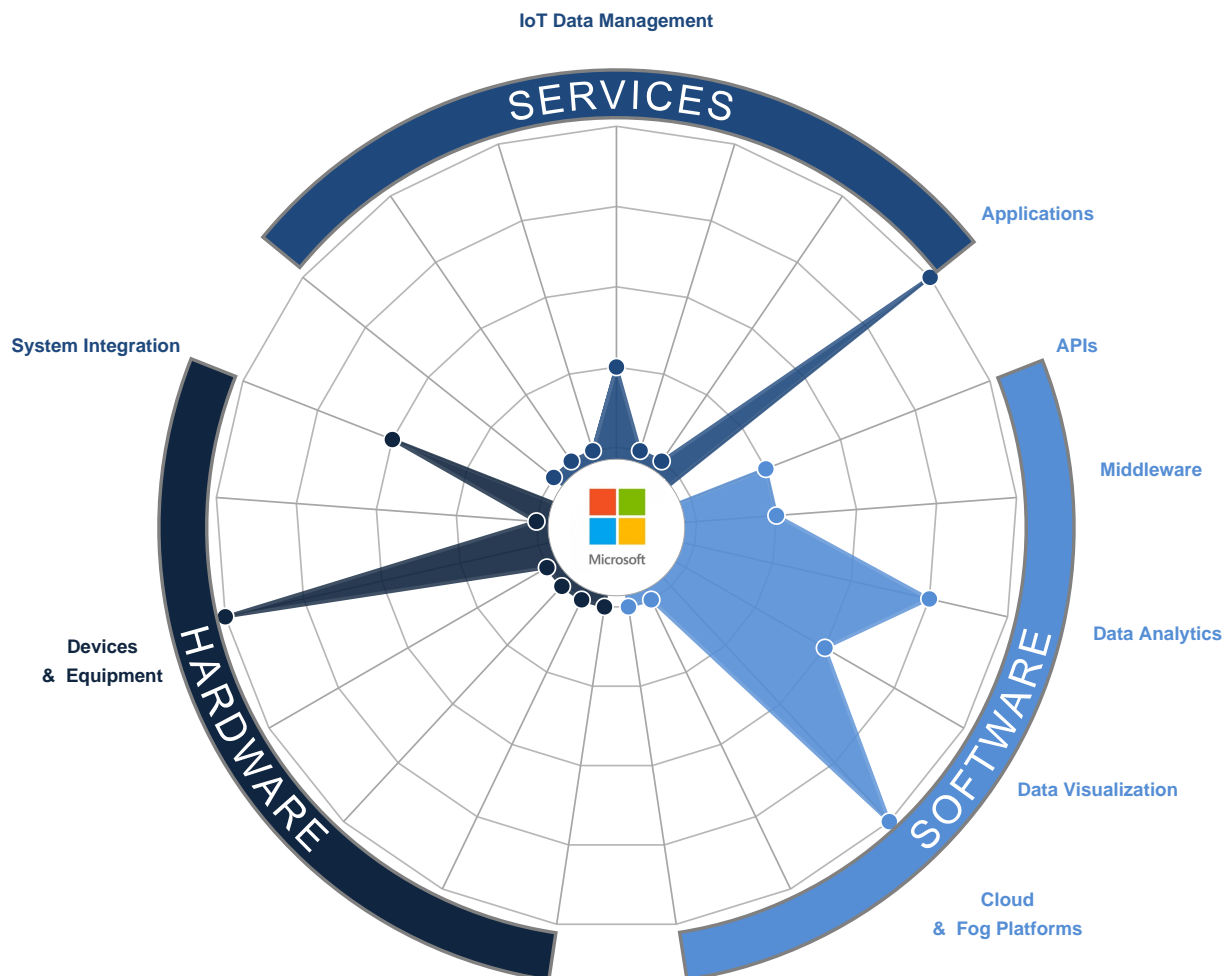


SML Intelligent Inventory Solutions



Overview

Applicable Industries



Consumer Goods



Logistics

Applicable Functions



Warehouse Management



Logistics

Connectivity Protocols



Other frequency

Other Frequency

RFID

Challenge

SML Intelligent Inventory's customers, some retail and supply chain businesses wanted a cost-efficient way to improve their inventory management so that they can increase their revenue.

Customer

SML Intelligent Inventory Solutions (SML IIS) is an expert in supply chain operations, radio frequency identification (RFID) technology, and enterprise software development.

Solution

The Clarity Application Suite uses radio frequency identification (RFID) technology to enable customers to see their entire supply chain, end to end, with greater precision and granularity than ever before, driving better insights, analytics, and decision making. Microsoft Azure App Service and Microsoft Azure Virtual Machines are used as supporting software.

Hardware Components




- RFID

Software Components




- Microsoft Azure App Service
- Microsoft Azure Virtual Machines

| | |
|-------------------|---|
| Data Collected | Inventory Logistics data, including inventory cycle count, shipment verification, transfers |
| Solution Type | IOT |
| Solution Maturity | Cutting Edge (technology has been on the market for < 2 years) |

Operational Impact

| | | |
|---|-----------|--|
|  | Impact #1 | Employee Efficiency - The Clarity Application Suite decreased labor cost of inventory processes by 50% or more. |
|  | Impact #2 | Data Aggregation - Cloud solutions enable aggregation of 'big data' to reduce out-of-stocks and shrinkage up to 25%. |
|  | Impact #3 | Real-time Tracking - The location of individuals and assets can be identified in near real-time. |

Quantitative Benefit

| | | |
|---|------------|---|
|  | Benefit #1 | The Clarity Application Suite increased utilization of assets by 50% or more. |
|  | Benefit #2 | The solution increased throughput by 70% by decreasing errors, latency, and bottlenecks in operational processes. |
|  | Benefit #3 | The Clarity Application Suite decreased outstanding sales by 10% more with accurate, timely invoices. |



Microsoft Solution Case Study

Intelligent
Inventory
Solutions

SML

Solution name: Clarity Application Suite

Company: SML Intelligent Inventory Solutions

Website: www.sml-iis.com

Country or region: United States

Company profile

SML IIS professionals are experts in supply chain operations, RFID technology, and enterprise software development.

