



Atliq Hardware

Consumer Goods Insight



Context

About Atliq Hardware

- Atliq Hardware's (imaginary company) is one of the leading computer hardware producers in India and well expanded in other countries too.
- It is present in 4 Region & 27 countries

The Problem

- The management at Atliq Hardware has noticed that they do not get enough insights to make quick and smart data-informed decisions.

The Approach

- They want to expand their data analytics team by adding several junior data analysts.
- Tony Sharma, their data analytics director wanted to hire someone who is good at both tech and soft skills.

Atliq's Market Presence

LATAM: 4 Countries



NA: 2 Countries



EU: 11 Countries

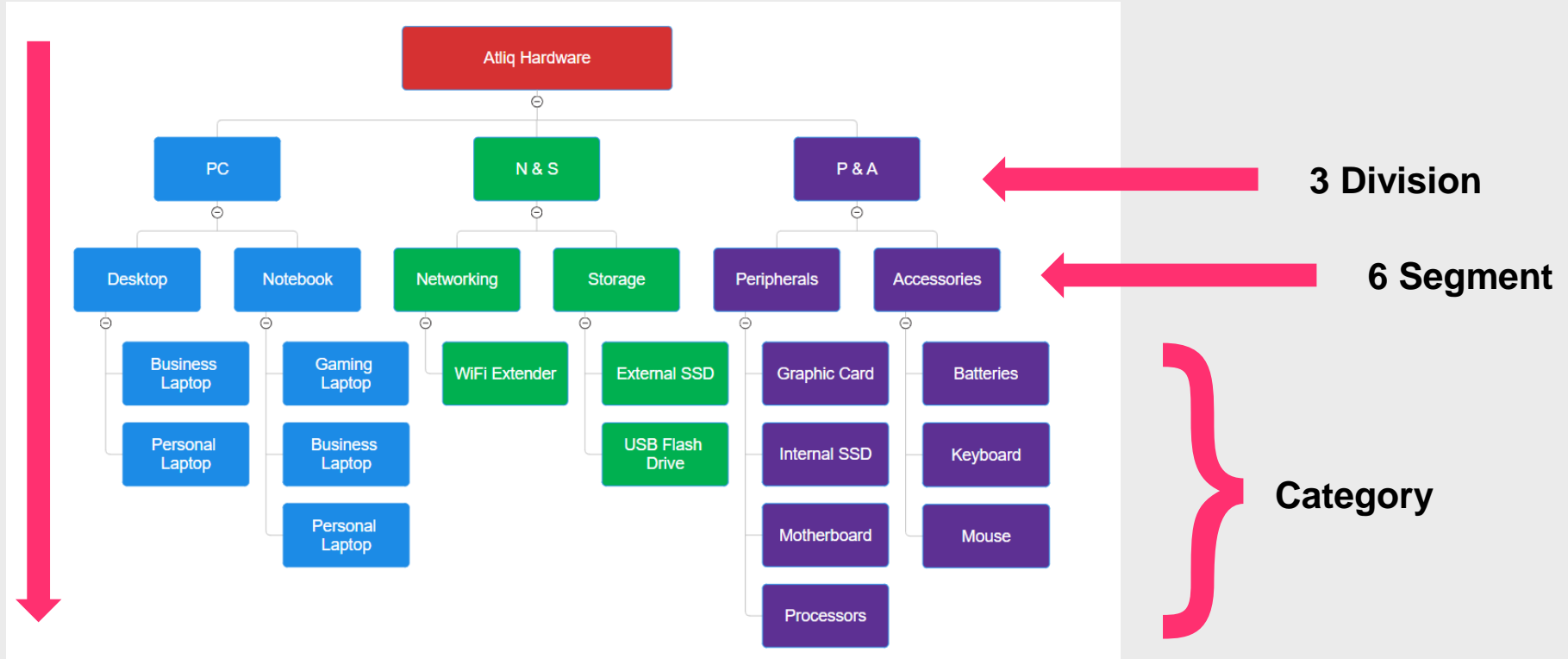


