STUDY TO ANALYSE THE KEY PERFORMANCE INDICATOR OF SUPPLY CHAIN IN HCL

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ABSTRACT

The project titled **"A STUDY TO ANALYSE THE KEY PERFORMANCE INDICATORS OF SUPPLY CHAIN AT HCL INFOSYSTEMS LTD."** HCL Infosystems Ltd. was instrumental in making this happen. From June 14, 2016, we conducted our research till July 18, 2016.

HCL Infosystems Ltd. provides Value added Distribution to its business partners and has some of the largest Sales & Distribution networks in India. An integrated supply chain backs up the several SBUs (Systems, Infotech, Digilife Distribution & Marketing Services, and Learning & Services) of HCL Infosystems.

This study examines HCL Infosystem Pvt Ltd's (HCL) key performance metrics in the sales and distribution industry, where it is one of the largest networks in the country. One of the few companies in its industry to have a national presence in India, the company's 42 distribution hubs are spread across the country's North, West, East, South-I, and South-II regions. The Key The phrases "On-Time Delivery," "Revenue Recognition," "Accurate Inventory," "Goods-in-Transit," and "Proof-of-Delivery Upload" are all examples of Key Performance Indicators, abbreviated as KPIs for short.

This study's significance can be attributed to the fact that it provides empirical evidence for the value of using Key Performance Indicators to evaluate the efficiency of supply chain operations. This is an important contribution to the field of study known as supply chain management. In the current investigation, descriptive research methods are utilised for the purpose of carrying out the analysis of the data that was gathered from the backend team.

Keywords:- Supply Chain, HCL, Key, Performance

INTRODUCTION

An Introduction to the Study

The term "supply chain" refers to the network of businesses that work together to process and deliver goods from the raw materials stage to the end user. The logistical, informational, and monetary links

between these manufacturers and providers are seamless. In the past, procurement, production, and distribution were all managed independently, with huge reserves kept on hand as a safety net. Increased rivalry and internationalisation of markets have increased the need of flexible supply networks in today's businesses. Companies in this industry must persistently improve customer service while decreasing costs to remain competitive. Recent advancements in communications and information technology, as well as a rapidly growing selection of logistical solutions, have given businesses the opportunity to save operating costs by coordinating the planning of various stages. There is a supply chain in place to back up the market the company services. Increased competition across international markets has sparked a push for better Supply Chain Performance. Due to the advent of products with shorter life cycles and the rising demands of customers, businesses have been forced to invest in and pay close attention to their supply chains. Maintaining and expanding market share requires ongoing attention to supply chain efficiency. In order to evaluate the efficiency of the supply chain, the current system should generate a number of measurable metrics. Businesses need to use performance evaluation methodologies to boost the effectiveness of their supply chains. Establishing metrics for gauging performance is generally a top priority for decision makers in the supply chain.

HCL Infosystems Ltd. is a leader in the distribution industry. Everything that happens between producing an item and someone actually using it is part of the distribution process. Because of its effect on supply chain costs and the quality of service delivered to consumers, distribution has a major bearing on a company's bottom line. Distributing goods carefully may help achieve a wide variety of supply chain objectives, from reducing costs to boosting responsiveness. How successfully an organisation satisfies the needs of its clients has a direct impact on the distribution network's bottom line. Despite the fact that there are many moving components involved in meeting client needs.

Literature Review

Sink and Tuttle (1989The success of a company's Supply chain may be evaluated with the use of performance measures.

(Chrisitan) 1998 (the year).Those that aim for and achieve maximum efficiency will ultimately rule their respective industries. They should have set the standard for low prices and high quality in their field. The ultimate purpose of Supply Chain Management is to boost company profits. This entails optimising earnings while keeping operational costs low. Keeping Supply Chain Costs low is essential for maintaining competitive pricing. Achieving a low Supply Chain Cost requires peak internal and external performance from the organisation. Internal performance indicators include manufacturing lead time and yield. The impact of external performance is being felt by customers. External performance measurements include things like on-time deliveries, response times, quality of service, and cost. Roger and Kristina, (1999).Management of supply chain activities and relationships in order to maximize customer value and achieve a sustainable competitive advantage. Ballou et al,(2000). For the process of organisational management, it is necessary to have a performance measurement system that can accommodate the presence of multiple companies and is regarded as tools for greater impact in the management of supply chains. This is a prerequisite for the process.

