

Global Food & Beverage Maker

Safety has consistently improved after implementing the Powerfleet In-Warehouse solutions. Using Powerfleet's Enterprise Dashboards, this food and beverage customer was able to change the way it measured and balanced productivity (pallets moved) safely (forklift collisions) and efficiency (active time on equipment vs. paid time). The bottom line was a stronger safety culture, with a new way to measure and manage productivity.

About Powerfleet

Powerfleet (Nasdaq: AIOT; JSE: PWR; TASE: PWFL) is a global leader in the artificial intelligence of things (AIoT) software-as-a-service (SaaS) mobile asset industry. With more than 30 years of experience, Powerfleet unifies business operations through the ingestion, harmonization, and integration of data, irrespective of source, and delivers actionable insights to help companies save lives, time, and money. Powerfleet's ethos transcends our data ecosystem and commitment to innovation; our people-centric approach empowers our customers to realize impactful and sustained business improvement. The company is headquartered in New Jersey, United States, with offices around the globe.



Background

One of Powerfleet's long-time customers—a leading multinational food and beverage company—implemented Powerfleet's In-Warehouse solution years ago to consistently improve in-warehouse safety.

The company quickly got the “low-hanging fruit” benefits out of Powerfleet:



Vehicle access control to make sure operators are trained on the right vehicles, prevent untrained personnel from using lift trucks, and automatically lock out unsafe equipment.



Electronic safety checklists to comply with government and corporate safety regulations—like OSHA rules at U.S. sites.



Impact sensing and damage control to improve the culture of safety, reduce accidents, and cut the costs of vehicle repairs and facility damage.

Based on the value and payback of these core benefits, the customer rolled out the solution on more than 2,500 pieces of material handling equipment across almost 100 food and beverage manufacturing and distribution facilities.

But the Customer wanted even more out of the system.



At the **Forefront** of **Food Safety** and **Supply Chain** Technology

The Customer has a long-standing tradition of leveraging cutting-edge supply chain technology.

For instance, it is among the leaders in adopting blockchain technology to secure shared data across the food supply chain, to help ensure food safety.

The customer is committed to continuous improvement through a corporate center of excellence that thrives on data from all aspects of manufacturing and distribution operations.

What's the **Cost** of **In-Warehouse Velocity**?

According to a DC Velocity survey, the #1 metric for distribution center operations is timely shipments. Also high on the list: the percentage of damage-free orders.

This food and beverage customer has the same priorities: the company makes every effort to instill a culture of safety while, at the same time, maximizing productivity.

Corporate management saw our Unity system—specifically Powerfleet's Enterprise Dashboards—as a way to link data from multiple sources to gain insight into the safety cost of lift truck throughput.

The data our food and beverage customer wanted to integrate included:

- Time forklift operators spent actively working
- Number of pallets moved by lift truck operators
- Number of damage-causing impacts recorded by lift truck operators

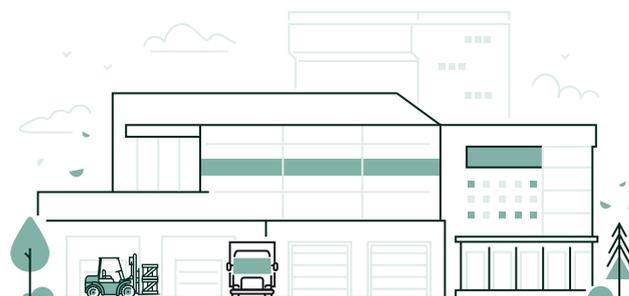
Key Considerations, **Pre-Implementation**

Before launching new technology for its in-warehouse workforce, our customer knew from experience it needed to plan carefully and be proactive about the way it would use the information.

One of the potential issues of data-driven technology is that the data can be overwhelming. Another challenge is translating the data into action.

All too often, a flood of data is received passively, without a clear vision of what to look for or how to react. The result can be an ineffective use of resources.

For any new system to succeed, stakeholders need a clear understanding of the key metrics they would track and how to act on the findings.





A Carrot-and-Stick Plan

Our customer knew that for Powerfleet's Enterprise Dashboards to be effective, the key employees touched by the system— lift truck operators, line supervisors, facility managers, and corporate management—all needed to care about the outcome.

Collectively, the company recognized the importance of both mental engagement and financial investment in the initiative.

The key to driving employee commitment is accountability, through both incentive rewards for positive behavior and reasonable consequences for negative behavior.

The customer implemented the following strategy:

- Developed a consistent set of measurements for in-warehouse productivity and safety, regardless of the type and size of each facility or the makeup of each site's forklift fleet.
- Established new benchmarks for pallet moves vs. lift truck motion time and impact events.
- Created key performance indicator (KPI) scorecards for drivers, supervisors, and warehouse managers.
- Provided cash bonuses and other incentives for meeting KPI targets.
- Retrained or reassigned forklift operators who failed to meet the benchmarks for safe productivity standards.



