

ESSENTIAL GUIDE

**FOR IMPLEMENTING
A TRANSPORTATION
MANAGEMENT SYSTEM**





A transportation management system (TMS) digitizes the entire freight transportation process for a Logistics Service Provider (LSP) helping them book, plan, operate, automate and optimize operations. It lets you execute the plan and give clear in-transit visibility of the movement of goods.

However, for a logistics service provider company, it is not sufficient to have just selected a proper TMS, but it is also necessary to implement the system methodically. Have you ever faced failure of initiatives, leading to failure in achieving desired outcomes? If yes, then in all likelihood, you have gone through a poor implementation process.

There can be an array of reasons why initiatives fail, but essentially they all fall in the class of poor implementation. When results are not achieved, objectives are not met, costs are overrun, and improvements are not acquired, it is not the management that is at fault. It is an implementation failure that happens in many companies. **A McKinsey research suggests that over 70% of change initiatives fail to achieve desired results because of unorganized implementation.**

The most significant advantage a good TMS will offer is to reduce operational costs remarkably for you and your customers. **It will eliminate back-breaking manual processes and give you savings on time, and simultaneously enhance the security of your and your customers' data across almost all departments.** Because of its immense benefits, it is eminent for a Logistics Service provider company to have a good TMS in place. However, implementing a managed TMS system in an organisation can be a daunting and confusing process at times. It is, therefore, essential to understand and prepare well in advance for the successful implementation of TMS. Supply chain technology leaders can use available research and data to prepare and avoid apparent risks in the TMS implementation process.

Below are some possible pitfalls to be kept in mind while implementing a TMS. These pitfalls, if not thought through well in advance and prepared to handle correctly, can hamper the implementation process and may even lead to substantial cost overruns. These critical areas for preparation in advance are -

Management support – Get the management behind this initiative.

TMS implementations need multiple teams to work towards a common goal. A dedicated drive from the CXO level is essential and will avoid deviations.

Identification of correct and knowledgeable "Super User" and making his time available whenever required

Supply chain leaders' involvement, understanding of the importance of TMS, its timely and successful implementation

Preparation and making ready of master data, like fleet details, vendor management details, cargo hub and spoke arrangements, warehouse, cross docking, shipment locations and others

Design and, if required, re-engineering of operation processes

End-user test scenarios and varied situation simulations



Project
Initiation



Solution
Definition



Design



Configuration
& Customization



Quality
Assurance



Go-Live



Support



PROJECT INITIATION

This step is vital in the implementation process because it defines collaboration between the logistics management software-producing company and the logistics service provider or the users. After identifying and selecting the most suitable TMS system during the vendor selection process, both organizations understand the requirements and plan the implementation process. This step is a "kick-off" step of the project. Although while RFP and vendor selection process, the company clarifies the intent, scope and objectives of the desired system. It is in the kick-off step that the scope and desired objectives are discussed in much more detail, agreed and signed off on by all concerned from both sides. A kick-off workshop or preplanning workshop is organized, where all concerned stakeholders and team leaders are involved. This workshop is a foundation for the entire implantation process and therefore following things are discussed and agreed upon in this workshop.

- i. Strategic Assessment
- ii. KPI Assessment and Objective Definition
- iii. Role Definition
- iv. Delivery Methodology and Expectations in Each Stage
- v. Communication Methodology
- vi. Governance Committee Structuring
- vii. Project Initiation Document Creation



