

# 360 BUSINESS INSIGHTS

Data Analysis Project using  
Power BI

AtliQ Hardware Company

**BY: AHMED ALI**



# 1. PROJECT PLANNING

Create Project Charter to describe the whole project with Key Features like Project Goals, Timeline, Risks and Stakeholder Views.

1

What We Know So Far

Project Name

Global Business Insights 360

Background Information

Atliq wants to make data driven decision making as a part of their work culture and taking their first big step towards that by embedding a Power BI tool in the organisation

Helpful Links

Link in anything that would help project members get up to speed on the project.

Key Players

Product Owner

Nick Puri

Business Development Director

Executive Sponsor

Stan Kohli

CEO

D & A Lead

Tony Sharma

Senior Data Analyst

IT Lead

Jarvis Singh

Data Engineer

Objective

Enable quick Insights for business across markets and data driven decision making. Enable "Start the day with analysis"

Success Measures

A functional dashboard is implemented with key business metrics as specified.

Users are able to use the tool in their business review meetings and in their decision making process such as customer negotiation, new product launch, marketing promotions, finance budgeting etc.

Timeline

Project Definition

W2

W4

W6

W8

Provide the dashboard for UAT

Users begin using the tool

2

Hopes & Fears

10 min

Hopes

Data driven Decision making

Self-Service

Ad-hoc request work

Personalized view

Fears

Not available everywhere

Feature Gap

3

Project Goals

10 min

What problem are we trying to solve?

Who

Executives, Finance, Supply Chain, Sales & Marketing teams

What

Unlock insights and enable data driven decision making

When/Where

Q2 of FY 2023

Why

care about it?

4

Defining Success

15 min

Future Headlines

Imagine the project is done and it's a HUGE success! Write a short 3-5 sentence press brief of why this was such a big success.

Revenue increase by 10%

Profit margin increased by 10%

Costs reduced by 10%

Manual work reduced by 10%

Create Measurable Success Metrics

When can we call this project a success?

10 % increase in Profit Margin

Prod time saved by automation

Attrition rate to be reduced (from 20% to 10%)

## 2. IMPORT & EXPLORE ATLIQ SALES DATA

**MORE THAN 1.4 MILLION OF  
RECORDS WAS IMPORTED.**

**10 FACT AND DIMENSION  
TABLES WERE EXPOLRED.**

**Import Data to MYSQL**

Import Fact and Dimension  
tables into MYSQL workbench.

**EXPLORE DATA using SQL**

Explore different types of Tables  
and Columns to have a good  
understanding of my DATA.

**IMPORT to POWER BI**

Connect and Load ATLIQ  
Sales DATA from MYSQL  
Database into POWER BI.



# 3. DATA MODELING

After Loading DATA to Power BI, I started doing the following steps:

