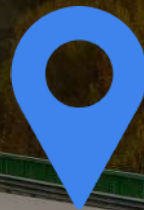




# ePOD Electronic Proof of Delivery Powered by mcube™

Smart Logistics Management Solution for Efficiency,  
Transparency & Control!



In today's fast-paced business environment, efficient logistics and timely deliveries are essential for maintaining customer satisfaction and operational efficiency across industries. Meeting customer expectations with real-time shipment updates and optimizing the supply chain are key drivers for innovation and business continuity.

TCG Digital's advanced ePOD solution helps achieve this by offering enhanced visibility and streamlined communication throughout the delivery process.

## ePOD Overview

### Product Information Note

The Electronic Proof of Delivery (ePOD) offered is a near real-time logistics & transportation management solution focused on offering visibility control, delivery accuracy, and customer satisfaction. Built on our proprietary end-to-end data and analytics platform mcube™ it offers seamless tracking and control of shipments, optimizing supply chain efficiency.

The solution automates delivery documentation, captures near real-time data to provide visibility and transparency into transit of transportation and goods. Customers can confirm receipt electronically, and transporters can submit freight bills quickly, speeding up transactions. Consignees can report issues directly in the application, ensuring fast resolution and reliable deliveries for sustainable business growth.

### What it Does?

#### Live Vehicle Tracking:

- Real-time visibility on consignment movement
- Visibility to customer on delivery status

**Issue Handling:** Exception based management of in-transit issues

Online Complaints: Online Complaint Management and Resolution

**Vendor Performance Management:** Basis near real-time delivery performance metrics

### Who is ePOD meant for?

Our ePOD is designed for all sectors concerned with logistics and transportation of finished products, such as

- Logistics and Transportation
- Retail and E-commerce
- Pharmaceuticals and Healthcare

- Petrochemicals, Process Manufacturing and Distribution
- Food and Beverage Delivery
- Utilities and Service Providers
- Postal and Courier Services and more

### Benefits

- **Monthly Savings of 8 FTE:** Blockchain based Automation reduces payment processing time by 87.5%
- **Closed Loop with ERP System:** Seamless Integration to Back-end Systems
- **Improved Working Capital:** Improvement of \$500K experienced for early payments and discounts

### Challenges Addressed

**Limited Tracking Visibility:** Customers expect real-time shipment updates, but phone and SMS communication is inefficient.

**Delivery Timelines:** Timely deliveries and near real-time visibility are crucial for sustaining business and repeat orders.

**Predictive Insights Needed:** Customers need full shipment transparency and ETA prediction before dispatch.

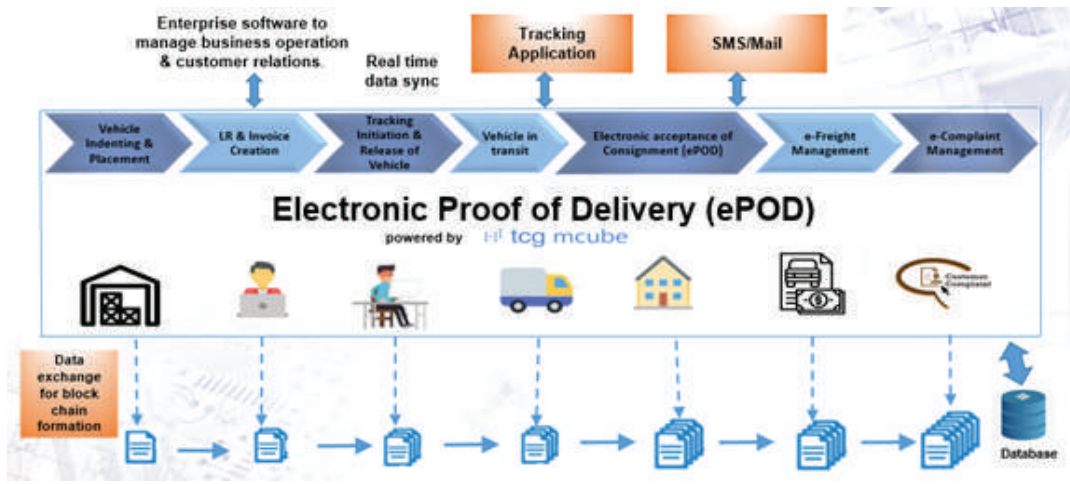
**Complaint Management Issues:** Centralized handling of issues like spills, route deviations, and damages is lacking.

**Data Manipulation & Fraud Risks:** Proof of delivery can be tampered with, requiring a fraud-proof, auditable system.

**Integrated Billing Needed:** Faster, transparent billing processes improve contract negotiations and payment timelines.

# ePOD Solution

Gain peace of mind knowing your valuable goods are monitored at every step of the way, from production to delivery.



