



TırGöz

Smart Logistics Monitoring and Optimization
Platform



Arda Öztürk
Berin Su İyici
Berkin Kağan Ateş
Burak Baştuğ
Umut Başar Demir



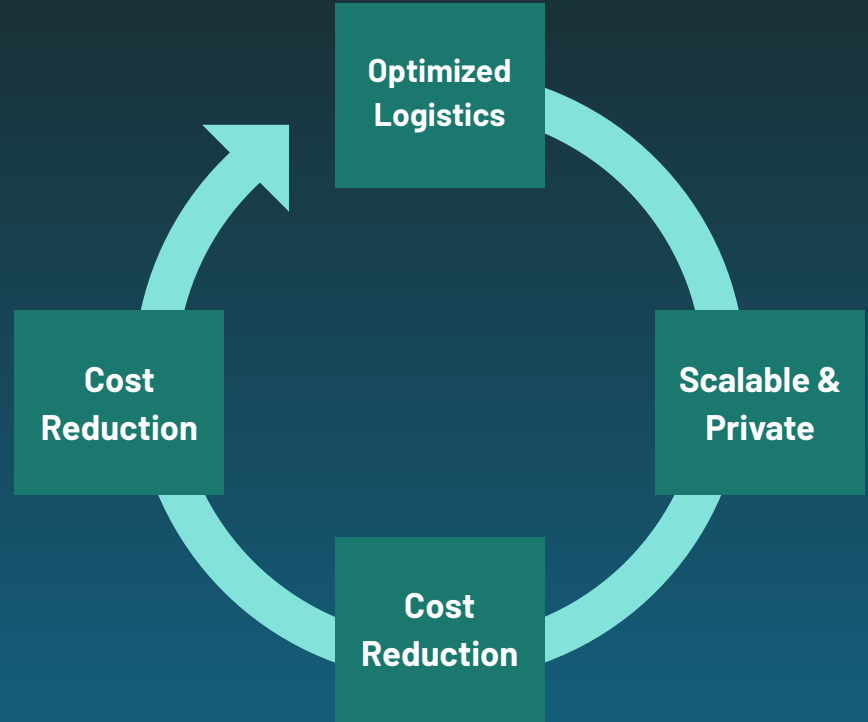
Problem, Solution and Its Value

Modern logistics operations suffer from:

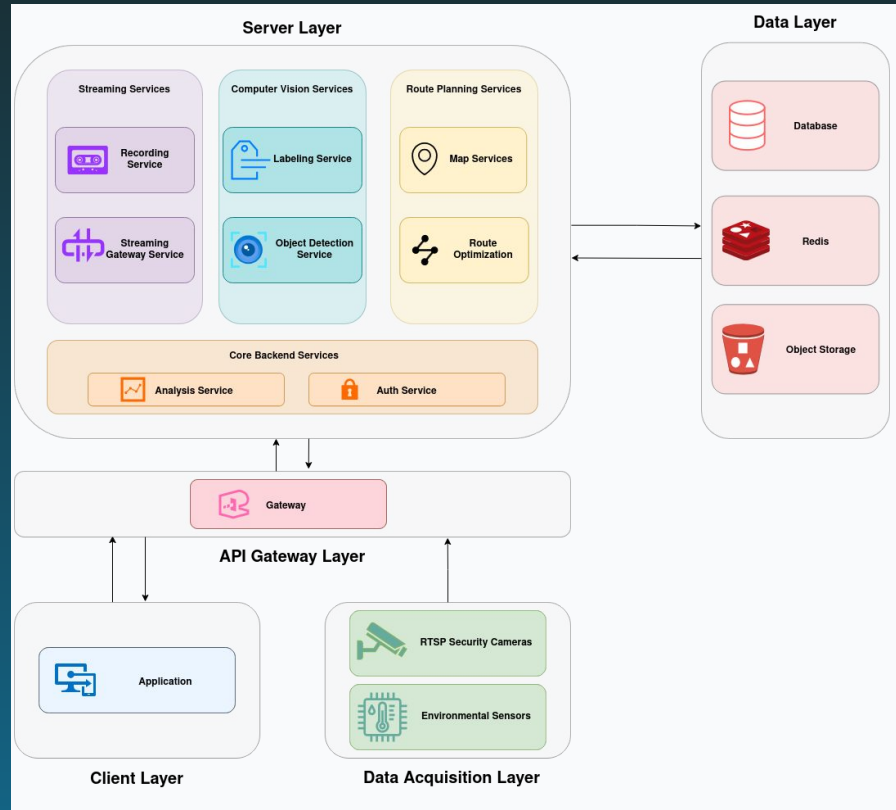
- Limited real-time visibility
- Costly cargo damage and safety risks
- Inefficient fleet and dock utilization

How do we solve it?