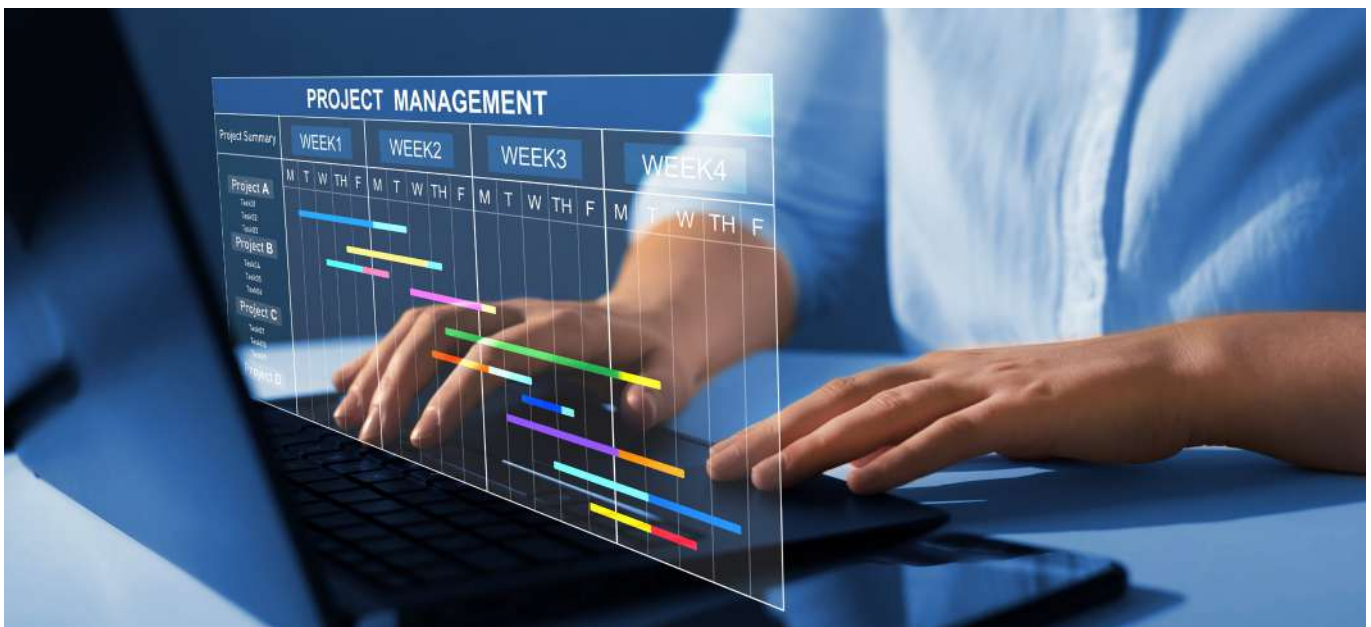
Based on all the above and any other relevant points discussed, it is always a good idea to create a Project Initiation Document (PID) with every detail and all related information during the project initiation stage. A few key points to be kept in mind while creating a good PID are as follows:

PROJECT CHARTER

This typically involves 2 parts.

1. Pre-requisite for blueprint or understanding and
2. Basis for scoping

Create a project charter and get it ratified by all stakeholders. The project charter outlines notable features like project scope, deliverables and objectives. The charter will help all stakeholders and supply chain leaders to agree on various aspects of the project to be on the same page.



IDENTIFYING CORRECT AND ADEQUATE STAKEHOLDERS

As stated before success or failure of TMS implementation can impact various departments in an organization. It is, therefore, imperative to identify the right stakeholders and then specify their roles in the implementation process, whom to involve at different project meetings and the reporting line and other such things. These initiatives will reduce the risk of lack of understanding and will ensure the project goes effortlessly. This also involves the preparation of an induction manual for resource onboarding.



OPERATIONAL DETAILS

The document must include operational details of the company which must have the below:

ORGANIZATION STRUCTURE	Organogram and detailing the hierarchies and roles
SERVICES	Bouquets of services being offered by the company
LOCATIONS	Catered by these services
BUY CONTRACTS / SELL CONTRACTS	Existing contracts with vendors as well as with key customers
RATE CARDS	Standard tariffs if any, pricing strategies

ELABORATE PROJECT OBJECTIVES AND DELIVERABLES

Writing down and creating a document elaborating on the project's objectives, goals and deliverables are necessary, as it helps the team members focus and understand what they are working towards and what it has to achieve finally. Additionally, documenting deliverables will also ensure that these are in line with the requirements of the stakeholders and business goals.

RISK ESTIMATION

During the initiation stage, imagining possible risks and difficulties ensure that the stakeholders are not caught off-guard and that you are ready with a fallback arrangement in case of an eventuality. Project costs, timelines and scope of work are typical risks that need consideration in advance.

IDENTIFICATION OF CRITICAL RESOURCES

Competent resources for crucial roles in the team is essential for the successful implementation of the TMS project. It will also help to make available desired skill sets if they are not already present. As a result, project implementation can be done as per decided timelines.

MILESTONES

The PID should comprise a list of critical events and key dates to achieve those events. Thus, PID will simplify the execution and tracking of project implementation progress. Additionally, it will give management visibility about the momentum of project implementation and take necessary action in case of deviation or delays.

KPIs FOR ASSESSMENT

Resource utilization (planned vs actual), progress achieved, or cost performance can be some of the KPIs. Remember that all KPIs should align with the overall project objectives and mirror the organization's business strategy.

