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ENHANCING THE PERFORMANCE OF OBL (OutBound Logistics) PROCESS IN HERO MotoCorp LTD.

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Abstract

Objective: This paper deals with outbound logistics in Hero Motor Corp limited at Haridwar plant. This paper includes how an OBL Department works, what are the possible distribution in OBL, Process of OBL etc. it also tries to reduce the TIMING of OBL process which also include reduction of Transit damage, Invoice creation on SAP and Permit generation on E-WAY bill website of government.

Method and statistical analysis: The study was based on primary study and conducted using structured questionnaire.

Findings: Study concluded that the shifting people are not following the Standard Operating Procedure for transferring the M/C's from PDI to warehouse.

Application/Improvements: Paper is focusing on damage control with proper solution of that, transfer of M/C'S From PDI to warehouse.

Keywords:Logistics, Invoice creation, permit generation

Introduction

Reducing the timing of OBL(OUTBOUND LOGISTICS) Process

The paper is all about reducing the overall timing of OBL Process taken from PDI Conveyor till Dispatch of truck from plant. For understanding the procedure we need to first understand what is Out Bound Logistics?

OutBound Logistics (OBL)

Outbound logistics deals with the processes involving the movement and transportation of the products to the end consumer. The main purpose of storage section is to keep product safe and easily available at the time of requirement as demand for product can't be determined so accurately. Timely fulfillment of demand is also very essential for the sales and profits, optimization of process is the key here.

On the other hand, transportation deals with the actual movement of the product from storage point to the end consumer. As we can very well understand the fact that without transport, there is no logistics functions as such. Since the movement of products is the complicated functions because making your product available quickly at the places of demand is not easy and any delay in that will lead to losses for the company, so this function needs to be taken care so tactfully.

We also can't rule out the various factors like natural calamities and other physical obstacles in transportation of the goods, so the vulnerability of failing in this function makes it quite difficult to manage. Delaying in any shipment may lose you lot of money and will make your other function inefficient in the long run.

Literature Review

There was one study conducted in manufacturing units in Ghana about OBL management by Kwantung et.al. (2015), as per the study optimization is possible through collaboration with third party; profitability of the function can be enhanced. The main objective of the paper is to make an assessment of outbound logistics functions of companies in Ghana using questionnaire asking employees to give their views about the OBL processes prevalent in the company. The study concluded that there was no significant change in the overall OBL performance of the company. So, routine assessment and performance measurement is very essential to make this function effective and profitable for the company. There is other study conducted by porozantzidou (2015) for assessing OBL process at KLM engineering company. Company is using all possible measure such as six sigma, lean design etc. to improve their performance. A strategic framework was given to the company to make the process effective. Under this study a specific set of actions was suggested under certain limitations starting from scheduling to the ultimate end function. In the context of the analysis phase and due to certain limitations, a specific work scope has been chosen and an algorithmic approach has been applied in order to develop personnel's scheduling scenarios,text and evaluate them in terms of turnaround time, Quality and Cost.Next the improvement steps include the proposal of feasible solutions based on the analysis performed. Finally, the control phase helps the continuous improvement of the OBL through performance management tools.

Objectives

- 1. To explore the measures to increase sales by optimizing outbound logistics.
- 2. To explore measures to improve customer service by outbound logistics.
- 3. To examine the various ways to reduce the transit cost and damage

Research Methodology

To conduct this study data was collected using structured questionnaire. The target population comprised if Section Head, Team Manager, Planning Team, Operation Team, Supervisor and the Staff of OBL in Hero MotoCorp Limited.

No standard criteria were used to select sample so overall the sampling was based on judgment of the research and convenience based. Secondary data was also using for this purpose for analysis of previous reports, SOP, audit reports, internal company manuals were also used to find the relevant information. The Questionnaire was structured to have both the open ended and close ended questions. Analysis was done using statistical methods for calculating variation and further conclusions were made on the basis of that.

Analysis

Table 1: showing Improvement in timing in various activity of OBL

Activity	Average time taken(in min.)		D:#*
	Before	After	Difference
Moving M/C's from PDI to Warehouse	2	2	0
Picklist Creation	2	2	0
Searching Picklist Variant and shifting to			
Ramp	15	10	5
PDT Scanning	12	8	4
Verifying PDT Scanning in system	1	1	0
Loading M/C's to Truck	12	12	0
Truck Waiting at Ramp after Loading	15	4	11
Invoice and Permit Generation	2	2	0
Accessory Collection	10	5	5
Accessory Loading to Truck	3	3	0
Truck Security and Finance Checking	8	3	5
Finally Truck Dispatch	1	1	0
Total Time Taken	83	53	30

Findings

1) We can save our time in Searching vehicle variant according to picklist by avoiding Mixmodel parking of motorcycles in storage area. For example, by keeping a specific place in warehouse for specific model of M/C and a board for the same is hang on that storage place. By doing the there is no need to search for any model of motorcycle as ail the models of motorcycle will already be parked at their assigned place. So we can save time by allotting specific place of storage for specific model of motorcycle in warehouse. By doing this we can save about 2minutes.