1

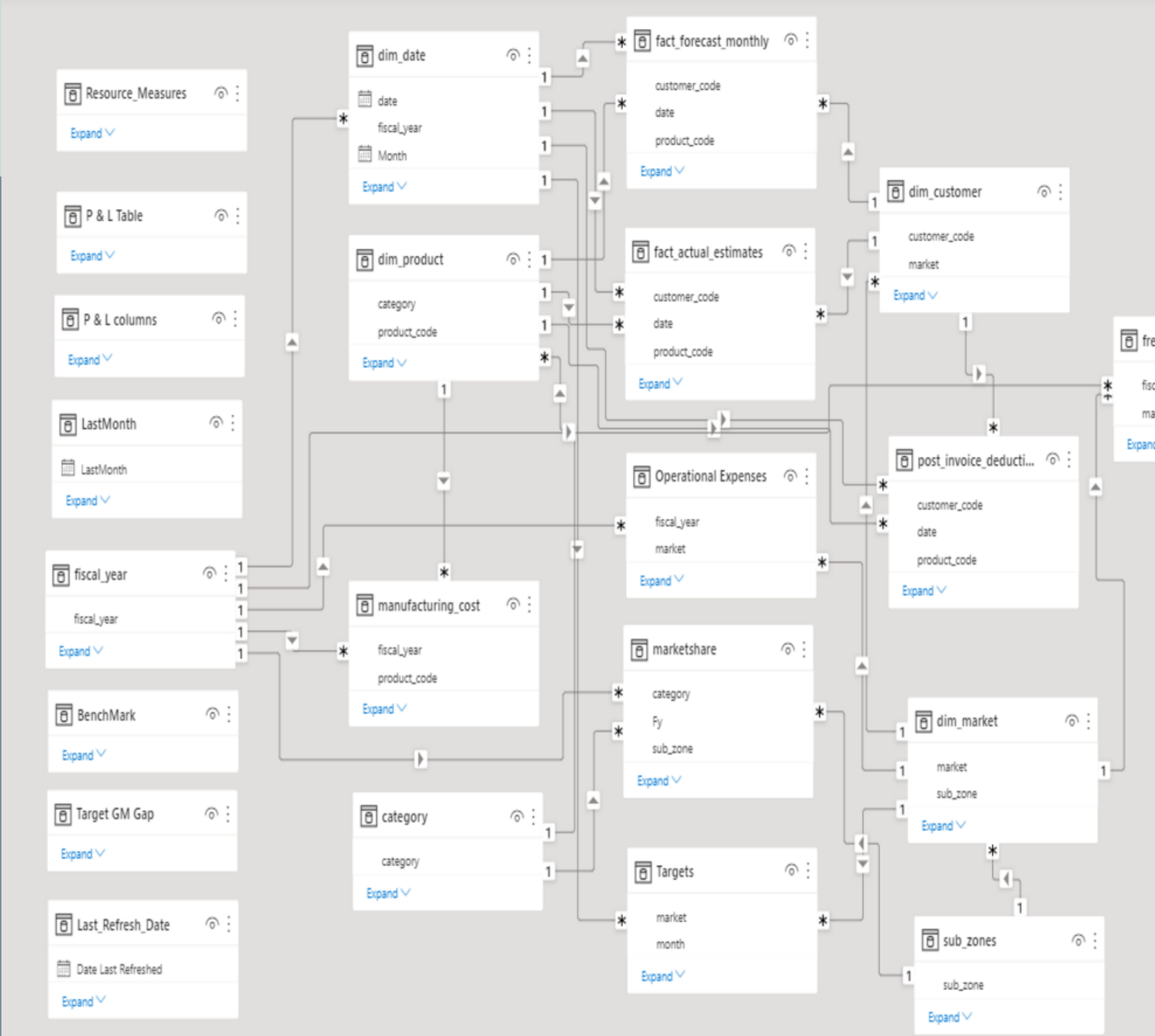
Cleaning, Formatting and Transforming Data using Power Query.

2

Creating Relationships between tables through Snowflake and Starshema Methodology.

3

Data Validation against Benchmarks provided by Product Owner.



# 4.FINANCE VIEW

Creating list of Metrics and Calculated Columns using DAX and Power Query to fulfill the Visuals according to Finance Mock-Up provided by Stakeholders.

