

Start-up: TNX brings artificial intelligence into the dispatching process

Translated from the German original by Alex Hoffmann



When Robert Blackburn recounted his experience with a large forwarding company which plans its distances on the wall on cardboard, Alexander Hoffmann paid attention. Blackburn had pointed out in his first interview as CEO of the Bundesvereinigung Logistik (BVL) that cargoes and routes could now be automatically coordinated by artificial intelligence (AI). And Hoffmann, co-founder of the software company TNX, is also convinced that AI-based solutions can lead to significant increases in efficiency.

This is what TNX does. The start-up makes it easier for carriers to make decisions in their daily dispatching processes. The solution helps to avoid empty runs and increases the utilization of trucks. Ultimately, it's about helping mid-sized and large companies make decisions and helping them make better decisions.

Self-learning system

"A dispatcher 30 years ago could still do his job at many companies in this day and age," notes Hoffmann. Many companies already use software for planning today. "But digitization often stops there." TNX offers an automated planning approach. Single loads are combined into routes. AI uses existing data in its self-learning system. "The computer does not look at everything from the perspective of an omniscient system, as is often the case with previous planning systems. Our system learns from what the dispatchers actually do," says Hoffmann.

Using bad data

The data quality in these processes can be improved. "The companies know that too. They are trying to compensate for this in particular at medium-sized to larger forwarding by dispatchers knowing how bad

data must be handled. "The TNX system is fed with logistics knowledge and improves by machine learning. "That's the way to find the right routes, freights and vehicles."

Here, profitability is always the focus. Especially larger logistics companies have different options to provide a vehicle. Either they have their own fleet, buy capacity from subcontractors or buy a capacity through a spot market at short notice for a freight or a day. Hoffmann: "Most approaches are not able to integrate all three procurement alternatives in the optimization. They minimize a distance or route, while actually needing to go for the best economic result. "

TNX expressly sees itself as a supporting function. Especially in the dispatching process it is always about the question, to what extent machine learning makes dispatchers obsolete. "There will be no black and white in the sense of: Today we have dispatchers and tomorrow or in 20 years, we have none," said Hoffmann. "However: a dispatcher, who plans 10 or 20 trucks per day today, will be able to plan 100 in future." Accordingly, the ratio of dispatchers to vehicles should drop significantly. A dispatcher makes numerous decisions on a daily basis, many of which, but not all of them, could be automated today. Hoffmann: "The way to a fully automatic dispatching is very, very long. That's because transport is far too special and service-driven for a computer to deal with all eventualities. "

Many regard AI as an almanac, as a tool that is like "a magical spell" that can solve all problems. It is important to deal with it very critically and to look at where AI can work well. "It's about bringing artificial and human intelligence together smoothly, so that they can interact together." Hoffmann sees the greatest added value of technology here.

Fear of "computer overlords"

The problem for providers of AI-based solutions: Intelligence is usually assigned primarily to humans. When suddenly there is talk of intelligent machines, there is usually a quick fear that people will be replaced by machines. Even in the freight forwarding and logistics industry, in which many traditional businesses are still active, many of them are cautious, as can be heard from AI providers in the market. Hoffmann also confirms this. The topic provokes "a certain reaction" in many customers and industries. He speaks of a "fear of computer overlords".

"However, we only relieve the dispatcher of the annoying activities, such as phoning 20 subcontractors until they find the right one, or creating 50 bad transport plans and then discarding them. Here a computer is simply faster - and not frustrated, if he has to do it often. "

Hoffmann finds relatively few differences between countries or markets. It is rather the companies that think differently. There are very traditional companies in terms of planning and scheduling processes. "There, the dispatchers are still perceived as the most important employees. With them still the opinion prevails: dispatching makes the money. " Other companies are more customer centric. There it is about providing the customers with a good quality or even surprisingly good service. As a rule, these companies are also very open to new technology - even external suppliers.

Key Account in New Zealand

TNX chose New Zealand as a pilot market, where the company is based. The first key customer is the logistics service provider Coda Group. From Berlin, Hoffmann has been taking care of the European market for a few months. Talks are currently taking place in Germany. TNX initially targets major freight

forwarders. "Our solution can make arbitrarily complex decisions, such as they are made every day, especially for larger companies." Hoffmann also sees opportunities on the shippers side, where visibility is playing an increasingly important role. "Today, the customer no longer appreciates just the delivered product, but the product at the right time at the right place."

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