What made Powerfleet's Enterprise Dashboards work for us?

We had a plan going in—what data we wanted and how we were going to use it.

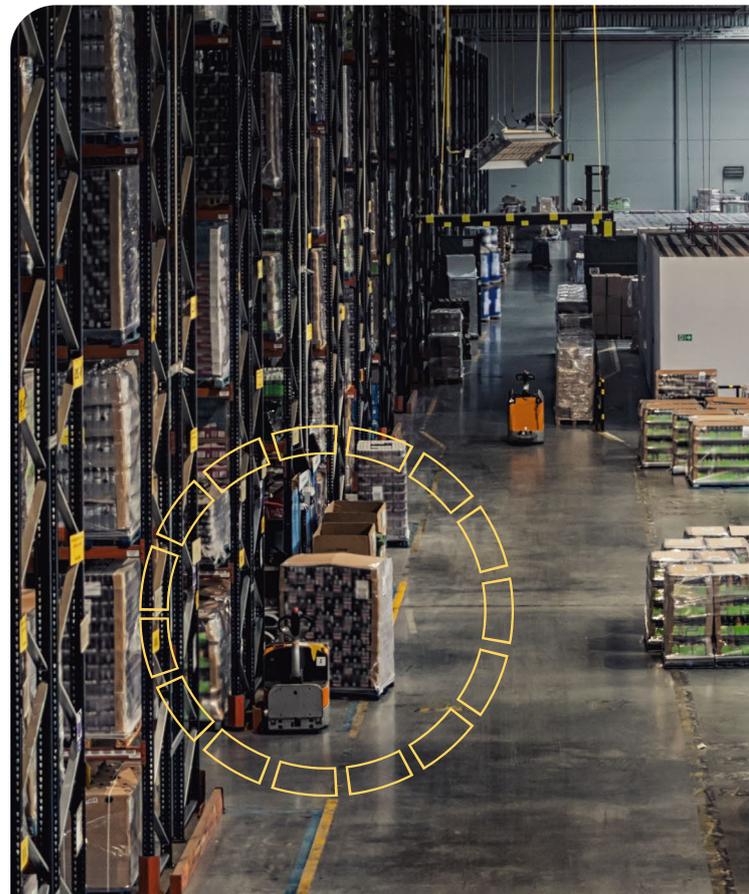
But before we took any action, we validated the data, then collected it for several months to benchmark forklift driver performance.

Only then did we launch an incentive program for drivers, supervisors, and warehouse managers who met or exceeded those benchmarks.

Now we have data we never had before to measure and balance productivity, in terms of pallets moved, with safety, in terms of forklift impacts.



-National Warehouse Manager



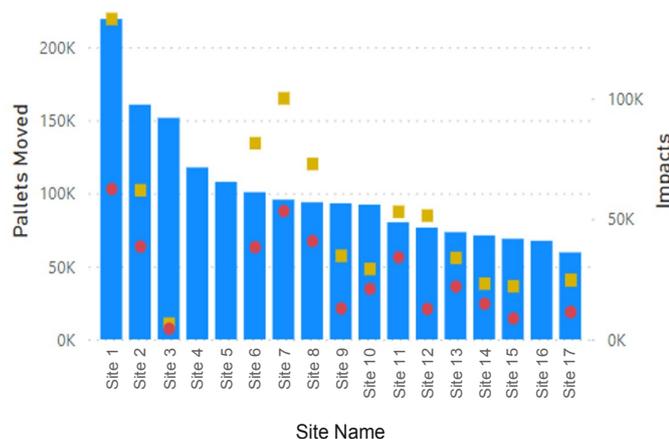


Putting the Plan into Real-World Practice

Powerfleet collaborated closely with the customer to integrate its Kronos® time-card system and SAP® warehouse management system (WMS) with Powerfleet's Enterprise Dashboards, enabling our analytics platform to chart integrated data, such as:

Total Impacts by Site

● Pallets Moved ● Moderate/Medium Impacts ● High/Severe Impacts



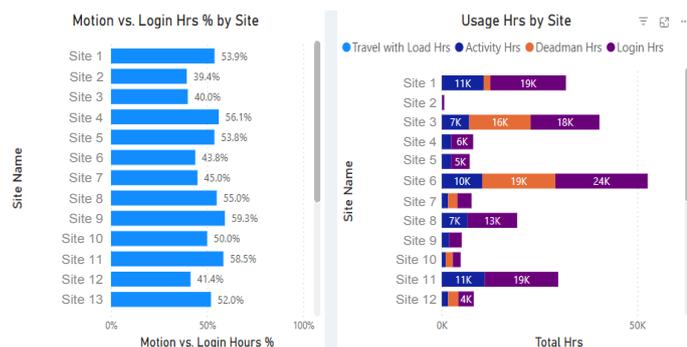
- Lift truck operator paid-time vs. seat-time, deadhead-time, and time-in-motion-with-load.
- Lift truck impacts vs. number of pallets moved.

