



**MEASI INSTITUTE OF MANAGEMENT
CHENNAI – 600 014.**

PRINCIPLES AND PRACTICE OF LOGISTICS MANAGEMENT

CASE STUDY MATERIAL

IVst SEMESTER (FULL TIME)

NEW REGULATION SYLLABUS 2018-19

MASTER OF BUSINESS ADMINISTRATION

UNIVERSITY OF MADRAS

NOTES PREPARED BY

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Case Study Number	I
Level of teaching	L3
Program outcomes covered	P01, P02, P03, P04, P05, P07,
Course outcomes covered	C327.1

Logistics and Supply Chain Management and its global economy

The speed and complexity of the global economy has opened up eyes for contemporary logistics and supply chain practitioners. Logistics and Supply Chain Management (LSCM) is introduced to be an integrated approach comprising of different functions and processes within a firm. It is extended to a network of various participants fulfilling increasing customer expectation in terms of cost minimization and benefit maximization. LSCM in India shares an outlay of around 13% of GDP and is considered as an evolving sector in the country. As being projected, the overall logistics market is likely to grow at a CAGR of 11 % in days to come. There are intensive case studies on LSCM practices all over the world. Yet, the status of Indian logistics and supply chain practices has noticeably been behind the global trend. As such, the study encompasses an objective of having an exploratory overview of logistics and supply chain dynamics in India. An attempt is made to point out different gaps and barriers to effective supply chain framework. The same brings to light a few pragmatic measures in order to bridge the apparent gaps. The methodology adopted here is based on the secondary sources of information along with a semi-structured primary investigation carried out for the purpose. Special focus is bestowed upon to intensify the project through qualitative responses gathered on current logistics and supply chain infrastructure in the country. Findings reveal that LSCM assumes greater significance in recent scenario. It invites a long term research agenda as changing consumer aspirations are the sturdy challenges for modern corporate world. To face these challenges, practitioners must go beyond short term planning and redefine the development objectives. Focus should be on an integrative tactic with a sound logistics network backed up by techno-savvy infrastructure. The significance of this paper lies in drawing attention of the practitioners towards diverse issues in Indian logistics and supply chain system. This study finally is in a position to conclude that a vibrant, active and intelligent LSCM has a meaningful contribution towards enhancing business horizon in the economy.

Assignment Questions

Describe Indian Practitioner Perspective



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Case Study Number	II
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P05, P07,
Course outcomes covered	C327.3

**LUXURY PRODUCT MANUFACTURER TURNS TO PENSKE TO IMPROVE
WAREHOUSE AND DISTRIBUTION OPERATIONS**

Penske Logistics reduces inventory shrinkage, improves overall inventory management



A leading producer of fine luxury products required a partner who could improve their warehouse and distribution operations and reduce the theft they were encountering with their high-value products. The organization does the bulk of their business throughout the Midwest and Eastern United States, which includes over 30 retail stores and 400 wholesale accounts.

Due to the high dollar value and small size associated with their products, they struggled with theft. Implementing stricter security and inventory management plans to protect inventory and control costs was a priority.



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Because they serve customers in the luxury market, the company offers many value-added services that provide a personalized touch, including monogramming, gift-wrapping, engraving and even handwritten gift cards. The provider needed to build these offerings into the solution as well. And because nearly 50% of the manufacturer's business is done within the two-month holiday window, a plan needed to meet their exceptional level of customer service even during the busiest time of the year.

Penske was contracted to oversee and stabilize their entire operation, including their workforce, and improve their overall distribution and warehouse strategy. Over eight months, Penske evaluated their operations and incorporated all the necessary changes to decrease inventory shrinkage, increase efficiency and reduce employee turnover.

Reducing Inventory Shrinkage

Because reducing theft was the top priority and an area where Penske could make an immediate impact, Penske quickly put several procedures in place to reduce theft and decrease costs. Penske established a single point of entry and improved the overall warehouse design to enable greater visibility and reduce opportunities for thefts to take place. Penske also added more audit controls and placed a greater emphasis on shipping and receiving procedures.

The impact was significant. During the manufacturer's first year of operations, they lost over a million dollars to shrinkage. In 2018, Penske was able to reduce that number to a mere \$424. In addition, the luxury product producer was able to lower their insurance premiums.

Improve Overall Inventory Management

Penske supplied a warehouse and distribution strategy that was flexible, responsive and efficient, as well as dedicated and experienced personnel to run the facility.

Initially, their warehouse could not efficiently accommodate their level of value-added services and throughput. Penske brought in several engineers and a product line expert to integrate a wide range of engineering, racking and IT solutions to move product through the warehouse more efficiently and control expenses.



