

INTRANAV
An Inpixon Company

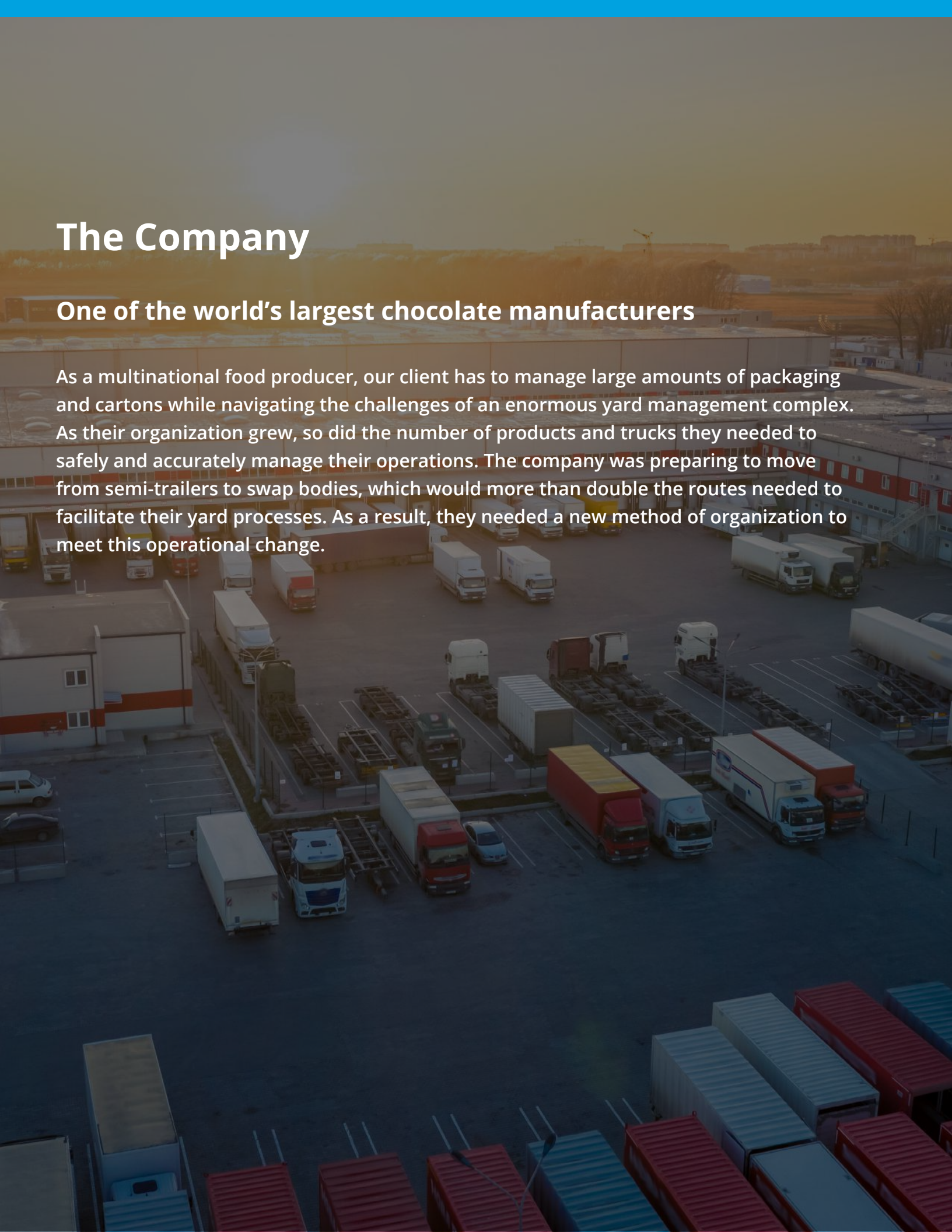
Location Tracking for Fast Truck Handling and Exceptional Output

How one of the world's largest chocolate manufacturers optimizes its process times with INTRANAV.IO and RTLS in yard logistics

The Company

One of the world's largest chocolate manufacturers

As a multinational food producer, our client has to manage large amounts of packaging and cartons while navigating the challenges of an enormous yard management complex. As their organization grew, so did the number of products and trucks they needed to safely and accurately manage their operations. The company was preparing to move from semi-trailers to swap bodies, which would more than double the routes needed to facilitate their yard processes. As a result, they needed a new method of organization to meet this operational change.





The Challenge

In internal yard traffic, truck drivers were given manual call orders with instructions to take trucks to the correct bridges and gates. The lack of real-time digital location tracking and a significant amount of idle time made it difficult to estimate when a truck would arrive at a swap gate. In addition, there was a recent switch from semi-trailers, which can hold 33 pallets, to swap gates, which hold a maximum of 18 pallets. This change doubles the number of trips that need to be coordinated with truck drivers, all without a targeted system, resulting in more work and bottlenecks for the team to manage.

