RoutingMaps

DESCRIPTION OF THE INVENTION

The main asset of RoutingMaps is the **Optimized Route Planning.**

RoutingMaps comprises advanced **optimization algorithms** together with a **graphic interface** that shows data, indicators and maps, all in a synchronized way that eases its understanding.

The algorithms in RoutingMaps are able to solve in seconds route problems with limited resources (fleet and crew), taking into account the most frequent business restrictions (time windows, work hours, etc.), and offering realistic solutions (routes) that meet the restrictions as well as optimize the costs using a flexible, multiobjective system.

Moreover, RoutingMaps offers a solution **simulation environment** that allows to generate, modify and **compare scenarios and select the solutions** that fulfil better the demands of your business.

RoutingMaps integrates a mobile app for **real time tracking** of planning routes, and **evaluation** of key indicators fulfilment.

APLICATION BUSINESS SECTORS

RoutingMaps can be used by any company that requires transport services, from passengers to goods (delivery or pick-up), courier services or service providers (commercial visits, maintenance services, etc.).

The bigger the problem to solve, the greater benefit in using this tool, in terms of saving of time in solving the problem and in terms of saving of costs.

Therefore, the business sectors of application would be:

- Industry
- Distribution
- Logistics and Transport

TECHNICAL ADVANTAGES AND BUSINESS BENEFITS

The main asset of RoutingMaps is the Optimized Route Planning.

Currently, route planning is usually done by hand either clustering the places to visit by postal code, or assigning areas to vehicles. Very often, the planning is a task delegated to the drivers that act according to their experience and knowledge of streets and roads.
RoutingMaps offers great advantages in this process:

The allocation of loads and routes to vehicles is based on the services to provide each day, taking into account the daily load, the service time windows and even its priority. The objective is maximizing the fulfilment of

dates and time windows and minimizing the cost associated to each route. RoutingMaps performs a global optimization making the most of the available resources, that leads to cost savings (vehicles, time, kms).

RoutingMaps does not require any prior knowledge of streets and routes, since it is based on the data provided by GoogleMaps. Therefore, it can be used by a planning manager who does not know the routes, effectively separating route planning from execution. In fact, route planning can be centralized. In addition, street and road information is constantly updated.

RoutingMaps shows the routes in maps and offers quantitative information of each one (length, cost, delays, etc.) providing advance information of times and costs that can be shared with our customers and reference for the subsequent tracking of the routes. Measuring deviations between planning and tracking allows the identification of improvement areas.

RoutingMaps allows the edition of the proposed routes (adding or deleting services, putting forward or backward services in the route, changing the allocation of the services, etc.) and evaluate the impact of the alterations graphically and quantitatively. Therefore, RoutingMaps is not only an optimization tool, but a simulation system that helps decision making.

STATUS DEVELOPED OF THE TECHNOLOGY

RoutingMaps is a software developed and tested by the Instituto Tecnológico de Informática. It is installed in customers from a variety of sectors and sizes. RoutingMaps is under continue evolution, including every year the improvements achieved through the research done in the ITI and the inputs and experience from our customers.

INTELLECTUAL PROPERTY RIGHTS

By licence

COLLABORATION SOUGHT

Companies interested in the following systems of cooperation:

- Agreement about patent license to implementation and to use of technology.

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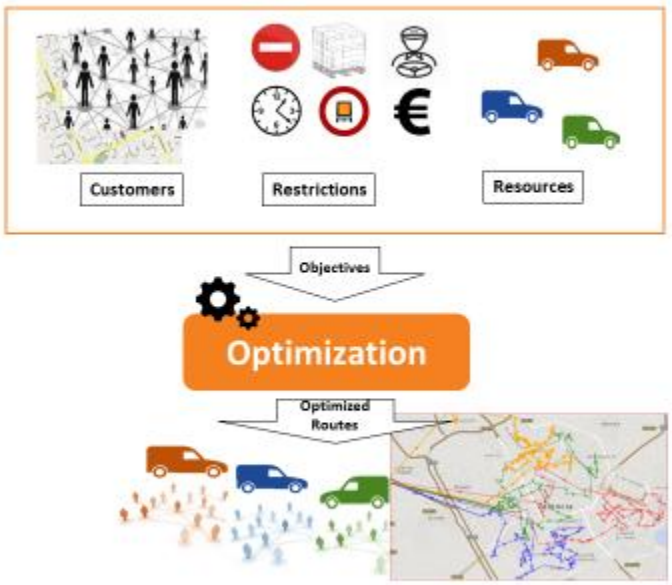
RELATED IMÁGES



CONTACT DETAILS

NAME: Eva López Gimeno – Responsable de Comunicación
TECHNOLOGY CENTRE: ITI – Instituto tecnológico de Informática
ADRESS: Cº de Vera s/n, edif. 8B – Acc. B – UPV - CPI
POSTCODE AND CITY 46022 - Valencia
T. +34 963 877 069
E-Mail: comunicacion@iti.es
Web: www.iti.es