



Optimization of SAP Logistics and Warehouse Management with Artificial Intelligence and Statistics

Initial Situation

Your customers regularly order goods from you. Your warehouse prepares the delivery in a timely manner. Before the delivery is made, the same customer places a new order at your place.

Your Optimization Potential

You would like to combine different orders from the customer that are shipped at one delivery time. This way you can save packaging material, volume and transport costs.

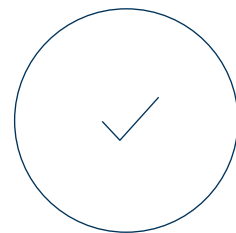
The Challenge

Assembling the delivery shortly before the shipment is not a viable solution, as this would overload the warehouse. The warehouse should be able to work with as even a workload as possible. A solution is therefore required that, on the one hand, recognizes when a customer has placed his last order and, on the other hand, can release orders early for the warehouse.

Our Solutions

To meet this challenge, we have developed two solutions. On the one hand, a machine learning system from the field of artificial intelligence. On the other hand, a statistical approach that can process different key figures from your customers' orders.

Your Advantages



- You can predict the ordering behavior of customers
- You can estimate when customers have fully completed their orders
- You can optimize the delivery of multiple orders to one customer
- You save packaging material, volume and transport costs

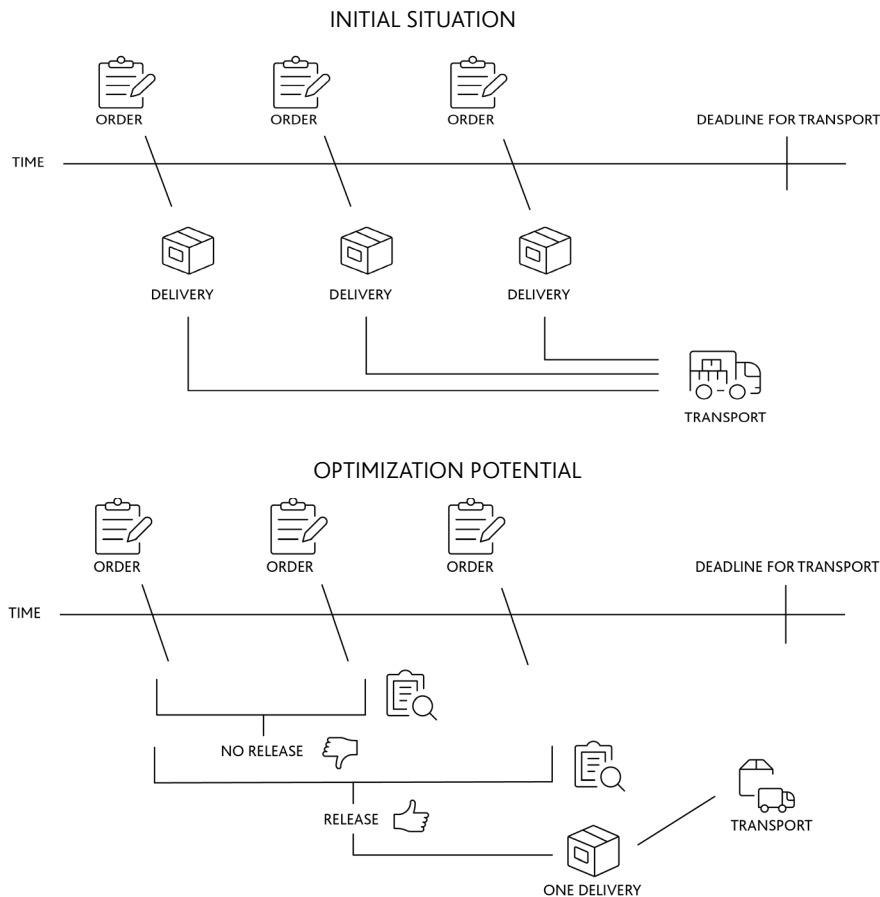




The neural network of our machine learning system is fed with the key data of the orders from your system and is thus able to estimate whether a customer has already completed his orders for the current period or not. This can be compared to good customer service representatives who can predict the behavior of their customers based on their experience. And it works even if there are only a few customer contacts.

The statistical solution uses key figures from the customer orders. Here, it is possible to configure exactly which key figures are used and what probability is required to release an order.

Both solutions can be used in parallel and complement each other.



Technical Implementation

The statistical solution can be implemented without modification in your SAP system, in which the statistical calculations are then also performed.

The machine learning network runs as a separate service, which can be hosted in parallel to your SAP system itself or provided as a SaaS solution.

You have questions, need information or a contact?
Get in touch with us.

Arvato Systems | **Alexander Böning** | SAP Consultant
Tel.: +49(5241)80-70770 | E-Mail: logistics@bertelsmann.de
arvato-systems.de

As a globally active IT specialist, Arvato Systems supports renowned companies with digital transformation. Our approximately 3,000 employees at more than 25 locations around the world have high-level technical skills and industry expertise, and they focus intently on meeting client needs. We work together as a team to develop innovative IT solutions, take our clients into the cloud, integrate digital processes, and assume responsibility for operating IT systems and providing accompanying support. Together with Arvato, which is part of the Bertelsmann Group, we are also able to map entire value-added chains. We ensure that our business relationships with our clients are both personal and based on a trusting partnership. This allows us to achieve long-term success together.