1. Existing IT Landscape
2. Reporting Needs
3. Statutory Requirements
4. Financial Dimensions
5. Automatic Data Capture Requirements





SOLUTION DEFINITION

A solution in technical terms is "an implementation of technologies, people, information and processes, in a specific system, to support business capabilities, that solves business problems".

The definition of solution initiates from the definition of a problem. An organization must understand the root causes (not just the symptoms) of its challenges. Most of the time, the real problems are invisible and what is visible are only the symptoms. Root cause analysis of the problem is therefore essential so that you are not just taking care of symptoms but administering the correct procedure to cure the underlying condition. Create a problem statement with the help of identified problems and their root causes. This statement should be communicated to all stakeholders, and have them review it so that you can correct it in case of variance.

The solution definition follows the problem definition. One can only create a solution definition if the problem is defined well. Solution definition will also set an essential objective for the TMS, such as what problem it is addressing and what work it should do to resolve the defined problem. Various aspects can impact what solutions or work will be done by the TMS; budget and resources allotted for the job, time given, the technology used, skillsets and others. The selected solutions will help to elaborate the project scope.



While defining the solution, below 2 areas are important:

A. PROCESS MAPPING

This includes the study of as-is processes. Process mapping should be able to create rules for processes, scenario lists, integration lists and operational processes.

B. SAND MODELLING

Sand modelling involves the creation of solutions for various scenarios identified during process mapping as stated above.

PROJECT SCOPE

In simple words, it is the planning of work necessary to complete the project. Project scope management ensures that the project comprises all and only the work required to accomplish the project. A correct project scope definition significantly contributes to the success of the TMS implementation. It must clearly define the TMS product's project goals, deliverables, functionalities and support processes. Additionally, in the project scope, all stakeholders involved must be identified and the tasks and deadlines assigned should be documented.

Powerful project scope management is critical because it will help implement the TMS project and manage your resources productively. Such a project scope can lead to various benefits as below:



A. REALISTIC TIMELINES

When you precisely know what's required to complete a project, it becomes easier to set realistic deadlines that you and your team members can honor.

B. ACCURATE BUDGETS

Scope of work also highlights projected cost expenses and thereby helps you set a realistic budget. Further, monitoring and sticking with that number during the implementation process becomes more manageable.

C. EFFICIENT PROJECTS

A good project scope helps your team deliver the output comprehensively by following the original requirements rather than letting them continue to deviate from the goals or miss deadlines.

In other words, your project scope statement serves as the project barometer. The project manager and the team members can keep checking this barometer, and it will inform them if the implementation progress is on the right course.



DESIGN PHASE

This is also called the discovery and design phase. In this phase, the new TMS's operational processes are discussed, documented and reviewed. Typically, a "Requirements Workshop" is organized by the software manufacturing company with the buying company, its users and other prominent stakeholders affected by the new TMS. During this workshop, the current transport operation processes (as-is processes) are mapped, and the IT landscape of the organization is reviewed. These processes typically include the following:



- | | |
|---|---|
| a. Fleet allocation / Operation process | e. Transportation execution processes |
| b. Transport procurement / Truck hire / Outsourcing process | f. Tracking and information sharing process |
| c. Order receipts process | g. Financial processes |
| d. Order fulfilment process | h. Performance evaluation process |



After reviewing the current, as-is processes, the project team will evaluate and determine the future state of the organization operating with the TMS, the to-be processes. This phase in TMS development / implementation includes multiple deliverable documents. Determination of to-be processes helps improve communication and collaboration between design and development teams. TMS vendor companies will have industry domain experts, and you can leverage this knowledge depository to identify newer areas where the new system can substantially help improve and further optimize processes. Having transparent communication during the design stage workshop and healthy collaboration with TMS partner is crucial to design successful future processes.

Based on the outputs of process mapping, after it is complete, various scenarios are built. A scenario is a description of a person's interaction with a system. Scenarios help focus design efforts on the user's requirements, which are distinct from technical requirements. Also similar to 'use cases' scenarios can be understood by people who actually will be using the system but do not have any technical background. They are therefore suitable for use during participatory design activities.