An excerpt of the latter chart is shown to the left, with the data aggregated by site. In this example, "Site 2" moves almost as many pallets as "Site 3," but significantly higher moderate and medium impact events. The user can click on any site to drill down into individual driver performance at that site, to determine which operators were at the root of the data.

Powerfleet and the customer also built KPI scorecards, allowing key metrics to be quickly understood. The following examples focus on, respectively, forklift fleet safety and productivity, by site.

Site Name	High/Severe Impact Rate					
	7 Day Rpt Vcls	Rolling 7 days	7 Day Alert	7 Days Threshold	Rolling 30 days	7-30 Day Compare
Site 1	42	1.41	●	1 - 3	1.36	↑
Site 2	39	11.98	●	1 - 3	10.29	↓
Site 3	28	2.53	●	1 - 3	7.51	↓
Site 4	6	0.00	●	1 - 3	0.00	→
Site 5	43	0.00	●	1 - 3	0.39	↓
Site 6	14	8.94	●	1 - 3	2.51	↑
Site 7						
Site 8	18	143.82	●	1 - 3	88.44	↑
Site 9	26	0.00	●	1 - 3	0.00	→
Site 10	51	1.90	●	1 - 3	1.70	↑
Site 11	21	0.00	●	1 - 3	3.68	↓
Site 12	76	4.87	●	1 - 3	3.26	↑
Site 13	11	0.00	●	1 - 3	0.00	→
Site 14	14	5.67	●	1 - 3	1.68	↑
Site 15	36	0.00	●	1 - 3	0.00	→

In the KPI scorecard excerpted to the left, the screen shows the 7-day safety rankings and 30-day trends of each site, based on their forklift fleets' rate of high and severe impacts. Green dots indicate compliance with corporate standards; yellow dots suggest improvement is needed. (Red dots would indicate a site's performance is unacceptable).



The next KPI scorecard excerpt ranks sites by forklift fleet efficiency, based on the amount of time vehicles spend in motion compared to the time vehicle operators are logged into the equipment. Sites 6 and 11 both complete the same amount of work in the period, with the highest activity hours. However, Site 11 is more efficient with more than 30% greater ratio of motion (time vehicles are moving) to login (time drivers are logged in). This highlights how different sites can vary in operational efficiency despite similar amount of completed work.



Translating Data into Action and ROI

The first key role of Powerfleet's Enterprise Dashboards for our customer was to validate data accuracy. One KPI scorecard monitored the health of system components— particularly to confirm that the Forklift Gateway VAC was collecting data normally and attributing it to identified operators.

With validated data flowing smoothly, the customer went through a period of analysis over several months, without acting on the data. This enabled the customer to set expected benchmarks without rushing to judgment about individual operator performance.

Importantly, the established benchmarks were ratios (not absolute numbers) to normalize performance across operators, vehicle types, and facilities with different operating patterns. The most critical benchmark ratios were:



Pallets moved to severe forklift impacts (which have a high correlation to damage) and to medium forklift impacts (an indicator of excess wear and tear over time)



Vehicle motion time to operator login time to Kronos shift time

Also significant, Powerfleet's Enterprise Dashboards enabled different standards to be set for different vehicle types and accounted for drivers who operated different types of vehicles in same shift or day.

Based on these benchmark ratios, the customer set up multiple KPI scorecards:

- For individual drivers (with daily, weekly, and monthly metrics)
- For supervisors (focused on all drivers each shift)
- For warehouse managers (with a view of the entire facility)
- For corporate management (with stack-ranking of all sites in a single view)

This data hierarchy enabled a rapid, logical flow of information and decisions. Corporate management identified high- and low-performing sites. Facility managers saw where they ranked compared to other sites, and where they stood in relation to the target benchmarks. Line supervisors drilled down to understand which forklift operators were high achievers—and which needed refresher training. And forklift operators could see in black-and-white where they stood.

Concrete Results

Using Powerfleet's Enterprise Dashboards, this food and beverage customer was able to change the way it measured and balanced productivity (pallets moved) safely (forklift collisions) and efficiently (active time on equipment vs. paid time).

This data enabled a new approach to material handling discipline, with high-performers rewarded with financial and other incentives, and low-performers trained to improve. The bottom line was a stronger safety culture, with a new way to measure and manage productivity.

85%
REDUCTION IN
ACCIDENT & DAMAGE

100%
COMPLIANCE WITH
KEY SAFETY METRICS