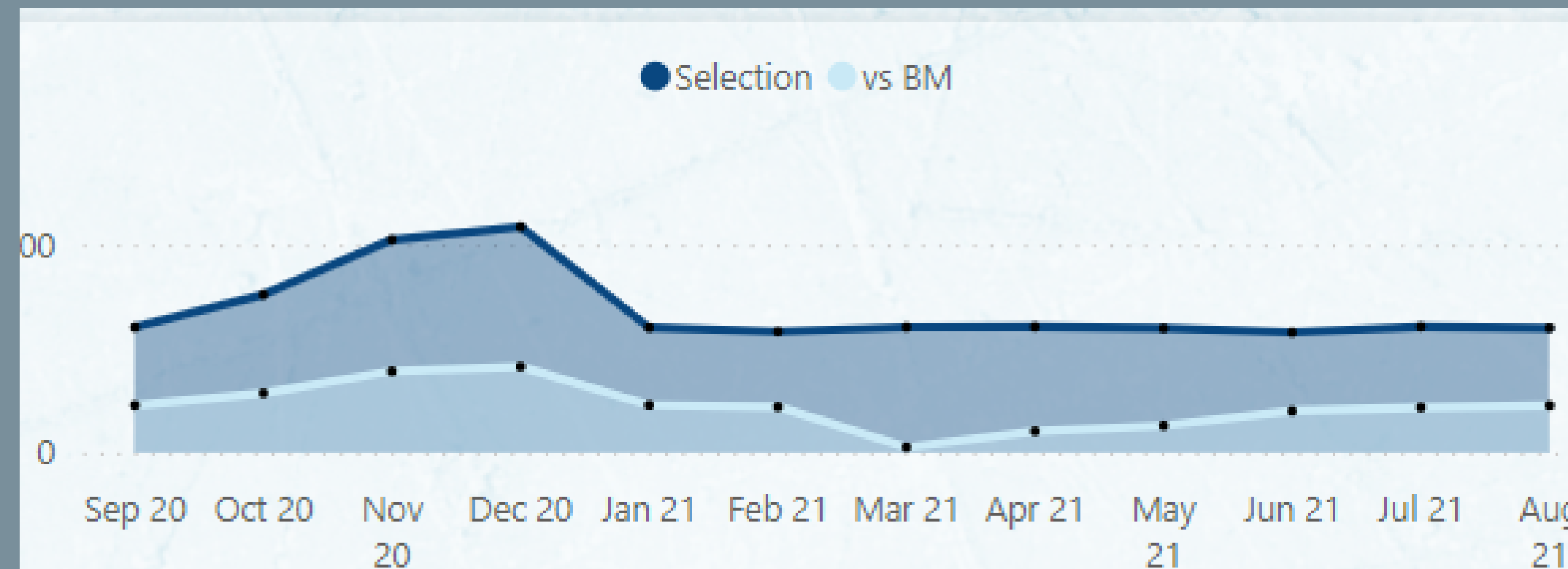
Line Item	2021	BM	Chg	Chg %
Gross Sales	1,664.64	535.95	1,128.69	210.60
Pre Invoice Deduction	392.50	124.69	267.81	214.77
Net Invoice Sales	1,272.13	411.25	860.88	209.33
- Post Discounts	281.64	95.85	185.79	193.84
- Post Deductions	166.65	47.43	119.22	251.38
Total Post Invoice Deduction	448.29	143.27	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	207.98
- Other Cost	3.39	1.10	2.29	209.52
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 %	-6.63	-0.85	-5.78	676.38

## Profit & Loss Statement

Full P&L statement Against Last Year BM.

## Net Sales Performance

Net Sales Performance Over Time



FINANCE VIEW  
KPIS

- **AtliQ Net Sales has increase by 207.43% in 2021 than 2020 but Gross Margin has decreased by 1.65%.**

Here are Top/Bottom Products by Net Sales. Also, you can check P&L Values Change against Last Year.

Below is the KPIs of Finance View Net Sales, Gross Margin and Net Profit Against Last Year.

segment	P & L values	P & L Chg %
▲		
⊕ Accessories	244.85	269.67
⊕ Desktop	46.43	4,791.34
⊕ Networking	45.16	72.26
⊕ Notebook	266.49	208.45
⊕ Peripherals	166.51	174.64
⊕ Storage	54.42	97.48
Total	823.85	207.43

Finance KPIs

\$823.85M✓

BM: 267.98M (+207.43%)

Net Sales

36.49%!

BM: 37.10% (-1.65%)

GM %

-6.63%!

BM: -0.85% (-676.38%)