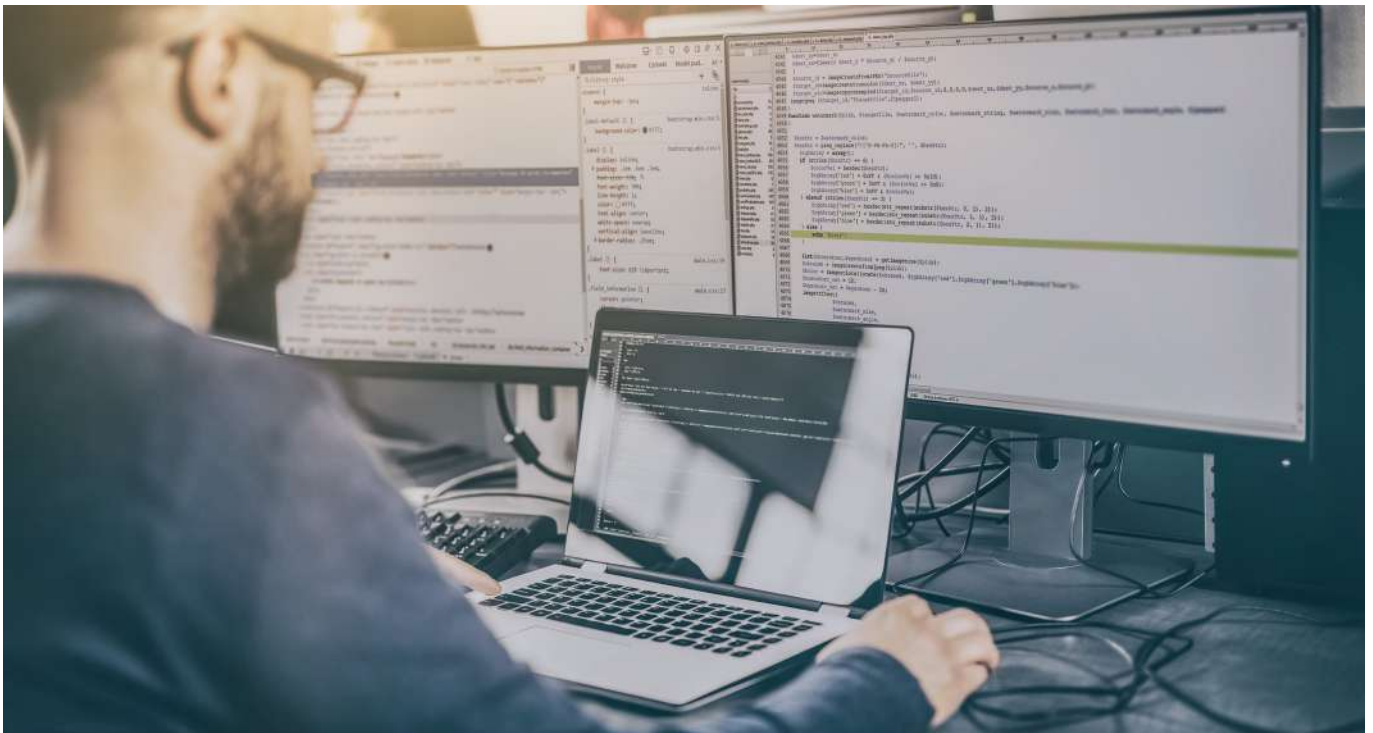


CONFIGURATION & CUSTOMIZATION

Once the requirements are brought out, present and future processes are reviewed, confirmed by the TMS producer and your company, the project steps into the next phase - the configuration phase. In this stage, the vendor will start configuring the TMS system as specified in the previous phases, considering the different requirements, mode of transportation, operational details, as-is processes, capabilities and interfaces to other applications.

A significant part of the work in this phase is taken care of by the TMS vendor.

The software-producing company carries out data mapping for the interface, basic configuration and solution development if any specific customizations are required. However, some tasks, such as interface preparations, the creation of interface test scenarios, and the collection and preparation of master data, must be carried out by the logistics / transport company. The configuration management process comprises of the following steps:



A. CONFIGURATION MANAGEMENT PLAN

This is critical as it clarifies how you plan to achieve the project's deliverables and informs the stakeholders about your configuration management strategies.



B. CONFIGURATION REQUIREMENTS

It is necessary to identify the project's configuration requirements. A meeting with key stakeholders and a review of deliverables are done with them. These deliverables are documented so that it becomes easier for you and TMS making company later to check progress and make changes, if any.

1. TRACKING CONFIGURATIONS

This step creates and keeps a list of all configuration versions, the previous and present ones. You can save a record of changes made and track the configuration progress.

