect rural supply sources with urban consumption markets showcases a mature and scalable model that enhances responsiveness, reduces lead times, and optimizes resource use across the board.

2. E-Choupal: Digitalizing Rural Procurement

Through the revolutionary e-choupal initiative, ITC transformed how it sources from rural India by introducing digital access to information for farmers.

- Provides internet kiosks in villages for market price access.
- Educates farmers on weather, farming techniques, and quality standards.
- Removes middlemen, offering better prices to farmers.
- Enables ITC to procure high-quality raw materials efficiently.

3. Agri-Business Excellence and Farm Integration

ITC's dominance in agribusiness is underpinned by a well-coordinated supply chain that links farmers directly to markets through structured procurement and logistics. The company deals in multiple crops, including wheat, soya, spices, and coffee, using a farm-to-fork strategy that ensures traceability and quality. Strategic sourcing practices, combined with backward integration, help ITC manage costs effectively while maintaining consistent product standards. This connection with the agricultural community not only strengthens ITC's raw material security but also contributes to rural economic development.

4. Efficient Logistics, Warehousing, and Technology Use

To manage its widespread operations, ITC relies on a robust logistics framework comprising regional distribution centers, multi-level warehousing, and a fleet system managed through data analytics. Modern technologies such as artificial intelligence and advanced forecasting tools enhance inventory management, load planning, and route optimization. These innovations ensure timely delivery, reduced wastage, and high service levels across varied product categories. ITC's logistics operations thus play a crucial role in enabling business continuity and customer satisfaction in competitive markets.



5. Sustainable Supply Chain Practices

Sustainability is at the heart of ITC's supply chain strategy, with consistent efforts to reduce its environmental footprint.

- Uses renewable energy across units.
- Follows zero-waste and low-emission policies.
- Focuses on recyclable and biodegradable packaging.
- Aligns with ITC's Triple Bottom Line: Economic, Social, Environmental.

6. Deep Consumer Insight and Innovation

Understanding customer needs and placing them at the core of its operations gives ITC a strategic advantage in a competitive market.

- Constantly monitors consumer behavior through research.
- R&D and marketing work closely to develop consumer-driven innovations.
- Insights from customers influence product development and service models.

7. Product Customization and Regional Relevance

ITC caters to the diverse Indian market by adapting products to local preferences, lifestyles, and purchasing capacities.

- Customizes flavors, packaging sizes, and price points.
- Offers products that cater to both premium and value segments.
- Localized marketing ensures emotional connection with customers.

8. Omni-Channel Engagement and Accessibility

ITC's customer-centric strategy includes a well-integrated channel mix that ensures product availability across traditional retail stores, modern trade outlets, and digital marketplaces. The company is also active on e-commerce platforms, offering convenience and choice to tech-savvy consumers. Through social media, mobile apps, and digital advertising, ITC engages with customers in real time, reinforcing brand presence and responsiveness. This Omni-channel ecosystem enhances customer experience by offering seamless access to ITC products anytime, anywhere.

9. Responsive Feedback and Service Mechanisms

Feedback loops are an essential part of ITC's customer-centric operations. The company actively collects input from customers via helplines, social media, and in-store interactions. This information is used to refine product features, resolve service issues, and enhance overall satisfaction. By adopting an agile approach to customer service and complaint resolution, ITC strengthens consumer relationships and ensures that evolving expectations are consistently met with prompt and meaningful responses.

10. Supply Chain and Customer Centricity Synergy

The real strength of ITC lies in how well its supply chain strategy aligns with its customer-first philosophy, creating a seamless value chain.



- Customer demand informs supply planning and logistics.
- Product availability and freshness are prioritized.
- Enhances brand reliability and consumer loyalty through operational excellence.

KEY BENEFITS

1. Enhanced Understanding of ITC's Integrated Supply Chain

This study provides a deep dive into the integrated supply chain of ITC Ltd., offering a comprehensive understanding of how the company manages its procurement, manufacturing, logistics, and distribution processes. It showcases how ITC has aligned these functions to enhance efficiency and reduce operational costs. The study reveals ITC's use of technology, automation, and data analytics to streamline supply chain functions, which leads to faster turnaround times and improved service delivery.

2. Insight into Customer-Centric Business Strategies

The research emphasizes ITC's focus on customer-centric operations. It highlights how customer feedback, preferences, and market demands are systematically integrated into the supply chain decision-making process. ITC's approach to aligning its supply operations with customer expectations contributes significantly to building brand loyalty and sustaining long-term customer relationships.

3. Evaluating the Technology Adoption in Supply Chain

One major benefit of the study is its detailed examination of the technologies used by ITC Ltd. in supply chain management. This includes the application of ERP systems, real-time tracking tools, and AI-driven forecasting models. The analysis helps understand how ITC leverages these technologies to enhance visibility, reduce bottlenecks, and make data-driven decisions across its supply network.