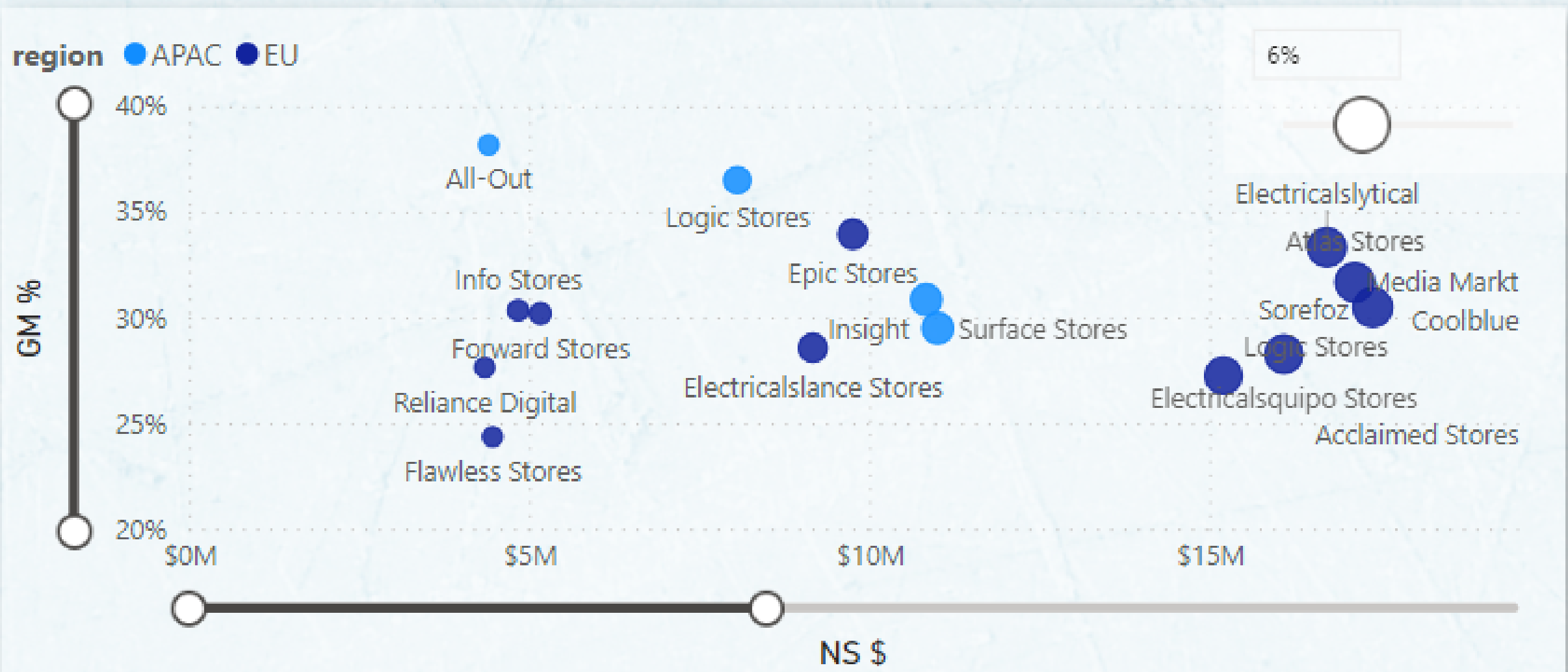
Net Profit %

# 5. SALES VIEW

## CUSTOMER PERFORMANCE MATRIX

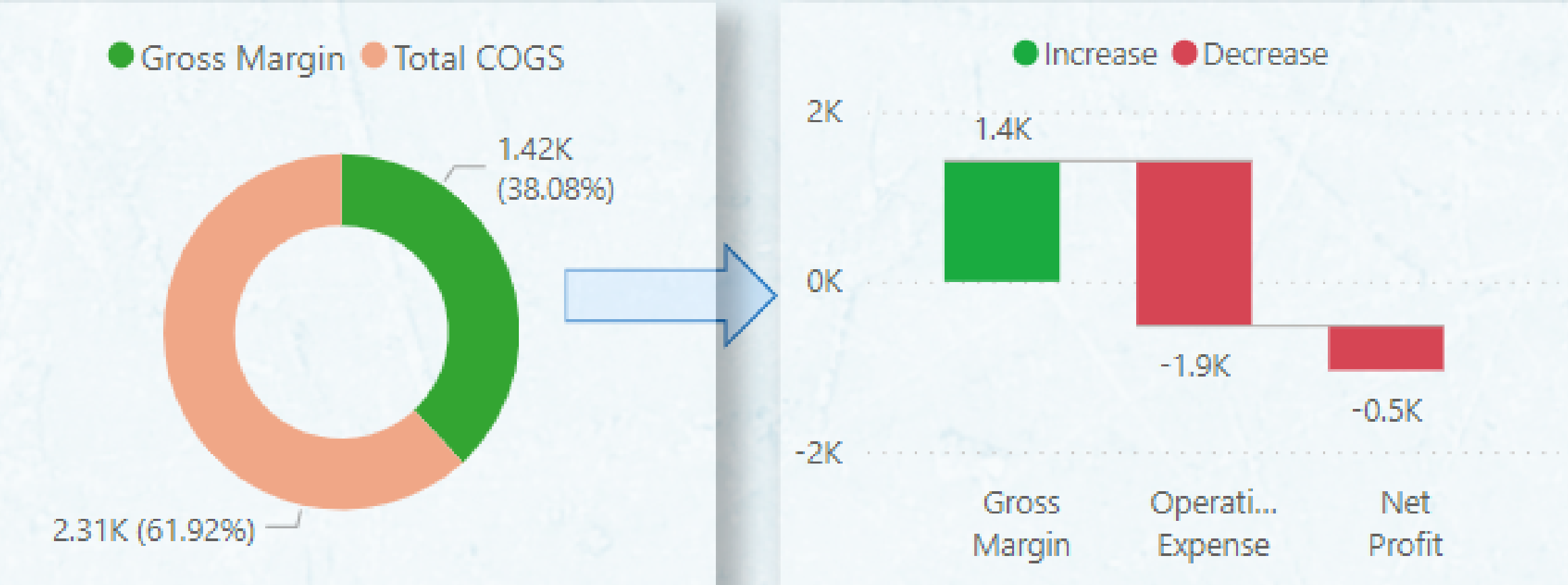
- In terms to measure Sales performance I have applied Top Customer Performance Categorized by Net Sales, Gross Margin and Gross Margin %.
- Also, Scatter chart having Net Sales and Gross Margin on its axis and showing market and region as the bubbles on the chart.

