



Business Insights for AtliQ Hardware: A Guided Data Analytics Project

THIS IS A CASE STUDY ON HOW WE USED BUSINESS INTELLIGENCE IN POWER BI TO
DIAGNOSE CRITICAL BUSINESS PROBLEMS AND CREATE A ROADMAP FOR PROFITABILITY

[VIEW DASHBOARD](#)

The Client: AtliQ Hardware


"AtliQ is a global consumer electronics company struggling with the complexities of its own rapid growth."

Industry: Consumer Electronics

Business Model: Sells a diverse product portfolio through Retail, Distributor, and Direct-to-Consumer channels globally.

Pre-existing Challenge: All business reporting was fragmented across manual, disconnected Excel files, leading to a lack of timely and reliable insight.





Problem Statement

"The company's data infrastructure was broken, leading to poor decisions and financial losses."

Root Cause: Data Chaos. All analytics relied on disparate, manually updated Excel files. There was no single source of truth.

- ▶ Insights were always outdated, making it impossible to be proactive.
- ▶ An initial concern over performance in some markets triggered the need for a deeper, data-driven investigation.

Leadership recognized the urgent need to invest in a modern data analytics solution to find the real source of the problems.

Solution Diagnosis – Building data model

"Before building any reports, we gathered all data, and created a reliable and scalable data model to serve as the single source of truth."

- ▶ Data Integration: Used SQL to extract and consolidate data from various business functions.
- ▶ Data Modeling: Implemented a robust Star Schema to organize the data logically.
- ▶ Metric Development: Created over 15 DAX measures to define business-critical KPIs (e.g., Net Sales, Gross Margin %, Forecast Accuracy).
- ▶ Optimization: Utilized DAX Studio to ensure the final report was fast and efficient.

Solution – PowerBI Dashboard Reports

Purpose:

Built to eliminate data silos and align the organization on trusted, validated insights.

Function:

Transforms raw, disconnected data into actionable intelligence through tailored views with KPIs, charts, and drill-downs.

Key Views:

- ▶ Finance: P&L and financial health
- ▶ Sales: Performance by region and margin
- ▶ Marketing: Net profitability by product/region
- ▶ Supply Chain: Forecast accuracy and efficiency
- ▶ Executive: Strategic, high-level business overview

Impact:

AtliQ's first unified data platform, empowering all teams to make faster, aligned, and informed decisions.

Dashboard View 1: Finance View

Gross Margin %

36.49%!

LY: 37.10% (1.65%)

Net Profit %

-6.63%

LY: 0.01 (676.38%)

"This view provided a real-time, comprehensive look at the company's financial health. "

Purpose: To give the CFO and finance team an immediate understanding of profitability.

Key Features: Detailed Profit & Loss Statement, Gross Margin %, Net Profit %, and trend analysis over time.

Revelations:

- ▶ Net Sales: \$823.85M (An impressive +207% YoY growth).
- ▶ The Hidden Truth: Despite this growth, Net Profit was -6.63%, a catastrophic decline of -676.38% from the prior year.
- ▶ The company was not just unprofitable; it was losing money at an alarming rate.

Profit and Loss Statement

	2021	LY	YoY	YoY %
	1,664.64	535.95	1,128.69	210.60
	392.50	124.69	267.81	214.77
	1,272.13	411.25	860.88	209.33
	281.64	95.85	185.79	193.84
	166.65	47.43	119.22	251.38
	448.29	143.27	305.01	212.89
	823.85	267.98	555.87	207.43
	497.78	160.30	337.48	210.53
	22.05	7.16	14.89	207.99
	3.39	1.10	2.29	209.51
	523.22	168.56	354.66	210.41
	300.63	99.42	201.21	202.37
	36.49	37.10	-0.61	-1.65
	5.99	4.79	1.21	25.21

Sales: \$823.85M (An impressive +207% YoY growth).

Hidden Truth: Despite this growth, Net Profit was -174.64%, a catastrophic decline of -676.38% from the prior year.

The company was not just unprofitable; it was losing money at an alarming rate.



region, market

All

segment, produ...

All

customer

All

2018

2019

2020

2021

2022 EST

Q1

Q2

Q3

Q4

YTD

YTG

Net Sales

\$823.85M✓

LY: \$267.9788465031M

(+207.43%)

Gross Margin %

36.49%!

