Transportation Management System: EXPLAINED

An efficient and smooth-running logistics and supply chain is what every company wants. Transporting of goods in an optimised manner with real time visibility not only helps in increasing warehousing efficiency but also the customer servicing through on-time delivery of goods. But without technology, a smooth-running supply chain is just a dream. With implementation of TMS to the supply chain process, the companies have been able to covert this dream to reality while reducing costs and optimising the resources.

❭ **Mrinmoy Kalita**

Transportation Management System (TMS) is a tool designed for supply chain professionals to help in their freight and carrier management. It is in fact a platform that deals with the planning and execution of the physical movements of goods through the management and optimisation of the daily operational transportation fleets.

A TMS provides the best combination between transportation mode and route to the destination in the most cost-efficient way.

Aditya Shah, Executive Director, V-Trans said, "With all information stored in the TMS it helps the user to figure the best mode, route, and rates for any type of

cargo movement and ensures that the user gets the best possible deal in terms of cost, time and feasibility."

Besides, the data stored and reports generated by the TMS plays crucial role in detailed analytics, which again helps in planning and forecasting of the movement of the goods.

In addition, just like your food delivery app Swiggy or e-commerce player Flipkart, TMS also possesses new advanced features of rating, booking and tracking.

Boosting Supply Chain with TMS
Use of the TMS has boosted the performance of the supply chain companies. The technology not only has benefitted the companies but the customers too.

From increasing profit by reducing transportation costs to

Transport Management System (TMS) is substantially transforming the logistics industry with the adoption of Internet of Things (IoT), Artificial Intelligence (AI) and Radio Frequency Identification (RFID) to enhance the productivity and reduce cost. The prevalent acquisitions of cloud-based system by logistics operators are gaining momentum in the industry over SaaS Transport Management System (TMS).
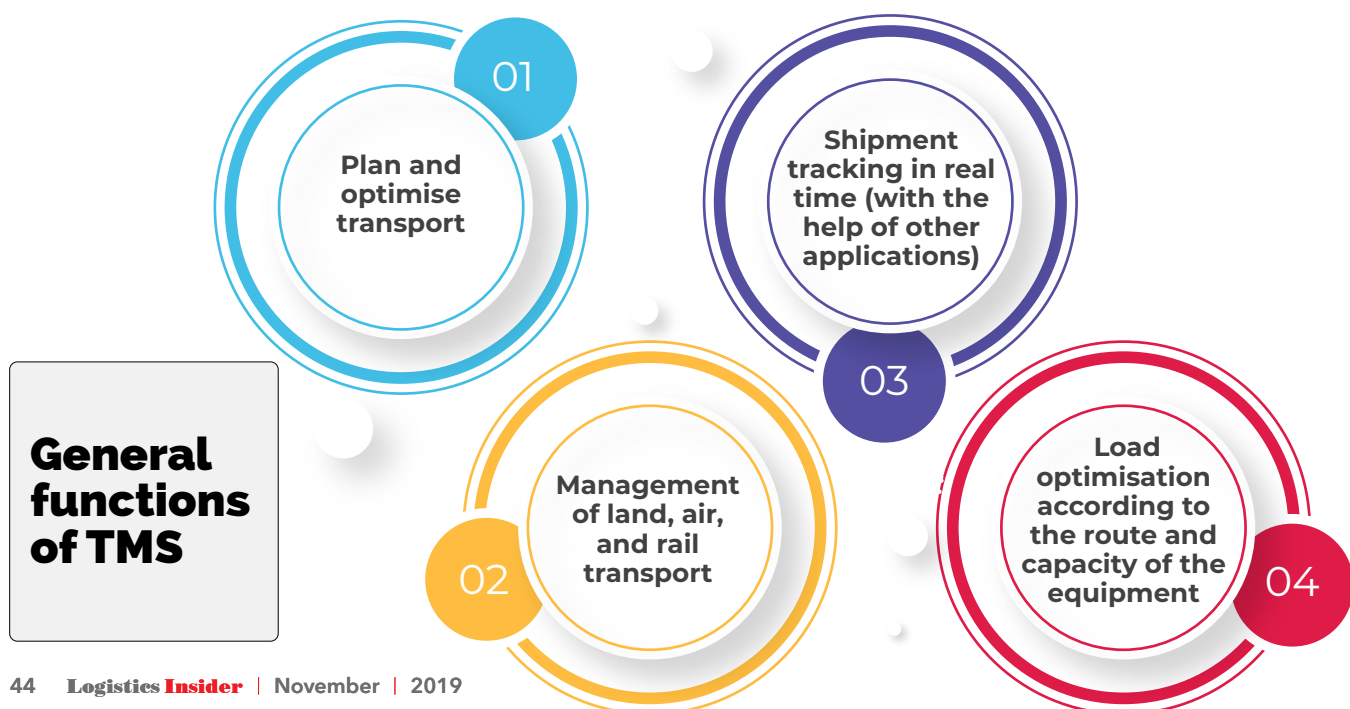
AMIT MAHESHWARI
CEO & MD, Softlink Global

enhancing the customer service, Transportation Management System has been helping companies in many ways. The benefits of using TMS are mentioned below:

Profitability: TMS is full of information on best mode, route and rates, so it directly impacts the logistics cost and helps in increasing profits by reducing the supply chain costs. This in turn results in optimisation of resources in the best possible way opening opportunities for the businesses to grow.

