



*TRAQbin*

LIVE IN  
A CLEAN  
WORLD

## VISION

Our focus is to collaboratively create technology solutions for profitable business.

## MISSION

With the power of talent and innovation that our team brings on the table, we provide our customers with high quality, relevant and customised technological solutions, which are easy, economical and safe to use.

## CHALLENGES AND NEED FOR THE SOFTWARE

Regions like India and Africa will be one of the fastest growing expanses for waste generation owing to their burgeoning population. **The real problem?**

- ⊙ Gap between garbage generation and its collection.
- ⊙ Loopholes lie in the monitoring of waste management.
- ⊙ Authority misses out on large amount of revenue

## TRAQBIN is the Solution

KS Infosystems pitches in to convert the problem into a million-dollar business venture by putting the trash in its place with 'Traqbin' – a breakthrough in the way waste can be managed and monitored.

Traqbin can help the Governments deal with garbage management by providing services in:

- ⊙ Usage and route planning optimization of garbage trucks
- ⊙ Efficient monitoring and management of waste bins
- ⊙ Verification of collection service
- ⊙ Application of Pay-As-You-Throw programs
- ⊙ Offers services – from the start till the end of the process -- at your doorstep
- ⊙ Reduces environmental costs that a company has to bear by facilitating better recycling

# PROCESS AND COMPONENTS

Traqbin is geared towards developing a national level platform to bring all small vendors and collection parties under one umbrella to establish a robust waste management system for a cleaner world.

An n-tier system, Traqbin uses an amalgamation of technologies at every step of its operation.

## Registration

The first module can be divided into 3 sub-parts:

- a) Land base creation
- b) Data collection using mobile application
- c) Data Verification using Call-Centre technology

After data validation, the information collected is filtered into two categories:

- ⊙ **Interested customers:** Those who agree to get a bin with immediate effect.
- ⊙ **Non-interested customers:** Prospective customers, to whom, follow-up calls are made in the course of time to check if they want to get a bin at their doorstep.

## Bin Distribution

After identification of the verified interested customers on the map, bins are then scheduled to be distributed to them. RFID tags are installed on the bins to give a unique identify each bin and monitor its usage from the Command centre.

## Bin picking

The assigned vehicles are guided by the waste-bin application installed in the vehicle. Therefore, the driver knows the 'task of the day' i.e. exactly which bin to pick from which location.

As the RFID-bin comes under the range of RFID Scanner (mounted on the back of the vehicle), the application indicates real time status of the bin by three types of indicators- Green, Red and Blue.

The status of the bins picked or not picked gets updated on the server in real time.

## Vehicle Tracking System

- ⊙ Real time vehicle monitoring and management
- ⊙ Fuel monitoring
- ⊙ GEO-Fencing
- ⊙ Violation alert such as over speeding and fuel theft

## Revenue collection

The invoices are auto-generated periodically in accordance with the bins picked. Alerts are sent to the customers though SMS and e-mails. All revenue collectors are equipped with Point-of-Sale (POS) devices, which are tagged and GPS enabled, and capable of collecting revenue from various platforms.

- ⊙ Cash
- ⊙ Mobile money
- ⊙ Credit card
- ⊙ Debit card
- ⊙ USSD
- ⊙ Cheque

## Consolidated Dashboard

The dashboard at the Command Centre gives live-feed of the daily operations, keeps real-time information of the interested customers, data of bins distributed, waste bins collected per schedule, and the revenue generated with live monitoring of operations performed by drivers and janitors at the fields. The A-Z of every component of Traqbin is available on the dashboards in real-time.

## The **TRAQBIN** Advantage

- ⊙ Up-to-date information with real-time reports: The application is online and the database is available at a centralised server i.e. there is one-single database. Therefore, one gets up-to-date information as the system offers the ability to watch data flow into the database in real time. This improves reporting capability, and promotes an effective monitoring and supervising system. RFID-based system can capture real time attendance of janitors on the ground.
- ⊙ Live Vehicle Tracking System: GPS-enabled trucks to track their movement and location. It sends routes directly to drivers, helps in instant identification of loaded vehicles, auto payment generation and collection, security and identification of the vehicles at the exit and the entry points.
- ⊙ Reduces carbon footprint: Trucks wear and emissions are minimized and volume per mile driven increases. This eventually reduces the company's carbon footprint.
- ⊙ Cost-effective: Fuel cost drops significantly, as the distance driven is reduced, vehicle maintenance costs reduces, and routes are serviced only when needed. Overspills, overfills and emergencies are eliminated.
- ⊙ Improved productivity and efficiencies: Analyse and benchmark the performance of your operation.



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IT SOLUTIONS

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