WIDE WORLD IMPORTERS



DEVELOPED BY: LUCKY DOG ANALYTICS

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AGENDA

Missed Sales Opportunities

Holding Costs & Overstock

Hidden Prices

The Solution

Architecture Diagram

Proof of Concept

Wins & ROI

Conclusion & Next Steps



OUT OF STOCK: A LOST SALE

- A high-demand item sells out in days
- A key retail customer calls to place a large reorder
- No warning system, no backup stock
- The customer goes elsewhere





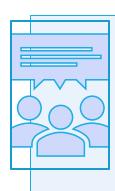


SURROUNDED: EXCESS STOCK

- Over-ordered items sit unsold in the warehouse for months
- Capital is tied up, cash flow suffers
- Space issues slow down fulfillment

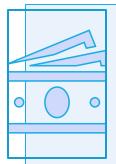


HIDDEN INVENTORY COSTS



Customer Impact

- 2,100 backorders annually
- 17-day average fulfillment delay
- 41% of customer complaints = inventory-related



Financial Impact

- \$2.1M annual cost of mismanagement
- \$850K in lost sales
- \$425K in additional labor
- \$375K in expediated shipping
- \$450K in write-offs



What's Driving the Problem?

- Legacy WMS
- Manual demand forecasting in Excel
- No automated inventory control
- Manual processing and oversight