APAC: 10 Countries

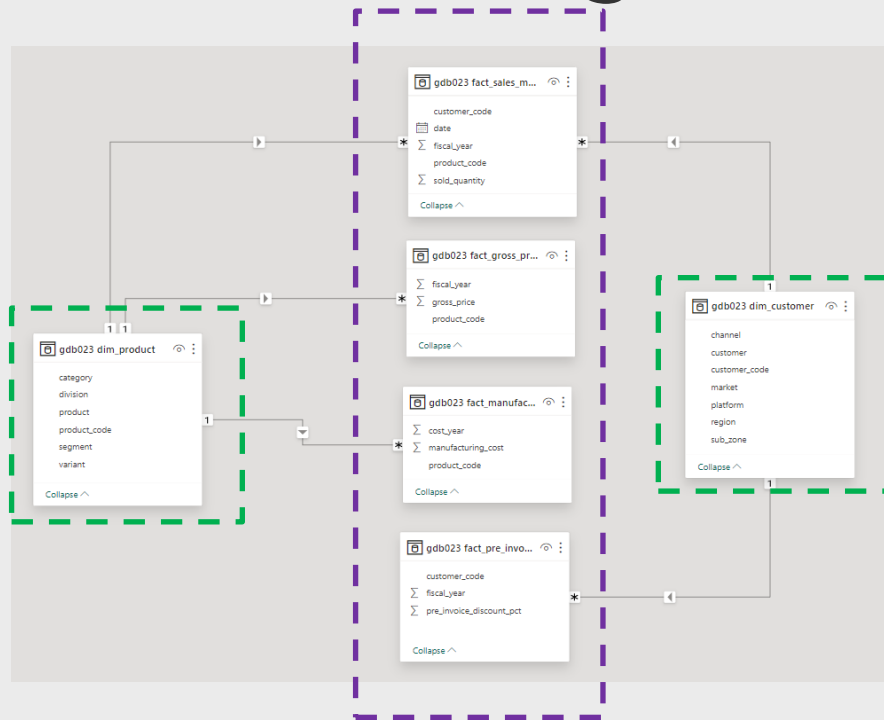


- Atliq Hardware has presence across 4 Region; 27 countries
- Largest presence is in EU region; followed by APAC region

Company Details – DSC Model



Data Modeling



- The datasets was provided by CodeBasics as a part of challenge.
- The data was in SQL format, it is imported to MySQL and connected to Power bi.
- The Queries for the requests are solved in MySQL and visualized in Power Bi.

----- Dimension Table

----- Fact Table

Total Tables: 6

- Dimension Table - 2
- Fact Table - 4

Dimension Table:

- Product
- Customer

Fact Table:

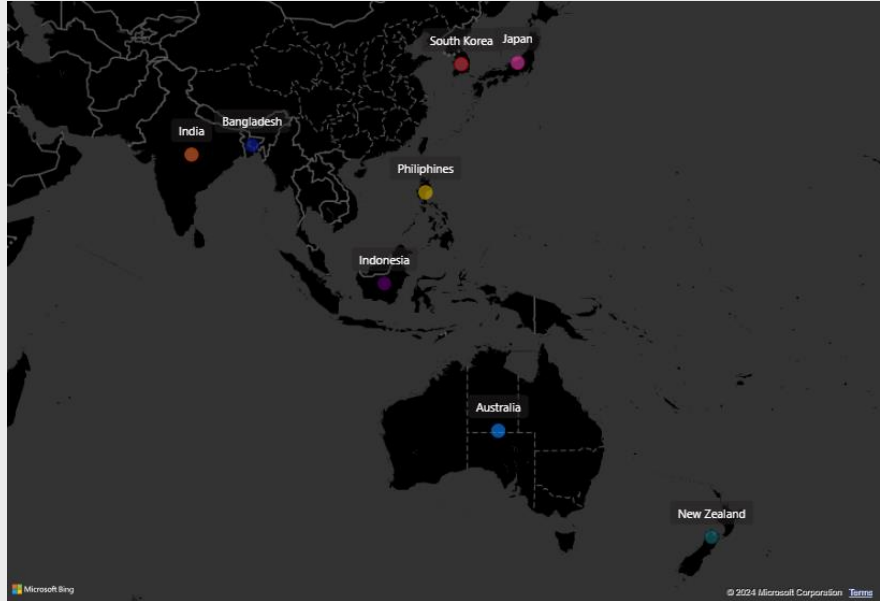
- Gross Price
- Manufacturing Cost
- Sales
- Pre Invoice Deduction

