



HARTMANN INTERNATIONAL EMBRACES DISPATCH AUTOMATION

HOW THE GERMAN MEDIUM-SIZED CARRIER SUCCESSFULLY IMPLEMENTED STEPWISE AUTOMATION AND OPTIMIZATION OF ITS REGIONAL MULTI-DROP DISPATCH PROCESS

HARTMANN INTERNATIONAL AT A GLANCE

Hartmann International is a medium-sized German logistics provider with a global footprint, headquartered in Paderborn and Ibbenbüren.

- › 500+ employees working in the Transport & Logistics and Air & Sea divisions
- › 165 vehicles (7.5t - 40t)
- › ca. 1,500 delivery orders per day
- › Using the Transport Management System by active logistics without the route optimization functionality
- › Pioneered deployment of innovative digital solutions for dispatch optimization within the CargoLine alliance

DIGITALIZATION PAVES THE WAY TO OPTIMISED DELIVERY ROUTE PLANNING

They hesitated to take the first step at first, believing that the initial effort of automating the dispatch process, the resulting disruption of workflows, and the required resources, time and capital would present an insurmountable challenge. But working together with Smartlane, Hartmann overcame these hurdles with elegance and has been using the solution in production for 18 months now. Software-supported, automated transport optimization has allowed the company to realize new saving potential.

THE ORIGINAL SITUATION AT HARTMANN

Seven dispatchers at Hartmann International work two daily shifts to aggregate the enormous volumes of data needed for delivery route planning from various source systems in a very time-consuming manual process. A wide range of additional parameters must be accounted for, such as an extreme variation of cargo volumes. Other conditions which stood in the way of optimization included:

- › the existing planning system based on delivery zones
- › strict separation of light and heavy regional transports to simplify processes at the depot
- › low data quality (missing/erroneous footprint and/or weight specifications in orders)
- › limited optimization potential due to existing planning constraints such as hazardous cargo, need for lifting equipment, customer or order priority, fixed assignment of delivery zones to specific vehicles etc.

To accelerate the dispatch process, reduce the dispatcher workload and optimize fleet utilisation, Hartmann began looking for a regional delivery route optimization solution. The specifications presented to Smartlane included:

REQUIREMENTS TO BE MET BY SMARTLANE

- › Avoid disruption of the existing, ongoing processes while implementing Smartlane technology
- › Accelerate the dispatch process
- › Instead of trying to provide a 100% solution, go for an >80% tool that achieves rapid, effective process improvements and reduces the dispatcher workload
- › Establish transparent planning processes for all stakeholders in the dispatch, logistics and executive offices



"Dispatching in LTL transport is a highly complex and time-consuming task. Smartlane's technology supports our dispatchers by automating manual processes and reducing their workload enormously. This has enabled us to improve the quality of our services significantly. Furthermore, our dispatchers no longer have to begin their workday in the middle of the night – they can come in four hours later now."

UWE LACHMANN
MANAGING DIRECTOR, HARTMANN INTERNATIONAL



SMARTLANE

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PHASED APPROACH TO IMPLEMENTATION

Following a requirements analysis and an initial trial, Smartlane conducted a two-day on-site workshop to establish a common understanding of the relevant business processes. Based on the outcome of the workshop, Smartlane prepared a custom step-by-step implementation plan to meet Hartmann's specific objectives. The plan defined a phased approach to an assisted implementation of Smartlane's Transport Intelligence technology in Hartmann's operational environment.

STEP-BY-STEP IMPLEMENTATION OVERVIEW - A SIMPLE IMPLEMENTATION APPROACH WITHOUT REQUIRING PROCESS CHANGES

1

UNCONSTRAINED OPTIMIZATION TRIAL IN PARALLEL WITH OPERATIONS (1 MONTH)

To maximize the saving potential, the dispatchers tested unconstrained route optimization in parallel with daily operations.

INTERIM RESULTS

- › Significant cost reduction opportunities thanks to improved fleet utilisation
- › Decision to incorporate the existing delivery zones to map an optimization strategy

4 WOCHEN

2

PREPARATION FOR AUTOMATED DISPATCH / GO-LIVE (1 MONTH)

The Smartlane software was integrated into the TMS in a matter of a few days. It provided high-quality analyses of planning results to support the team at Hartmann, and delivered rapid results covering 80% of the dispatchers' planning work while accounting for all planning parameters.

INTERIM RESULTS

- › Interface integration
- › >1,000 delivery orders allocated and routes planned in an automated, 40-minute process
- › Initial reduction of dispatcher workload by 2 hours daily
- › Minor process changes required at Hartmann
- › Go-live after a short, one-month preparatory phase

4 WOCHEN

3

OPERATIONAL ROLL-OUT OF AUTOMATED DELIVERY ORDER DISPATCH

Smartlane consultants provided assistance in the dispatchers' daily operations, performing analyses as a basis for further optimization of the planning results. They adapted the solution to achieve significant efficiency increases, such as prioritising orders, implementing a transitional stage for order allocation between heavy and lightweight unit loads, and automated the adjustment of inaccurate order information (mathematical conversion to pallet slots as a basis for freight allocation). The routes planned by the Smartlane software were then fed back to the TMS, allowing the dispatchers to perform the subsequent, final daily route planning task using their customary user interface.

INTERIM RESULT

- › Dispatching time reduced by up to four hours
- › All planning constraints accounted for
- › Prioritization of urgent orders
- › Optimization time reduced to <30 minutes by Smartlane
- › 90% of dispatch process covered by Smartlane

NEXT
STEPS

INTEGRATION OF COLLECTION ORDERS INTO AUTOMATED DISPATCH

Collaborating closely, Hartmann and Smartlane developed a concept for integrating collection orders into the planning system. This was first implemented in a trial environment and is now used in production. Smart multi-trip scheduling further improves fleet utilisation.

PLANNED

In the next step, Smartlane and Hartmann will implement the integration of telematics and the dispatch of ad-hoc collection orders.

WHAT HARTMANN INTERNATIONAL HAS ACHIEVED THROUGH SMARTLANE

SMARTLANE SUCCEEDED IN REDUCING DISPATCH TIMES BY 50 PER CENT WHILE MAINTAINING THE SAME QUALITY LEVEL, COMPLYING WITH ALL CONSTRAINTS AND AVOIDING DISRUPTION OF DAILY OPERATIONS. AT A GLANCE:

- › Dispatch results optimized thanks to stepwise, assisted implementation of Smartlane Transport Intelligence
- › Reduction of dispatcher workload by cutting dispatch time by four hours per day
- › Support of the depot routing process through stop implementation, accounting for light vs. heavy regional traffic
- › Significant improvement of fleet utilization thanks to smart multi-trip planning, among other factors
- › Reduction of CO₂ emissions
- › Enhanced planning transparency
- › High user acceptance by involving all dispatchers, IT staff and management at an early time



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