

**Volume 12, Issue 5, May 2023** 



**Impact Factor: 8.423** 











[e-ISSN: 2319-8753, p-ISSN: 2347-6710] www.ijirset.com | Impact Factor: 8.423 | A Monthly Peer Reviewed & Referred Journal |

|| Volume 12, Issue 5, May 2023 ||

| DOI:10.15680/IJIRSET.2023.1205072 |

# Implementation of Transport with Tender Web Application

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**ABSTRACT**: A Transport Management System (TMS) is a digital process that manages all transportation activities in a single point of view. It contains all the details of vehicles and jobs in a dynamic way, allowing users to collect data in a single click. The TMS includes a tender system that enables transporters to view open tenders and quote for them. They also have access to their approved tenders with details such as tender amount, dispatch date, and payment dates. The purpose of the TMS is to simplify transportation activities, eliminate the need for maintaining registers, and enable easy access to indent reports. The TMS comprises four main components: indenter, transporter, super admin, and admin, each with specific responsibilities related to managing transportation activities.

**KEYWORDS**: Transport Management System, Indenter, Super-Admin, Transporter.

#### I. INTRODUCTION

The Transport Management System (TMS) is a digital platform designed to manage all transportation activities for a specific job. It provides a single-click view of all vehicle and job details, enabling users to collect data in a dynamic and efficient manner. The TMS also features a Tender system, allowing transporters to view and quote for open tenders across different locations. They can access their approved tenders with details such as tender amount, dispatch date, and payment dates as a ledger for easy reference. The TMS eliminates the need for repeated communication with transporters regarding job details and payment, making the process more streamlined. By digitizing the transportation activities and removing the need for maintaining registers, the TMS provides an easy and accessible way to view indent reports.

We have developed a Tender system for transporters that allows them to easily view and apply for available jobs from any location. Using this system, transporters can also review their approved tenders, including important details such as the tender amount, dispatch date, and payment dates. This system was created to eliminate the need for repeated inquiries about pricing and duration, as well as to streamline record-keeping. With our web app, transporters can access their indent report at any time, making it a convenient and efficient solution for managing their business needs.

#### II. RELATED WORK

The current study explores a model designed to facilitate the indenting and transportation process through an automated system. The study identifies four key stakeholders in this model: the indenter, transporter, super admin, and admin. The indenter is responsible for filling out the indent, specifying the type and quantity of materials needed. The system automatically generates a report based on the indent. [1] The transporter component of the system provides transporters with access to available tenders, which they can edit and file as long as the indent does not exceed the limit set by the super admin. Once the transporter files the tender, the super admin selects the transporter and fills out the invoice details for payment. The transporter must upload an invoice for advance or force payment, which is confirmed by the subquery displayed in the transporter portal. [2] The super admin plays a critical role in selecting the transporter based on the indent in the tender and filling out the invoice details. The admin monitors the advance payment and balance payment to ensure that all aspects of the process run smoothly. Overall, the study highlights the importance of transparency in the indenting and transportation process, made possible by the automated system.



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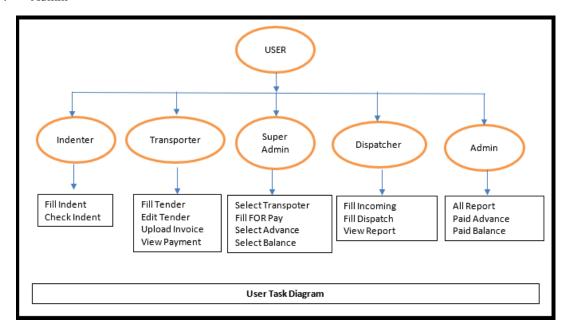
# || Volume 12, Issue 5, May 2023 ||

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#### III. METHODOLOGY

In the Proposed system Transport with Tender Web Application has five modules:

- I. Indenter
- II. Transporter
- III. Super Admin
- IV. Dispatcher
- V. Admin



#### Let's study in detail:

#### Indenter:

In this system, the indenter plays a crucial role in specifying the type, quantity, and source of materials required. As the indent is forwarded, an automatic indenter identifies the robustness of the request, which aids in generating accurate reports.

#### Transporter:

In transporter model, the transporter gets to know which plus tenders are for them and he files the tender for that which he can edit as long as the indent is not greater than that of the super admin and the super admin can send any transporter Selected then it shows in his portal and he has to upload invoice as soon as super admin selects for advance or force payment, the subquery gets displayed in the portal and the transporter also gets confirmed so that all model is transparent goes.