Financial Year

- The Financial Years of Atliq Hardware is from September to August Period
- FY 2020 → September 2019 to August 2020
- FY 2021 → September 2020 to August 2021
- Q1 → Sept to Nov
- Q2 → Dec to Feb
- Q3 → Mar to May
- Q4 → Jun to Aug

Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

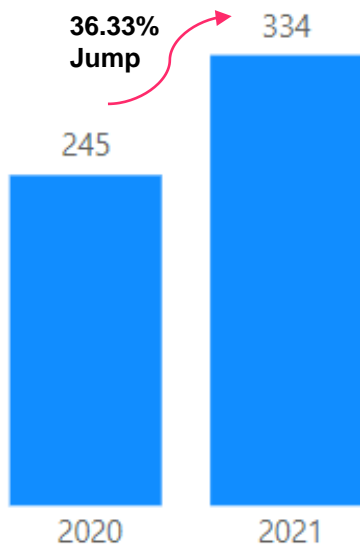
	market
▶	Australia
	Bangladesh
	India
	Indonesia
	Japan
	Newzealand
	Philiphines
	South Korea



- Out of the 10 countries in which Atliq Hardware operates in APAC region, **Atliq Exclusive is present in 8 countries.**
- 2 countries in which Atliq Exclusive is not present (APAC region) are Pakistan & China.

What is the percentage of unique product increase in 2021 vs. 2020?

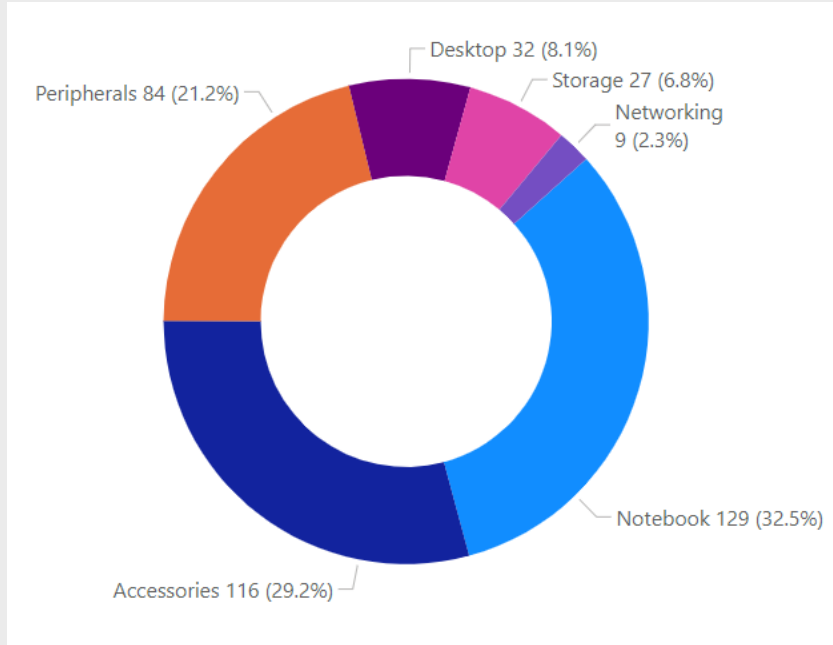
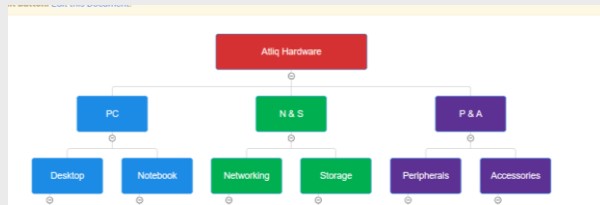
	unique_products_2020	unique_products_2021	percentage_change
▶	245	334	36.33 %



