



APS Success Story KTD Group

Company

KTD Group is a Lithuanian construction, ground stabilization and ground preparation company located in Kaunas. The company acts as a contractor/sub-contractor from small to large projects in different locations at the same time. There, it sends its equipment, workers and required supplies. The main application area is road construction.



Use Case



The main use case we have considered is road construction, but the same model/GUI and logic applies to road maintenance/snow plowing/multi fields farming, etc. Basically, anywhere where field coverage planning is required (think vehicle tracks, different zones, different surface layers) we need to handle first the operations and logistics planning & scheduling in a way that optimizes our KPIs, in particular costs. We needed an APS engine that we can integrate with our software that is handling the in-field execution part at the single vehicle level with autonomous driving simulations to better estimate task duration at any specific geographic zone with specific spatial configuration.

Until recently, KTD was planning manually and using MS Excel. This process was unable to optimize resource usage. It did not scale to growing business activity.

Objectives

The main business objective of KTD as it applies to the road construction use case was to reduce overall costs (e.g. extra hours, travel, parking, ...) and increase the utilization of resources by eliminating unnecessary idle time and time lost in transport between locations. As KTD had capabilities in the software for the execution part only, the IT objective was to use a planning optimization tool that we could integrate and that was flexible enough for the use case requirements.

Why ORITAMES?

ORITAMES was chosen because it provided multiple resources scheduling and automated optimization. In particular the fact that ORITAMES supports a very flexible modeling of all the resources, including moveable resources, was a major selection criterion compared to other standard APS competitors. The ability to integrate easily using standard formats (XML) was also a requirement.

Solution

In early 2020, KTD integrated the ORITAMES APS Scheduler with its IT systems. It was able to validate the data model and the planning requirements. At the time of writing, the system is undergoing productive ramp up at the company.

With ORITAMES help, KTD can support:

- multi construction sites and multi zones (all in different locations)
- multi different model vehicles assignment and their transportation planning
- multi alternative execution modes to select best vehicles team set

Benefits

ORITAMES delivers optimal schedule with up to 5 min. schedule precision! This is unheard of in road construction domain, where the common practice is "rough" planning in days if not in weeks... KTD expects this increased agility to be a real competitive advantage.

User Testimonial

"We find ORITAMES to be a very flexible and adaptive real-time scheduling tool. Construction industry is very challenging to plan, so ORITAMES ability to quickly model our specific constraints was a key criterion when selecting the APS vendor. We are confident to have the right tool and long-term partner to cement our competitive edge for the v4.0 digital revolution".

-- Tadas Jurgutis, Business Development Manager, KTD Group www.keliutiesimas.lt

www.oritames.com

This document is provided to you for informational purposes only. The information furnished in this document, believed by MangoGem to be accurate as of the date of its publication, is subject to change without notice. MangoGem SA assumes no responsibility for any errors or omissions in this document and shall have no obligation to you as a result of having made this document available to you or based upon the information it contains.