SOLUTION: END-TO-END INVENTORY OPTIMIZATION WITH MICROSOFT FABRIC, LUCKY DOG & POWER BI

Customer & Sales Activity

Data Loaded -MS Fabric Lakehouse

Data Transformed Predictive Models & Analytics

Forecasts - Power BI

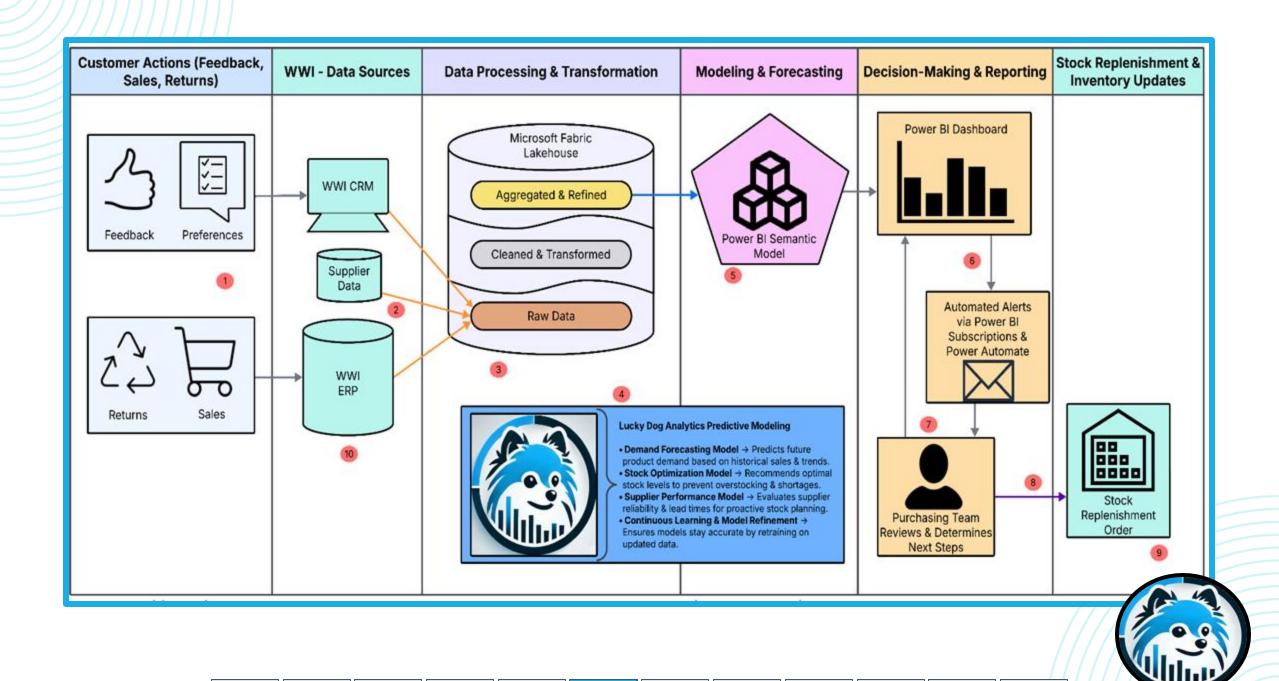
Alerts & Reports

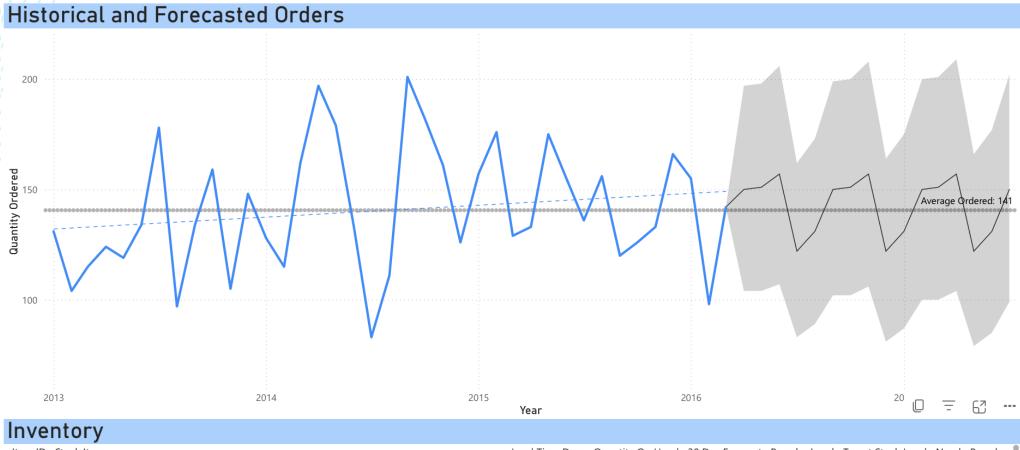
Dashboards

- CRM collects feedback & preferences
- ERP captures sales, returns and inventory impact
- Data from ERP, CRM & suppliers is extracted via Azure Data Factory
- Stored in Raw Data Layer
- Cleaned & standardized
- Structured into Aggregated Layer for modeling
- Demand Forecasting
- Stock Optimization
- Supplier Performance
- Continuous Learning

- Semantic model enables dashboards, visualizations & alerts
- Power BI & Power Automate send email alerts for stock issues
- Dynamic manager engagement
- On-Demand access to trends, risks & recommendations







Inve	Inventory								
Item ID	Stock Item	Lead Time Days	Quantity On Hand	30 Day Forecast	Reorder Level	Target Stock Level	Needs_Reorder		
1	USB missile launcher (Green)	14	175609	168.01	20	100	No		
2	2 USB rocket launcher (Gray)	14	165538	168.31	20	100	No		
3	Office cube periscope (Black)	14	253190	1,648.53	10	120	No		
4	USB food flash drive - sushi roll	14	208109	163.96	5	100	No		
5	USB food flash drive - hamburger	14	199064	159.78	5	100	No		
6	USB food flash drive - hot dog	14	196995	160.76	5	100	No		
7	7 LISR food flash drive - nizza slice	14	205295	161 64	5	100	No		



Lucky Dog Analytics, Order Forecast

✓ Live data ∧

Data updated on 4/10/25, 4:07 PM



Inventory Items

Daily Average Order 30 Day Order Average Quantity On Hand Reorder? Stock Alignment Target Stock Level

19 - Dinosaur battery-powered slippers (Green) M

5.60 168.08 49638 No Misaligned 30

5.60 168.08

If stock target is misaligned, re-evaluate target stock levels

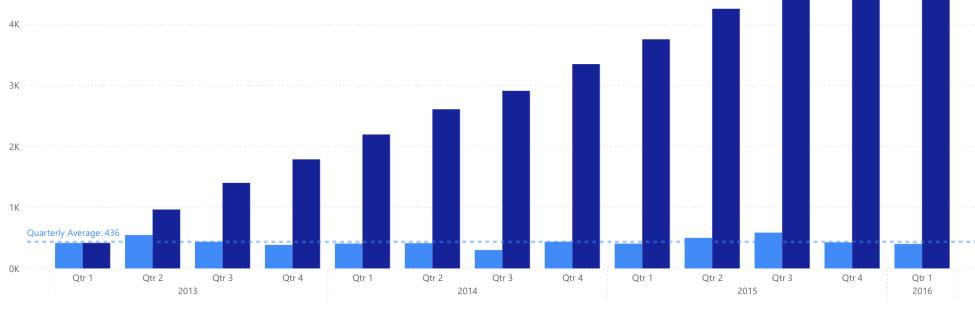
Running Quantity Order Totals

by Quarter and Year

Quantity
Quantity
Running Sum

6K

4K







✓ Live data ∧

Data updated on 4/10/25, 4:07 PM





WHAT WWI GAINS: OPERATIONAL BENEFITS

- Reduced Stockouts & Backorders
- Improved Forecast Accuracy
- Shorter Delays, Fewer Cancellations
- Real-Time Alerts & Automated Reports
- Streamlined Replenishment
- Supplier Performance Visibility



STRATEGIC WINS & SYSTEM-LEVEL VALUE

- Fewer Write-Offs & Expedited Shipping
- Scalable Data Architecture (Microsoft Fabric)
- Power BI for Full-Company Visibility
- Improved Cross-Team Collaboration
- Forecasts Improve Over Time
- Foundation for Future Growth



IMMEDIATE IMPACTS

Cost Area	Previous Cost	Projected Savings
Lost Sales	\$850,000	↓ by up to <u>60%</u>
Write-Offs	\$450,000	↓ by up to <u>40%</u>
Expedited Shipping	\$375,000	↓ by up to <u>50%</u>
Labor Costs	\$425,000	↓ by up to <u>30%</u>
Admin Error Adjustments	High	↓ from 18% to <u>under 5%</u>
Total Potential Impact	\$2.1M	~\$1.2M in annual savings

FUTURE ENHANCEMENTS & PREMIUM SERVICES

Scalable Add-Ons

- Product lifecycle modeling
- Supplier portal integrations
- Churn prediction
- Pricing optimization
- Department-specific dashboards

Support Options

- Quarterly model health checks
- Dashboard refreshes
- Training
- Onboarding
- Ecosystem Development



LET'S LAUNCH PHASE 1

Your Next Steps



Assign Internal Stakeholders

(Inventory, Ops, Finance)



Schedule Kickoff

(Target week of 5/01/25)



Confirm Milestones & **Deliverables**

(12-week implementation, 3 phases)

Results You'll See

- ✓ ~\$1.2M in Projected Annual Savings
- ✓ Smarter, Faster Replenishment
- ✓ Real-time Inventory Visibility
- ✓ Predictive Insights for Better **Decisions**
- ✓ Improved Collaboration **Across Teams**



THANK YOU! WE'D LOVE TO HEAR YOUR THOUGHTS.