customer	NS \$	GM \$	GM %
Amazon	\$496.88M	182.77M	36.78%
AtliQ Exclusive	\$361.12M	166.15M	46.01%
Atliq e Store	\$304.10M	112.15M	36.88%
Flipkart	\$138.49M	58.37M	42.14%
Sage	\$127.86M	40.31M	31.53%
Leader	\$117.32M	36.02M	30.70%
Neptune	\$105.69M	49.36M	46.70%
Ebay	\$91.60M	33.06M	36.09%
Acclaimed Stores	\$73.36M	29.58M	40.32%
walmart	\$72.41M	33.06M	45.66%
Electricalslytical	\$68.05M	25.34M	37.24%



# 6.MARKETING VIEW

region	NS \$	GM \$	GM %	Net Profit \$	Net Profit %
⊕ APAC	\$1,923.77M	690.21M	35.88%	-281.16M	-14.62%
⊕ EU	\$775.48M	267.80M	34.53%	-95.52M	-12.32%
⊕ LATAM	\$14.82M	5.19M	35.02%	-0.44M	-2.95%
⊕ NA	\$1,022.09M	459.68M	44.97%	-145.31M	-14.22%
Total	\$3,736.17M	1,422.88M	38.08%	-522.42M	-13.98%



## Top Product Visual

Creating Top Product table alongside with product Segment and Category to present Net Sales, Gross Margin and Net Profit.

## Unit Economic Donuts

Donut Visual to describe Gross Margin % = Net Sales - COGS

## Unit Economic Stacked Column Chart

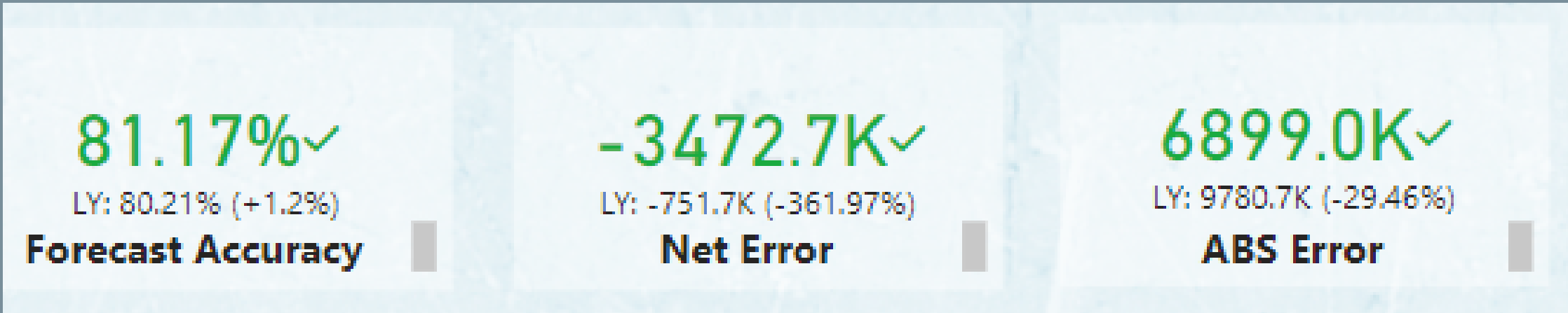
Shows the increase and decrease of Gross Margin and Net Profit after Operation expenses.



