

SMART WATER JAIPUR

- AI-Driven Water Tanker Demand & Water Scarcity Prediction System
- Domain: Artificial Intelligence & Machine Learning
- Industry: Smart City | Urban Infrastructure | Civic Tech
- Developed By
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- Role: AI/ML Intern – Kvon Tech Pvt. Ltd., Jaipur



PROBLEM STATEMENT

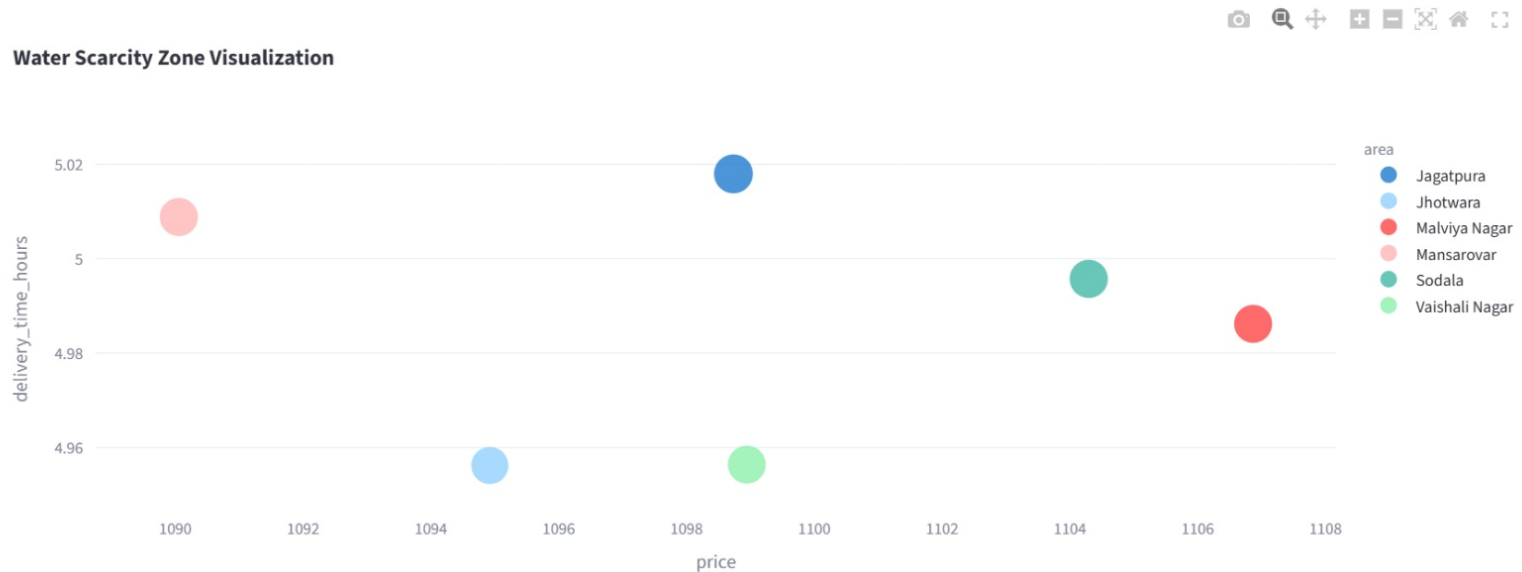
- • Irregular municipal water supply forces citizens to depend on private water tankers.
- • No intelligent system for demand prediction, scarcity zone identification & pricing control



