

A man wearing a blue hard hat and a plaid shirt is standing in an industrial setting, possibly a gas processing plant. He is holding a clipboard and a pen, looking off to the side. The background shows various pipes, valves, and gauges, with a warm, golden light suggesting sunset or sunrise.

**A leading LPG
supplier takes control
of its assets with IoT.
Here's how.**

Client background

Client: A large supplier of liquefied petroleum gas (LPG) to homes and businesses

Industry: Gas

Area of operation: Global

Products: LPG, LNG, Bio LPG



Pallet digitalization initiative enables integrated asset management, leading to cost savings, enhanced safety and efficient production planning

Challenges

The client was experiencing a rapid growth trajectory. This led to significant challenges in efficiently managing its gas distribution operations. The inability to track the pallets and cylinders in circulation resulted in high OpEx due to constant refurbishment of lost assets. Also, siloed operations led to lack of relevant data and insights, undermining effective decision making.

The client was looking for remote identification, detection, and recording of the location of pallets to enable real time inventory and tracking of pallet entry/exit from individual locations. It also wanted the ability to integrate the type and quantity of gas bottles into each pallet and log pallet damage in real time to ensure compliance. Additional needs included increasing safety through accountability and enabling a maintenance record of all pallets.

Solution

Wipro collaborated with the client to design a pallet digitalization initiative.

Wipro assessed the digital supply chain use cases and identified pallet tracking as the key to address immediate challenges affecting revenues. The team employed a two-pronged approach:

- Tagged the pallets to enable communication with fixed and mobile devices over radio frequency. Client software installed on the devices ingests the data and transfers it using GSM connectivity to the IoT platform hosted on Cloud
- Established a data security and management layer at the edge with remote access and control of the units to monitor data breaches, sim card malfunctioning, data over-usage, sim tampering and so on

Highlights of the automated pallet detection solution:

- Horizontal platform architecture to support multiple users
- Rules-driven notifications for proactive decision making and incident avoidance
- Flexible and modular approach for easy integration
- Deep business insights through data analytics for performance enhancement
- Remote management and secured access for convenience, safety and security

Business impact

The client saw huge improvements in operations visibility, safety, cost savings and brand reputation as a direct outcome of the pallet digitalization initiative.



Cost Savings

- Reduced the recurring need for replacing lost assets by eliminating mismanagement and theft, which used to cost the client over \$1.2 million p.a.



Better Visibility

- Enabled real time inventory of pallets as well as their transit details for superior visibility, asset management and on-time deliveries. This resulted in enhanced order booking with 5% increase in quarterly revenues.



Safe Operations

- Physical condition recording of pallets coupled with maintenance schedule enabled regular maintenance plan of pallets ensuring safer transport and reduction in accidents resulting in reduced 3rd party claims.



Increased Security

- Enabled pallet accountability and rapid detection of abnormal pallet movement and missing equipment
- Ensured compliance



Operational efficiency

- Drove high asset utilization by putting idle pallets into circulation
- Enhanced production planning and supply chain activities by enabling proactive decision-making based on past trends



Real-time visibility and tracking of pallets provided boost to the pallet digitization program. Not only did the initiative bring in anticipated operational benefits, but also fueled the production, resulting in increased revenues.

Ashish Khare

General Manager, IoT - Cloud & Infrastructure Services,
Wipro Limited.



Wipro Limited

Doddakannelli, Sarjapur Road,
Bangalore-560 035,
India

Tel: +91 (80) 2844 0011

Fax: +91 (80) 2844 0256

wipro.com

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services, strong commitment to sustainability and good corporate citizenship, we have over 175,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information,
please write to us at
info@wipro.com