### Super Admin:

The work of the super admin is to select the transporter with the work price from the filled Indent in Tender and fill the invoice details for the payment and select the advance and balance payment of the transporter and reach the admin, so that the admin is easy to make the payment.

#### Admin:

an admin is responsible for overseeing and managing various aspects of the company, including financial transactions such as advance and balance payments. They monitor these payments and ensure that all reports are accurate and up-to-date. Additionally, admins oversee the daily operations of the company and ensure that all tasks are being completed in a timely and efficient manner.



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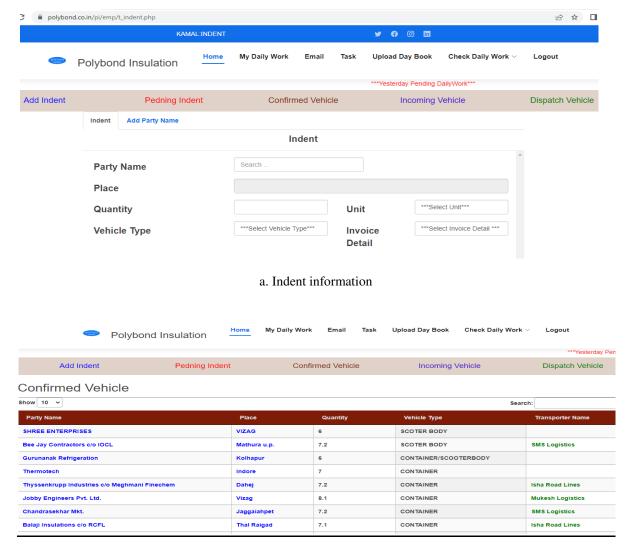
#### Dispatchers:

The role of a dispatcher is to manage and coordinate the distribution of goods or services to the designated locations. They are responsible for ensuring timely delivery, tracking shipments, and communicating with both customers and delivery personnel. Dispatchers play a crucial role in ensuring efficient and effective transportation and logistics operations.

The TMS was developed using modern web development technologies, including HTML, CSS, and JavaScript. The front-end of the TMS was built using React, while the back-end was built using Node.js and Express. A database was created to store all the information related to vehicles and jobs. The TMS was thoroughly tested and optimized to ensure efficient and reliable performance.

#### IV. EXPERIMENTAL RESULTS

Fig 1(a) represents the implementation and results of the Transport with Tender Web Application. Fig 1(b) shows the indenter filling out indent information, while Fig 1(c) displays the incoming vehicle at the user side. Fig 1(d) shows the dispatch vehicle details in the user side. These figures likely demonstrate the different stages of the transportation process as managed by the Transport Management System with Tender.



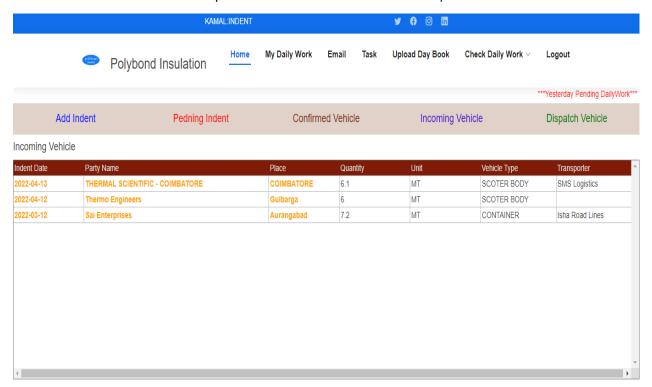
b. Confirm vehicle at user side



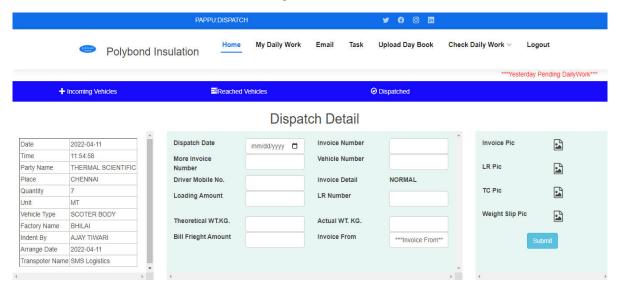
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#### c. Incoming vehicle in user side



d. Dispatch vehicle details

Fig 2(a) represents the Super Admin Dashboard view of the application, which enables the Super Admin to manage and monitor all transportation operations, including ongoing or incoming vehicles, payment activity, and other tasks. This dashboard likely provides a comprehensive view of all the tasks and operations related to transportation management.

