Case Study

LEADING FOOD SERVICE PROVIDER

Technology specialists for food service enterprises, globally

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THE CLIENT

IT is a major Indian sweets and snacks manufacturer based in India. The company has manufacturing plants in Nagpur, New Delhi, Kolkata, Bikaner. It has its own retail chain stores and a range of restaurants in India, and international market. In contemporary times, It's products are exported to several countries worldwide, including Sri Lanka, United Kingdom, United States, Canada, United Arab Emirates, Australia, New Zealand, Japan, Thailand and others.

OUR RESULTS

With IoT-based business solutions, Client could gain the real-time visibility and enable the automated, intelligent actions needed to ensure food is of the highest quality, delivered on time and prepared in optimal settings. It used IoT-connected testing equipment to confirm food quality as it leaves the factory or warehouse. It's fleet managers can then leverage the IoT to make sure temperature-sensitive perishable goods don't go bad in transit through sensor-enabled refrigeration systems.

BUSINESS NEED

Our client who is a INR 4000 crore fast food manufacturer conglomerate with 3 factories and 50 food outlets had an IT infrastructure in place which was built around Microsoft technologies. To make their business process more efficient and intelligent, they wanted to revamp this existing system to a more modern and powerful solution. It wanted to deliver goods with the assistance of IoT-connected mobile devices with Bluetooth printers and Bluetooth temperature sensors mounted in the trucks. Further it also wanted to be able to gather intelligence about customers' shopping behavioural patterns so that it could provide them with the most relevant goods and services. One of the core challenges in this project was to develop a system that could handle these multiple connected devices which were expected to generate million events every single day. Further the system needed to have provisions for storing and analyzing this huge amount of collected data so that patterns could be identified within it.They also wanted to connect their stores shelf to IoT hub so that the temperatures could be monitored and solution can predict the shelf life for the prepared food items.

It had following main business objectives when they approached Trident for the possible IoT Based Solution

- Goods tracking through RFID tags
- Improved shelf time
- Expiry alerts
- Reduced wastage
- Beacons for personalized mobile shopping experience
- Enhance instore experience
- Faster accurate order dispatch
- Analytics for enhanced decision making

TECHNOLOGY SOLUTION

Based on the need or the business problem the following solution components are identified SQLite, Azure Mobile Apps Services, Cloud Services, Azure Storage, Event Hubs & Stream Analytics, Microsoft Power BI to address the same.

Inventory Automation.

To achieve the traceability between finished/semi-finished good and the raw material batch, to identify and eliminate the human errors or process violations, following processes we automated through RFID based smart weighing and tagging solution to capture accurate date at each stages:

- Raw material receiving.
- Raw material issue to production floor.
- Raw material stock taking.

- Packaging of finished goods.
- Dispatch of packaged materials.
- Receiving of finished good at retail store

Transportation monitoring.

To identify and eliminate transportation losses , the data such as temperature, location and door opening and closing are collated and used to determine the exact Time, Transporter and location at which this losses occurred. A preventive alerts are also sent to the dispatch and transportation in-charges on the real-time basis to stop such pilferages.
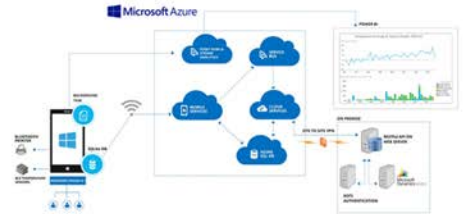
Preventive maintenance.

The data of the performance of the machinery are sent on a real time basis to the IoT servers, these data are then analyzed and alerts are triggered to the maintenance team is any uneven deviations are observed.

A Glimpse of our IoT Based Food
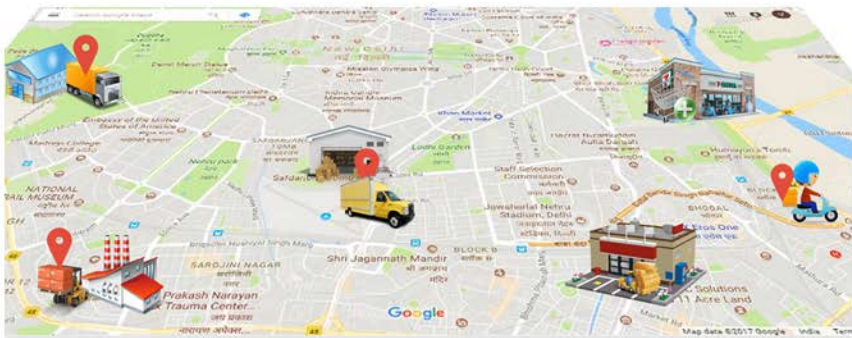
Temperature Sensors Location Sensors RFID Sensors Vibration Sensors Visual Sensors Proximity Sensor

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.

Quick Facts

1999	Year of Establishment
250+	No. of Employees
300+	No. of Customers

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CRM	ERP	Internet of Things (IoT)
MS D365 Sales MS D365 Marketing	MS D365 Operations MS D365 Business Central Microsoft Dynamics AX Microsoft Dynamics NAV	Retail Supply Chain Asset Management Fleet Management Energy Management

Audit & Risk Analysis	Business Intelligence	Retail Applications
ACL GRC ACL Exchange ACL Analytics	MS Power BI SPSS Qlik Sense	LS Retail D365 Retail

DevOps	Mobile Apps	Security
IBM Microsoft Dynatrace	Sales Force Automation Service Team Automation Customer Loyalty Management Mobile Inventory Managment	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 Navision, Axapta & MSCRM, 2011

Gold Certified Partner for Microsoft Dynamics Navision, 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

Gold Microsoft Partner — Microsoft

LS Nav Platinum Certified Partner 2018

Business Partner IBM

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