

Optimizing Waste Collection Routes!

Philibert Dalle
Co-Logistics Director

Who we are



SARIA INDUSTRIES – Collecting waste and creating value

Our first goal is to promote the value of waste recycling. To achieve this, perfect control of the routing of these is essential

45 logistic sites, 17 of which are waste treatment plants

6,200 daily pick-ups (550 route plans to organize every day)

Reviews and Objectives

Project scope: *Optimize 56 % of route planning and 32 % of waste collection from the group, or 2000/day.*

Regular collections with frequent removals.

Collect boxes, transport to carts and remove the waste.

Collected waste of meat or vegetable type.

Reviews : Very repetitive tours (no need for questioning). Customer contingencies were present. Tours are by request only because they are not as profitable.

Objective : Challenge and optimize tours:

- **[Operational reason]** Switch from "sudden and reactive" mode to "proactive" mode.
- **[Financial reason]** Monitor the upward or downward shift of resources committed to the road
 - => Variability of expenses in relation to the volume of activity



Project Milestones

Launched on March 2009

Pilot in 3 steps:

- 6 months of settings (For Opti-time and our E.R.P.)
- 6 months pilot on our first site
- 6 months pilot on a second site

Deployment in 2 steps:

First, following a voluntary approach to sites,

Then, following a thorough approach, for the most resistant sites, indifferent or unconscious.

People involved:

3 for the Project, 2 for the Pilot, 25 for the Users



For better ownership, we renamed the project "BIOTOUR II".

Gains & Impacts

Using updated software: Automatic update of quantities

Reduce the number of unused bins in the tour

Identified 30% - Safety margin 10% - Target set at 20%

[Productive gains] 30 more clients per day

[Financial gains] 4 fewer visits per day, 45 K€ saved on a collection budget of 450 K€/ month

Last Unit deployed

- Deletion of 3 out of 20 vehicles in total

[Financial gains] 15% of resources

33.7 K€ saved on a collection budget of 225 K € per month

Next Unit needed to be deployed

- Elimination of empty runs, 7% of planned removal

[Working conditions] 4 less redundant runs every day

[Financial gains] 9.5K€ saved on a collecting budget of 247K€/month



Gains & Impacts

Sense of better forecasts

(Technology automatically takes into account the payloads of the truck and the time range of the collection agent)

[Impact on customers]

Less cancellation.

More accurate predictions of quantity of bins creates better customer service.

Sense of better control

[Impact for stakeholders]

Less stress when validating tours.

Less unnecessary work for collection agents.

Less unnecessary handling of bins by agents.

Less time spent readjusting tours.

Finding the right solution

[Business Impact]

Saves time on searches and calculations.



Perspectives



Today [**Paramount**] :

Operators' continued re-appropriation through exploitation of Geoconcept by validating their daily tours.

Account for irregular, "periodic" collections; therefore, the number of rounds generated

Tomorrow [**Useful**] :

Integrate the predictions of the quantities to be collected

Integrate variable information of passages

Set up a tour simulator

Set up a data exchange with our customers

Future [**Ambitious**] :

Introduce non-regular collections based on customer calls (22% of the tours, 4500 / day) into Biotour II

Test and monitor; make improvements where necessary

A vibrant tropical illustration featuring a toucan with a large orange beak and blue eye, surrounded by various green leaves, palm fronds, and colorful flowers including purple, yellow, and red ones.

GEOWORLD

PARIS
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FESTIVAL

THANK YOU

For your attention