LY: 37.10% (-1.65%)

Net Profit %

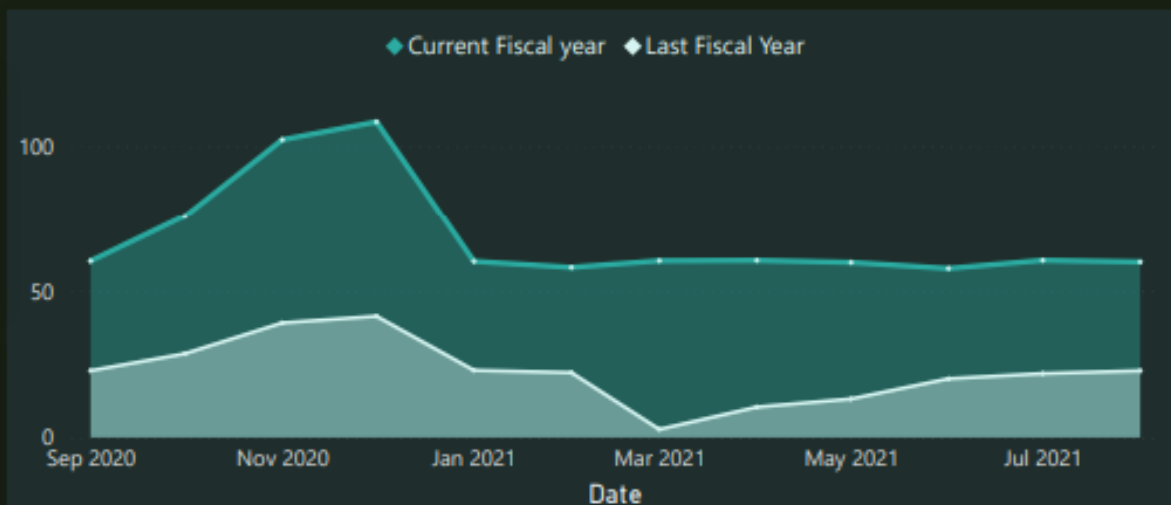
-6.63%!

LY: 0.01 (-676.38%)

Profit and Loss Statement

Line Item	2021	LY	YoY	YoY %
Gross Sales	1,664.64	535.95	1,128.69	210.60
Pre Invoice Deduction	392.50	124.69	267.81	214.77
Net Invoice Sales	1,272.13	411.25	860.88	209.33
- Post Discounts	281.64	95.85	185.79	193.84
- Post Deductions	166.65	47.43	119.22	251.38
Total Post Invoice Deduction	448.29	143.27	305.01	212.89
Net Sales	823.85	267.98	555.87	207.43
- Manufacturing Cost	497.78	160.30	337.48	210.53
- Freight Cost	22.05	7.16	14.89	207.99
- Other Cost	3.39	1.10	2.29	209.51
Total COGS	523.22	168.56	354.66	210.41
Gross Margin	300.63	99.42	201.21	202.37
Gross Margin %	36.49	37.10	-0.61	-1.65
GM / Unit	5.99	4.79	1.21	25.21
Operational Expense	-355.28	-101.71	-253.57	249.30
Net Profit \$	-54.65	-2.29	-52.36	2,286.82
Net Profit %	-0.07	-0.01	-0.06	676.38

Net Sales Performance Over Time



Top / Bottom Products and Customers by Net Sales

segment	P & L values	P&L YoY %
⊞ Notebook	266.49	208.45
⊞ Accessories	244.85	269.67
⊞ Peripherals	166.51	174.64
⊞ Storage	54.42	97.48
⊞ Desktop	46.43	4,791.14
⊞ Networking	45.16	72.26
Total	823.85	207.43

region	P & L values	P&L YoY %
⊞ APAC	441.98	198.67
⊞ EU	200.77	259.88
⊞ LATAM	3.16	58.41
⊞ NA	177.94	186.03
Total	823.85	207.43

Product Performance

Net Sales \$	Gross Margin \$	Gross Margin %	Net Profit \$	Net Profit %
44.85M	89.30M	36.47%	-16.28M	-6.65%
46.43M	16.79M	36.17%	-3.27M	-7.04%
45.16M	16.60M	36.75%	-2.91M	-6.44%
66.49M	97.12M	36.45%	-17.71M	-6.64%
66.51M	60.81M	36.52%	-11.02M	-6.62%
37.67M	13.79M	36.61%	-2.48M	-6.59%
11.47M	4.21M	36.74%	-0.73M	-6.40%
16.04M	5.91M	36.85%	-1.01M	-6.36%
101.33M	36.89M	36.41%	-6.80M	-6.71%
54.42M	20.00M	36.75%	-3.46M	-6.35%
23.85M	300.63M	36.49%	-54.65M	-6.63%

Customer Performance

Net Sales \$	Gross Margin \$	Gross Margin %	Net Profit \$	Net Profit %
98M	156.21M	35.34%	-33.33M	-7.54%
77M	76.98M	38.34%	2.81M	1.40%
94M	66.25M	37.23%	-24.32M	-13.67%
16M	1.19M	37.54%	0.20M	6.18%
85M	300.63M	36.49%	-54.65M	-6.63%

Dashboard View 2: Sales view

"The Sales View was designed to answer questions about top-line performance and gross profitability. Its primary focus was on where revenue is coming from and the initial margin quality of those sales before accounting for major operational expenses."