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Penske created standardized processes that established appropriate inventory levels to ensure the right amount of inventory is held at any one time. Through its warehouse management system (WMS), Penske tracks inventory levels and guarantees the quality of the sequencing. The WMS also provides greater visibility of product location and counts, so associates can quickly locate inventory. As a result, the organization's product on hand continues to go down even as orders increase.

Train Employees to Own Processes

The company struggled with high employee turnover within operations management. As a result, they wanted to establish a defined career path and make the company a great place to work. To accomplish this, Penske realized the employees needed to be part of the solution. Penske engaged workers at the employee level and encouraged them to suggest process improvements and provide constant feedback, which included development of the warehouse and distribution line procedures. Not only did this produce a better overall solution, but it also developed trust, which reduced employee turnover and theft and provided better control of expenses.

In addition to stabilizing the workforce, Penske cross-trained 85 percent of the organization's employees, allowing them to ramp up production and meet seasonal increases without hiring and training additional staff. Because employees were better equipped to do more and take part in multiple responsibilities, employee downtime decreased while throughput increased. The company was able to increase the number of tasks completed per day without growing staff, while also increasing the number of value-added services it offers.

Assignment Questions

Identify the steps to improve distribution?



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Case Study Number	III
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P06
Course outcomes covered	C327.3

Domino's supply chain operations

Domino's revamped supply chain operations in India. It discusses the various benefits of the new logistics model and discusses the reasons for the revamp. The benefit of low costs achieved through the new model was passed on to the customers in the form of lower prices. The case also compares Domino's new supply chain model with McDonald's supply chain model.

Assignment Questions

Analyze the supply chain of another fast food company and compare it with Domino's supply chain model



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Case Study Number	IV
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P06, PO7
Course outcomes covered	C327.1

Avvashya CCIA's custom-designed solution

Top Indian automaker triples aftermarket revenue with Avvashya CCIA's custom-designed solution Avvashya CCI had to bring India's second-largest commercial vehicle manufacturer's warehouses under one roof, as a single, consolidated 'master' store, at its manufacturing facility in Alwar, Rajasthan.

Build a state-of-the-art, bespoke warehouse in limited time to meet the aftermarket demands of our client's customers, thereby improving their customer service delivery. The job was to consolidate aftermarket operations and expand its market share amid stiff competition and a depressed market.

The fragmented inventory challenge

Multi-location warehouses spread across Nagpur, Jaipur, Kolkata and Delhi were pushing up costs, without actually meeting the aftermarket demands of customers for this manufacturer. Inadequate infrastructure bred inefficiencies into the inventory visibility and management process. They also exposed the aftermarket value chain to risks such as inventory damages and inaccurate dispatches.

Fragmented inventory led to order losses — often, orders could not be fulfilled, as they would come to one warehouse while the inventory would be lying in another. Holding a high stock in every warehouse was not an option, as that would escalate costs. The inefficiency had an impact not only on revenues but also on brand reputation and credibility.

Creating a state-of-the-art, dynamic aftermarket warehouse. Realized that a plain-vanilla consolidation was certainly not an option. We needed to infuse a series of value-added services and bespoke solutions to create a state-of-the-art and dynamic aftermarket warehouse for our client that would meet global standards and support the auto manufacturer's distributors and dealers across India.



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Apart from developing an efficient warehouse, ACCI's custom-designed solution for the automaker included value-delivering features such as emergency orders and express service management, unit conversion management, and composite kit creation and management.

Multi-fold business impact with ACCI

Designed, developed and stabilised within a very short span of time, the Alwar warehouse stands differentiated in the automotive industry as a dynamic aftermarket warehouse, with advanced abilities.

The value is visible at multiple levels:

Revenues have tripled: Revenues from the Alwar warehouse have shot up to INR 15 million a day, from the INR 5 million-level in just one year.

- Productivity and efficiency have improved: Advanced infrastructure options such as racking and bin-mapping have improved pick efficiency by three times to 60 per hour, per man day, from the earlier number of 20 per hour, per man day.
- The standard order fulfillment time in the warehouse is 24 hours. For emergency and express orders - it is three hours, which is an industry-best number.
- Customer service delivery is at its best: While streamlined and well-managed warehouse management processes have impacted efficiency and productivity, value-added services have enhanced customer service delivery by several folds. For instance, composite kits ensure superior vehicle experience for customers, directly impacting revenues and brand loyalty.

Assignment Question

1. Build a state-of-the-art, bespoke warehouse in limited time to meet the aftermarket demands of our client's customers, thereby improving their customer service delivery.



