SOLUTION OVERVIEW

Cognizant

Track It. Trace It.

Optimize Operations by Tracking Enterprise Assets

Legacy asset tracking technologies are being replaced by mobile and sensors embedded on vehicles, assets, and employees.

This new digital capability allows assets to be tracked and monitored remotely. As companies improve their means to capture asset use, managers and employees can begin benefiting from real-time operational insights.

Tracking assets remotely at every level — across the company, supply chain, or in the field — is advancing operational excellence practices, improving agility and creating better user experience.

IOT TO TRANSFORM OPERATIONS

Hardware costs are dropping and network coverage is ubiquitous. An increasing number of IoT-enabled devices are entering the global marketplace. DHL Trend Research and Cisco estimate that by 2025, fully $1.9 trillion of economic value will result from the use of IoT-enabled devices in the global supply chain and logistics sector (Internet of Things in Logistics: A Collaborative Report, 2015).[1]

That gives organizations an unparalleled opportunity to create competitive advantage through improved operational efficiency. An IoT-based equipment and capital asset-tracking solution can help you know the location, status, and operating performance of assets across your operations in real time. In turn, you can better monitor equipment, track inventory, service equipment, and make workers more efficient.

USE CASES FOR TRACK-AND-TRACE

- Asset and vehicle tracking
- Brand protection
- Improved customer experience
- Excursion management
- Inventory and condition management
- Process control and recording
- Pedigree, quality validation and verification
- Self-diagnosing and self-correcting processing
- Task tracing and security

But how to design? Who to implement?

KNOW WHERE. KNOW NOW.

Cognizant helps organizations optimize operations by understanding the location and condition of all their equipment and other assets to manage inventory, monitor equipment, understand usage, and schedule and monitor workers. Our Track-and-Trace solution forms the backbone of an IoT-based enterprise asset-tracking solution.

Cognizant's Track-and-Trace solution leverages your organization's existing investments in RFID tags, beacons, and ultra-wideband platforms to collect and communicate data in real-time on equipment location, product status, performance, and environmental factors that affect function.

Highly customizable, Cognizant's Track-and-Trace solution can be implemented in a range of industries, allowing executives in charge of operations, procurement, and manufacturing to review and optimize their operations to deliver more goods faster and more cheaply. And since logistics is one of the costliest components of trade across a range of industries – from manufacturing supply and delivery to cold-chain monitoring in sectors such as food and pharmaceuticals – managing it as efficiently as possible is a decisive benefit.

Cognizant's end-to-end solution includes recommendations on what devices to adopt, building an IoT platform, implementing analytics, and using digital solutions to integrate the enterprise. Our deep technology knowledge and our expertise across industries helps us build intelligent and scalable solutions for proactive end-to-end asset life-cycle management.

Support new business models.
Track-and-Trace offers insights on customer behavior to optimize product development and create new revenue streams, and increases the value of your supply network by enabling cooperative interaction.

Improve operational processes.
Configure automated processes to your business flows, to eliminate time consuming and error prone manual tracking.

Service in the field.
An integrated IoT-based solution allows you to service equipment in the field to prevent breakdowns and optimize usage.

Lower Costs.
Asset management and tracking can increase workforce productivity and reduce expense. With real-time inventory visibility across facilities, you can reduce procurement costs, by leveraging items in one location to avoid buying them in others.

Increase safety.
Monitor and track your crew members in real time, particularly in adverse conditions. And collect actionable temperature, pressure, or damaged data related to perishable or dangerous goods.

Lessen Risk.
Asset tracking helps you satisfy regulatory and security requirements more easily. And with item tracing and proof of delivery, you can secure distribution channels, reducing loss, theft, and counterfeiting.

Doing Away with Million-Dollar Defects and Delays

Cognizant's client is a heavy equipment manufacturer making customized equipment that sells for seven figures or more per unit. Production inefficiencies at its vehicle manufacturing facilities are costly. They asked Cognizant to optimize its production floor workforce to achieve a more consistent cycle-time.

Cognizant conducted a situation analysis, and developed a sensing and analytics-based Track-and-Trace solution to create a more efficient assembly line. We connected location-tracking sensors on the production line — including beacons on workers, RFID tags on products, and RSP readers on 120 workstations — and implemented data-visualization tools to create associations to solve the cycle-time problem.

Based on this real-time information, production floor managers can track key performance indicators at workstations, see where defects occur, understand their causes, and immediately address them. They can identify delays in the assembly line down to individual operators, increase process compliance, and introduce predictability to the start-and-stop of actions at each workstation.

SMARTER SYSTEMS = GREATER VALUE

Cognizant's Track-and-Trace solution can help your organization to implement self-diagnosing and self-correcting systems, increase safety and security, trace tasks, validate quality, protect brands, and improve customer service. The new metrics and incentives that emerge from more and better data can return enormous potential value.

ACTING ON INSIGHTS

Asset tracking has the potential to revolutionize the way your company does business. Cognizant's Track-and-Trace solution helps you realize the full economic value of data related to your inventory, equipment, and workers — by turning it into actionable insights. And while reviewing and revising supply chain and logistics operations by implementing a digital solution may seem daunting, Cognizant will partner with you every step of the way.

WHY COGNIZANT

Cognizant designs and develops customized programs to help your business ensure product availability, increase services levels, enable customer assistance initiatives, and eliminate queues. We are a full-service global IoT services provider. We help companies digitally transform their operations, products, and places as they pivot from sensing to sense. We combine end-to-end engineering and IoT experience to design and build physical products and have the capability to connect them to sense, act, and derive actionable intelligence.

OUR SERVICES

IOT ADVISORY

We evaluate business and digital readiness, define Track-and-Trace use cases and technical and operational requirements, propose solutions to allow transformation at scale, and deliver a roadmap to deployment.

DESIGN OR RETROFIT

We embed IoT-enabled products and assets, or retrofit existing products, assets, and/or physical environments to better manage product development end-to-end from conception to prototype to manufacturing to market.

DEPLOY AND MANAGE

We implement operational and technical components of the product/asset design or use case and manage delivery, to enhance operational processes with improved insight and control and to enhance customer experience.

OPERATIONS MANAGEMENT

We optimize throughput of industrial product or asset processes, helping companies use real-time and historical data – along with advanced analytics – to make better decisions. Our solutions allow operators to monitor and maintain equipment as well as predict and address operational issues.

GETTING STARTED

In order to get the most out of your assets, products or places, Track-and-Trace solution is one enabler to drive a game-changing impact. Want to learn more about how to get started in creating a value-driven Track-and-Trace solution? We offer a leadership workshop to explore the opportunity, use cases, and impact of connected solutions. Contact us at www.cognizant.com/enterprise-iot-solutions.

[1] "Internet of Things will deliver $1.9 trillion boost to supply chain and logistics operations," The Network – Cisco's Technology News Site, 15 Apr 2015. At https://newsroom.cisco.com/press-release-content?articleId=1621819. Report at http://www.dhl.com/en/about_us/logistics_insights/dhl_trend_research/internet_of_things.html. Accessed 8 Oct 2017.

ABOUT COGNIZANT

CCognizant (NASDAQ-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 205 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.

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