Supporting Microsoft software and services

- Microsoft Azure App Service
- Microsoft Azure Virtual Machines

"Having a cloud-based deployment model enables us to scale to hundreds of stores in an instant. None of our competitors have that capability."

Clint Tennill, VP of Architecture, SML IIS

Providing clarity in the cloud for more efficient inventory management for retailers

"RFID technology is at the core of our solution, and it's the easiest, most cost-effective way to get a highly accurate inventory."

Clint Tennill, VP of Architecture, SML IIS

The Clarity Application Suite uses radio frequency identification (RFID) technology to enable customers to see their entire supply chain, end to end, with greater precision and granularity than ever before, driving better insights, analytics, and decision making. Running on Microsoft Azure, the solution scales to meet retail and supply chain customers' needs. Customers can simplify and expedite inventory management to reduce costs, provide more accurate insights, and make better business decisions.

Enabling highly accurate inventory

SML Intelligent Inventory Solutions (SML IIS) is an expert in supply chain operations, radio frequency identification (RFID) technology, and enterprise software development. The company created its Clarity Application Suite to help retail and supply chain businesses improve their inventory management using RFID. "RFID technology is at the core of our solution, and it's the easiest, most cost-effective way to get a highly accurate inventory. This enables businesses to increase their sales by having the right merchandise in the right place at the right time," says Clint Tennill, Vice President of Architecture at SML IIS. "It also reduces inventory shrinkage by giving the business better visibility into goods moving in and out of retail locations and through the supply

chain."

Customers using the Clarity Application Suite have seen real advantages, including the following:

- Increased utilization of assets by 50 percent or more
- Increased throughput by 70 percent by decreasing errors, latency, and bottlenecks in operational processes
- Decreased outstanding sales by 10 percent more with accurate, timely invoices
- Decreased labor cost of inventory processes by 50 percent or more
- Reduced out-of-stocks and shrinkage up to 25 percent



Gaining benefits from flexible solutions

A retailer can use handheld RFID readers, install fixed readers in the ceiling, in doorways, or at point of sale (POS) systems, or use a combination of any of these to track inventory. All merchandise is tagged individually and tracked as it moves from the stockroom to the showroom and is finally sold. The RFID readers stream each event to the inventory system as it happens, resulting in a real inventory count for every item in stock. Jason Guzzardo, Principal Architect at SML IIS, explains, "For instance, a reading could result in a new item being found, so that item has to be made available in the system. Or a reading may show an item has moved or has been sold, which means the stock floor needs to be replenished. A retailer can use the information collected to run a replenishment report or variance reports—anything it needs to keep an accurate assessment."

The system produces a variety of reports such as inventory cycle count by site and location, shipment verification, and transfers. It also integrates with customer ERP solutions and exports data to Excel for further analysis.

Because of the solution's flexible architecture, customers can adapt it to meet their specific inventory needs. Specialty retailers may prefer to RFID tag all of their merchandise to track all movement from

the time an item enters the store until it leaves the store either as a sale or a transfer to another location. Other retailers, such as department stores, may only tag certain categories of items. "Some of our customers only tag a subset of merchandise, like jeans," explains Tennill. "Jeans can have 100 different sizes because of waist sizes, lengths, and other variations. Without RFID, retailers can have a very difficult time tracking what is in stock."

Architecting a solution to change the market

In the past, customers have deployed the Clarity Application Suite on-premises, but SML IIS has re-architected the solution to run in the cloud on Microsoft Azure Virtual Machines. Customers access the applications through a browser. The company believes that providing Clarity in the cloud will create real differentiators for SML IIS in the market. Tennill explains, "Having a cloud-based deployment model enables us to scale to hundreds of stores in an instant. None of our competitors have that capability."

Tennill also believes that running the Clarity Application Suite in the cloud will help lower the barrier of entry for smaller customers. "By offering our products in Azure, we can get to the more cost-conscious customers who don't want to make a capital-intensive investment for the

same set of needs as a larger retailer," he says.

Another differentiator is its mobile-only solution, which enables retailers to get an inventory management system up and running quickly. "We send them the handheld RFID readers, consult with them on tagging the merchandise, and then spin up the Azure instance and they are ready to go," says Tennill. "We can get a business from zero to doing stock counts in a week."

Ensuring operational freedom

By offering the Clarity Application Suite in Azure, SML IIS also offers customers more flexibility and operational freedom. "If a large customer wants to do a stock count every Monday morning across 200 stores, the system can easily handle the traffic," says Tennill.

SML IIS sees new markets opening up with a cloud-based solution as well, such as holding companies that own many types of businesses including a variety of retail establishments. Tennill explains, "We offer companies real flexibility from a deployment standpoint. Because the solution is cloud-based, they don't have to worry about building servers and supporting it in their datacenters, so they can start with just one store and grow it as needed."



Clarity Application Suite provides item-level tracking throughout the supply chain.



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