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Case Study Number	V
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P05, P06
Course outcomes covered	C327.4

Datex Case Study- Logistics International, LLC In order to gain increased control over inventory, the new system was set up to track the variety of attributes and parameters needed to accurately track and properly allocate all types of inventory, i.e. lot, serial number, etc. Using FootPrint®, Logistics International now employs FEFO as the primary allocation strategy, but can also utilize FIFO and FMFO and can allocate by specific lot and pallet. In addition, Logistics International now follows a replenishment strategy and utilizes wave picking in order to improve the efficiency of the overall picking operation in the warehouse. Because of the amount of case picking and shipping via UPS/ FedEx, Logistics International needed to be able to have its users capture certain attributes of the carton using handheld devices in order to allow for seamless integration with the respective carriers. Warehouse team members now use mobile devices to capture the width, length, weight, and height of the cartons being shipped. Measurement sampling can be accomplished at a “picking container” level, which is either a case or pallet. Providing real time visibility and access to inventory, orders, invoices and customizable reports via a web portal enhanced the ability of Logistics International to meet the dynamic needs of its varied customer base in addition to satisfying the needs for accuracy and effective operations. Using the portal, customers can view shipments, attachments, warehouse inventory levels, run and print reports and create orders. The Solution- continued Most of the value added services performed by Logistics International were not being billed. These services included but were not limited to: shrink wrapping, palletizing, repacking, kitting, light assembly, de-kitting, perpetual cycle count, labeling, special requests, disposal of unwanted product, gift wrapping, secure storage, extra insurance for high value goods. By developing customer specific billing profiles, Logistics International now is able to recoup the cost of these services, increase potential revenue and profitability. In addition, use of the automated billing feature allows Logistics International to bill



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for handling and storage. By using an activity based system, activities associated with each customer are captured, even if they are not being billed. Capturing this information provides the management team with vital information on each account and provides the opportunity for them to review current pricing strategies for each account and the entire operation. By allowing management to see how much time and work is being utilized for each customer, the team can better assess the value of the services and potential billing strategies. Upon implementation of Datex FootPrint® 3PL WMS, Logistics International also gained the ability to bill for initial and recurring storage, increasing potential revenue. Prior to this, Logistics International did not bill until the first day of the following month for initial storage, losing valuable days in the billing cycle. With respect to recurring storage, Logistics International did not charge true recurring storage charges, i.e. the cost of the upcoming month of storage. These practices changed with the implementation of a split-month and recurring storage billing structure. Anniversary billing, another industry standard was also implemented and provides the secondary benefit of encouraging customers to ship product out more expeditiously in order to avoid additional storage charges. The initial implementation involved 5 integrations including FedEx, ProShip, ROC, E-Commerce, Solomon and TMS1.

Assignment Questions:

Describe the advantages of implementation 5 integrations



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Case Study Number	VI
Level of teaching	L3
Program outcomes covered	P01, P02, P04, P05, PO6
Course outcomes covered	C327.2

Warehouses are getting so full of goods like fridges and washing machines that retailers are asking shipping companies to push back deliveries, which may drag global container shipments down as much as 30% in the next few months, according to the head of an industry group.

Shipments have probably fallen about 15% so far this year amid the coronavirus pandemic, according to International Chamber of Shipping Chairman Esben Poulsson. Second-quarter declines, compared with a year ago, will depend on by how much governments reopen economies, he said.

“Inventories of goods like apparel, textiles, white goods, are full,” Poulsson said by phone last week. “We are hearing of receivers of these goods asking shipping lines whether they can store these goods for a period of time or slow their ships down or basically delay taking delivery.”

The slump is a setback for shipping giants such as Cosco Shipping Holdings Co. and Ocean Network Express Holdings Ltd., which started the year strong as healthy trade volumes allowed the industry to boost rates. That optimism has now evaporated as the virus outbreak has forced shoppers to stay home, crimping retail sales in the biggest consumer markets.

Forward bookings for shipments from Asia to North America and Europe have slowed for April and into May, according to Ocean Network Express Chief Executive Officer Jeremy Nixon. Shipments of products from North and Latin America, Europe and Oceania to Asia are still strong, said Nixon, whose company is Japan’s largest container-shipping operator.

In addition to lower volumes, the industry has been hit by restrictions aimed at containing the outbreak. Ensuring that seafarers can board and transfer onto ships amid port curbs and canceled flights remains a major challenge, Poulsson said.

Inbound containers to the Port of Los Angeles plunged 26% in March from a year earlier, while Singapore’s container throughput dropped to its worst reading since August and Hong Kong’s measure fell below average again after a brief respite in February.

“Some containerships have been running at only 20% capacity and numerous sailings have been canceled,” Tim Huxley, chairman of Mandarin Shipping Ltd., said in an interview. “Our five



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container ships have certainly been carrying less and we have also had to endure some waiting time between employment.”