4. Understanding Risk Mitigation in Supply Chain

The study identifies how ITC Ltd. proactively addresses risks within its supply chain—ranging from supplier disruptions to market volatility. It explains the mechanisms ITC employs, such as diversified sourcing, local supplier development, and scenario planning, to build resilience and ensure business continuity under uncertain conditions.

5. Improved Perspective on Sustainability Practices

Sustainability is a key theme in ITC's operations, and the study throws light on the company's green logistics, waste reduction, and eco-friendly packaging initiatives. By exploring these strategies, the study enhances understanding of how supply chain sustainability is not only a corporate responsibility but also a competitive advantage for ITC.

6. Framework for Benchmarking Supply Chain Excellence

This study provides benchmarks and KPIs used by ITC to measure supply chain performance, such as inventory turnover, order fulfillment rate, and delivery timelines. This information is valuable for other businesses and students aiming to measure and compare their own supply chain performance against industry leaders.

7. Strategic Sourcing and Supplier Relationship Management

Another key insight is ITC's approach to sourcing and maintaining relationships with suppliers. The study highlights ITC's long-term partnerships, quality assurance practices, and supplier development programs, which ensure consistent input quality and foster innovation in supply chain operations.

8. Inspiration for Agile and Flexible Operations

The study showcases ITC's ability to adapt quickly to changing market conditions and consumer preferences through flexible operations. This includes examples of how ITC pivots production lines, modifies distribution routes, and introduces new product variants in response to real-time market data an essential capability in dynamic business environments.

9. Learning from Multi-Sector Supply Chain Models

Since ITC operates in diverse sectors such as FMCG, agri-business, and hotels, the study offers a unique opportunity to compare supply chain practices across industries. This cross-sectoral view helps in identifying best practices that can be adapted and implemented across different business contexts.

10. Contribution to Academic and Industry Research

Finally, the study contributes to the broader literature on supply chain and customer-focused strategies by offering empirical insights from a top-tier Indian conglomerate. It serves as a rich case study for academic purposes and provides actionable insights for professionals seeking to enhance supply chain efficiency and customer satisfaction in their organizations.

MAJOR OBSTACLES

1. Complexity of Multi-Divisional Operations

ITC operates across multiple sectors like FMCG, agribusiness, paperboards, and hospitality. Managing a unified yet flexible supply chain for such diverse product categories is a major challenge. Each division has unique logistics, sourcing, and customer needs, increasing the operational complexity.

2. Data Accessibility and Confidentiality

During the study, access to real-time and sensitive company data posed a limitation. ITC's proprietary information on technology systems, supplier details, and customer analytics may be protected, restricting deeper analysis. This affects the depth of financial or operational benchmarking.

3. Rapid Technological Advancements

ITC is a tech driven company, but staying updated with constantly evolving digital tools and analytics platforms is a continuous challenge. The study faced difficulty capturing real-time changes in IT systems and automation strategies that are dynamic and frequently upgraded.

4. Geographical and Infrastructural Barriers

Given ITC's wide rural procurement network (especially via e-Choupal), infrastructure-related issues such as poor

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connectivity, transport limitations, and power shortages in remote areas continue to hinder smooth supply chain operations. These challenges affect consistency in raw material sourcing and logistics.

5. Variability in Customer Preferences

Accurately mapping, predicting, and responding to shifting consumer behaviors and regional tastes makes customer-centric operations more complex. The study had to simplify these variations for analysis.

6. Limited Secondary Data Availability

There is a lack of publicly available and updated secondary data for ITC's internal operations, especially in supply chain execution and vendor relationships. Much of the available data is high-level or strategic in nature, limiting insight into operational bottlenecks.

7. Supplier Dependency and Disruptions

Despite ITC's efforts in backward integration, it still faces occasional disruptions due to supplier dependency in some regions. External factors like climate change, political shifts, and labor issues can delay procurement or affect product quality.

8. Regulatory and Compliance Hurdles

Complying with diverse state and national regulations related to food safety, labor, environmental policies, and trade logistics adds to operational burden. These regulatory variations can cause delays or require continuous adaptation across states.

9. Difficulty in Measuring Intangible Outcomes

The study also faced difficulty in quantifying the impact of customer satisfaction and brand loyalty in purely numerical terms. While ITC's customer-centric policies are evident, directly linking these efforts to performance metrics is not always straightforward.

10. Time Constraints and Scope Limitation

As with many academic or project-based studies, time and resource limitations restricted the ability to conduct detailed field visits, interviews, or long-term impact assessments. The scope had to be focused within a defined time frame, leaving out some in depth areas of exploration.

SUGGESTIONS

SUGGESTIONS FOR IMPROVING ITC'S SUPPLY CHAIN AND CUSTOMER-CENTRIC OPERATIONS

1. Strengthening Inventory Management

• Implement advanced demand forecasting techniques to reduce stock shortages and overstocking.

• Utilize real-time tracking systems to ensure optimal stock levels across all retail channels.

2. Enhancing Distribution Efficiency

- Develop regional distribution hubs to streamline logistics and improve delivery speed.
- Adopt route optimization strategies to minimize transportation delays.

