

A close-up photograph of a large pile of lemons and limes, showing various shades of green and yellow. A single green leaf is visible among the fruit.

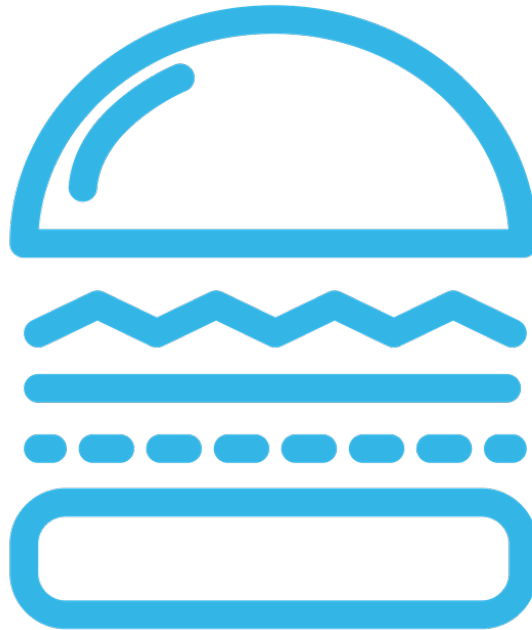
The next 'Big Thing' for your supply chain

Quick Guide to Food Supply Chain Traceability

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Food and beverage products: Subject to rapid physical deterioration



Temperature & Humidity Sensitivity

Careful management of perishable goods throughout the supply chain is essential. The amount of time in which the quality of perishable goods remains acceptable is short; the deterioration of product quality over time may lead to food safety issues and waste.

Delivery Reliability

Supply chain managers need to be prepared to handle disruptions and shortages in the supply chain and manage inventory levels. A shortage of perishable products while there is a demand for the products may result in significant loss of revenue.

Regulatory Compliance

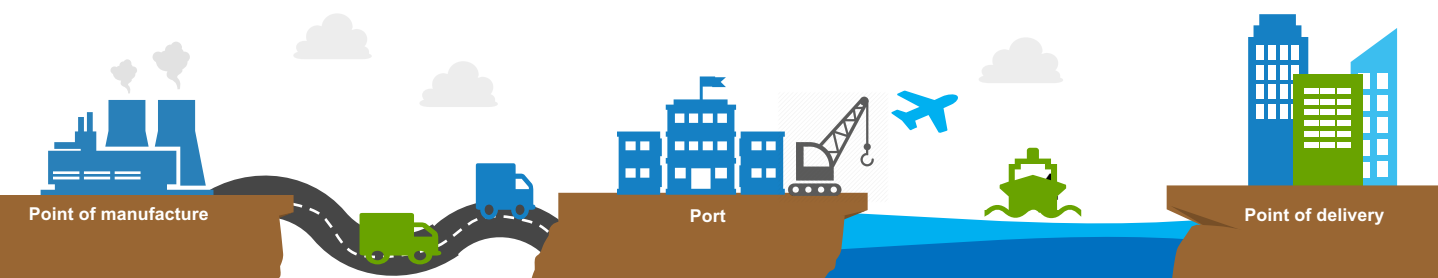
Increasing regulatory requirements are driving the need for real-time visibility of product location, availability and condition to verify the quality of incoming components and prevent contaminated food products entering the market resulting in waste and recalls.

The complex global supply chains: The case for supply chain visibility

Improving supply chain transparency is a high priority for companies, especially in industries such as the food and beverage industry where consumers and regulators are pushing for more information on how products are made and transported from the point of manufacture to the point of delivery.

To tackle the challenges imposed by global supply chains, industry leaders are beginning to leverage the data hidden in their supply chains to gain valuable intelligence. Real-time data acquired through end-to-end monitoring systems and supply chain visibility solutions has the potential to improve supply chain performance in an unprecedented level. The insights resulting from uncovering supply chain blind spots empower supply chain managers and other senior decision makers to reduce risk in the supply chain, meet environmental and import requirements and react to disruptions in the supply chain.

Product recalls, quality issues, tougher regulations, new industry standards, rising costs – they're all impacting food and beverage supply chains across the globe.



Big data and cloud based solutions provide contextual intelligence shared across supply chains

Today’s powerful digital technologies enable businesses to gather large volumes of data. Research shows that implementing data analytics solutions across the supply chain brings visibility that enables data-based decision making and leads to efficiencies, optimized processes and reduced costs. The challenge faced by businesses is to have data analytics capabilities in place that are able to process and analyze the large set of the collected data and display it on easy-to-interpret charts. Dashboards uncovering supply chain blind spots by displaying what's happening to the cargo while in transit help decision makers understand where do disruptions happen along the supply chain.