# 7.SUPPLY CHAIN

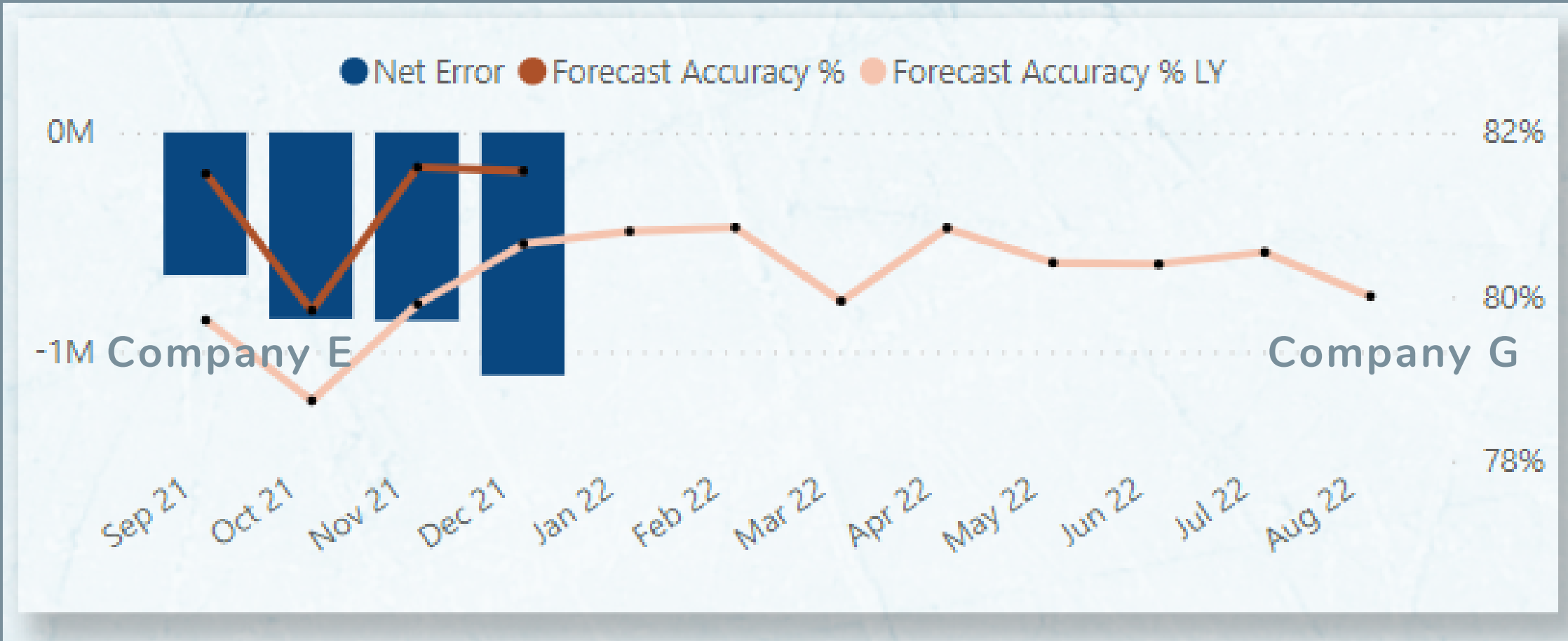
## KPIS

- Building Measures from Sold and Forecast Quantity to have Net Error, Absolute Error and Forecast Accuracy



