



Effectiveness of Material Handling Systems with Reference by Ellipso Logistics Private Limited

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ABSTRACT

Materials handling have been referred to which are conveying, elevating, positioning, transporting, packaging and storing. Storage or warehousing is very much a part of materials handling. Materials handling uses different equipment and mechanisms called Materials Handling Equipment. Though in one of the definitions, processing operations and inspection have been specifically excluded from scope of materials handling operations, it is worth mentioning that in specific cases processing or inspection of materials may be accomplished simultaneously with handling activity. One definition also covers the important objective of materials handling which is lowest cost solution.

Keywords: Material Handling, Logistics, Effectiveness

Introduction

Originally a methodology used in military and aerospace planning, the systems point Of view has been applied in recent years in industry, and in particular industrial materials handling, with considerable success. The concept has been extended with the broad application of solid-state electronic controls, and wide proliferation of computer technology.

The essential requirements of a good materials handling system may be summarized as:

1. Efficient and safe movement of materials to the desired place.
2. Timely movement of the materials when needed.
3. Supply of materials at the desired rate.
4. Storing of materials utilizing minimum space.
5. Lowest cost solution to the materials handling activities.

A materials handling system can encompass an entire plant and, in some cases, even the facilities of suppliers and customers. In a manufacturing plant, for example, it may begin at the receiving and continue through inspection, Storage, processing, packaging, and shipping. It can also include packaging and shipping at the supplier's plant, as well as unloading and handling at the customer's site. Within the overall system, smaller systems or subsystems operate in various areas of the plant.

Ideally, they should be integrated into the entire operation, so as to optimize materials handling efficiency throughout the facility. Regardless Of size and complexity, a material handling system should contain two parallel flows the physical flow of materials, and a corresponding flow of information. It is necessary to know why an item is moving past a particular point at a given time, where it is going, and what is to be done with it next in Order to fulfil Operating Objectives. The flow of information, therefore, provides the basis for controlling the Operation.

The following can be achieved by applying the systems approach to materials handling

- Better adaptability to control
- Better coordination with suppliers and customers
- Continuous flow of materials and information
- Fewer delays between Operations and departments
- Higher levels of equipment utilization
- Improved scheduling
- Less product damage
- Lower labor costs
- Optimum return on investment

- Reduced inventories
- Reduced space needs
- Safer, more systematic work procedures

Ellipso Logistics pvt. Ltd., is one of the leading exporter and importer in Chennai recognized by Government of India as ONE STAR EXPORT HOUSE. One Star Export House means, the exporter of goods/ service who hold valid importer- exporter code no. (IEC) may apply to Director General of Foreign Trade (DGFT) for the recognition as 'statusholder' viz. One Star Export House, Two Star Export House, Three Star Export House, Four Star Export House and Five Star Export House. DGFT awards status-holder position to the exporter on the basis of exporter performance in the current year and previous two years. The export performance is counted on total FoB/FoR value including deemed exports. The achievers of USD 3 million export performance will be recognized as "ONE STAR EXPORT HOUSE". The company has always strived to serve its customers in innovative ways. Finding new means to improve the quality of service is the boost. The company has commenced the business as an exporter and importer in Chennai since 1997. Ellipso Logistics has been in the business since 2001 to offer a range of variety of spices and grocery items to suit specific end-user requirements and have always put quality before profitability. The company has a fully equipped in-house comprehensive warehouse facility, which includes the entire process from the state of the art and finally the industry's finest packing system. The company find themselves revolutionizing and evolving in this rapidly changing scenario to keep up their commitment to deliver the best to their customers. By paying attention to the changing market trends the company as an on-going process, expanding the business to suit a variety of market packaging conditions. The wide range of clients and products the company service puts us in a unique position to cater to the customer needs. The company has proved a wide acceptability of the products all over the country/export.

SWOT ANALYSIS OF ELLIPSO LOGISTICS PRIVATE LIMITED.

STRENGTH

- Strong market position
- Strong revenue growth
- Large-scale operations
- Total solution under one roof
- Highly controlled distribution system
- Temperature controlled storage and
- warehouses

WEAKNESSES

- New to the logistics industry
- No overseas offices/operations

OPPORTUNITIES

- Geographical expansion
- Creating new market segment
- Technological and economic trends
- Transport infrastructure
- Web-enabled logistics operations

THREATS

- Entrance of a new competitors
- Competitors copying LSS strategies
- Economic conditions
- Fuel prices
- Low quality and inefficiency of roads Infrastructure

FUTURE TRENDS

The growing trend in digitalization is having a massive impact on a variety of industries, including logistics. Demand for logistics has increased as a result of the increased demand in the retail industry owing to internet shopping. This forces logistic companies to perform at their highest level. However, the performance of logistic services may be hampered by a variety of issues. Due to road accidents, strikes, weather factors, and other factors, goods can be destroyed during transportation, warehouse, or loading and unloading from the carrier, causing business disruption.

Despite these uncertainties, the logistics industry is working hard to ensure quality and on-time delivery. These problems can be overcome with improved technology, which will allow us to receive better, more reasonable, and speedier services. To achieve long-term goals, logistic organisations must use and adapt to new trends. The following are some of the significant developments that will shape the future of logistics.

Robots ruling warehouses

Customers' increasing reliance on internet purchasing has put the demand on vendors to deliver things as soon as feasible. As a result, e-commerce behemoths are refocusing their efforts on automating warehouse processes with robots, and some have already begun the journey. Robots are being trained to load, unload, pick and pack goods, and even deliver shipments, according to research and development. This facilitates a faster, more accurate, and error-free procedure, minimising manpower and human errors. One of the limits could be the expense, which would limit it to developed enterprises.

Upcoming era of drones and automated vehicles

Do not be alarmed if you see a car without a driver or if you see items flying around your neighbourhood; this is the beauty of technological technology. Amazon is considering using drones to deliver packages in order to improve the customer experience. Efforts are being undertaken to develop automated trucks that will reduce the labour pool and provide on-time delivery while using less fuel. However, the most important point to be addressed is one of safety. Drones and self-driving vehicles will undoubtedly alter the current logistics landscape.

Internet-Of-Things

One of the most talked-about technologies is the Internet of Things. IoT allows data to be sent from machine to machine without the need for physical assistance. This can be very useful in logistics because it allows you to track the status and manage inventory, i.e., you don't have to check on the goods that need to be fulfilled or the performance of the items. There are a variety of other ways in which IoT might aid logistics. Other technologies, such as AIDC (Automatic Identification and Data Capture) or RFIDs, are said to be compatible with IoT. (Radio Frequency Identification). The logistics business is poised to thrive in the future because to the Internet of Things.

Block chain Technology

In the logistics industry, block chain improves transparency, traceability, and security. Customers may gain additional clarity and transparency on their shipment's route, such as who controls it and what state it is in till it enters their hands. It also enables logistical businesses to easily track any unwanted manipulation.

3D Printing

3D printing is a method of producing three-dimensional objects.

3D printing, also known as additive manufacturing, will undoubtedly play a significant part in the future of logistics. This will allow the logistics industry to participate in the storage and transportation of 3D printing materials, resulting in increased shipping efficiency. The adoption of 3D printing will also eliminate the need for warehouses because production can be done on the spot and on demand. The logistics sector isn't standing still; it's going through a lot of changes that are making it even better and creating a more customer-friendly environment through better transparency and technology.

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