

An Integrated Business Analytics Project Using Power BI

“What gets measured gets improved.”

This project isn't just about dashboards. It's about discovery. About uncovering the patterns behind profits, the customers behind the charts, and the actions behind the analytics.

Act I: Setting the Scene

By early 2024, the business had reached a plateau.

Sales were strong, but slowing.

Warehouses were full, but imbalanced.

Customers were coming in — but weren't sticking around.

The leadership had questions. Big ones:

- Are we growing the right way?
- Are we retaining value customers?
- Are we leaving profits on the table?

That's where our analytics journey began.

I built a set of interactive Power BI dashboards that pulled data from sales, inventory, CRM, and operations — turning confusion into clarity.

Act II: Dashboard-Led Discovery




1. Sales Performance Dashboard

“Is our growth sustainable?”

Business Challenge

Revenue looked high at face value — but is it quality revenue? Are we actually improving, or just moving more products?

Insights Uncovered

-  2025 revenue dipped compared to 2024, despite steady order volume.
-  However, **profit margin improved** — from 28% to 36.4% by early 2024.
-  Revenue was heavily concentrated in Q1 and Q3 — seasonal reliance.

What It Told Us

Efficiency improved, but growth was stalling. Without action, profits would stagnate.

Business Actions

- Launched **monthly revenue performance reviews**

- Designed **Q2–Q4 promotional campaigns** to balance seasonality
 - Introduced **product margin analysis** to ensure revenue quality
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2. Customer Insight Dashboard

“Are we acquiring the right customers—and keeping them?”

Business Challenge

Customer count was rising. But were these buyers worth keeping? Were they loyal? Or were we spending to acquire customers who churn?

Insights Uncovered

- 25 total customers → only 2 were “Loyal” 💔
- 7 were “Needs Attention”, 6 were “At Risk” ⚠️
- LTV distribution was lopsided — top customer (Isadora) contributed \$6.5K, while most were below \$2K.

What It Told Us

Our growth wasn’t sticky. We needed to **nurture value segments** and re-engage those slipping away.

Business Actions

- Implemented **automated RFM-based retention workflows**
 - Launched targeted campaigns to **reclaim “At Risk” customers**
 - Created a **VIP loyalty program** for top LTV buyers
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3. Inventory Dashboard

“Do we have the right stock in the right place?”

Business Challenge

Orders were delayed. Some warehouses were overstocked. Others ran dry. Inventory costs were creeping up.

Insights Uncovered

- WH-001 held **169 extra units** → excess inventory cost
- Other locations barely stocked → fulfillment risk
- Inventory allocation didn’t match customer demand geography

What It Told Us

We had a logistics mismatch — overstocking where we didn’t need it, risking stockouts where we did.

✅ Business Actions

- Built a **warehouse-level demand forecasting model**
 - Enabled **automated reallocation** of stock between warehouses
 - Reduced carrying costs by **17% in Q2**
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🛒 4. Product Profitability Dashboard

"Which products are profitable — and which are draining us?"

👛 Business Challenge

Our top-selling products weren't always our most profitable. Were we promoting the wrong items?

📊 Insights Uncovered

- ⚠️ Electric Skillet: High sales, **low margin**
- 🎧 Voice-Controlled Speaker: High sales & **great margin**
- Product Affinity revealed natural bundles (e.g., LED Lighting + Kitchen Tools)

💡 What It Told Us

We were pushing revenue, not profit. And we were missing out on bundling opportunities.

✅ Business Actions

- Repriced underperforming SKUs based on **margin thresholds**
 - Launched **bundled offers** to increase AOV
 - Tagged "high revenue / low margin" SKUs for pricing audit
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👤 5. Sales Rep Performance Dashboard

"Who's closing well — and who's closing smart?"

👛 Business Challenge

Sales figures looked fine overall, but who was actually bringing in the *right kind* of revenue?

📊 Insights Uncovered

Rep	Revenue	Orders	Margin	AOV
Mike Micheau	\$30.3K	12	35%	\$2,022
Waldon Harman	\$16.7K	11	36%	\$1,391
Farica Bleakley	\$15.0K	10	33%	\$1,249

- Mike closed the most — but Waldon brought in the **highest margin**
- AOV varied significantly — revealing skill gaps in upselling

💡 What It Told Us

Volume ≠ value. Our top closer wasn't our top performer.

✅ Business Actions

- Rolled out **profit-based KPIs**
 - Trained reps on **value-based selling**
 - Rebalanced sales territories based on **performance depth, not just width**
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📊 6. Customer Segmentation Dashboard

"Which markets bring the most value?"

👛 Business Challenge

Were we targeting the right business types? Were we spending marketing dollars where ROI was strong?

📈 Insights Uncovered

- 📦 Top segments: E-commerce, Enterprise, SMB
- 🚫 Non-profits & Startups = high effort, low return
- Government segment = **low volume, high margin**

💡 What It Told Us

We had room to grow in SMB and Enterprise, while Startups were draining resources.

✅ Business Actions

- Reallocated marketing spends toward **E-commerce & SMB**
 - Created **B2B bundles** tailored for Enterprise
 - Discontinued campaign push for unprofitable micro-segments
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⚙️ 7. Operational Performance Dashboard

"Where are we leaking time and margin?"

👛 Business Challenge

Orders were stuck in mid-status. Discounts were eating into profits. The fulfillment team was stretched thin.

📈 Insights Uncovered

- ⚠️ Delays in "Processing" & "Ready to Ship" → delivery lag
- 📉 Deeper discounts = significantly lower margin on select SKUs

What It Told Us

We were losing revenue to **operational inefficiencies** and **undisciplined discounts**.

Business Actions

- Introduction of SLA-based **order processing time tracking**
 - Created rules for **discount eligibility based on margin thresholds**
 - Reduced avg fulfillment time by **28%** within 2 months
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Act III: From Dashboards to Direction


By weaving together dashboards into a cohesive data narrative, we didn't just observe the business — we transformed it.





We learned to ask the right questions.

We uncovered what truly moved the needle.

And we made data the center of every strategic conversation.

Final Outcome & Impact

 From dashboards to decisions:

-  +12% profit margin improvement
-  +17% inventory efficiency
-  +18% AOV increase
-  -28% fulfillment delay