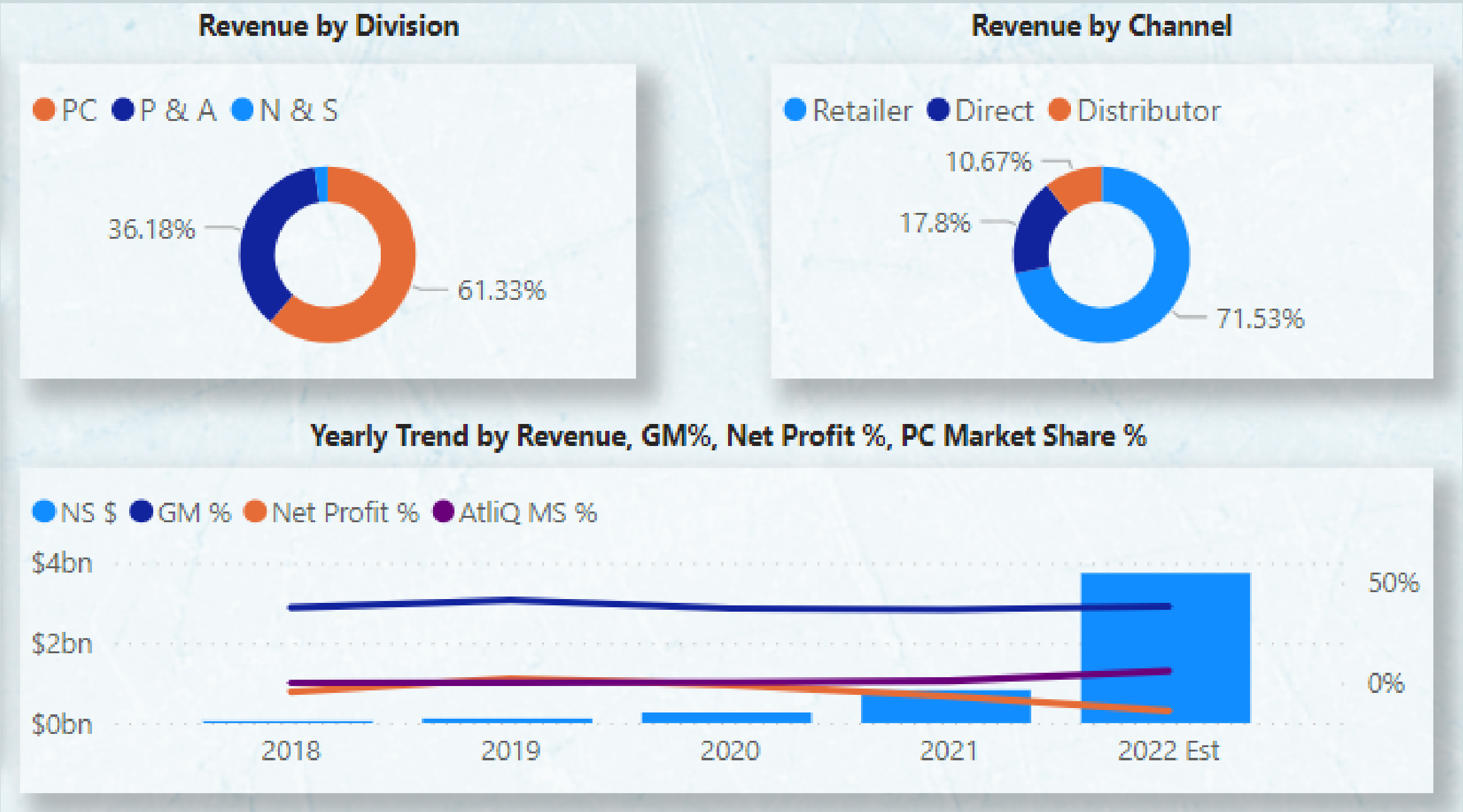
## TRENDS OF SUPPLY CHAIN

- Visual Line and cluster column Chart to trend Forecast Accuracy % with Net Error over Time.