## Product Information Note

**Vehicle Geo-location Tracking:** Near Real-time tracking of vehicles from the factory to the customer's location using GPS and SIM-based tracking.

**Customer Alerts:** Notifications sent to customers as delivery approaches, allowing them to prepare for unloading, reducing damage and miscommunication.

**Complaint Management:** Handles issues like spillage, delays, and route deviations through a centralized system.

**Geofencing & Fraud Prevention:** It sends notifications to customers when shipments are near the destination. Additionally, ePOD functionality activates near the final destination to minimize fraud risks.

## Platform & Technology

**Blockchain:** The platform, powered by mcube™, incorporates analytics and Ethereum blockchain for data immutability, providing auditability and preventing data tampering. This ensures security and traceability even among interactions with third-party transporters.

**Permanent Documentation:** Blockchain technology ensures non-tamperable, permanent records for all delivery documents and claims.

**Billing Integration:** ePOD triggers billing once a delivery is confirmed, improving transparency and allowing enterprises to negotiate better contracts. Transporters benefit from faster payments due to enhanced billing processes.

**Digital Signature & Delivery:** A seamless digital signature for delivery confirmation.

**Vendor Integration:** Transport vendors can submit bills digitally, enabling bill discounting.

**Integration with Enterprise software:** Fully integrated with existing ERP, thus aligning delivery information with order and dispatch details.

**Transparency:** Customers can track delivery status in real-time, including estimated delivery times.

**Centralized Data on mcube™:** All logistics data is stored on the mcube™ platform, enabling future enhancements such as vendor performance tracking and KPI management.



# Case Study

## Boosting Logistics Efficiency with ePOD for a Large Petrochemical Plant



CLIENTS

Haldia Petrochemicals, one of India's largest Petrochemical Manufacturers (700,000 TPA ethylene, 1,270,000 TPA PTA capacity)

- ePOD with real-time geolocation tracking (web & mobile)
- Automated processes with alerts and secure blockchain for transactions
- Streamlined complaint management



SOLUTIONS



CHALLENGES

- Wanted real-time shipment visibility
- Wanted to switch from manual processes for POD and invoicing to automated version
- Risk of data manipulation and fraud

- Improved Efficiency: Near Real-time tracking, reduced transit delays
- End-to-End Visibility: Full transparency from LR to delivery
- Faster Processing: Invoice time cut from 2 hours to 15 minutes
- Enhanced Security: Blockchain ensures data integrity, preventing fraud
- Compliance & Safety: Tracks hazardous materials with safety benchmarks
- Customer Confidence: Increased satisfaction and repeat orders
- Actionable Insights: Near Real-time reporting for better decisions
- Future-Ready: Continuous improvement via data analytics



RESULT

### How do we partner with you?

As a strategic partner, we deliver a tailored solution that aligns with your unique operational needs and goals.

**Seamless Integration:** We work with your team to effortlessly integrate ePOD into your system, ensuring minimal disruption.

**Continuous Innovation:** ePOD evolves with your business, offering regular updates and custom enhancements.

**Training & Support:** We offer comprehensive training and ongoing support to maximize ePOD's potential.

**Flexible Engagement:** Choose between Cloud-based SaaS with subscription or On-premise deployment.



Lummus Digital is at the forefront of transforming the oil and gas downstream sector by offering innovative digital solutions that tackle the complex challenges faced by refineries and petrochemical industries. As a joint venture between TCG Digital and Lummus Technology, we blend decades of process engineering expertise with advanced AI and data science to deliver tailored solutions for measurable outcome. Our AI Analytics platform mcube™ is at the heart of these transformations. We enable organizations unlock the full potential of their data, and by seamlessly integrating AI/ML capabilities into their business processes, we empower businesses to accelerate their digital transformation journey, enhancing agility and driving impactful results.

Our team, comprising over 500 process engineers and 100+ data scientists, we are committed to developing and implementing solutions that enable refineries and petrochemical units to achieve success in their AI-driven business transformation journey.

[www.lummusdigital.com](http://www.lummusdigital.com)



mcube™ is TCG Digital's flagship Data, AI, and Analytics platform—engineered at the intersection of deep industry knowledge and digital innovation. Built on a domain-driven design, it seamlessly navigates the most complex and disparate data landscapes. With AI 2.0 at its core, mcube™ fuses advanced models with real-world context to solve high-impact business challenges. By integrating mcube.data, mcube.ai, and mcube.agents, it transforms enterprise data into intelligent ecosystems. mcube™ drives semantic discovery through ontologies, and empowers agentic applications for autonomous decision-making and continuous learning. From harmonizing data to deploying intelligent agents, mcube™ accelerates 'velocity to value'—delivering clarity, intelligence, and outcomes at scale.

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