



Logistics Orchestration & Decision Intelligence Platform

Target Industries

Life Sciences, Produce, LSP / 3PL, Sensor, Retail (F&B)

Customer Pain Point

Managing transportation & logistics for temperature-sensitive products is hard and expensive. Each year, \$800+ billion worth of perishable food, medicines, and consumer goods are wasted due to temperature management failures in transit & storage. Enterprises invest hundreds of billions annually in 3PL services, consulting, packaging, sensors and temperature control solutions aiming to reduce losses through improved visibility. Despite these growing investments into data loggers, TMS / visibility aggregators & IoT sensors, product loss ratios continue to rise while enterprises remain underwhelmed with a lack of actionable data.

Solution

PAXAFE is a logistics orchestration & decision intelligence platform that helps cold chain manufacturers and Logistics Service Providers (LSP) reduce visibility monitoring & intervention costs, digitize & automate Lane Qualification and Lane Risk Assessments (LRA), automate quality workflows and incorporate prescriptive recommendation into the real-time visibility network.

Customer Benefit

Acting as the trust layer for temperature-controlled logistics networks whose mission is to drive towards zero waste in cold chain transportation, PAXAFE accelerates and improves logistics planning decisions (SOP, routing, packaging, carrier, mode of transport, IoT) while automating tactical monitoring of critical day to day shipments.

PAXAFE customers benefit from putting their cold chain operations on auto-pilot – accelerated and optimized decision-making & instant tradeoff analysis – powered by gen-AI -- without the costly dashboards, consultants and analysis paralysis

Leadership

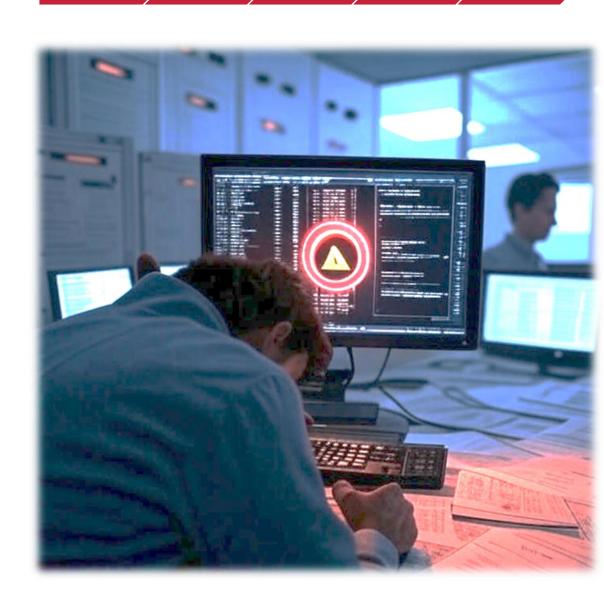
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Cold Chain is difficult and expensive...

Visibility has **not** solved the problem.

- Lengthy & Sub-Optimal Lane Qualification: Static standard operating procedures (SOPs) and non-standardized lane risk assessments (LRA) managed through email, excel and QMS no systemic feedback loop between plan & real-world data!
- Limited Control Tower Functionality: Disparate visibility data amongst passive, real-time IoT, carrier milestone data, etc. with no efficient way to consolidate and overlay into singular view
- Expensive shipment monitoring: Focus on reacting to IoT / general alerts that act as poor proxy for actual shipment risk, resulting in \$200+ / shipment monitoring over-reliance on hypercare
- Manual Product Release: Current process towards product disposition, document review and retention, TOR calculation and product release is laborious with limited automation
- Transportation Network Blind Spots: Lack of confidence in lane / route selection, packaging optimization, inventory carrying costs, LSP / IoT performance, CO2 emissions & other systemic issues adding to cost or increasing risk



Why? The data is not actionable

- "Can I overlay my IoT, passive and carrier data to understand source of truth?"
- "Paying \$200+ to monitor and hyper-care each shipment is too much"
- "I didn't know my 3PLs were taking unauthorized / non-validated routes"
- "I'm missing 30% of the IoT pings that are supposed to ping every 60 minutes"
- "I don't have the data / confidence to know which lanes / routes I can move from air to ocean"
- "My contracted lead time is too long and is resulting in excessive inventory carrying costs"
- "I'm doing all of these thermal modeling studies, but how does the packaging behave in the real world? Where do I need to add and where can I remove thermal life?"
- "How are my IoT / packaging / LSP partners performing?"
- "How are tariffs going to impact PRODUCT X on LANE Y and ROUTE Z?"
- "How is my network performing in the aggregate? Where are the systemic failures, and how can I address them?"