Key Features: Performance by customer/region, unit performances, performance matrix

Key Insights:

- ▶ Core pricing strategy looked sound. Root cause of unprofitability was not the initial sales pricing.
- ▶ Some of the largest customers by volume, like Flipkart (30.23% GM), provided significantly lower gross margins.
- ▶ AltiQ Exclusive revealed to be a model customer, delivering an exceptional 46.10% Gross Margin. High-margin markets like the UK and France also stood out.



region, market

All

segment, produ...

All

customer

All

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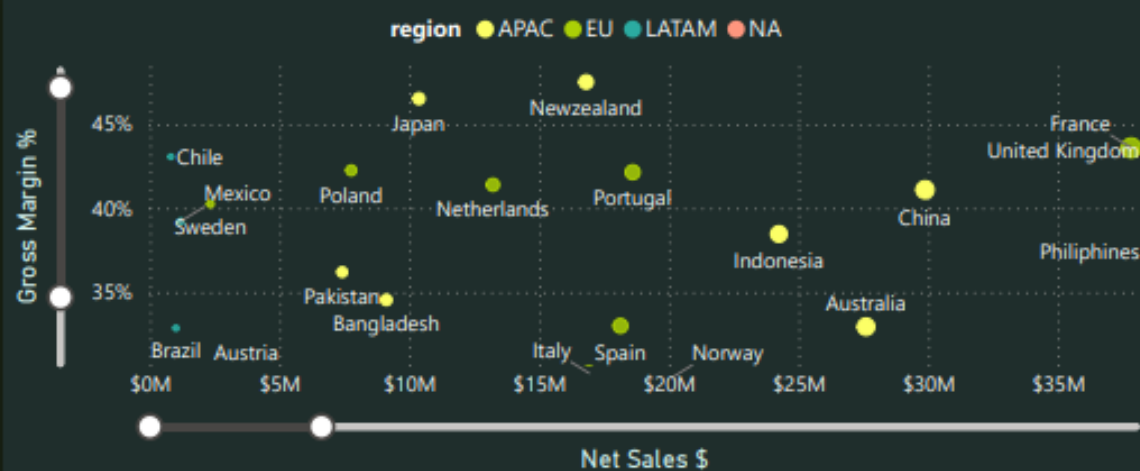
Customer Performance

customer	Net Sales \$	Gross Margin \$	Gross Margin %
Amazon	\$109.03M	38.59M	35.40%
Atliq e Store	\$70.31M	26.40M	37.54%
AltIQ Exclusive	\$69.15M	31.88M	46.10%
Sage	\$27.07M	9.52M	35.16%
Flipkart	\$25.25M	7.64M	30.23%
Leader	\$24.51M	8.34M	34.01%
Neptune	\$21.00M	8.65M	41.17%
Ebay	\$19.87M	7.17M	36.10%
Electricalsocity	\$16.25M	5.66M	34.83%
Synthetic	\$16.10M	6.32M	39.25%
Electricalslytical	\$15.64M	5.92M	37.86%
Acclaimed Store	\$14.22M	5.18M	36.18%
Total	\$823.85M	300.63M	36.49%