According to Simchi-Levy (2000), expenses tend to go down when an organisation improves its internal operations, whereas they tend to go up when it improves its exterior operations.

Lancioni's paper (2000) discusses the issue of competing objectives. To function at its best, every system must strike a delicate balance between conflicting objectives. Possible trade-offs include inventory and transportation expenses, production diversification and inventory, and inventory and lot size. Customer service and Supply Chain Cost make for the most comprehensive trade-off.

Supply Chain (SC) capabilities and resources are crucial for organisations to cut costs, boost efficiency, and supply consumers with high-quality products and services, say Gunasekaran et al. (2001).

Scope of the study

This project's findings are relevant to the present condition of the Distribution sector in India. The study's aim is to assess the efficiency of a supply chain and locate any bottlenecks. Key performance indicators (KPIs) for the supply chain will be analysed, and steps to improve them will be suggested. The Noida-based HCL Infosystems Ltd. provides all the information used here.

Objective of the study

Using Key Performance Indicators, the goals of this project are to: evaluate the Supply Chain operations of HCL Infosystems Ltd; suggest ways in which current operations may be improved; and evaluate the Supply Chain operations of HCL Infosystems Ltd using Key Performance Indicators.

Methodology

Only descriptive information has been gleaned from the research. A descriptive study is a type of exploratory research that relies heavily on the collection of data. As part of this study, the key performance indicators (KPIs) of the supply chain will be investigated in order to gain a better understanding of the performance of the supply chain as a whole.

Sampling and sample size

Due of its comprehensive nature, this research may be classified as a census. In this scenario, the whole populace comprises of the back-end workers who monitor the key performance indicators. The back end group consists of sixteen extremely competent professionals.

Data source and method of collection

Both primary and secondary data were been used for the project.

Primary sources

Primary data was mainly used to collect information various KPI from the employees who are in charge of monitoring/tracking the KPIs. For the purpose of collecting primary data, structured interview method was adopted. The Senior Logistics Executives were interviewed.

Secondary sources

Secondary sources of data were ERP system reports and review reports.

Data Analysis and Interpretation

Data collected through questionnaire is analyzed with the help of MS excel. Percentage analysis, cross tab analysis and correlation analysis were done.

Limitation of the study

Time frame for the project was a major limitation considering the nature of the topic selected. The restriction to access data and publications that were confidential was another limitation.

DATA ANALYSIS AND INTERPRETATION

The key Performance indicators that are considered for the study are

1. On-time delivery in a professional manner

2. Revenue Recognition

3. The precision with which the inventory was compiled

4. The provision of a Proof of Delivery (POD) file for uploading.

5. Goods in Transit, also known as "GIT" (abbreviated).

On Time Delivery

This KPI measure the timely delivery of the Microsoft Handset's supply chain. On time Delivery refers to the delivery of the product on the desired time mentioned by the customer.

Revenue Recognition

When the customer accepts the provided good or service, performance standards are satisfied, and revenue is recorded. The revenue collected from the transaction with the customer will not be shown in the company's books and records until after ownership has been transferred.

Inventory Accuracy

The ability to accurately count inventory has become increasingly important. Without such accuracy, the company risks having insufficient stock on hand to meet customer demand or having stockpiled more than is necessary.

Proof of Delivery (POD) uploads

Proof of Delivery (POD) is the transporter document that is signed by the customer. The POD is uploaded on to the ERP system and is stored for future references. The POD upload rate is monitored by the back end team.

Goods in Transit (GIT)

When a seller ships an order to a buyer but the latter has not yet received it, the items in question are considered "goods in transit." Moving products between HCL Infosystems' own storage facilities is considered "goods transfer." Products might be relocated on a regular basis or when demand suddenly spikes.

24 hours Delivery. The order for Microsoft product from the customer should be fulfilled with in 24Hours of billing of the customer invoice.

SUMMARY OF FINDINGS

62.5 percent of respondents found the expected level of KPI performance to be achievable, while 37.5 percent found it to be too low. This suggests there is scope for further progress. 56.25 percent strongly agree and 43.75 percent agree that 3PL warehouses/transporter functioning is extremely important to achieving the KPI. Since the company uses 42 third-party logistics providers, the effectiveness of these companies has a major bearing on the supply chain as a whole. About 73.3% of the populace regularly interacts with warehouses, and of those, 43.75% believe the warehouse's or transporter's response to operational issues is adequate.