At this point, it became clear that the customer's manual approach to coordinating internal plant traffic would no longer suffice. In addition, this customer's operation was highly dependent on a precise and well-timed schedule. If truck arrival times are delayed, the entire production process is slowed. This resulted in wasted money, time, and resources as trucks had to be located, redirected to the designated swap body location, and guided to exit while others waited to be dispatched. As a result, there was a continued increase in idle time, which delayed subsequent production steps.

The customer urgently needed a better system for internal plant coordination that would provide transparency through real-time locations of trucks and swap bodies in the yard as a first step. That's why the company turned to Inpixon's team. The request was to use RTLS and Inpixon's INTRANAV.IO platform to create a better process that was more efficient, accurate, and precise.

Integrations

- ✓ **Inpixon:** Real-time location and yard management via advanced IoT platform.
- ✓ **Wirepas:** Battery-powered mesh connectivity technology.



The Solution

With Inpixon's IIoT solution, this client is working towards changing their process to become a smoother, more seamless system. Our technology is helping by:



1. Enabling GPS tracking of trucks and swap bodies for transparent internal yard processes, faster transport handling, and analyses

With real-time GPS tracking, both the trucks and swap bodies can be searched and found instantly in the huge yard area through INTRANAV Map and the INTRANAV Yard Management Module. This allows much faster coordination and timing of in-plant transportation processes. Thanks to our GPS capabilities, this leading chocolate manufacturer is able to implement heat mapping reports in addition to location tracking services. This expands monitoring capabilities and provides deeper insight into individual truck and swap body usage in real-time and for historical analysis.

Heat mapping accomplishes this by visualizing the activity patterns of trucks within the location tracking data. For example, suppose a truck's heat map is colored red. In that case, this indicates that it has remained in one position for an extended period, signaling staff to contact the truck driver and determine the reason for the inactivity. If the color is green, it indicates that everything is moving at a good pace. The trail reports would also help customers see which routes are the busiest or most delayed and identify bottlenecks before they can cause disruptions. Location data can also be analyzed to see how long it takes for the deliveries to be loaded or unloaded at ramps, which can be determined by specifying the idle time of the truck via the INTRANAV.IO platform. By leveraging this data, our customer can optimize their transport processes.



2. Automatic identification of swap bodies at the gates during loading and unloading processes

In addition, our partnership with Wirepas enables easy identification of trucks at the swap body and at the ramps/gates.

The asset tags affixed to trucks and anchors in the facility are connected to the INTRANAV.IO software, which allows tracking the location of the trucks to better plan and records their arrival time and prioritize swap bodies accordingly. This results in significant time and cost savings for our customer. They can also collect data on when each truck arrived at each swap portal and analyze it to find further ways to optimize the overall process.



3. Project Outlook

Automatic allocation of truck transport jobs in the yard for the always shortest route

By locating the trucks, as well as the swap bodies throughout internal plant premises, in real-time, drivers are assigned via INTRANAV.IO which swap bodies in their proximity they have to pick up. The shortest, most efficient route from the truck's position to the swap body is calculated using location technology.

This allows drivers to get to the swap body and exchange the load even faster, which means they and the production team can keep to their schedules and avoid costly delays.



Results & Benefits

By implementing our solution, our customer achieved the following operational improvements:



Help trucks find the right swap body faster and reduce idle times

This saves the company time and money and simplifies the administrative process for its employees.



Analyze real-time and historical movement and idle times for more efficient yard logistics

Knowing exactly where process bottlenecks are allows you to optimize them.



Enable real-time monitoring of the supply process in the yard

By tracking trucks and swap bodies, the company is able to identify process blockers more quickly in the yard.

Inpixon offers a highly flexible and cost-effective enterprise IIoT solution, ideally suited for industrial, automotive, aerospace, logistics, or production processes.

If **INTRANAV.IO Asset Manager, Yard Management & Doc Identification capabilities**, or any of our other services are of interest to you, **contact us to discuss optimization possibilities for your manufacturing and logistics workflows today!**

About INTRANAV, an Inpixon Company

INTRANAV, an Inpixon company, offers a highly flexible and cost-effective enterprise solution, ideally suited for automotive, aerospace, logistics or production. Further fields of application are for example, in the area of production line automation; automatic cycle feedback into SAP systems, line balancing/production leveling by **INTRANAV SMART Factory**, “Just in Sequence” – provision for the right sequence, plausibility checks or zone-based control of automatic programmable logic controllers.

Let's talk about your goals.

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