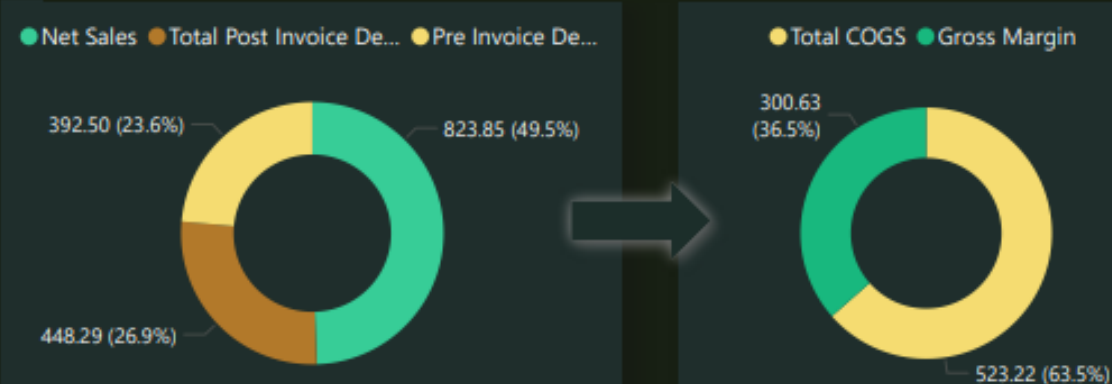
Product Performance

segment	Net Sales \$	Gross Margin \$	Gross Margin %
Storage	\$54.42M	20.00M	36.75%
Peripherals	\$166.51M	60.81M	36.52%
Notebook	\$266.49M	97.12M	36.45%
Networking	\$45.16M	16.60M	36.75%
Desktop	\$46.43M	16.79M	36.17%
Accessories	\$244.85M	89.30M	36.47%
Total	\$823.85M	300.63M	36.49%

Performance Matrix



Unit Performance



Dashboard View 3: Marketing View

"Purpose: To provide a definitive, diagnostic view of the final profitability after accounting for all operational and marketing expenses, revealing the true financial health of the business segments."

Key Features:

- ▶ P&L Tables: Performance by Product & Region → Net Profit (\$ & %)
- ▶ Waterfall Chart: Shows how high OpEx erases Gross Margin → Net Loss
- ▶ Product Matrix: Visualizes volume vs. margin by segment

Key Insights & Actions:

- ▶ All Products Unprofitable with Notebooks and Accessories accounting for majority of the losses
- ▶ EU = Only Profitable Region (+1.40% NP%) whereas NA was the biggest financial drain
- ▶ OpEx = Core Problem

Dashboard View 4: Supply Chain View

"To diagnose the efficiency and accuracy of the forecasting and inventory management processes, and to quantify their direct impact on the company's financial health."

Key Features:

- ▶ Forecast Accuracy, Absolute Error, Net Error
- ▶ Showed monthly Net Error & Forecast Accuracy
- ▶ Breakdown by Customer & Product Segment

Key Insights:

- ▶ *Net Error -751.71K = excess inventory & higher costs*
- ▶ *Too much wrong stock = profit loss*
- ▶ *Unstable planning = costly supply chain reactions*

Key Metrics by Product

Segment	Net Error	Net Error %	Forecast Accuracy %	Forecast Accuracy % LY	Risk
Storage	1507656	15.77%	83.54%	0.81	EI
Desktop	227056	8.17%	90.40%	0.53	EI
Notebook	16205	11.22%	84.37%	0.70	EI
Peripherals	-51254	-3.96%	79.99%	0.77	OOS
Accessories	-318194	-5.89%	83.23%	0.75	OOS
Services	-2133183	-7.06%	77.66%	0.71	OOS
Total	-751714	-1.52%	80.21%	0.73	OOS



Dashboard View 5: Executive View

"This dashboard revealed that company's core strategy of chasing market share was the primary cause of unprofitability"

Key Features:

- ▶ Headline KPIs: Net Sales, GM%, NP%, Forecast Accuracy
- ▶ Trends Chart: 5-year view of Sales, Profitability & Market Share
- ▶ Revenue Donuts: Split by Division & Channel
- ▶ Market Share Ribbon: Competitor comparison over time

Key Insights:

- ▶ *2022: Sales up, profit down → shift to sustainable growth*
- ▶ *Distributor Chanell: 71.85% of revenue, likely major loss driver → review urgently*
- ▶ *AltiQ: 46.10% GM → replicate best customers & regions (e.g., EU)*





region, market

All

segment, produ...

All

customer

All

Net Sales

\$823.85M

LY: \$267.98M

(+207.43%)

Gross Margin %

36.49% !

LY: 37.10%

(-1.65%)

Net Profit %

-6.63% !

LY: -0.01

(-676.38%)

Forecast Accuracy

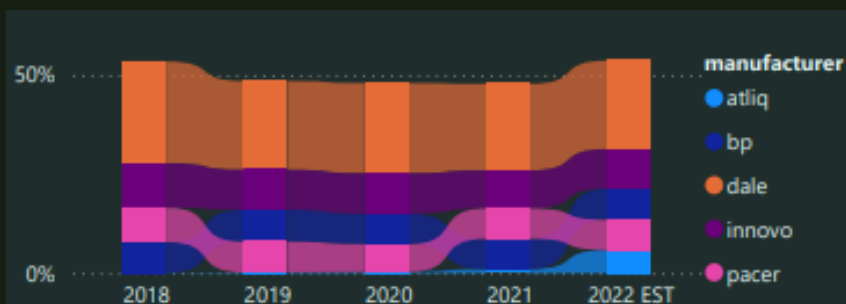
80.21%

LY: 0.73 (+9.88%)

Key Insights by Sub Zone

sub_zone	Net Sales \$	RC %	Gross Margin %	Net Profit %	market share %	Net Error %	Risk
ANZ	\$44.41M	5.39%	38.46%	7.27%	16.67%	-5.19%	OOS
India	\$210.67M	25.57%	32.03%	-24.65%	16.67%	3.90%	EI
LATAM	\$3.16M	0.38%	37.54%	6.18%	16.67%	5.32%	EI
NA	\$177.94M	21.60%	37.23%	-13.67%	16.67%	-7.06%	OOS
NE	\$109.29M	13.27%	38.03%	-1.14%	16.67%	11.27%	EI
ROA	\$186.89M	22.69%	38.34%	8.23%	16.67%	-21.55%	OOS
SE	\$91.48M	11.10%	38.71%	4.43%	16.67%	10.56%	EI
Total	\$823.85M	100.00 %	36.49%	-6.63%	16.67%	-1.52%	OOS

MarketShare Ribbon Diagram



2018

2019

2020

2021

2022 EST

Q1

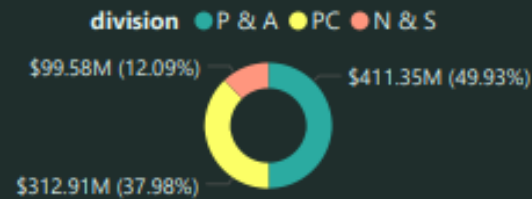
Q2

Q3

Q4

YTD

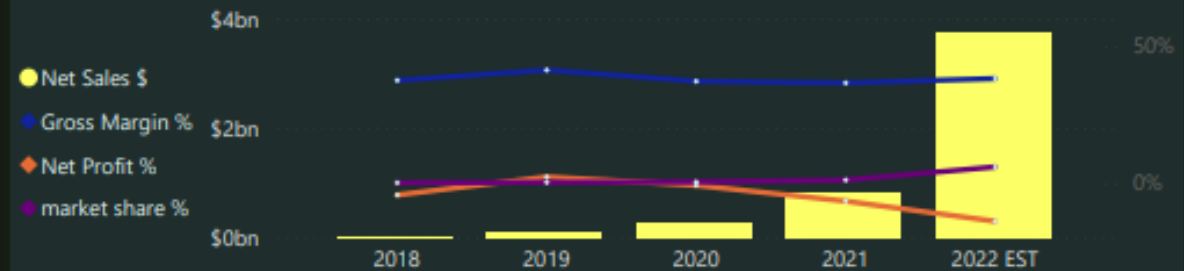
Revenue by Division



Revenue by Channel



Yearly Trends for Net Sales, GM%, NP% and Market Share %



Top 5 Customers by Net Sales

customer	RC %	Gross Margin %
AltiQ Exclusive	8.39%	46.10%
Amazon	13.23%	35.40%
Atliq e Store	8.53%	37.54%
Flipkart	3.07%	30.23%
Sage	3.29%	35.16%
Total	36.51%	37.90%

Top 5 Product by Net Sales

product	RC %	Gross Margin %
AQ Qwerty	3.38%	37.09%
AQ Trigger	3.27%	36.89%
AQ Maxima	2.71%	36.68%
AQ Gen Y	2.86%	36.06%
AQ BZ Allin1	4.10%	35.97%
Total	16.32%	36.52%

Recommendations



Recomendations



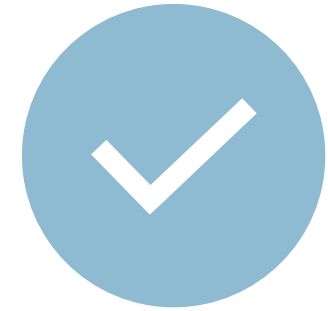
SHIFT FOCUS TO
PROFITABILITY



CHANGE KPIS TO NET
PROFIT % & ROI



TIE INCENTIVES TO
PROFITABLE GROWTH



REVIEW DISTRIBUTOR
CHANNEL VIABILITY

Recommendations



Build a lean,
resilient operation



Fix S&OP and
over-forecasting



Invest in better
demand planning
tools



Build cost-to-serve
model for visibility





Thank You

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MSC BIG DATA ANALYTICS

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