



Case Study



IOT FOR TRANSPORT

A premier logistics service provider goes cutting-edge with IoT based Fleet

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ABOUT THE CLIENT

Thar Dry Port, is part of HPCSL, very well connected to the hinterlands through Road & Rail; the ICD is one of its kind in providing the flexibility of container movement by Rail and Road respectively. The uniqueness of the setup is its existence as the first privatized ICD in the state and country as well.

They offer efficient and cost-effective cargo consolidation, warehousing, distribution, container storage and container repair services to meet the logistics needs of manufacturers, global retailers, consolidators and forwarders, shipping lines and container leasing companies.

OUR SOLUTION

The Fleet Management solution helps the client's logistics customers in intelligent decision-making, to effectively manage their fleet of vehicles. Deep insights into Driver Performance, Real-time vehicle tracking, Predictive Maintenance of Vehicles and Fuel usage.

BUSINESS NEED

HPCSL ventured into service sector in 2001 & started its first Inland Container Depot at Jodhpur followed by Sanand in Ahmedabad. The Thar Dry Port ICD in Jodhpur is a fully equipped dry port for CFS & CY cargo handling services, linked to gateway ports of Nhava Sheva, Mundra & Pipavav.

It is strategically located on the common road route from Rajasthan to all the major gateway ports, (at a distance of 1 hour drive from Jodhpur City on the National Highway No. 112, about 14 km from the railway station/ bus station). The vendor base at the location and vicinity utilizes and explores the benefits of this time and cost efficient facility to enhance their overall logistics effectiveness.



Real Time Tracking of Vehicles



Improve Fleet Fuel Management



Increase profitability



Improve Supervision and Safety



Monitor & Maximize Vehicle Efficiency



Improve Driving Behavior



Stolen Vehicle Recovery



Reduce Idling Time





Vehicle Tracking

With the existing systems, they had no means to track their fleet of vehicles in real-time; to avoid any breakdown, failure, or delay in their supply chain operations. There were no insights to understand the driving habits of workforce like harsh braking, cornering, etc., due to which they were unable to put a focus on training and improving the performance of inefficient, unsafe, & discourteous drivers. In addition, they had no means to identify unplanned stops of each vehicle, drive time versus customer service time and vehicle idle time. In addition, their existing system lacked capabilities to track vehicle idling & fuel usage trends to optimize fuel consumption, making it impossible to set up a cost-effective fleet optimization engine. Unexpected failure/breakdown of vehicles resulted in a huge loss in vehicle productivity and maintenance costs. Also, their existing manual process for vehicle repairs and maintenance was time-consuming.

Our client wanted to address all these impediments smartly with an efficient fleet management solution that utilizes diagnostic data of the vehicles, drivers and history of unplanned events. And, such data needs to be obtained from installed GPS enabled devices (IoT assets) in the vehicles. These devices provide information such as vehicle speed, engine coolant temperature & RPM, trip mileage/fuel consumption, hard acceleration/brake, engine idle time etc. By analyzing the collected data, a complete picture of real-time operations can be made available. These insights would help them select the most appropriate route, maximize uptime, control costs, and reduce fuel; thereby boosting productivity, increasing operational efficiency, and optimizing fleet. However, to architect such a solution they required an integrated IoT & Data Analytics platform; which supports any kind of device and possesses an ability to perform analysis for critical insights. To create such a robust predictive analytics fleet management solution, they engaged Trident as their IoT & Data Analytics consulting partner

TECHNOLOGY SOLUTION

IoT based Realtime Vehicle Tracking System enables to capture parameters that hold significance for optimizing the operational efficiency of fleets. The data from edge devices is presented in a structured manner on dedicated Application Dashboards (as tables, graphs, charts, etc.) after various data validation and analysis operations. Exception Alerts are generated for any unauthorized event generation to take predictive, preventive and corrective measures on time.

Analytical and Reporting tools are incorporated into the solution to understand the acquired data continuously. Based on the analysis; Pattern and Insight Reports are generated enabling the operators to evaluate, benchmark and compare the performance of assets for informed decision-making.

Primary Parameters

- Realtime Location Tracking using GPS
- Vehicle Ignition Status
- Speed – Derived from GPS location tracking
- Cargo Door – Open/Close (for Theft Prevention)

Derived Parameters (Software Analytics)

- Hub map Creation – Hubs will include Customer Location, Container Yard, Toll Plaza, Fuel Station, Workshops, State Borders, Ports
- Auto Capture of Vehicle arrival and departure at hubs
- Create Ideal Route to be followed
- Identify and map actual route followed
- Capture unscheduled halts and calculate Idling time



ABOUT TRIDENT

Trident is a global consulting firm that empowers organizations around the world to digitally transform and grow their businesses. Our expert consultants offer strategic consulting, implementation services, support and managed services and pre-built software solutions that help our clients innovate and reinvigorate customer, employee, partner and supplier experiences and processes using Microsoft Dynamics 365, ERP, CRM, Business Intelligence/Analytics and related Microsoft cloud solutions.

Trident enables Digital Transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights through an integrated set of disruptive technologies: big data analytics, internet of things, mobility, cloud, security, unified communications, etc.

CRM MS D365 Sales MS D365 Marketing	ERP MS D365 Operations MS D365 Business Central Microsoft Dynamics AX Microsoft Dynamics NAV	Internet of Things (IoT) Retail Supply Chain Asset Management Fleet Management Energy Management
Audit & Risk Analysis ACL GRC ACL Exchange ACL Analytics	Business Intelligence MS Power BI SPSS Qlik Sense	Retail Applications LS Retail D365 Retail
DevOps IBM Microsoft Dynatrace	Mobile Apps Sales Force Automation Service Team Automation Customer Loyalty Management Mobile Inventory Management	Security Application Security End Point Security Database Security

Trident's Vertical Focus



Retail



Hospitality



E-Commerce



Logistics



Manufacturing



Real Estate &
Construction



Education

Recognitions and Awards



'Transformative 100' by ChannelWorld at the Premier 100 annual awards for 2016, 2017, 2018



Microsoft Dynamics President Club winner from Microsoft for Microsoft Dynamics Navigation, Axapta & MSCRM, 2011



Gold Certified Partner for Microsoft Dynamics Navigation, Axapta & MSCRM



Platinum Partnership with LS Retail supporting clients with more than 5000 POS.



Attainment of **Premier partnership** status with IBM, 2010



Most Innovative Partner of the Year award from IBM, 2009.



Strategic Alliances



Quick Facts

1999 Year of Establishment

250+ No. of Employees

300+ No. of Customers

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