- **89 unique products** were added to Product basket between FY 2020 to FY 2021
- This is **36.3% jump** in Unique Products introduced
- This show there is an increase in product demand

Provide a report with all the unique product counts for each segment

	segment	product_count
►	Notebook	129
	Accessories	116
	Peripherals	84
	Desktop	32
	Storage	27
	Networking	9



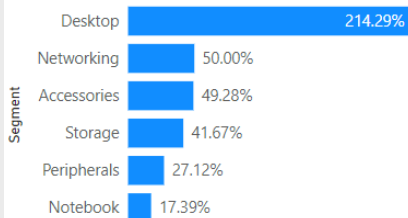
- Notebook Segment has the highest unique products (129) followed by Accessories (116)
- Top 3 Segment accounts for **82.9%** of the unique products sold by Atliq Hardware.
- Networking segment accounts for lowest no of unique products (9) – which is 2.3% of unique products sold
- Storage & Networking (both belonging to N & S division) are at the bottom two position

Which segment had the most increase in unique products in 2021 vs 2020?

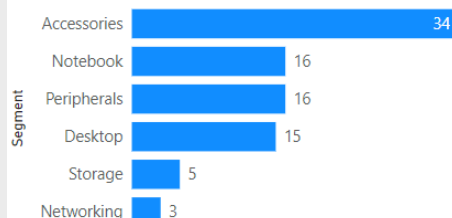
Result Grid | Filter Rows: | Export: | Wrap Cell Con

	segment	product_count_2020	product_count_2021	difference
▶	Accessories	69	103	34
	Notebook	92	108	16
	Peripherals	59	75	16
	Desktop	7	22	15
	Storage	12	17	5
	Networking	6	9	3

% Increase in Unique Products - 2021 vs 2020

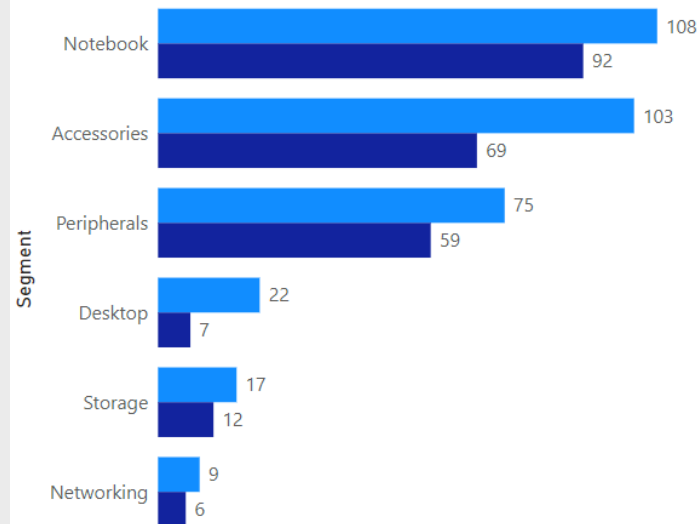


Increase in No. of Unique Products - 2021 vs 2020



Unique Products 2021 vs 2020

Unique Products 2021 Unique Product 2020

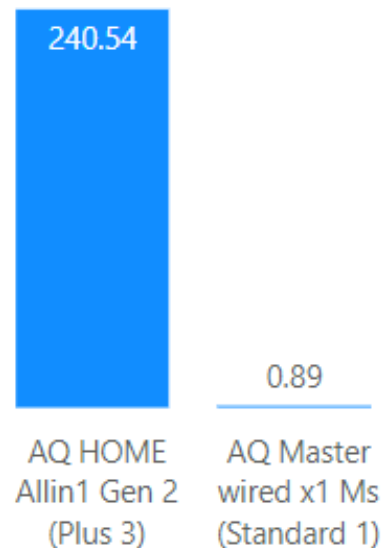


- **Desktop segment saw the largest growth** in terms of percent of Products introduced between FY 2020 to FY 2021 (214% growth)
- In terms of Absolute numbers, **34 new products** have been introduced in Accessories segment which is the highest
- 16 new products were introduced in Notebook & Peripherals segment each.