2. TESTING CONFIGURATION REQUIREMENTS

Examining if your project is consistent with the configuration requirements is another crucial step. This step is also known as auditing. This step's main intention is to ensure that your project's final result meets specified requirements. You can also identify areas of improvement while testing.



QUALITY ASSURANCE

Ensure a High-Quality Implementation: One of the main constraints observed often is the failure to double-check requirements and confirm TMS capabilities for high-quality implementation. The double-check and confirmation is initiated after the system is configured as per previously identified requirements and after the clean data is uploaded. This phase helps ascertain whether the TMS is configured correctly and whether it integrates with other applications, like warehouse management systems or accounting systems. This stage is also for reviewing and fine-tuning the uploaded data, the configured processes and the TMS capabilities. During the double-check and confirm stage, you need to allocate a good amount of training for your super users, as this will impart longer-term success to the project. Training super user is essential because these super users, in turn, will train the rest of the end users on various operational aspects of your TMS. Simultaneously, they will also be responsible for supporting the User Acceptance Testing (UAT) design and test cases. This phase is also crucial because the more time you allocate to this task and the in-depth testing and training you will go for will help you have a much smoother go-live phase.

Before deploying the TMS into a production environment, end users will test the system for its usability. UAT is typically carried out once the functional, integration and system testing is completed. A typical UAT process is carried out by end users who will carry out their daily operations to understand how the system behaves. End users will execute multiple scenarios to find out chinks in the armor before the go-live.





GO-LIVE



As a concept, go-live is straightforward. Go-live is the stage at which the product becomes useable for its intended application, or it becomes live. However, a successful go-live commonly rests on various complex factors, and many go-lives do not go effortlessly or experience complete failure. In fact, most logistics service provider companies first test the system at on branch or at one operations hub, learn from its experience and then launch it at other locations / branches.

In the case of TMS, go-live is the stage at which code moves from the configuration and test environment to the deployment environment. At this stage, the system becomes accessible to users. And they can start transacting with the help of the new system.

The deployment and go-live phase is the concluding step in TMS implementation. All the efforts taken in uploading clear and powerful master data, having super user trained well and TMS configuration tested rigorously – is put to a litmus test now.

TMS vendors are investing more in developing usability, it is still advisable to emphasize the importance of training the super users and end users if you implement TMS. Creating specialized training material in line with your operations and other processes should help your end users better understand the various features offered by the TMS. Using real-life examples and data in training scenarios helps end users comprehend the new TMS features and functionalities well.

Go-live is the period in the TMS development process when the project goals are achieved, desired results are produced and output is accepted. There are two essential elements of the go-live process:

A. THE TRAINING PHASE

In this, key users can handle their activities and tasks using TMS, from the first day of adequately using the new TMS. The goal should be to reach go-live with users fully aware of the features and their use in the new TMS. There are various ways of offering the training plan, provide one-to-one training, group seminars with several users involved, or 'train the trainers' approach wherein super users train other employees in the organization engaged in the TMS-related process.

B. THE TESTING PHASE

In this, a double confirmation is done that there should be no system errors and that, on the other hand, the new processes and factors in TMS meet the transport company's needs in every way.





SUPPORT



Once the go-live is completed, it's necessary that the system is placed under a hyper care support or 24/7 support for the next few months. Being a new solution the LSPs will definitely face few chinks in the armor that needs to be addressed quickly so that the business does not stand still. Once the hyper care support stabilizes the solution, it can be moved to regular support team to handle change requests and new features.

TMS can give your company a big leap forward in terms of performance, efficiency and growth. However, with the disorganized implementation of the TMS, you won't be able to reap the benefits this great tool can provide you otherwise. Implementing a TMS is a crucial first step toward digitizing the entire ecosystem of a logistics service provider. Following these processes and frameworks will help LSPs avoid pitfalls and increase the chances of a successful implementation.

ABOUT RAMCO LOGISTICS PLATFORM

Ramco Logistics Platform provides a cloud-based integrated solution tailor-made for third party logistics and express parcel service providers. The software helps to overcome key pain points, including supply shortages, limited resources, operational costs, the surge in demand and new compliance rules. The integrated solution encompasses transportation management system, warehouse management system, fleet & hub management and rating & billing. Trusted by over 25+ logistics companies worldwide, the platform is powered by NextGen AI & ML features that help logistics service providers reduce cost and acquire new customers.