By leveraging big data and the data collected by cargo tracking and monitoring, companies can gain unprecedented visibility and control across the supply chain.

Results companies have achieved using big data analytics in the supply chain¹

Improvement in customer service and demand fulfillment of 10% or greater



Faster and more effective reaction time to supply chain issues



Increase in supply chain efficiency of 10% or greater



Greater integration across the supply chain



Optimization of inventory and asset productivity



Improved cost to serve



Improvement in demand driven operations



Shortened order-to-delivery cycle times



Supply chain visibility solutions: The key to mitigating supply chain risk

Supply chain visibility has significant benefits for supply chains operations. An effective supply chain visibility solution together with a well developed traceability strategy allows organizations to see where each ingredient came from and where the finished product is heading. This end-to-end visibility is the key to resilient supply chains and becomes especially important when facing disruptions in the supply chain or crisis situations such as recalls. The visibility and the data provided by IoT solutions in the food chain allow organizations to significantly reduce supply chain risk by enabling the company to either take action to prevent disasters or to respond to disruption by activating backup plans.

Reducing risk in the supply chain



Reduced recalls

Continuous data on cargo integrity enables organizations to prevent, rather than react to recalls.



Mitigate supply shortages

Continuous data flow enables supply chain managers to build resilient supply chains.



Reduced food waste

Knowing what happens throughout the supply chain helps to reduce food waste.



Ensure consumer safety

Unbroken data streams help to mitigate foodborne illnesses improving brand and corporate reputation.



Compliance with regulations

Ability to meet food safety and food security requirements as well as import and environment regulations.