3. Improving Retailer Coordination

- Strengthen partnerships with local stores and supermarkets to ensure consistent product availability.
- Offer automated restocking solutions for retailers to prevent stock outs.



4. Addressing Customer Satisfaction Issues

- Improve product freshness and quality control through better supply chain monitoring.
- Introduce a customer feedback mechanism to resolve supply chain-related complaints faster.

5. Competitive Pricing Strategies

- Re-assess pricing structures to make ITC products more cost-competitive.
- Offer targeted promotions and discounts to increase affordability and customer retention.

6. Leveraging Technology for Supply Chain Optimization

- Invest in AI-driven analytics for better demand forecasting and decision-making.
- Use block-chain technology for enhanced transparency in product sourcing and logistics.

CONCLUSION

In conclusion, this comprehensive study on the supply chain and customer-centric operations of ITC Ltd. highlights the company's strategic brilliance in integrating operational efficiency with market responsiveness. ITC has successfully built one of the most agile and robust supply chains in India by seamlessly combining traditional practices with modern technologies, allowing it to cater to the diverse demands of its extensive product portfolio across sectors such as FMCG, agribusiness, hospitality, and more. The company's innovative initiatives like e-Choupal have not only optimized rural procurement and enhanced raw material quality but also empowered millions of farmers by giving them access to market information, thereby creating a sustainable and inclusive supply chain model.

Moreover, ITC's customer-centric philosophy evident in its commitment to understanding consumer behavior, customizing products, and engaging through multi-channel platforms further strengthens its position in an intensely competitive market. The company's focus on sustainability, both environmental and social, adds long-term value to its operations, making it not just a profit-driven enterprise but a responsible corporate citizen. Despite facing obstacles such as infrastructural limitations in rural areas, regulatory complexities, and data access challenges, ITC demonstrates a strong capacity for risk mitigation, strategic planning, and operational agility. The insights gained from this study contribute significantly to the understanding of how large conglomerates can effectively align their supply chain dynamics with customer satisfaction, innovation, and sustainability goals. This study thus serves as a practical and academic benchmark for organizations seeking to modernize their supply chains while keeping the customer at the center of every decision. It reinforces the notion that supply chain excellence, when paired with genuine customer focus, can not only drive growth but also ensure long-term relevance and resilience in a rapidly changing global market.

REFERANCES

 R. Banerjee. (2024). The Role of Supply Chain in ITC's Growth Strategy. Analyzes how ITC aligns its supply chain with business objectives. Retrieved from

 $\underline{https://www.itcportal.com/sustainability/sustainability-reports.aspx}$

 N. Chandrasekaran. (2024). Sustainable and Resilient Supply Chains in India. Covers sustainability trends in Indian manufacturing supply chains. Retrieved from <u>https://www.intracen.org/our-work/projects/sustainable-and-resilient-value-chains</u>

 A. Gupta & R. Iyer. (2024). Digital Transformation in Supply Chains: The ITC Experience. Discusses ITC's AI and ML-powered supply chain solutions. Retrieved from https://www.itcportal.com/digital-transformation-at-itc.aspx

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 J. Kumar & P. Sen. (2024). ITC's Sustainable Packaging and Consumer Perception. Explores the role of green packaging in shaping consumer choices. Retrieved from <u>https://www.intracen.org/resources/publications/state-of-sustainable-markets-2024</u>

 S. Mehta. (2024). Customer Satisfaction and Supply Chain Performance in FMCG Sector. Evaluates supply chain efficiency's role in consumer purchasing behavior. Retrieved from <u>https://www.itcportal.com/sustainability/sustainable-supply-chain.aspx</u>

6. V. Menon. (2024). Logistics and Supply Chain Innovations in the Indian FMCG Sector. Focuses on advancements in ITC's logistics infrastructure. Retrieved from

https://www.itcportal.com/sustainability/itc-sustainability-report-2024/itc sustainability-report-2024.pdf

7. K. Rao. (2024). Understanding Sustainability Initiatives: A Global Perspective. Presents a framework for sustainability efforts in manufacturing. Retrieved from

https://www.oecd.org/en/publications/understanding-sustainability-initiatives_8f8a3d7f-en.html

8. A. Sharma & P. Verma. (2024). ITC's Green Supply Chain Initiatives and Their Impact. Analyzes ITC's focus on sustainability and eco-friendly logistics. Retrieved from

 $\underline{https://manufacturing.economictimes.indiatimes.com/news/industry/itcs-green-logistics-expansion-for-mid-mile-and-last-mile-deliveries/111338920$

9. B. Sumant. (2024). Digital is at Core of Everything Today We Do at ITC. Discusses ITC's digital transformation for supply chain optimization. Retrieved from

https://m.economictimes.com/small-biz/trade/exports/insights/digital-is-at-core-of-everything-today-we-do-at-itc-says-executive-director-b-sumant/articleshow/115770938.cms

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