Financial pain from major economies shutting down is rippling across the supply chain, said Lee Klaskow, a senior analyst for logistics at Bloomberg Intelligence. “The dry bulk, ro-ro and containerliner industries will be the most impacted as the service industries halt to a stop and manufacturing capacity lays idle.”

To react to lower exports out of Asia, ONE has reduced regular sailings from the region to Northern Europe, the Mediterranean and North America, Nixon said. A major question for the industry now is when demand might rebound, and whether global trade will be permanently altered by the pandemic.

“In the long term, we still see strong business requirement for global trade and container shipping,” Nixon said. “But the challenge will be what is the growth after coronavirus.”

Assignment Questions:

Describe the growth after coronavirus.”



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Case Study Number	VII
Level of teaching	L3
Program outcomes covered	P02, P03, P04, P06
Course outcomes covered	C327.2

Challenge

Mohawk Global Logistics

Mohawk Global Logistics sought a powerful transportation management system (TMS) to help them expand their customer base, offer new value-added services, implement EDI, and ultimately help clients streamline the complexities that come with transportation management. Mohawk's goals also included reducing manual tasks with increased automation and analytics, along with improving communication and connectivity with carriers and client partners.

Solution



The decision came down to 3Gtms and another Tier 1 TMS provider. Mohawk selected 3Gtms because of the freedom of the solution: the freedom to give their clients access to the system, the freedom for clients to create a load, and the freedom to create and deliver personalized logistics services. In addition, the 3Gtms solution is in the growth phase of its product lifecycle and is



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continuously being developed to address the latest trends. In contrast, older Tier 1 TMS systems are past the point of maturity and are now bloated technologies that can't respond adequately to modern-day transportation needs.

As Mohawk sought to expand and include more value-added services, the 3Gtms system's freedom and flexibility were critical to their growth and service goals. In addition, 3Gtms's single-platform solution responds in real-time to challenges and issues, from the time an order is created in the ERP through delivery and financial settlement. Its design is fundamentally different from anything else on the market, allowing Mohawk to self-configure the solution without the need for long-term, costly support contracts. 3Gtms' fast integrations were another key feature that would help Mohawk on-board clients – and save them money – even faster.

Results

With 3Gtms, Mohawk has eliminated the need to check rates for multiple carriers in multiple places. In addition, the enhanced visibility has attracted new clients. "A big selling point for many of our clients is the visibility that 3Gtms provides," said Gerry McDevitt, vice president, domestic services at Mohawk. "A client can get access 24/7, and shipment reports are pushed to them automatically."

With the 3Gtms Integration Hub, Mohawk has strong integration capabilities that enable them to on-board new accounts more quickly and efficiently, and to scale faster as well. The result: Mohawk saves money and time with simpler and faster set-ups – and its customers do too. "The high-speed brokerage entry screens allow us to streamline our processes and deliver better service to our customers while reducing overall transportation costs," said McDevitt, "The 3Gtms team is extremely responsive to our needs, and the reliable connectivity we have with carriers and client partners has enabled greater productivity and customer service. As a result, our enhanced operations have become a demonstrable competitive advantage for us – and one that benefits our clients as well."

Assignment Questions

Describe Mohawk Global Logistics Streamlines Customer Complexity in detail

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Case Study Number	VIII
Level of teaching	L3
Program outcomes covered	P02, P04, P05, PO6
Course outcomes covered	C327.2

The Indian logistics industry is set to grow massively from \$90 billion to \$125 billion in 2010. India has increasingly integrated into global trade which requires it to address the global supply chain and on time delivery. India's express industry is predicted to be one of the fastest growing sectors in the economy. Moreover, it is expected to surpass other growing sectors like retail, banking, financial, chemical and automobiles over the next five years. However, the industry is fragmented, consisting of some 2,500 Indian and foreign companies vying for this enormous market. While the established players provide an integrated delivery service, the focus of the small players is to gain a corner in the supply chain market. A number of them offer only one or two services out of a range of services comprising of:

Transportation

Express cargo delivery

Warehousing

Freight forwarding

Courier services

Bulk and container freight

Large scale retailing, government initiatives, and growing containerised cargo at ports are a few factors that propelled the growth of the industry. In spite of the favourable circumstances the industry has several roadblocks. High transportation and storage cost, low productivity, complex



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tax laws and feeble technology result in various operational inefficiencies and undue delays in distribution networks. It is to be seen whether the Indian logistics industry will overcome these bottlenecks and grow with the rising economy and support other industries like retail whose growth depends on strong and efficient logistics.

Assignment Questions

Indian Logistics Industry-An Overview

Opportunities and Challenges-Discuss

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