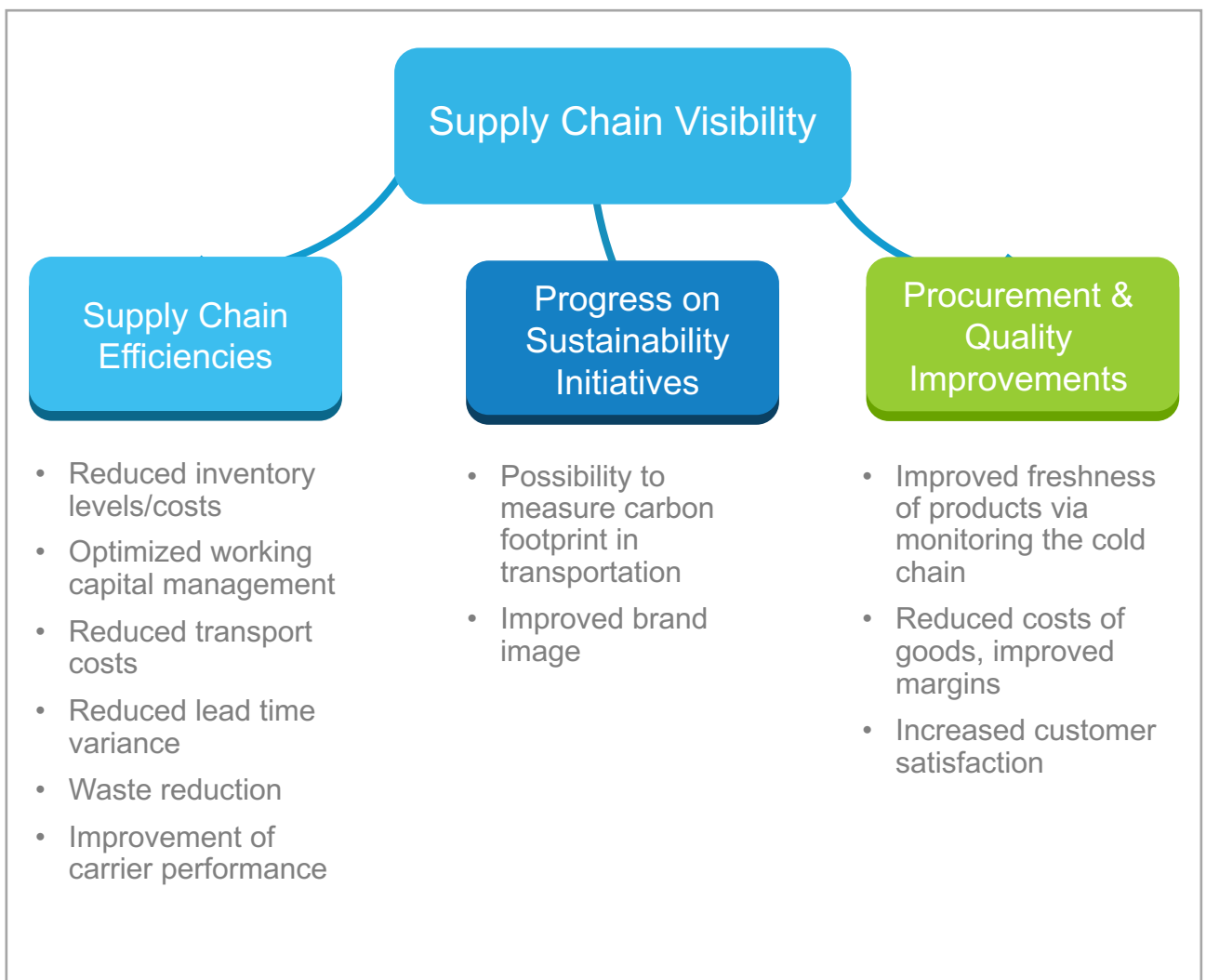
React to disruptions

Real-time alerts and information enables supply chain leaders to proactively address disruptions.



The business case for supply chain visibility solutions

Beyond reducing risks in the supply chain, supply chain visibility solutions offer quantifiable business results. This value created by visibility solutions could pay for traceability systems and justifies their implementation.²





Monitor your cargo

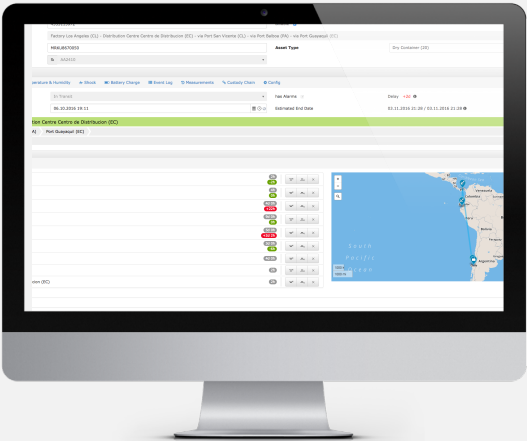
We eliminate milestone based visibility solutions that only record data about the status & condition of assets when goods reach or leave certain checkpoints. Arviem provides real-time, trustworthy, carrier independent data about the whole journey of the goods from the point of manufacture to the point of delivery uncovering supply chain blind spots. Our cloud-based, easy to use cargo monitoring and analytics platform provides business intelligence for decision makers.

Supply visibility solution by Arviem

Arviem’s supply chain visibility solutions support their users in the efficient management of strategic, operative and financial supply chains via supporting real-time data-driven decision making. Arviem offers a wide array of services that are transforming supply chains by combining the latest sensor technology, big data, and clever data analytics methodology. Arviem’s pay-as-you-use cargo tracking and monitoring services are enabling our customers to efficiently manage and optimize their operative and financial supply chains without the need for investing in assets or technology.

"Monitoring the location and environmental conditions of our shipments is a very important component of our stewardship efforts. Arviem provides us this capability."

Dow Chemicals on Arviem’s Services



Parameters Monitored by Arviem

Our cloud-based, easy to use cargo monitoring and analytics platform provides business intelligence for decision makers.