PROJECT OBJECTIVES

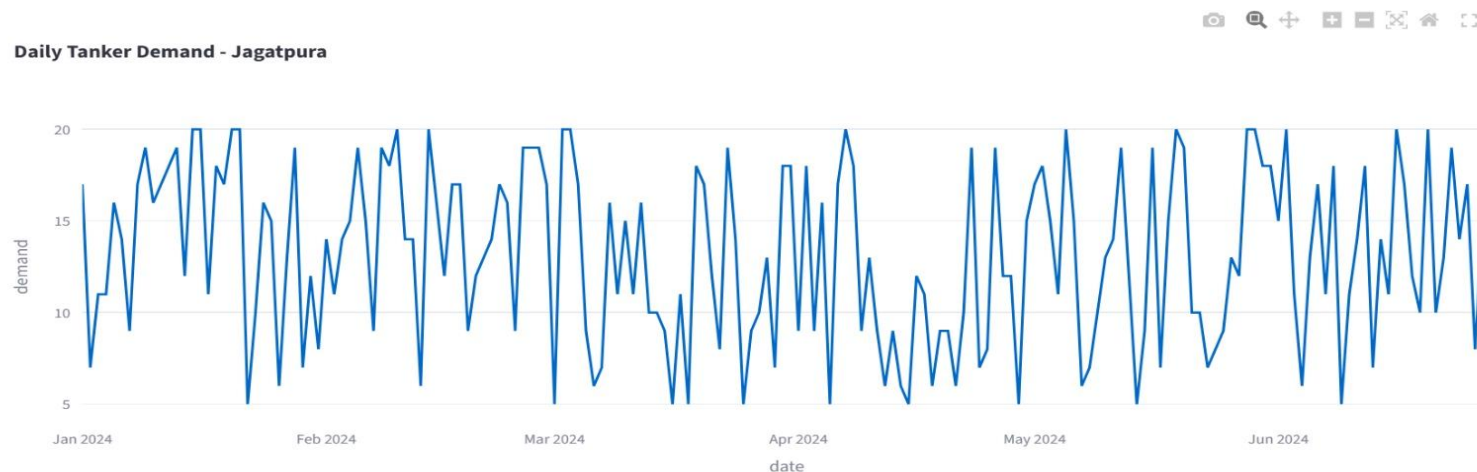
- • Predict water tanker demand using Machine Learning
- • Identify water scarcity risk zones & abnormal pricing

Water Scarcity Zones



DATA SOURCES

- • Municipal water supply data
- • Weather data (rainfall, temperature)
- • Groundwater level data
- • Simulated tanker booking & pricing data



SYSTEM ARCHITECTURE

- • Data Collection
- • Data Preprocessing
- • Machine Learning Models
- • Prediction & Insights Dashboard



ML TECHNIQUES USED

- • Regression models for tanker demand prediction
- • Classification for scarcity risk zones
- • Anomaly detection for abnormal pricing



EXPECTED OUTPUT

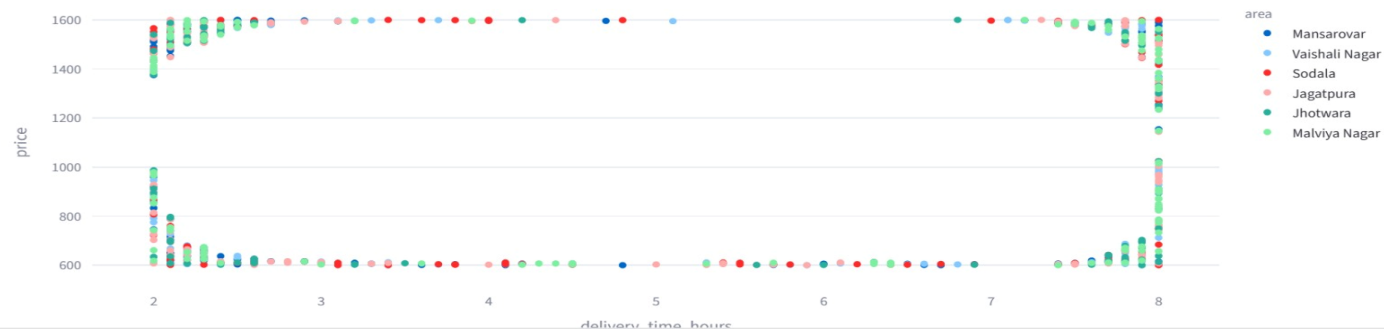
- • Area-wise tanker demand forecast
- • High-risk water scarcity zones
- • Pricing anomaly alerts



Price Exploitation Detection

Total abnormal price cases detected: 678

Price Exploitation Cases



BENEFITS

- • Efficient water tanker distribution
- • Fair pricing for citizens
- • Proactive water resource management



FUTURE SCOPE

- • IoT sensor integration
- • Mobile app for citizens
- • Real-time tanker tracking



CONCLUSION

- • Demonstrates real-world application of AI & ML
- • Supports Smart City initiatives
- • Enables data-driven water management