- Live Video Analysis
- Automated Anomaly Detection
- Data-driven Routing Decisions



System Architecture



Project Plan

Project Status:

All Work Packages are done

WP1: Requirements & System Models

WP2: Streaming & Frontend

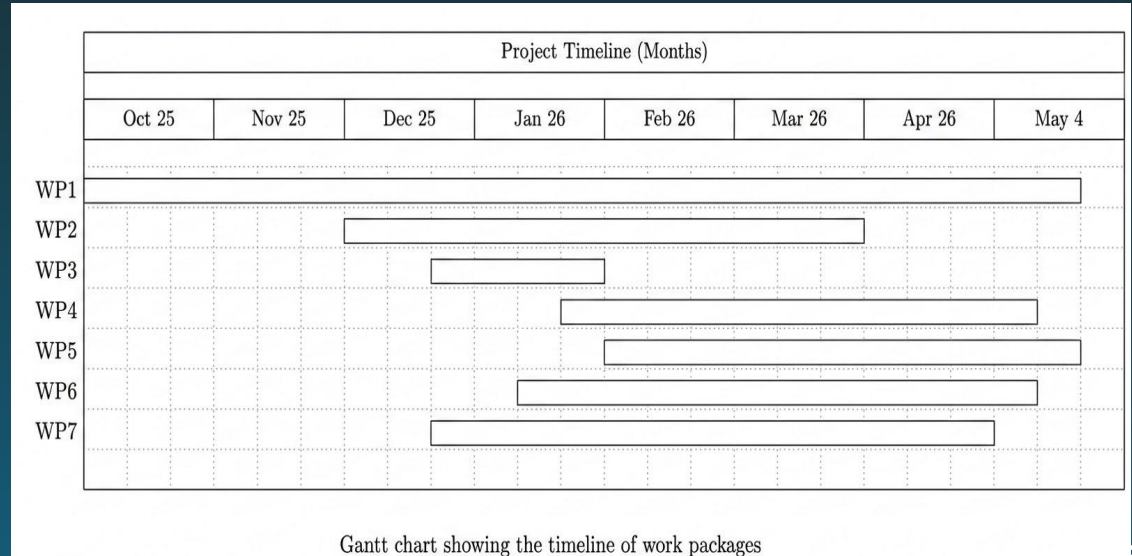
WP3: CV Model Training

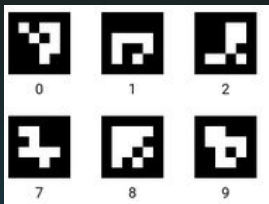
WP4: CV Inference & Events

WP5: Backend & Integration

WP6: Route Planning

WP7: Testing & Deployment





Project Health

Performance Indicators

- Latency: ~1.5s
- Model Accuracy: ~0.84 mAP score
- Tests with multiple streams
- Minimal GPU usage

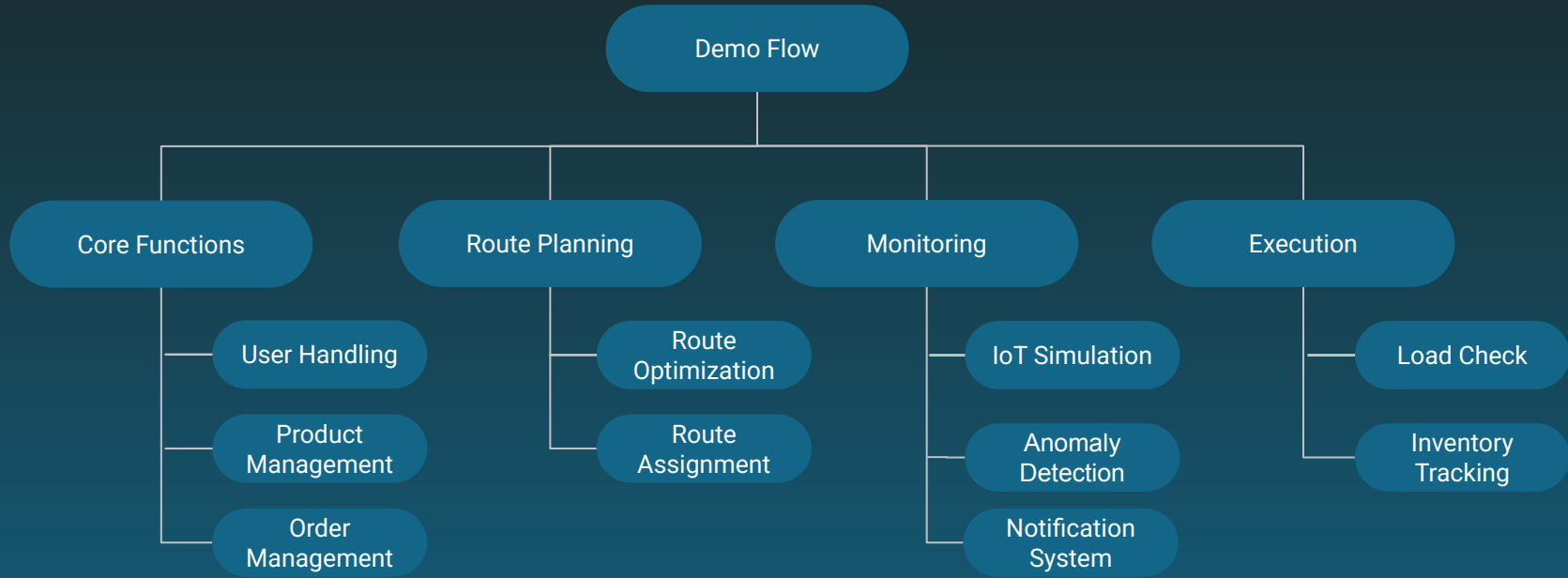
Risk Management

Risk: Synthetic data lacked edge-case variability
Action: Pivoted to real-world data augmentation

Risk: Item detection for boxes with models lowers accuracy
Action: Used ArUco barcodes for reliable inventory tracking

Risk: False positive anomaly events
Action: Implemented human verification via event clips.

Demo Overview





Thanks!

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