Timbba: An Innovation to Reduce Leakage and **Frauds for Sawmills**

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Abstract

There are many issues that sawmill owners face such as fraud in consignment, leakage in material, and altered data during the journey of wood logs through various ports and sawmills. This paper discusses how Timbba® solves these problems and increases efficiency, and eliminates losses for sawmill owners.

Keywords: Fraud, leakage, sawmills

I. INTRODUCTION

India isn't just a large producer of tropical logs in the whole world but in addition, it is the biggest buyer of wood products. India imports timber majorly from Kandla, Mundra, Nhava Sheva, Chennai, Kolkata, Tuticorin and Mangalore Ports in both bulk and container vessels coming from Malaysia, China, New Zealand, Indonesia, Germany, South America, Far East, Papa New Guinea, Solomon Islands, and Africa.

Nearly 2.5 lakh to three lakh cubic meter (CBM) timber unloaded from eight ships at Deendayal Port Trust (DPT), Kandla and Mundra Port has piled up in eight warehouses in two months. Kandla port alone accounts for 70% of India's timber import and processed wood is sold to various industries including building construction and furniture makers.

Transporting of wood/logs from various regions of the world via ports in India to sawmills has never been an easy process. There are many loopholes in operation that result such as fraud in consignment, leakage in material, and altered data. So, sawmills face the outcomes and bear the losses. After doing a lot of research on these many problems faced by sawmill owner, we created a solution named "Timbba®".

II. INCREASE SAWMILL EFFICIENCY **WITH TIMBBA**

Timbba is a timber measurement app and also a digital workflow system that works on mobile phones that help sawmills to detect leakage and fraud in a consignment. It has innovative features that help users in many ways:

- (1) Scans barcode faster in the gate-in process.
- (2) Digitally feeding of data (measurements, grade, barcode no.)
- (3) Share real-time reports of Gate-In, sawmill scanner, stock, loading.
- (4) Monitoring of all sawmill work on mobile phone.
- (5) Managing teams remotely.
- (6) Provide data security to users with cloud-based technology. With Timbba, sawmill owners & managers can monitor the work at various stages just via a click on their Smartphones. Many sawmill owners are now using Timbba and appreciating the role it plays in fraud prevention, monitoring, and overall management. Timbba has completely removed dependence on people for managing sawmill operations.

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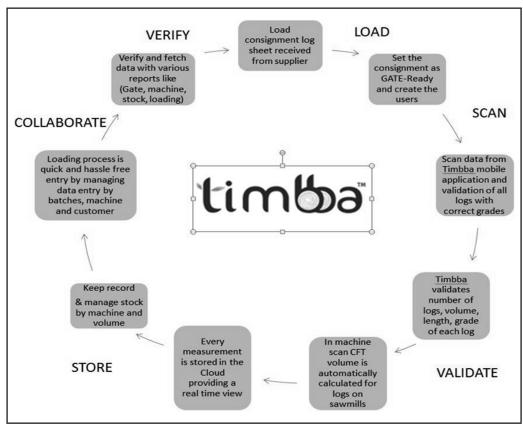


Fig. 1. Timbba Process

III. STEP BY STEP PROCESS FOR LOG SCANNING WITH TIMBBA®

Timbba works for those who work in the timber industry, generally in sawmilling of logs. It is an enhanced solution for sawmills to detect frauds through digital measurement and verified reports. To make it easier for people to start using Timbba we have to describe the workflow step by step. Fig. 1 shows the Timbba process.

- (1) Load consignment log sheet received from the supplier.
- **(2)** Set consignment as gate scan ready and create users for Timbba mobile app.
- (3) The user will scan the barcodes/QR codes with the help of Timbba inbuilt scanner on a mobile device.
- **(4)** Every measurement is stored in a cloud providing a real-time overview of measurements.
- (5) In machine scan logs on the sawmill, auto calculates

the CFT volume and verifies variation.

- **(6)** Timbba validates the number of logs, volume, length, and grade of each log. Users can filter the data and check for any leakage or fraud.
- (7) After completion of saw work, users can keep the records & manage stock by machine and volume.
- **(8)** Once saw wood is ready, Timbba makes loading process quick & hassle free by managing data entry by batches, by machine, and by customer.
- **(9)** Timbba verifies and fetches data with various reports of gate, machine, stock, and loading.

IV. CONCLUSION

Timbba provides an easy to use mobile application that fraud and leakage that happens during transportation and processing of logs in a simple way.

About the Author

Deepak Jain is an experienced engineer and product leader with a demonstrated history of working in the computer software industry solving technically challenging problems at scale. Eager to build products, solving real-time problems, Deepak founded Subtlelabs as a product engineering company that is today serving customers across the globe. He had earlier worked with global companies and architechted solutions in Healthcare, Security, Fintech, Logistics and CRM domains.