

INNOVATION PILOT

Shop floor Optimization: delivering on time, every time

The challenge

One of the world's leading manufacturers of trucks, buses, construction equipment and marine industrial engines, wanted to understand if it was possible to improve line feeding process, helping tigger truck drivers to choose the optimal route in order to deliver materials only when needed, at the time they are needed.

The solution

Through dedicated interviews and field surveys, Fincons studied the entire milk run process of the company.

Data about material requests, multiple delivery endpoints and delivery time performances was been gathered and analyzed using the most recent **big data techniques**.

The data collected was merged with plant areas layout to discover and highlight inefficiencies in the usual drivers' routes.

A specific **optimization algorithm** was identified to prove the chosen path often resulted in delay in delivery and and inefficient use of resources.

The software tool developed by Fincons analyzes all requests and **dynamically suggests the best route** to accomplish the delivery missions on time.

The benefits

Studying logistic flows and combining driver experience with mathematical and statistical analysis resulted in a better understanding of the **delivery process**.

The identified route optimization algorithm, adopted in the current scenario and integrated into the delivery aid software for tigger drivers', reduces lead time and makes it more constant within the desired delivery time windows.

A **lead time reduction** results automatically in a **cost saving** as the overall process reaches a higher efficiency level.

