

The role of reefer telematics and fleet wide cost savings

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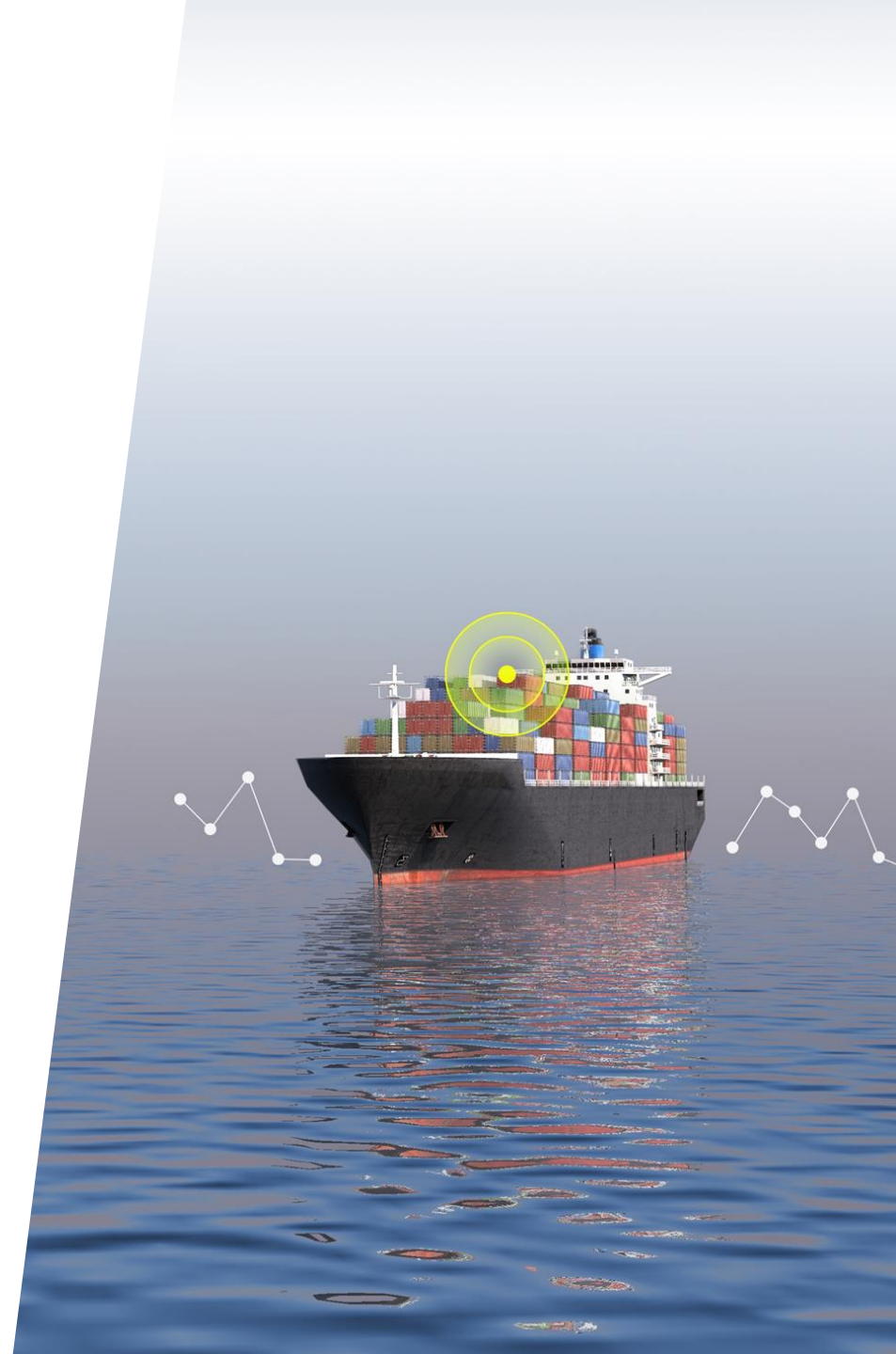
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ROI = Return on investment
Only important to ocean carriers

ABSOLUTELY NOT!

Like it or not, the **cold chain** is a partnership where every stakeholder plays a crucial role.



