**Introduction**

The heart of any well-functioning supply chain is transportation management systems (TMS). From procurement and planning to logistics and lifecycle management, a TMS has an impact on every aspect of the supply chain operation. As a result, it's only natural that companies that can use a TMS have more efficient planning, execution, and customer satisfaction than their competitors. Transportation Management (TM) is one of the industry's most advanced transportation management solutions.

In fact, in Gartner's Magic Quadrant for Transportation Management Systems for 2021, TMS is in the Leaders quadrant. This article will walk you through Transportation Management's features, benefits, and integrations.

**What is transportation management System?**

TMS enables companies to manage the whole transportation process in real time, including planning and optimization, forecasting, freight tendering, and charge management. The solution is intended for shippers and logistics service providers and covers all means of transportation (air, ocean, rail, and road).TMS can be used on-premises or in the cloud, giving it even greater flexibility.

**Strategic Freight Management**

In supply chain management, freight procurement and sales are crucial. TMS enables you to automate the quote-to-contract process, forecast future transportation needs, and negotiate freight.Customers, trucking companies, and logistics service providers all have different rates.

**Placement of orders**

Purchase orders from S/4HANA and other third-party ERP systems can be integrated into TMS's Order Management System (TMS). Transport demands may be managed more effectively with the support of the system's real time order-to-cash and procurement-to-pay processes Sales and order scheduling are also synchronised so that customers receive their orders on time

**Optimisation of transportation**

It is possible to determine ideal resources and routes using manual and automated planning, and optimization techniques. It is possible to cut freight costs by consolidating inbound/outbound transportation and planning procedures across locations.

**With Transportation Management, integrations are simple.**

Integrations have become an art form at TMS, and that legacy continues to thrive. Order and delivery processing, sales order scheduling and other logistics-related applications are just a few of the modules that TMS readily connects with.

Even better, TMS is pre-integrated, with Order to Cash and Procure to Pay. If you want to make sure your business processes are going at maximum speed, you can link freight settlement with ERP billing and invoicing.

**Benefits of Transportation Management**

It's easy to integrate the TMS with other programmes, and that's one of its biggest advantages. Nevertheless, it isn't the only benefit you'll be able to enjoy. In addition, companies who adopt TMS can expect lower expenses as a result of increased efficiency and scalability. Transport and warehousing processes that are united in TMS provide greater transparency, allowing you the opportunity to respond swiftly when a "small" problem arises, before it becomes an issue of major proportions.

**System Overview**

Diagram

Description automatically generated

**Detail Requirment**

**High Level Requirments**

|  |  |  |
| --- | --- | --- |
| **Id** | **Description** | **Status (Implemented/Future)** |
| HR01 | **Local Transport Cab or lorry** | Implementeing |
| HR02 | **National Transport Train,cab,flight,lorry** | Implementeing |
| HR03 | **International Transport flight,ship** | Implementeing |
| HR04 | **Login Details** | Implementing |

**Low Level Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **Id** | **Description** | **HLR ID** | **Status (Implemented/Future)** |
| **LR01** | **Local Treansport**  **By car persons** | **HR01,HR02** | Implementeing |
| **LR02** | **Local Treansport**  **By lorry loades** | **HR01,HR02** | Implementeing |
| **LR03** | **National Transport Train small loads** | **HR02** | Implementeing |
| **LR04** | **National Transport flight to fast delivery** | **HR03,HR02** | Implementeing |
| **LR05** | **International transport By ship** | **HR03** | Implementeing |
| **LR06** | **Login Details form to transport details** | **HR04** | implementeing |