



CASE STUDY

Critical Asset Monitoring Increases Visibility, Improves Operational Efficiency for Global Leader in Medical Instrumentation

Overview

With the scale and complexity of today's global logistics, it has never been more difficult to ensure the safety and timeliness of shipments. More than ever, businesses are looking to mitigate the threat of theft, damage, and loss in their global, multi-modal supply chains. Prior technologies for supply chain management, such as passive data loggers and temperature probes, fail to provide the real-time visibility and actionable data necessary to guarantee that high-value assets will arrive on time — and in good working condition. IoT solutions for supply chain management are helping companies optimize their

end-to-end supply chains by getting ahead of the risks with package-level condition monitoring, location tracking, global connectivity, multi-carrier communications, and real-time alerts.

The Challenge

The global services group at a leading developer of medical devices and laboratory equipment is tasked with ensuring customer satisfaction by managing the timely fulfillment of medical instrumentation repairs from and to customer sites. This includes providing demo instrumentation to guarantee customer business continuity, which



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requires accurate inventory management. Knowing that a lack of visibility would cause damaged equipment to sit with customers for extended periods, delay order fulfilment, and disrupt demo inventory, this global services group wanted to take a progressive approach to asset management.

In addition to the lack of constant shipment visibility and inability to effectively estimate time of arrival provided by traditional RFID solutions, some of the pain points and process gaps identified were that instruments were not being picked up, boxes were getting lost and/or unopened, repair centers not having a tracking system, and most importantly, no internal or external visibility of these instruments. In order to avoid the negative impacts on repair operations, it was determined that a proactive approach was needed that would keep them ahead of the curve and mitigate the potential operational disruptions.

The Solution

The company needed to leverage a GPS device, with condition monitoring capabilities, that they could attach to the instruments to enable tracking and gain visibility anywhere in the world. They engaged with KORE on a proof-of-concept (POC) for Critical Asset Monitoring, a comprehensive solution based on advanced trackers, sensors, algorithms, cloud services, and a suite of managed services. The company took a three-phase deployment approach for the POC beginning with a three-month test drive before moving into a pilot phase and ending with full integration, demonstrating their progressive approach to new technology adoption.

The test drive phase included an initial smaller quantity of units, with manual interventions into existing processes. Starting in North America, they would then expand the POC into the EMEA



region and finally try a few longer trips in Asia-Pacific. The objectives of Phase 1 were to test the added value provided by the trackers, ease of use, data provided, and reliability of the solution.

The pilot phase would expand to scale up five times the number of trackers, customizing processes to routinely accommodate tracking. They planned to develop lightweight integration and tooling, adjusting the portal if need be. In

this phase, they would assess the benefits of the solution and get the development budget. The objectives of Phase 2 were to achieve integration into the customer workflow, begin customer involvement, analyze scalability, and test a variety of uses cases and travel routes.

Finally, when integration is reached, they would scale up to 100 assets moving at any given time with hundreds of trackers. At this phase, they



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would fully integrate tracking into existing business systems. The objectives of Phase 3 would be to adapt processes and scale-up implementation of the solution.

In order to assess the proof-of-concept, the success metrics were determined by relevant stakeholders of each business group,

focusing on reducing equipment loss, damage during transportation and number of service calls. A yet-to-be-determined metric would be something quantitative, such as the percentage of tracked instrument loss.

The Result

Unequivocally, the implementation was a success for the global operations team. They had successfully achieved visibility of shipment position, condition (tilt and shock), and estimated time of arrival. Additionally, the availability of instrument stock increased while their turnaround time decreased, positively affecting customer experience. The use of Critical Asset Monitoring by KORE was shown to facilitate communication and follow-up with customers, surpassing the expectations of the global team. Because of the overwhelmingly positive results of phase one, the agile and responsive global team decided to fast track adoption through Phase 2, to then move into full integration and implementation of the solution.

The power of real-time location tracking and condition monitoring of high-value medical assets is in the results. This global leader in medical instrumentation was able to leverage the actionable insights gained from the solution to improve operational efficiency, leading to increased customer satisfaction and ultimately a positive ROI.

About KORE

KORE is a pioneer, leader, and trusted advisor delivering transformative business performance. KORE empowers organizations of all sizes to improve operational and business results by simplifying the complexity of IoT. KORE has a deep IoT knowledge and experience, global reach, purpose-built solutions, and deployment agility to accelerate and materially impact customers' business outcomes.

For more information, reach out to KORE to learn how we can help you optimize your supply chain with Critical Asset Monitoring.

