

THE CHALLENGE

At a large cement facility, customers send their trucks or third party trucks to pick up orders for bulk material. **Many of these sites have legacy ERP systems and manual processes** for tracking load out operations and truck cycle times. Customer volumes grew, and an increasing number of trucks were visiting sites at different times on any given day. This presented a number of challenges such as:

- Not knowing how to keep track of multiple trips and customers while also running the yard with efficiency
- Lack of ability to identify and investigate bottlenecks and their root causes
- Having zero visibility into regulation compliance, with unreliable self-reporting
- Unable to enforce safety and procedural processes due to lack of source of truth

OUR SOLUTION

Atollogy provided a solution that could seamlessly digitize their loading operation by tracking points of interest and load weights and identified anomalies and exceptions in real-time. Atollogy's sensors were installed quickly, without the need for IT support and with no disruption to the yard. Based on computer vision, Atollogy's system began capturing all the necessary information on truck entry, exit, linger time and location, without the requirement of integrating with any internal systems.

Atollogy's solution:

- Utilizing machine vision techniques, collected & identified truck movement & complete cycle times in and out of the yard
- Tracked truck movement through the yard by license plate and other key identifiers
- Connected automatically to Atollogy's operations cloud to feed AI processes
- Provided actionable insights via situational, composite, and trend-based analytics

YARD OPERATIONS

INDUSTRY

Manufacturing & Mining

OBJECTIVE

- Track truck entry, exit & location without any retrofitting or change management
- Improve load out operations, cycle times & operational throughput
- Digitize a manual process and provide real-time insights

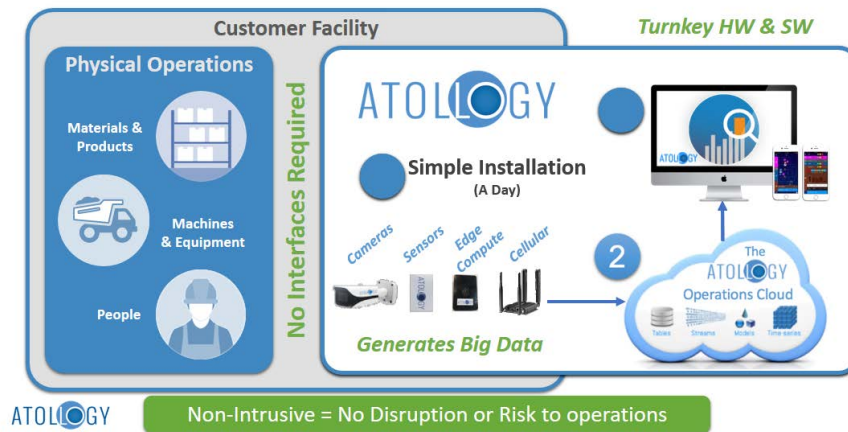
TECHNOLOGY

- Computer vision
- Real-time data processing
- Cloud and edge computing

BENEFITS

- Optimized silo utilization and identified which scales were under/over utilized
- Decreased overall average cycle time by over 25% by identifying and correcting a major bottleneck
- Increased loading efficiency by 29% by reducing cycle time and increasing truck loads per day
- Identified high traffic times of day and mitigated departure vs waiting in queue resulting in higher customer retention & savings by avoiding having to recapture lost customers
- Saved time and increased speed by digitizing signature device
- With the realized increases in efficiency, the profits alone could pay for the cost of the Atollogy solution 99 times over once sales/demand catches up with the realized throughput

ATOLLOGY SUBSCRIPTION-BASED SOLUTION



RESULTS & IMPACT

Atollogy's Yard Operations Solution digitized the customer's load out operations, reduced manual tracking, and helped improve load out operations cycle time.

Atollogy solved these challenges by:

- Building a digital twin of all trucks, leveraging computer vision and artificial intelligence capabilities
- Captured image of truck entrance & exit, coalescing the data in real-time
- Flagged anomalous events
- Alerted on safety hazards & breaches to regulatory weight requirements
- Leveraged data to provide insights on process/flow changes in facility, e.g., speed up check-out
- Empowered Sales, Loader Operator, and Weigh Master to make real-time decisions to improve customer experience

**For more information about Atollogy's Yard Operations Solution, contact us:
atollogy.com or 650-460-7325**

About Atollogy

Atollogy's proprietary algorithms and capabilities are revolutionizing how physical operations are managed by integrating the physical world with artificial intelligence. Our goal is to help our customers leverage enterprise class computing and analytics without the need to endure the pain, expense, and process changes of classic enterprise systems. Atollogy is a privately held startup founded in 2016 with offices in Santa Clara, California.

ATOLLOGY

atollogy.com