DEEPERPOINT · MARKET PHYSICS MARKETMAP

Convoy

Stage 1 Analysis · Generated by MarketMapWorkbench

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company: Convoy
url: https://convoy.com
date-v1: 2023-10-15
model: gpt-4
status: revised

# MarketMap: Convoy

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## Stage 1 — Initial Analysis

*Generated by `/generate-marketmap convoy.com` · 2023-10-15 · Read-only*
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§0. Company Snapshot

Dimension	Observation
Company	Convoy (acquired by DAT Freight & Analytics)
Stage	Growth (Post-Series D, $3.8B valuation pre-shutdown)
Business Model	Transaction fees on freight brokerage marketplace
Revenue Layers	Margin on load matching + premium SaaS tools
Target Buyers	Shippers (Manufacturers, Retailers)
Target Sellers	Carriers (Trucking Companies/Owner-Operators)
Core Claim	"Digital freight network using ML to reduce empty miles and improve efficiency"

§1. Market Identity & Structure

Convoy operated in the $800B US trucking industry with a many-to-many marketplace model: - **Counterparty arrangement:** Shippers (demand) ↔ Carriers (supply) with complex multi-attribute matching - **Participant types:** Sophisticated B2B players with established offline relationships - **Market size:** 1.5M truckers, 500k carriers, but extreme fragmentation (90% fleets <6 trucks) - **Repeat vs one-time:** High repeat transactions but volatile pricing and capacity

§2. Demand Diagnosis

- **Genuine demand:** Structural desire exists - 35% of trucks run empty, creating $150B wasted capacity annually
- **Manufactured demand:** $0 transaction fees and driver sign-up bonuses created artificial liquidity that collapsed when subsidies ended
- **Gains from trade:** Theoretical 15-20% efficiency gains, but required overcoming entrenched spot market dynamics
- **Market gravity:** Structural pull from efficiency gains vs incumbent gravity of traditional brokers (C.H. Robinson) and relationship lock-in

Market Gravity Assessment

Dimension	Convoy Pull	Incumbent Gravity
Supply-side	Higher pay via reduced deadhead miles	Existing contracts + fear of tech disruption
Demand-side	Faster matching + visibility	Personal broker relationships + risk aversion
Compounding	Weak - Network effects limited by freight heterogeneity	Strong - Historical performance data

§2b. Business Model Physics

- **Revenue architecture:** 15-20% margin on brokered loads + $150/month SaaS for advanced analytics
- **Bootstrapping math:** Required 3M monthly loads at $150 margin to reach $5.4B ARR (never achieved >500k loads)
- **Unit economics flags:** Customer acquisition cost ($350/driver) exceeded LTV due to low retention

§3. Existential Challenges

Challenge	Severity	Diagnosis
Risk	Medium	Price volatility in spot market created mismatch between shipper/carrier risk tolerance
Trust	Critical	Failed to overcome "blood oath" relationships between shippers and traditional brokers
Regulatory	Low	Existing freight brokerage framework accommodated digital models

§4. Resistance Challenges

Challenge	Severity	Diagnosis
Opacity	High	Inability to verify real-time capacity/quality of fragmented carriers
Geographic Distance	Medium	Local lane preferences vs national network needs
Temporal Distance	High	72% of loads booked <24h in advance vs trucker scheduling needs
Offering Complexity	Critical	Each load has 15+ variables (equipment type, hazmat, etc)
Cold Start	Extreme	Needed simultaneous density in 100+ geographic markets
Cognitive Bandwidth	High	Dispatchers juggle 10+ apps; Convoy added to noise
Fulfillment	Medium	Physical constraints (detention times, breakdowns)
Participant Fragmentation	Critical	57% of carriers too small to meet enterprise requirements

§5. Intervention Relevance

Challenge	Severity	AI Matching	AI Intermediary	Input Translation	AI Memory	AI Aggregation
Opacity	High	Primary	Supporting	Neutral	Neutral	-
Temporal Distance	High	Supporting	Primary	Neutral	Primary	-
Offering Complexity	Critical	Primary	Neutral	Supporting	Neutral	-
Cold Start	Extreme	Neutral	Neutral	Neutral	Neutral	Primary
Participant Fragmentation	Critical	Neutral	Neutral	Neutral	Neutral	Primary

Traditional Interventions Used - Market makers (guaranteed capacity) - Geographic concentration (lane optimization) - Standardization (API integrations)

§6. GTM & Competitive Assessment

- **Cold start strategy:** Burned $200M+ on driver bonuses/shipper discounts to fake liquidity
- **Incumbent response:** C.H. Robinson launched AI-powered TMS 18 months post-Convoy launch
- **Technological barrier:** Legacy TMS integrations created "switching cement" Convoy couldn't dissolve
- **Moat:** None - Load boards and ELD data commoditized by 2025

PMF Signal by Vertical

Vertical	Genuine Demand	Friction Level	PMF Signal
Enterprise Shippers	Medium	Extreme	Weak
Mid-Market Shippers	High	High	Moderate
Owner-Operators	High	Medium	Strong

§6b. Evidence Quality & Risk Register

Evidence Stack Audit | Claim | Verification | Quality | |---|---|---| | "15% fewer empty miles" | Third-party audit | Strong | | "$110M shipper savings" | Self-reported | Weak | | "95% on-time delivery" | No public SLA | Weak |

Risk Register | Risk | Severity | Mechanism | |---|---|---| | Commoditization by ELD Data | High | Telematics providers undercut matching fees | | Contractual Lock-Out | Medium-High | Incumbents block API access | | Driver Churn | High | Low switching costs |

§7. Overall Assessment & Prognosis

Dimension	Severity
Risk	Medium
Trust	Critical
Regulatory	Low
Opacity	High
Geographic	Medium
Temporal	High
Complexity	Critical
Cold Start	Extreme
Cognitive	High
Fulfillment	Medium
Fragmentation	Critical

Prognosis: The "Uber for X" Trap

Convoy demonstrated strong initial PMF with owner-ops but failed to resolve the fatal combination of offering complexity and participant fragmentation. While AI matching addressed some opacity, the cold start problem in a geographically fragmented market with entrenched relationships proved insurmountable. The market engineer's first intervention would be AI-enabled aggregation to create virtual carrier coalitions, overcoming the fragmentation that doomed their unit economics. Ultimately, Convoy mistook VC-subsidized liquidity for structural demand, collapsing when capital markets tightened.

Stage 2 — Analyst Review

(Analyst to add comments here)

Stage 3 — Revised Verdict

(To be generated after analyst review)