Obvious (...and less than obvious)
ways **reefer telematics** helps the
entire cold chain

- Vessel fuel usage
- Safer food chain
- Crew and vessel safety
- “The new black holes of shipping” – VSA’s / feeder ports / final mile
- Who, what and where damaged that reefer
- Diagnose what’s wrong with my reefer – before it actually happens
- “Paralysis by analysis” – telematics provides lots of data
.... over time this data will become more useful and necessary

ROI we are a for profit business

*“ the name of our company is not
the RED CROSS!*

*We are here to make a profit and
get a return on our investment! ”*

Stakeholders

Primary Stakeholder

Reefer Equipment Management

Consumer

Container Operations

Port Operations
Carrier operated ports and 3rd party ports

3rd Party Vessel Operations

Key Activities

- M&R
- Modification Handling
- PTI Reduction & Statistical PTI
- Fleet condition monitoring
- Remote Software Upgrades
- Warranty Tracking
- Lease Repair Return
- Maintenance Depot Optimization
- USDA Cold Trmt. Support

- Visibility - where, when and how

- Container pre-positioning
- Fleet management
- USDA Operations
- Claims Support
- Utilization optimization

- Perform local PTIs
- Vessel operator management
- Load and discharge planning
- Terminal Monitoring Cost Reduction
- 3rd Party Terminal SLA compliance
- Automatic Gate/In-Gate Out
- Move verifications

- Load and discharge support
- Vessel Ops
- Reefer Monitoring on vessel

Data Elements

- Failure Alarms
- Service alerts and warnings
- Warranty Status and alerts
- Equipment repair times
- Upgrade Status
- PTI Operations & Management
- Maintenance Logs
- Shock and Damage Alerts
- Log file automation

- Educated consumer is the best customer

- Dwell times per geozone
- Equipment up time analytics
- USDA automation support
- Fleet utilization Data
- Claims data

- Failure Alarms
- Temp excursion alarms
- PTI Operations & Management
- 3rd party SLA assessment data reports (plug in times, etc.)
- Move data

- BAPLIE Files
- Ship hold location data (load plan)
- Reefer ID data
- Plug in alerts
- Failure alarms
- Temperature excursion alarms

Stakeholders

Primary Stakeholder

Detention & Demurrage Controls

- Demurrage monitoring
- Excess over free time alerts response
- Billing compliance checking

Intermodal Trucking

- Last Mile carriage
- 3rd Party Subs
- Owned fleets
- Fuel Usage management

Claims Management

- Claims data collection
- Claims assertion and follow-up

Operations & Monitoring Center

- Reacting to alerts response policies and procedures
- System status health monitoring
- Tier 0 Field and user support
- High level operational dashboards and KPI monitoring

Executive and Chief SCO

- Overall KPIs and report cards
- Fleet outage reports
- Asset availability
- Top problems and issues
- Internal org and 3rd party vendor performance
- Overall fleet/cost reduction
- Repurposing staff
- Process improvements
- Trends

Key Activities

Data Elements

- Excess detention and demurrage alerts
- Reports to assess proper 3rd party billing

- Gate in/ Gate out
- Last mile temp compliance and alerts
- Fuel monitoring alerts and reports
- Excess detention reports
- Security alerts

- Various forensics Shock data
- Temp data
- Plug in times
- Geolocation reports and custody

- Dwell time reports and alerts
- Geozone reports and alerts
- Position management tools
- Plug in alerts
- Failure alarms
- Temperature excursion alarms

- Dwell times per geozone
- Equipment up time analytics
- Equipment repair times
- 3rd party SLA data
- System usage profiles
- Fleet utilization Data

Stakeholders – ROI and Process Drivers

- Modification Handling
- Terminal Monitoring Reduction
- Equipment Lifetime Extension
- Fuel Savings
- PTI Reduction and Statistical PTI
- Improved 3rd Party Terminal SLA compliance
- Power Consumption Fee Reduction based on Run-Times (per trip)
- Automatic Gate/In-Gate Out
- Reduced/Removed Depot Handling & Procedures

Stakeholders – ROI and Process Drivers (continued)

- Reefer Improved Damage Claims and Assignment
- Improved repair under Warranty Period
- Increased ability to bill customers for extended reefer hold times
- Reduce Dwell and Demurrage Times for 3rd party ports and terminals
- Terminal move verification
- Maintenance Depot Optimization
- Increase Utilization Based on Better up time to save cost, and improved positioning - (or reduced lease fleet size)
- Vessel Related ROI (add on ROI)
- Improved performance for all above in relation to vessel transport segment.

Questions / comment

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