

Régens conquers with GIS innovation

“Innovation and new services are the means for beating competitors” – says Norbert KISS, GIS expert, consultant of Régens Zrt (Régens Private Limited Company). As an example, he refers to their new solution that supports the performance of entire distribution processes.

Régens Zrt has recently extended its field of specialization to the development of GIS applications. What is your role in this field?

I intend to contribute to the already established GIS knowledge-base at our company. Ever since modern electronic maps and GPS have made vehicle tracking financially viable, we have been searching for new solutions to merge vehicle tracking with our existing solutions, e.g. our management software, with the aim of providing novel quality services. With a bit of foresight we can create new services that could not have been available without GIS solutions.

GIS has indeed found its way into everyday life. Navigation systems have become integral parts of luxury cars. But what is the corporate target-group for the newly developed services of Régens?

We basically design our GIS software for players of the supply and distribution chain. The management system in the software can solve and track administrative tasks necessary for providing forwarding and transportation services. We often face the need from our clients to extend the use of our software beyond simply tracing the management procedures to the design of the most diversified processes. We have developed solutions in the past that could handle transportation tasks manually. These solutions could be used to handle several hundred orders by allocating the means of transport, manner of transport and the time to each order. Now, we can combine the existing management systems with our GIS optimising solutions.

Is route planning available through the solutions of Régens?

Route-optimising is the easy part. It is more complex to define the best means of transport for each of the several hundred orders and the sequence of performing orders within the same route-allocation: let's say we have twenty orders to go in one route-allocation, then we need to define, which address comes first, second, etc. This requires a route planning application based on more criteria and working very fast.

How can you save money for your clients and what other advantages can be attained with the software optimisation?

First of all by reducing the kilometers we are saving money in transportation costs. The second and even more significant advantage is enhancing the quality of services provided by our clients. Our programs and algorithms take into account such frame conditions and optimising aspects that a dispatcher can't always consider (e.g. which vehicle has been requested by a certain client, what type of vehicle shall carry the transport, etc.). Our program guarantees to avoid breaching the frame conditions. This allows for deliveries arriving on time, shortens the time required by the dispatcher for carrying out the administrative tasks and preparing the route plans. At larger companies it can take up to four-six hours for the dispatchers to plan the next day's routes. This forces them to close accepting next day's orders too early. Our program decreases the time necessary for planning and preparation, thus allows for accepting orders with short deadlines.

What is the exact amount of time saved?

The program offers a satisfactory solution within a few minutes. Then the dispatchers review the transportation plan and do the fine-tun-

ing. Practically, planning next day's routes is done in 30 minutes. This allows for accepting orders until later hours during the day, which results in a considerable competitive advantage. We can further enhance the advantages by connecting the conveyance with the storage procedures: unnecessary movement of goods can be spared by adjusting storage activities to transportation activities. Picking can be done adjusted to transport vehicle taking into account the results of route planning and practically halving the resources required for picking and the possibility of a mistake. Naturally in such cases route planning must consider picking and loading capacities. I would emphasize that we not only ease the planning tasks of our clients, but vehicle tracing compares the planned and actually completed routes automatically; therefore controlling the performance of sub-contractors shall become considerably easier.

Why is it profitable to choose the solution offered by Régens?

Our greatest comparative advantage is our ability to address issues from a practical point of view and our existing management skills. Contrary to boxed-applications coming off the shelf, we are able to custom-make our optimising system to solve any task; e.g. our Track 2006 software can handle all management tasks, from the call for offers till invoicing and can be made interoperable with other programs, like Logistock designed for inventory, the groupeach shipping software GroupBy or the Custom[R]s customs software. This allows us to offer integrated solutions that could enhance the competitiveness of any logistical service provider. Our ability to control the logistics procedures with the help of the GIS well supplements the above functions.

What is the time required for introducing such a system and what are the phases of customizing?

The first step in the whole introduction process is to prepare the special map showing the intended activity of the client. The next step is to define framework conditions to be considered and to determine the optimising criteria, respectively.

Our experiences show that even two companies working in the same sector, at the same location tend to direct their vehicles through alternative ways, which renders special importance to the criteria of optimising. If no unusual criteria requiring special developments are set, then we can complete setting the parameters of the optimiser in three days. In case our client already operates an adequate management system and therefore does not need our management solution, only the optimising module, then we have to arrange for mutual interoperability of the programs. We can assume the delivery of the complex solution practically within two-four weeks.

What novelties do you intend to add your applications?

We continuously work on the improvement of special maps already mentioned, because the solutions currently available on the market are deficient. We have recently started a development that enables our program to operate in more languages that will allow for easy translation into any language. However the directions of development are defined primarily by the constantly changing requirements; we work e.g. on new development that will allow us to provide counseling. The new solution will essentially allow us to determine the ideal business site location in the ideal area and to optimize the depot-structure and design fixed-routes by using retrospectively available statistical data. Our experiences show that the procedures of distribution are worth revising every one or two years.