Get the products that have the highest and lowest manufacturing costs.

	product_code	product	variant	manufacturing_cost
▶	A6120110206	AQ HOME Allin1 Gen 2	Plus 3	240.54
	A2118150101	AQ Master wired x1 Ms	Standard 1	0.89

- There is a **huge difference** between Manufacturing cost between the product with highest and lowest manufacturing costs



Generate a report which contains the top 5 customers who received an average high pre_invoice_discount_pct for the fiscal year 2021 and in the Indian market.

	customer_code	customer	average_discount_percentage
►	90002009	Flipkart	30.83
	90002006	Viveks	30.38
	90002003	Ezone	30.28
	90002002	Croma	30.25
	90002016	Amazon	29.33



- For top 5 Customer, the average pre invoice discount percent ranges between **30.83% to 29.33%**
- Among top 5 customer - **Flipkart** has the highest average pre invoice discount percent – 30.83%, while **Amazon** has the lowest average pre invoice discount percent – 29.33%

Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month.

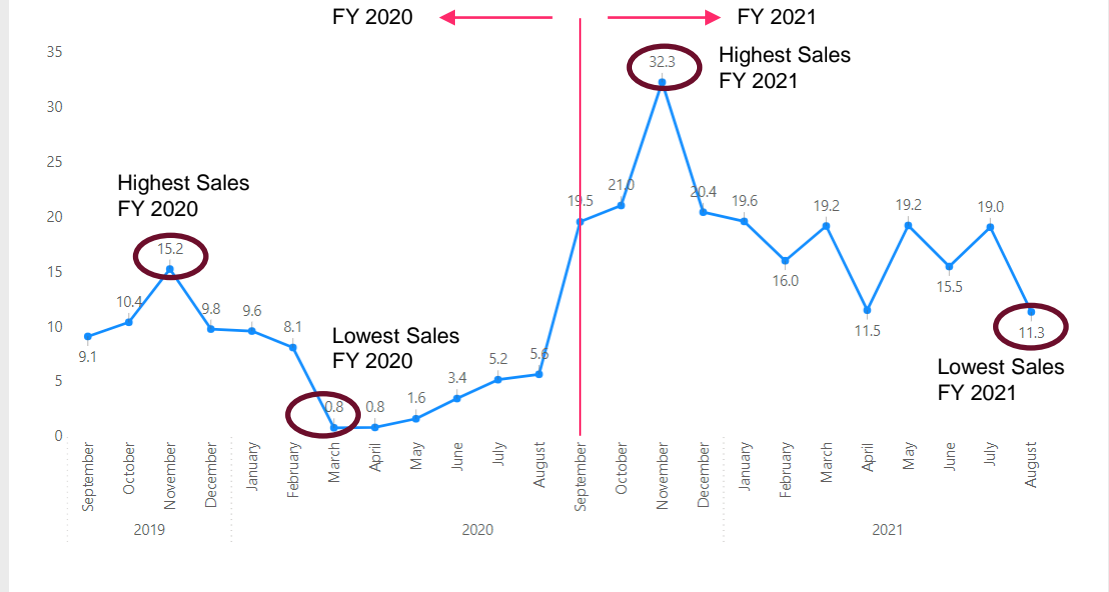
	month	year	gross_sales
▶	September	2019	9.09 M
	October	2019	10.38 M
	November	2019	15.23 M
	December	2019	9.76 M
	January	2020	9.58 M
	February	2020	8.08 M
	March	2020	0.77 M
	April	2020	0.80 M
	May	2020	1.59 M
	June	2020	3.43 M
	July	2020	5.15 M
	August	2020	5.64 M
	September	2020	19.53 M
	October	2020	21.02 M
	November	2020	32.25 M
	December	2020	20.41 M
	January	2021	19.57 M
	February	2021	15.99 M
	March	2021	19.15 M
	April	2021	11.48 M
	May	2021	19.20 M
	June	2021	15.46 M
	July	2021	19.04 M
	August	2021	11.32 M