Fig 2(b) shows the selection of a transporter in the Super Admin panel by the Admin. This likely refers to the process of selecting a transporter for a specific job or tender based on factors such as availability, location, and previous

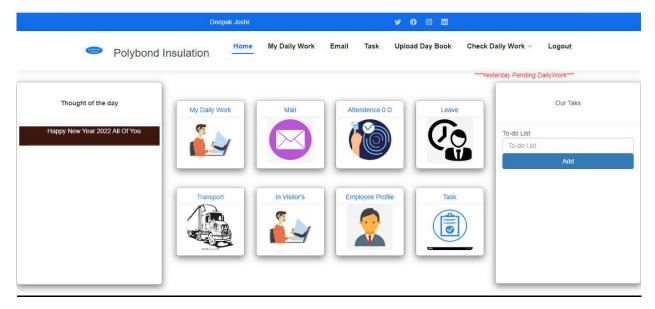


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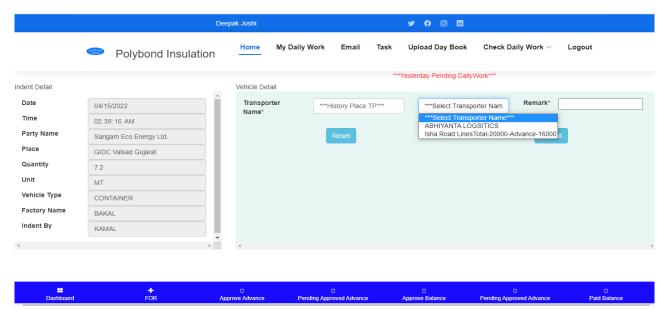
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performance. The Super Admin and Admin play important roles in ensuring the smooth operation of the transportation system by monitoring and managing all aspects of the transportation process.



b. Super Admin in Dashboard



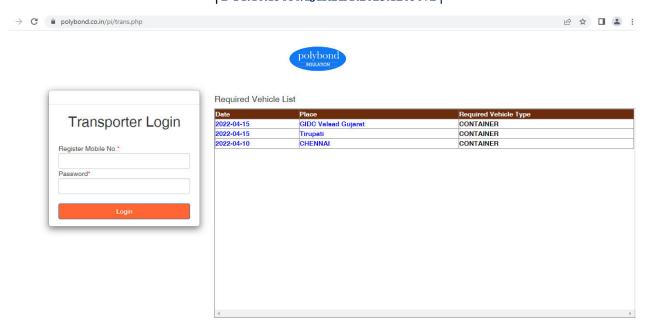
a. Selection Transporter in Super admin



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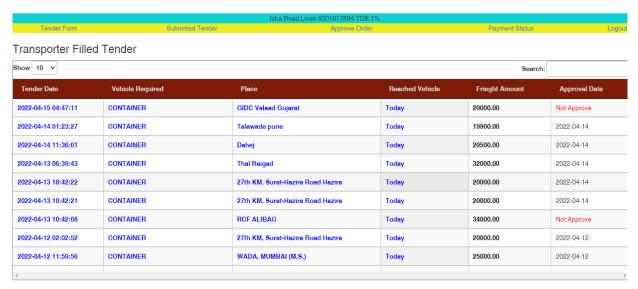
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b. Transporter Login with list of Tender

Figs. shows Transporter login and list of Tender, to bid to fill the form for the indent for the particular task, The below Figs shows the list of the Transporter filled Tender form.



C. Transporter filled Tender form

#### V. CONCLUSION

In conclusion, the Transport Management System developed in this study is an effective digital solution for managing transportation activities for a specific job. It simplifies the transportation process, eliminates the need for maintaining registers, and provides easy access to indent reports. The Tender system allows transporters to easily view and apply for available tenders, and to review their approved tenders. The TMS is user-friendly, efficient, and reliable,



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and has the potential to revolutionize the transportation industry. Further research could focus on expanding the capabilities of the TMS to include more advanced features, such as real-time tracking of vehicles and shipments.

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