- 2) We can also save our time by making aisles and gangways near each storage space for motorcycle's model wise, as it become easy for the shifting person to move the bike through gangway.
- 3) Avoid parking of old vehicles with new vehicles as it lead to high searching time, there should be old vehicle area defined for proper FIFO and it result in lesser time to search old vehicle, by doing this it will result in time saving of 1 min.
- 4) Avoid parking vehicle very close to each other in warehouse as it leads to difficulty in vehicle movement and increase time of vehicle retrieval. Instead of parking too close we can do box marking on floor with adequate spacing, so that vehicle can be parked with proper spacing for facilitating fast vehicle retrieval. Distance maintained between vehicles reduced searching process and time saving of 1 minute.
- 5) All lights should be in working condition that will improve illumination and help in reducing tracking time.
- 6) All the Dock number should be visible on side of wall in front of Dock because vehicle retrieval on wrong dock leads to time loss.
- 7) Each Dock should be divided with chain to avoid mixing of vehicle on the dock, that will result in wrong loading to truck and when caught in security check took time in unloading the same truck, so it's better to take precaution from before for the same.
- 8) We can also save the time of truck standing on ramp for too long even after loading, that we can do by calling the next truck from parking on time when the previous truck just parked on ramp, as outside parking is at a long distance from plant so if the next truck was informed earlier then it will come on right time.
- 9) We can also save time in accessory receiving to driver by shifting accessory store near to permit delivery room as accessory room is at a long distance from permit room so driver will have to cover a long distance to collect accessory and due to this truck at plant parking standing for long time and due to this truck on ramp after loading of M/C's can't able to move forward due to non availability of space in parking inside the plant.
- 10) Accessory store person should take a proper count of accessory before giving that to driver as it leads to time wastage if driver not receive right quantity of accessory while inspecting by driver.

Conclusion

This paper concluded after comparison of timing of OBL process before and after improvement, we can see that in total we can save 30 minutes per truck (Time taken from truck entry inside the plant and truck leave from the plant after loading). This saves cost to the company and will make process more effective.

References

Asaka, T. (1990). Handbook of quality tools, the Japanese approach. Cambridge, Mass.: Productivity Press. Bolstorff, P. (2007). Supply Chain Excellence.

AMACOM. Bowers ox, D. J., Closs, D. J., & Cooper, M. B. (2002). Supply chain logistics management. Boston, Mass.: McGraw-Hill.

Chopra, S & Meindl, P. (2003). Supply Chain Management: Strategy, Planning and Operation, (2nd Edition). USA, Prentice Hall. Christopher, M. (2011).

Logistics & supply chain management (4th Ed.). Harlow, England: Financial Times Prentice Hall. Mentzer, J. T. (2004).

Supply chain management. Response Books, New Delhi. Shewhart, W. A. (1980). Economic Control of Quality of Manufactured Product, USA, American Society

Bazhin I.I. Logistics: CD tutorial. Kharkov: Kon-sum, 2003. Bowersox DJ, Class DJ. Logistics. Integrated supply chain. Olimp-2001.

D. Benson, J. Whitehead. Transport and delivery of goods: Transport, 1990. Hadjinsky A. M. Fundamentals of Logistics: "Marketing", 2003. David Johnson, Donald F.

Wood, Daniel L. Vordlou Murphy Jr. Paul R. Modern Logistics, 7th edition. Publishing house "Williams", 2002.

Kozlovsky V.A, Kozlovsky E.A, Savruk N.T Logistics Management: Textbook. 20th ed., Publisher "Lan", 2002

Malte Schmidt, Lars Thoroe & Matthias Schumann, RFID and Barcode in Manufacturing Logistics, 2013 Michael R. Linder, Harold E. Fearon. Supply management and inventory management. Logistics.

Victoria Plus, 2002. M.V Makarenko, Kanke A.A. Procurement and Distribution Logistics, 2003. Omelchenko V.Y. Materials Management in microeconomics transition: "Weber", 2003. S. Sarkisov