Time saving: With the combination of information and technology a user can take advantage of the same and save a lot on time for the supplies while providing better control of operation.

Enhanced customers service: With all operations under control, and time and cost optimised, the customer service level is bound to improve.

Better load consolidation: Using a TMS to

General functions of TMS

01 Plan and optimise transport

02 Management of land, air, and rail transport

03 Shipment tracking in real time (with the help of other applications)

04 Load optimisation according to the route and capacity of the equipment

consolidate the load achieves a level that is not possible with manual analysis.

Improvement in the efficiency: TMS reduces the deviations caused by manual processes and decreases the costs of transport administration and helps in monitoring the performance of transport service providers.

The Modern TMS technology

With the increasing use of automation in the logistics arena, the modern and advanced TMS has to communicate effectively with all the stake holders. It must also control and managing various functions as order entry, creating shipment, optimising the routes, manage carriers, scheduling pick up & deliveries and managing the warehouses.

Ms Karen Ravindranath, Director – WebNMS IoT (Zoho's IoT division) said, "Modern and futuristic Transportation management

> All Indian companies are moving towards TMS as they have witnessed the benefits of it. Technology driven and analytics powered insights are translating in the monetary benefits and increased customer service levels. However the preference is given to the Indian developers as complication and policy framework in the subcontinent is quite different than global counterparts.
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> **ADITYA SHAH**
> **Executive Director, V-Trans**

Systems will scale beyond ordinary vehicle tracking. Present day TMS solutions are not tied down to the devices, rather they are an embellishment of modern, collaborative software that can manage multiple aspects of the business."

Also, TMS is substantially transforming the logistics industry with the adoption of Internet of Things (IoT), Artificial Intelligence (AI) and Radio Frequency Identification (RFID) to enhance the productivity and reduce costs, as the reports are transformed into useful data helping the logistics service providers take intelligent business decisions.

According to Ms Karen, integrated and IoT driven Fleet and Logistics management software like the WebNMS fleet Management solution is

05 Simulation of cost and shipping time

07 Invoice validation

09 Service quality control in the form of KPI

06 Management of reports and statistics

08 Freight Negotiation

enabling businesses to track, manage and gain operational and business insights from everyday operations while minimizing costs, operational redundancies and maximizing the potential of fleet operations.

Amit Maheshwari, CEO & MD, Softlink Global said, "We have worked on data trends from sales, operations, finance which can predict the exact trends and help our customers make decisions and further course of action. We are integrating AI in our system to help in taking strategic decisions and deliver promising results."

Apart from these, integration of ERP and TMS has also been helping companies get benefits such as -

1. Faster implementation of process and faster realisation of ROI
2. Higher visibility across the transportation value chain
3. Achieving unrealised value/savings/ROI as the implementation and breakeven time of an ERP is much higher than that of a TMS

Present day TMS solutions are not tied down to the devices, rather they are an embellishment of modern, collaborative software that can manage multiple aspects of the business. Contemporary fleet management software are a holistic offering of solutions that include real-time vehicle tracking, proactive asset life cycle management, compliance tracking, people management, process management and hassle -free enterprise software integration.

KAREN RAVINDRANATH
Director – WebNMS IoT (Zoho's IoT division)

increased customer service levels.

V Trans added, "The selection of right TMS is very detailed process and includes consent from various stakeholders. Success of TMS also depends on collaborative receptiveness and support in execution."

Besides, the approach of Indian software solution providers towards TMS is also noticeable. Companies like **WebNMS**, Softlink Global have been serving the industry with their updated technology solutions and helping the LSPs getting the best out of their businesses.

As mentioned by Ms Karen, they offer multiple versions of fleet management solution: On-premise, cloud compatible solutions and SaaS based solution. They aim to empower every business, small to large scale enterprises to move to digital and IoT driven fleet operations.

In addition, there are some directions in which the TMS needs to be explored more and also requires technological advancements. They are-

- Live Tracking
- Breakdown Support
- Executive Oversight

Softlink has developed a product named Logi-Sys, which can cater to the small, medium and large-scale companies without investing much and benefiting from the use of the same technology irrespective of the size of the organisation.

India's approach towards TMS

As the technology integration is happening rapidly in the logistics industry, companies have been able to achieve tremendous growth with the upgradation of existing system. Indian companies too have enjoyed the benefits of this technologically rich era.

Companies are adopting TMS as its benefits have been clearly witnessed. Technology driven and analytics powered insights are translating in the monetary benefits and