There has been a major rearrangement, and new procedures are being harmonised; 56% of workers anticipate positive effects on KPIs as a result.

Half of those polled had high confidence in the SAP system's reliability and effectiveness, and 62.5 percent say it helps them keep tabs on supply chain performance.

A survey found that 37.5% of the public agreed that HCL Infosystems' supply chain performance is affected by the sales team's responsibility for Demand Planning and inventory control.

When it comes to getting packages to their destinations within 24 hours, South II and the East perform the poorest. After consulting with the relevant Regional Logistics Managers, we've concluded that some locations within these regions

are covered by a 48-hour SLA, and that the order value falls below the Minimum Order value. Factors contributing to the poor performance include a lack of direct access to rural areas, difficulties scheduling appointments with clients, and a credit freeze for enterprises engaged in organised trade.

While the team succeeds in meeting their goals for On-Time Delivery, Revenue Recognition, Inventory Accuracy, and Goods-in-Transit, they fall short when it comes to uploading proof of delivery. Why people are poor distribution centre employees who input Proof of Delivery data into the ERP system, leading to subpar performance.

The use of KPI review once a week has considerably improved the supply chain. The supply chain consists of the following five regions: the North, South-I, South-II, East, and West. An individual Regional Logistics Manager is responsible for each area. After a week of examining their Key Performance Indicators, each area may have a better understanding of their achievements and shortcomings. As a result, there is now some healthy competition amongst the five regions.

SUGGESTIONS

Some suggestions for how HCL Infosystems could improve their current situation are as follows:
Seventy percent of HCL Infosystems ltd.'s revenue comes from the sale of Microsoft Handsets in India. Products in this market tend to have a limited lifespan. Increasing the supply chain's flexibility and responsiveness can help businesses meet the ever-changing needs of the market. It is possible that the company's supply chain performance will increase as a result of the outsourcing of warehouses and transportation.

Thirteen of HCL Infosystems ltd.'s 42 warehouses in India are devoted exclusively to Microsoft devices, and all are conveniently located near major population centres. As a result, the supply chain is more versatile and extensive than ever before. In terms of aesthetics, standardisation, and manpower, the warehouses might use some work. Because of the strong partnership with the 3PL warehouse

provider, the warehouse employees will benefit from an influx of talented new members.

The SAP ERP system is essential to the organization's supply chain. While the system is often trustworthy and efficient, there are occasions when performance is compromised because of a slow network. If the SAP team and the IT Team can coordinate their efforts, they may be able to find a solution.

The Supply Chain group can look into the viability of implementing a rating system for vendors. Providers will see an increased incentive to enhance their services as a consequence. The team has achieved or surpassed the key performance indicator objectives set for them; now the department must concentrate on keeping up the excellent work. The Logistics Service Agreement also allows for quarterly reviews of vendor performance.

CONCLUSION

By putting more attention on their supply chain, businesses may get an advantage in the increasingly competitive market. Because of its wide and reliable supply chain, HCL Info systems Ltd is a crucial player in the vast Indian industry. Companies like Redington India Pvt ltd, Compuage Infocom, Cerebra Integrated Technologies Ltd, Ingram Micro Inc, and Savex Technologies Pvt. Ltd are growing by capitalising on their supply chain knowledge to increase their market share. In such a scenario, the company can improve supply chain efficiency by strengthening relationships with external suppliers. This will directly boost the company's market share.

Key performance indicators such as on-time delivery, revenue recognition, inventory accuracy, and goods-in-transit are all achieved by the team, but proof-of-delivery upload is not one of them. As a means of keeping tabs on how the Key

Performance Indicators are faring, the Supply Chain Department has created weekly review meetings of the various employees responsible for tracking the KPIs. The use of KPI review once a week has considerably improved the supply chain. The assessment mechanism has spurred healthy competition amongst the five areas of the supply chain, leading to concrete improvements. The SAP system the organisation used is crucial for monitoring key performance indicators. The 42 distribution centres around the nation are all supported by the SAP system.

This research delves deeply into supply chain performance by studying KPIs and the viewpoints of the backend staff. This information may one day be used to compare the efficiency of various distribution networks. This study lays the groundwork for further investigation of the KPIs. Monitoring and assessing key performance indicators (KPIs) for each warehouse and categorising warehouses based on performance may be included to future iterations of the research.

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