# 8.EXECUTIVE MANAGERS VIEW

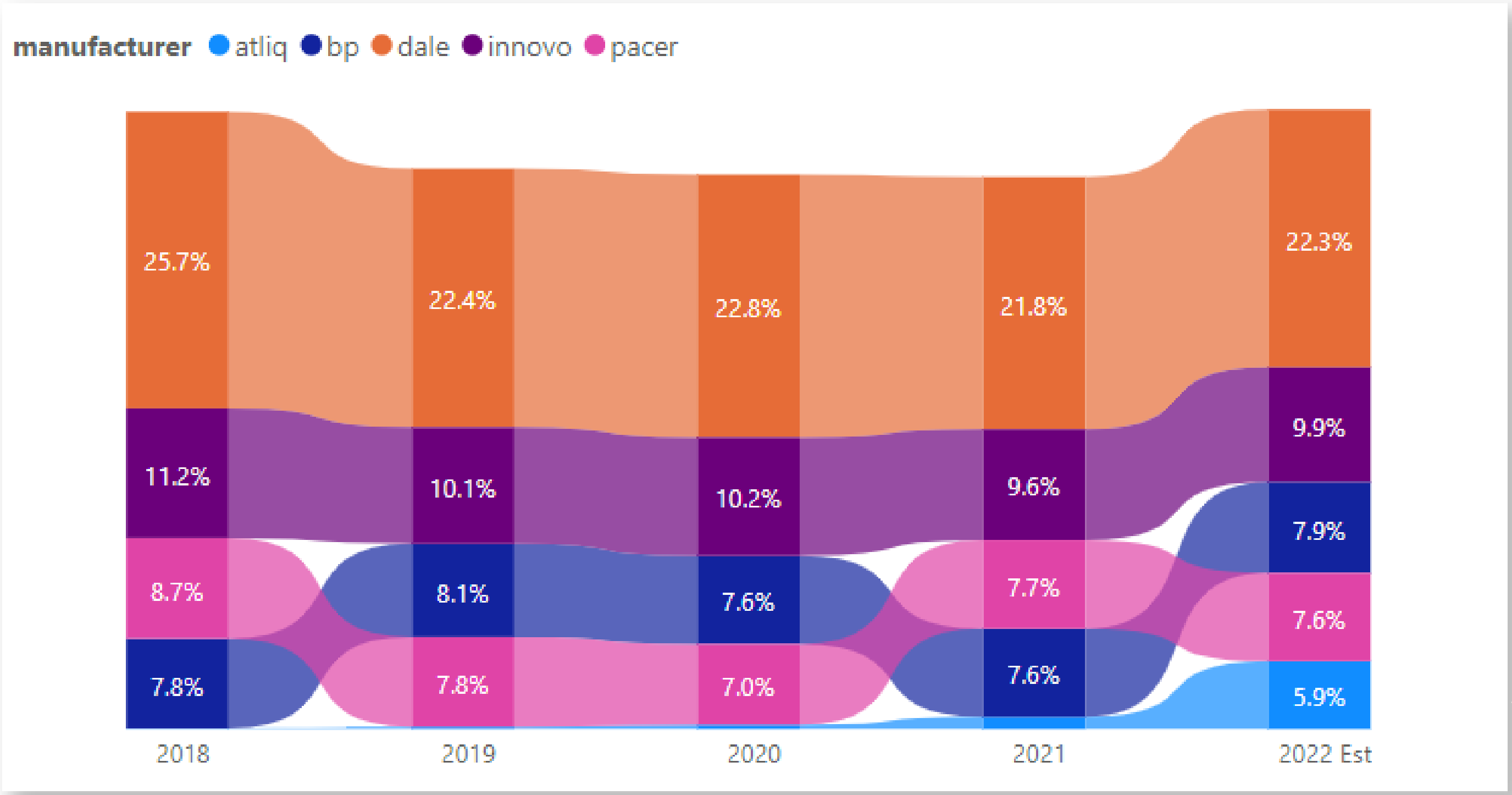
Implementing Stakeholders  
Requirements into Executive View.



Create a Donut Chart to  
show Revenue by Divison  
and Channel.

Present Yearly trend over  
Revenue, Gross Margin,  
Net Profit and Market  
Share.

# PC MARKET SHARE TREND - ATLIQ & COMPETETORS



360 Business Insights

## CONTACT ME

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**All Attached Visuals are from My  
360 Business Insights Project.**

You can Check out and Interact with  
the full Dashboard through the link: