AtliQ Hardware Analysis :
`   Finance, Sales and Marketing

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Introduction

In this project, we thoroughly explore sales and finance analytics, breaking down customer net sales and navigating the financial landscape through profit and loss reports.

The main goals of this project are:

- **Data-Driven Decision-Making:** We used practical methods, such as advanced Excel, Power Query, and Power Pivot, to make sure our decisions are based on solid data.

- **Integrated Insights:** In our analysis, we combined insights from both sales and finance. We calculated and cross-referenced the numbers to ensure a complete understanding.

- **Key Findings Revealed:** We dived into the world of data-driven decision-making, uncovering important findings that were carefully calculated. These findings guide us towards global recognition, operational efficiency, and surpassing market targets.

- **Strategic Blueprint Developed:** This isn't just an analysis; it's a strategic plan we've created using a mix of analytical tools and problem-solving skills. We've outlined our steps for sustained excellence in every aspect of our business operations..

Methodology and Tech Stack

Microsoft Excel was used as the primary Data Analysis Tool.

Power Pivot: Used to improve data modeling and analysis capabilities.

Power Query: Applied for effective data extraction, transformation, and loading (ETL) processes.

Data Modeling: Employed to structure and organize data for deriving meaningful insights.

Conditional Formatting: Utilized to enhance visual representation and emphasize key metrics.

Pivot Table: Used for dynamic and interactive data summarization.

Dataset

We were given several Comma-Separated Values(CSV) files both for sales and Finance Analytics, there are both fact and dimension tables,

➢ **dim_customer:** Consists of customer information for AtliQ.

➢ **dim_market:** Consists of different market, subzone, and region information for AtliQ.

➢ **dim_product:** Consists of product information such as segment and category.

➢ **fact_sales_monthly:** Consists of sales data, quantity, amount, etc.

➢ **ns_targets2021:** Consists of market-wise sales target information.

➢ **fact_sales_monthly_with_cost:** Consists of all information from the fact_sales_monthly table, with freight and manufacturing costs.

SALES ANALYTICS

Customer Net Sales Performance Report

AtliQ Hardwares

FILTERS
division	All
region	All
market	All

Customer
Net Sales Performance

Customer	2019	2020	2021	2021 vs 2020
Acclaimed Stores	1.4M	2.9M	10.9M	278.1%
All-Out		0.2M	0.8M	395.7%
Amazon	12.2M	37.5M	82.1M	118.9%
Argos (Sainsbury's)	0.4M	0.7M	2.3M	206.0%
Atlas Stores	0.2M	0.7M	3.2M	370.3%
AtliQ e Store	7.2M	23.7M	53.0M	123.8%
AtliQ Exclusive	9.6M	17.7M	61.1M	245.8%
BestBuy	0.9M	1.8M	6.3M	256.1%
Boulanger	0.2M	0.8M	4.1M	392.9%
Chip 7	0.6M	1.3M	5.5M	316.1%
Chiptec		0.4M	3.0M	622.0%
Control	0.9M	2.2M	7.7M	249.2%
Coolblue	0.5M	1.2M	4.2M	260.0%
Costco	1.1M	2.8M	9.3M	237.4%
Croma	1.7M	2.5M	7.5M	205.1%
Currys (Dixons Carphone)	0.3M	0.8M	1.9M	146.9%
Digimarket	0.8M	1.7M	4.1M	141.1%
Ebay	2.6M	6.3M	15.2M	142.2%
Electricalsara Stores	0.1M	0.6M	1.9M	186.0%
Electricalsbea Stores		0.1M	0.7M	404.6%
Electricalslance Stores	0.1M	0.7M	2.3M	213.3%
Electricalslytical	1.8M	2.6M	11.9M	357.5%
Electricalsocity	2.3M	3.5M	12.4M	258.8%
Electricalsquipo Stores	0.2M	0.7M	3.6M	435.3%
Elite	0.4M	0.8M	4.1M	395.5%
Elkjøp	0.5M	1.3M	5.2M	291.9%
Epic Stores	0.4M	0.9M	4.2M	346.1%
Euronics	0.4M	0.9M	3.9M	344.7%
Expert	0.8M	1.8M	6.4M	264.0%
Expression	1.7M	3.0M	9.8M	228.2%
Ezone	1.5M	2.0M	7.9M	291.6%
Flawless Stores	0.1M	0.5M	1.8M	296.3%
Flipkart	2.9M	8.3M	19.3M	131.0%
Fnac-Darty	0.5M	0.8M	2.9M	249.8%
Forward Stores	0.6M	1.5M	4.1M	172.0%
Girias	1.5M	2.1M	8.7M	319.3%
Info Stores	0.1M	0.5M	1.8M	284.1%
Insight	0.4M	1.0M	2.8M	171.8%
Integration Stores		0.2M	1.4M	787.2%
Leader	4.7M	6.0M	18.8M	214.8%
Logic Stores	0.2M	0.9M	4.8M	415.2%
Lotus	1.5M	2.1M	8.1M	282.6%
Neptune	1.0M	3.4M	16.1M	371.5%
Nomad Stores	0.5M	1.6M	4.0M	146.9%

AtliQ Hardwares

Customer	2019	2020	2021	2021 vs 2020
Notebillig	0.2M	0.4M	1.1M	187.4%
Nova		0.0M	0.4M	2564.9%
Novus	1.9M	3.7M	9.9M	164.2%
Otto	0.3M	0.4M	1.2M	198.6%
Premium Stores	0.5M	1.1M	3.9M	253.1%
Propel	1.6M	2.5M	10.8M	340.6%
Radio Popular	0.5M	1.5M	5.3M	262.6%
Radio Shack	0.8M	1.7M	5.4M	211.5%
Reliance Digital	1.6M	2.6M	9.7M	277.9%
Relief	0.4M	1.0M	4.1M	303.6%
Sage	4.8M	6.4M	20.7M	221.5%
Saturn	0.2M	0.4M	1.2M	210.5%
Sorefoz	0.6M	1.1M	4.7M	333.6%
Sound	0.6M	1.7M	4.4M	160.3%
Staples	1.2M	2.9M	8.8M	207.0%
Surface Stores	0.1M	0.5M	2.1M	298.8%
Synthetic	1.9M	4.4M	12.2M	176.0%
Taobao	0.2M	1.3M	3.3M	148.7%
UniEuro	0.6M	1.6M	7.3M	357.0%
Vijay Sales	1.7M	2.1M	8.5M	297.8%
Viveks	1.6M	2.2M	7.8M	248.1%
walmart	1.3M	2.6M	9.7M	270.4%
Zone	0.3M	1.6M	5.3M	236.2%
Grand Total	**87.5M**	**196.7M**	**598.9M**	**204.5%**

- Amazon , AtliQ e store and AtliQ Exclusive had some of the highest revenue in 2021.
- Ciptec, Integration Stores and Nova showed impressive growth in 2021 compared to 2020

Market Performance vs Target Report

AtliQ Hardwares

FILTERS

division	All
region	All

Market Performance vs Target
All Values are in USD

Country	2019	2020	2021	2021-Target	%
Australia	3.9M	10.7M	21.0M	-2.2M	-9.5%
Austria		0.1M	2.8M	-0.3M	-10.5%
Bangladesh	0.5M	2.3M	7.0M	-0.7M	-9.3%
Canada	4.8M	12.2M	35.1M	-5.1M	-12.6%
China	1.4M	5.4M	22.9M	-2.1M	-8.3%
France	4.0M	7.5M	25.9M	-2.2M	-7.8%
Germany	2.6M	4.7M	12.0M	-1.5M	-11.3%
India	30.8M	49.8M	161.3M	-9.6M	-5.6%
Indonesia	2.5M	6.2M	18.4M	-2.4M	-11.5%
Italy	2.9M	4.5M	11.7M	-1.0M	-8.2%
Japan		1.9M	7.9M	-0.3M	-4.0%
Netherlands	0.2M	3.4M	8.0M	-0.7M	-7.6%
Newzealand		2.0M	11.4M	-1.4M	-11.0%
Norway		2.5M	13.7M	-1.4M	-9.5%
Pakistan	0.6M	4.7M	5.7M	-0.5M	-8.5%
Philipines	5.7M	13.4M	31.9M	-2.5M	-7.3%
Poland	0.4M	2.8M	5.2M	-0.9M	-15.3%
Portugal	0.7M	3.6M	11.8M	-0.5M	-4.1%
South Korea	12.8M	17.3M	49.0M	-4.4M	-8.2%
Spain		1.8M	12.6M	-1.8M	-12.4%
Sweden	0.1M	0.2M	1.8M	-0.2M	-10.0%
United Kingdom	2.0M	8.1M	34.2M	-3.0M	-8.0%
USA	11.5M	31.9M	87.8M	-10.2M	-10.4%
Grand Total	**87.5M**	**196.7M**	**598.9M**	**-54.9M**	**-8.4%**

- Despite having a larger shortfall in absolute terms (9.9 million), India's sales performance was relatively better with a shortfall of only 5.6% of its total sales. This suggests that India's market size (actual sales) is significantly larger.

- USA lagged the most behind target (10.2M). The relative difference of -10.4% for the USA indicates that the actual sales were 10.4% less than the target. This could be a significant shortfall depending on the size of the USA market and could have implications for the company's strategy in the USA. It's a clear indicator that the sales performance in the USA needs to be reviewed and possibly addressed.

- Poland and Spain, despite having less absolute difference, have highest relative difference. This indicates a significant underperformance relative to the market size in Poland.

Top 10 products based on the percentage increase in their net sales from 2020 to 2021

AtliQ Hardwares

FILTERS

		Top 10 Products
division	All	2020 vs 2021
market	All	
customer	All	All Values are in USD

Products	2020	2021	2021 vs 2020
AQ Mx NB	0.0M	1.4M	5623.5%
AQ Smash 2	0.4M	11.2M	2489.5%
AQ LION x3	0.1M	1.2M	1692.3%
AQ LION x2	0.1M	0.9M	1668.9%
AQ LION x1	0.0M	0.8M	1619.5%
AQ Home Allin1	0.7M	5.2M	669.0%
AQ Electron 4 3600 Desktop Processor	3.0M	19.4M	541.3%
AQ Pen Drive DRC	0.6M	3.8M	487.7%
AQ GT 21	0.8M	4.4M	461.1%
AQ Zion Saga	0.7M	3.6M	428.5%
Grand Total	**6.4M**	**52.0M**	**708.0%**

- In 2021, AQ Electron 4 3600 Desktop Processor earned the most revenue at 19.4M.
- Growth wise, AQ Mx NB had the highest growth in 2021 of 5623.5%
- AQ Smash 2 had second highest revenue in 2021 at 11.2M and second highest growth at 2489.5%

- More focus should be given to the most grown products.

Net Sales and Growth Percentage- A Division Level Report(Year 2020-2021)

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FILTERS

market	All
customer	All

Net Sales Division Report 2020 vs 2021

All Values are in USD

Division	2020	2021	2021 vs 2020
N & S	51.4M	94.7M	84.4%
P & A	105.2M	338.4M	221.5%
PC	40.1M	165.8M	313.7%
Grand Total	196.7M	598.9M	204.5%

- P & A division generated highest revenue in 2021 of 338.4 M but PC had higher growth of 313.7% in 2021 from 2020 .
- These insights suggest that while the P & A division is currently the major revenue driver, the PC division is showing strong potential for future growth. It might be beneficial for the company to investigate the factors contributing to the PC division's impressive growth and see if any successful strategies can be replicated in other divisions. At the same time, maintaining the performance of the P & A division should remain a priority given its significant contribution to the overall revenue.

Top & Bottom 5 Products in terms of Quantity Sold

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FILTERS

market	All
division	All
customer	All

Top 5 Products Sold

Product	Quantity Sold
AQ Master wired x1 Ms	4151.0K
AQ Master wireless x1 Ms	4126.3K
AQ Gamers Ms	3975.1K
AQ Gamers	3376.6K
AQ Master wireless x1	3371.2K
Grand Total	**19000.1K**

FILTERS

market	All
division	All
customer	All

Bottom 5 Products Sold

Product	Quantity Sold
AQ GEN Z	63.1K
AQ Gamer 1	51.7K
AQ Smash 2	36.0K
AQ Home Allin1	15.2K
AQ HOME Allin1 Gen 2	8.9K
Grand Total	**174.9K**

Newly Launched Products-2021

AtliQ Hardwares

New Products in 2021
All values in USD

Product	2021
AQ Clx3	4.4M
AQ Electron 3 3600 Desktop Processor	14.2M
AQ Gen Y	19.5M
AQ GEN Z	11.7M
AQ HOME Allin1 Gen 2	3.5M
AQ Lumina Ms	4.2M
AQ Marquee P3	4.9M
AQ Marquee P4	1.7M
AQ Maxima Ms	13.7M
AQ MB Lito	2.8M
AQ MB Lito 2	2.3M
AQ Qwerty	22.0M
AQ Qwerty Ms	15.4M
AQ Trigger	20.7M
AQ Trigger Ms	17.9M
AQ Wi Power Dx3	17.2M
Grand Total	**176.2M**

Top 5 countries in terms of net sales in 2021

AtliQ Hardwares

FILTERS

division	All
customer	All

Top 5 countries : 2021 Net Sales
All values in USD

Countries	2021
Canada	35.1M
India	161.3M
South Korea	49.0M
United Kingdom	34.2M
USA	87.8M
Grand Total	**367.2M**

FINANCE ANALYTICS

Yearly P&L Report

AtliQ Hardwares

FILTERS

market	All
region	All
customer	All
division	All

P & L
By Fiscal Year
All values in USD
Note :21 vs 20 is not a part of pivot table

Values	Fiscal Years 2019	2020	2021	2021 vs 2020
Net_Sales	87.5M	196.7M	598.9M	204.5%
COGS	51.2M	123.4M	380.7M	208.6%
Gross_margin	36.2M	73.3M	218.2M	197.6%
GM%	41.4%	37.3%	36.4%	-2.3%

- The company's sales and gross profit reached an all-time high in 2021, the profitability of each dollar of sales (as indicated by GM%) has decreased since 2019
- While the company is selling more, it's making less profit on each sale, which could impact the company's overall profitability. It might be beneficial for the company to look into ways to reduce COGS or increase selling prices to improve GM%.

AtliQ Hardwares

FILTERS

division	All		
customer	All	**P & L**	
market	All	**By Fiscal Year**	
region	All	All values in USD	
FY	2019	Note : Do not modify pivot table	

Quarters

	Q1			Q2			Q3			Q4				
Metrics	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		Grand Total
Net_Sales	6.5M	8.0M	10.7M	11.4M	6.5M	6.1M	6.4M	6.3M	6.5M	6.2M	6.5M	6.3M	87.5M
COGS	3.8M	4.7M	6.3M	6.7M	3.9M	3.5M	3.8M	3.7M	3.8M	3.6M	3.8M	3.7M	51.2M
Gross_margin	2.6M	3.4M	4.5M	4.7M	2.7M	2.6M	2.7M	2.6M	2.6M	2.6M	2.7M	2.6M	36.2M
GM%	40.9%	42.0%	41.5%	41.4%	40.9%	41.9%	41.5%	41.4%	40.8%	42.0%	41.5%	41.4%	41.4%

division	All		
customer	All	**P & L**	
market	All	**By Fiscal Year**	
region	All	All values in USD	
FY	2020		

Quarters

	Q1			Q2			Q3			Q4				
Metrics	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		Grand Total
Net_Sales	17.1M	20.6M	28.7M	29.9M	17.1M	15.9M	2.1M	7.8M	9.9M	14.9M	16.1M	16.5M	196.7M
COGS	10.6M	12.8M	18.1M	18.9M	10.7M	9.9M	1.3M	4.8M	6.2M	9.3M	10.2M	10.5M	123.4M
Gross_margin	6.5M	7.8M	10.6M	11.0M	6.5M	6.0M	0.8M	2.9M	3.7M	5.5M	5.9M	6.1M	73.3M
GM%	37.8%	37.8%	37.0%	36.8%	37.8%	37.7%	36.7%	37.7%	37.5%	37.3%	36.7%	36.8%	37.3%

division	All		
customer	All	**P & L**	
market	All	**By Fiscal Year**	
region	All	All values in USD	
FY	2021		

Quarters

	Q1			Q2			Q3			Q4				
Metrics	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		Grand Total
Net_Sales	44.8M	54.6M	74.3M	78.1M	44.8M	41.8M	44.0M	43.5M	44.4M	41.5M	44.0M	43.0M	598.9M
COGS	28.4M	34.7M	47.4M	49.8M	28.4M	26.5M	28.0M	27.7M	28.1M	26.4M	28.0M	27.4M	380.7M
Gross_margin	16.4M	19.9M	27.0M	28.3M	16.4M	15.3M	16.0M	15.8M	16.3M	15.1M	16.0M	15.6M	218.2M
GM%	36.7%	36.5%	36.3%	36.3%	36.7%	36.5%	36.4%	36.3%	36.6%	36.4%	36.4%	36.3%	36.4%

- November and December show highest net sales, however, COGS also increases.

P&L Report,2021.

AtliQ Hardwares

FILTERS

		P & L
region	All	**By Market for 2021**
sub_zone	All	All values in USD
FY	**2021**	

Market	Net_Sales	COGS	Gross_margin	GM%
Australia	21.0M	14.1M	6.9M	32.9%
Austria	2.8M	2.0M	0.9M	30.1%
Bangladesh	7.0M	4.5M	2.4M	34.5%
Canada	35.1M	21.7M	13.4M	38.2%
China	22.9M	13.5M	9.4M	41.1%
France	25.9M	14.7M	11.2M	43.2%
Germany	12.0M	8.9M	3.1M	26.2%
India	161.3M	109.7M	51.6M	32.0%
Indonesia	18.4M	11.3M	7.1M	38.4%
Italy	11.7M	8.2M	3.5M	30.1%
Japan	7.9M	4.2M	3.7M	46.5%
Netherlands	8.0M	4.6M	3.4M	42.0%
Newzealand	11.4M	5.9M	5.5M	48.2%
Norway	13.7M	9.6M	4.0M	29.5%
Pakistan	5.7M	3.6M	2.0M	36.2%
Philipines	31.9M	19.4M	12.5M	39.1%
Poland	5.2M	3.0M	2.2M	42.6%
Portugal	11.8M	6.8M	5.0M	42.1%
South Korea	49.0M	31.4M	17.6M	35.9%
Spain	12.6M	8.4M	4.2M	33.1%
Sweden	1.8M	1.1M	0.7M	40.2%
United Kingdon	34.2M	18.7M	15.4M	45.1%
USA	87.8M	55.3M	32.5M	37.0%
Grand Total	598.9M	380.7M	218.2M	36.4%

- India has generated highest revenue of 161M but also has highest COGS. It lags a bit on GM%
- On the other hand, Japan, Netherlands and Newzealand having decent enough revenue considering their market size, their GM% has been the highest between 42% and 48%.
- USA, being second on revenue generation , also falters a bit on GM%

In summary, while revenue generation is important, managing COGS and maintaining a high GM% are equally crucial for profitability. Countries like Japan, Netherlands, and New Zealand seem to be doing well in this regard. On the other hand, high-revenue countries like India and the USA might need to focus on strategies to reduce COGS and improve their GM%.

P&L Report by Sub zones .

AtliQ Hardwares

FILTERS

GM%
By Quarter (sub_zone)

FY	2019				
GM%	Quarters				
	Q1	Q2	Q3	Q4	Grand Total
Subzone					
ANZ	43.0%	42.2%	42.6%	42.5%	42.6%
India	42.5%	42.2%	42.0%	42.5%	42.4%
NA	35.1%	35.4%	35.4%	35.7%	35.4%
NE	36.6%	37.0%	36.5%	36.6%	36.7%
ROA	44.5%	44.3%	44.0%	44.5%	44.4%
SE	44.5%	44.1%	44.0%	44.2%	44.2%

FY	2020				
GM%	Quarters				
	Q1	Q2	Q3	Q4	Grand Total
Subzone					
ANZ	43.3%	43.0%	42.8%	41.8%	42.8%
India	32.3%	32.1%	32.4%	32.0%	32.2%
NA	39.9%	40.1%	39.1%	39.7%	39.8%
NE	37.6%	37.8%	38.5%	37.7%	37.8%
ROA	38.4%	38.3%	38.8%	37.7%	38.2%
SE	38.5%	37.3%	38.2%	37.8%	37.9%

FY	2021				
GM%	Quarters				
	Q1	Q2	Q3	Q4	Grand Total
Subzone					
ANZ	39.0%	37.8%	38.3%	38.0%	38.3%
India	32.3%	31.8%	31.9%	32.0%	32.0%
NA	37.1%	37.4%	37.5%	37.4%	37.3%
NE	37.9%	38.7%	38.2%	38.3%	38.3%
ROA	38.5%	38.4%	38.1%	38.1%	38.3%
SE	38.6%	38.3%	38.6%	38.5%	38.5%

- In 2021, apart from NA and NE, rest other subzones had highest GM% in Q1.
- NA and NE had higher GM% in Q2 and Q3.

This could be due to various factors such as seasonal demand for products, pricing strategies, or cost variations.

Thank You