Door opening



Temperature fluctuations



Geo location



Position based ETA



Intrusion detection



Humidity fluctuations

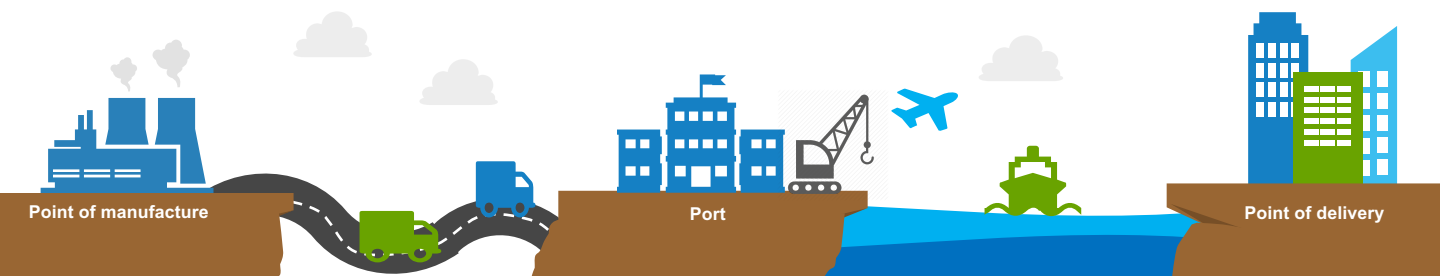
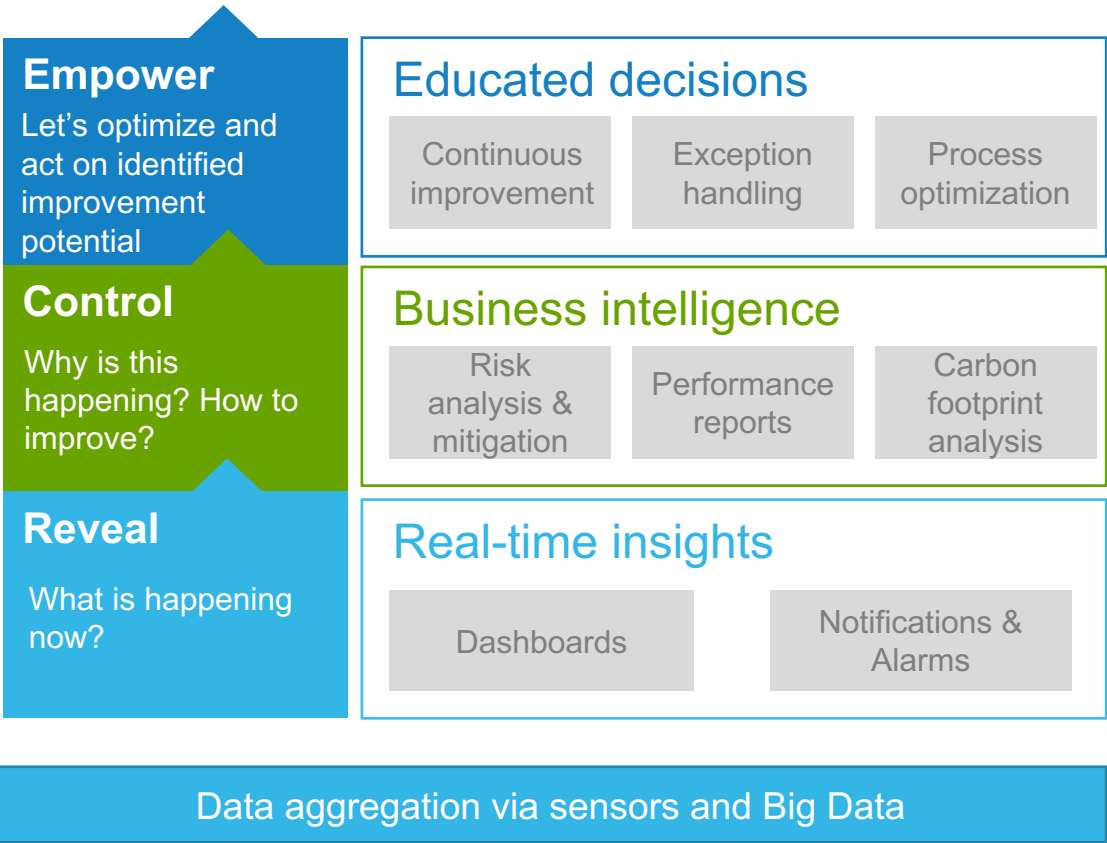


Shock detection



Performance reports

The Arviem supply chain visibility operating model



Why Arviem?

We operate **worldwide** and offer a **full service**

We provide **multimodal** cargo monitoring solutions

We offer '**pay-as-you-use**' service, no investment needed

We guarantee **24/7** customer service

Our solution is up and **running in a day**

We have **long established expertise** in the industry

We operate from and develop our software in **Switzerland**

*"We have eliminated waste,
reduced demurrage costs
substantially and achieved timely
product availability and product
freshness."*

Nestlé on Arviem's Services





Resources:

- 1: Accenture: Big Data Analytics in Supply Chain: Hype or Here to Stay? Accenture Global Operations Megatrends Study
- 2: Wilkinson, S. (2012) The Value of Supply Chain Visibility: Traceability is just the start