PAXAFE

PAXAFE Modules

Planning Visibility Monitoring Quality Automation Aggregate Insights

Lane Qualification

Digitize Standard Operating Procedures (SOP) and Risk Assessments

- Digitized Standard
 Operating Procedures (SOP)
 bulk ingestion and
 qualification of existing lanes
 (origin/destination pairs).
- Creation of new lanes with associated SOPs
- Risk assessment on new Lanes with primary / secondary vendor recommendations
- Centralized communication and doc repository portal for tight version control
- Lane Manager functionality to approve, reject and implement SOP changes

Command Center

Agnostic Transportation Visibility of Live & Completed Shipments

- Agnostic platform capable of ingesting data from:
 - software systems: TMS, ERP, Apps, middleware, etc.
 - IoT data: Active, Passive, ELDs, GPS, Temperature, etc.
 - Carrier systems via EDI, API, flat file, etc.
- Provides shipment visibility via location, condition monitoring, carrier milestones and other relevant transportation data
- Alerts & notification engine with platform, email & text support
- Shipment reports
- External 'share only' links

Exceptions Mgmt.

AI-Enabled Live Shipment
Monitoring w/ Proactive & Targeted
Intervention

- Shipment performance and risk algorithm enabling proactive monitoring and exceptions management
- Replaces device alerts with a more reliable shipment risk proxy, minimizing monitoring overhead
- Incorporates prediction around delivery time and temperature excursions
- External risk factors (geopolitical, weather, etc.)
- Task manager to action / assign / document intervention tasks
- ATHENA enabled insights, root cause and recommendations

Auto Product Release

GxP-Validated Automated Product Release

- Digitize Time-out-of-Range calculation (TOR) and product Accept / Reject decisions for Quality teams
- Supports devices agnostically and both passive loggers and realtime IoT devices
- Document repository and ingestion / parsing for supporting shipment documents like BOL, Packing Slip, etc.
- Supports complex workflows like batch release, split shipments & pallet mapping
- Configurable approval workflow, with full automation & quasiautomation

Lane Optimization

Lane (OD Pair) Aggregate Insights & Recommendations Surrounding Performance & Risk of Completed Shipments

- Continuous monitoring of lane performance across origin – destination pairs (lanes)
- Aggregated performance and risk scoring of LSPs, packages, waypoints, routes, IoT (active & passive) & milestone
- ATHENA enabled insights to summarize origin – destination pair (lane) and route performance with hyper-contextualized ML and Al-generated recommendations taking into consideration historical performance and external risk factors.

ATHENA AI

Large Language Model - an embedded assistant

PAXAFE value flywheel bridges gap between plan & real world

PLANNING



Athena

OPERATIONS

Interactive chat & visualization interface that allows for comprehensive inquiries, analysis, reporting and recommendations.



Network Design & Planning

Digitize SOPs, DRAs and Lane Risk Assessments to streamline and accelerate the lane qualification process

Network Optimization

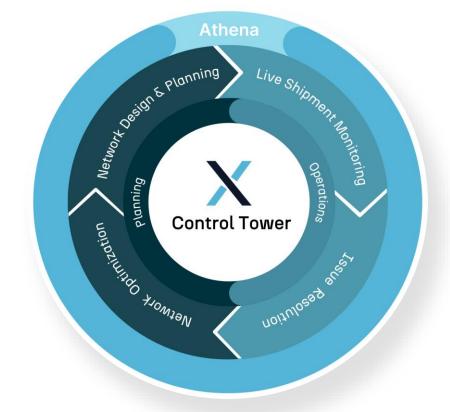
Aggregate lane performance and

passive lanes, driving automated

root cause analysis (RCA) and recommendations on sub-optimal

lanes and routes

risk assessment for active &



X Control Tower

Data-agnostic visibility control tower to overlay product location & condition for high value freight – MORE THAN A 'DOT ON A MAP'.



Exceptions Management

Contextualize & classify level of risk on a live shipment, reducing device alert noise and lower monitoring & intervention costs & overhead





Automate quality workflows with GxP validated acceptance and rejection of goods at the point of delivery



PAXAFE

Consolidated cold chain transportation management

PAXAFE



Thank You!

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