FY 2020

Total Sales
Quantity:
79.5M (26.2%)

FY 2021

Total Sales
Quantity:
224.4M (73.8%)

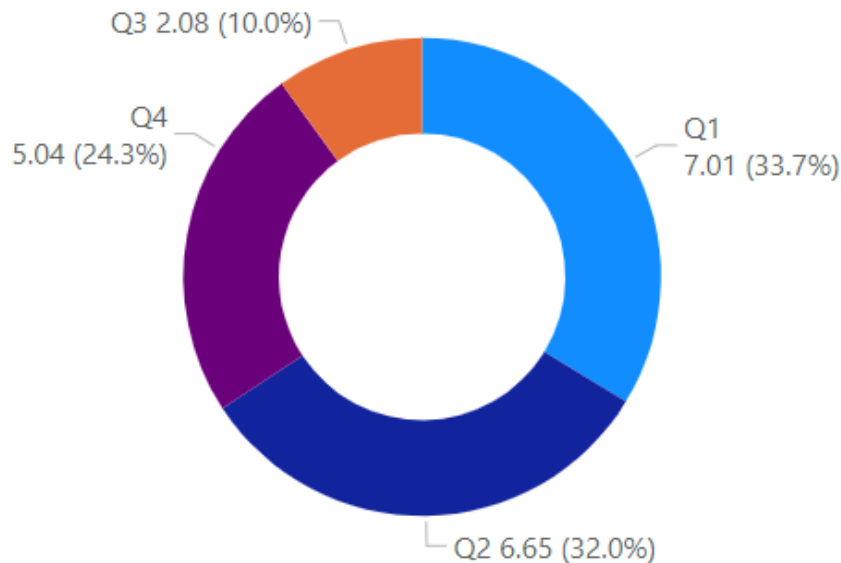


- The lowest Total Gross Sales for FY 2020 is in March, for FY 2021 it is August
- The highest Total Gross Sales for FY 2020 & FY 2021 is November
- FY 2021 contribution – 73.8%; FY 2020 contribution – 26.2%

In which quarter of 2020, got the maximum total_sold_quantity?

	quarter	total_sold_quantity_in_millions
▶	Q1	7.01
	Q2	6.65
	Q4	5.04
	Q3	2.08

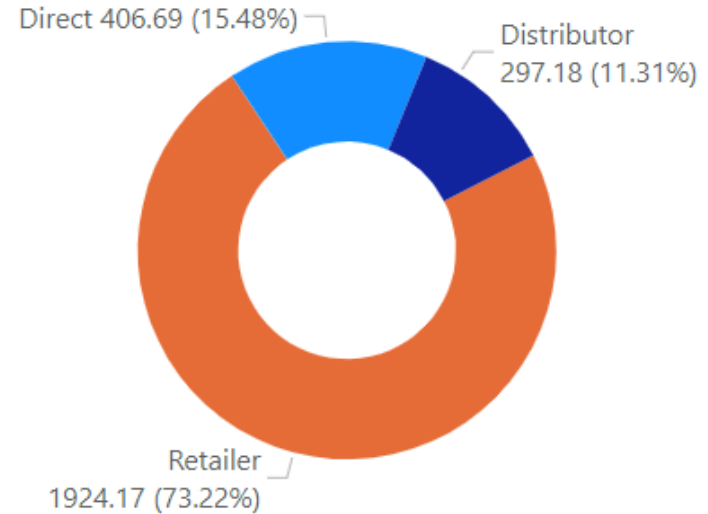
Quarter	Month
Q1	Sept, Oct, Nov
Q2	Dec, Jan, Feb
Q3	Mar, Apr, May
Q4	Jun, Jul, Aug



- FY 2020 Q1 saw the most units sold, while Q3 had the fewest.
- Q1 and Q2 together account for **65.7%** of total products sold in FY 2020

Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

	channel	gross_sales_in_millions	percentage
▶	Retailer	1924.17	73.22
	Direct	406.69	15.47
	Distributor	297.18	11.31

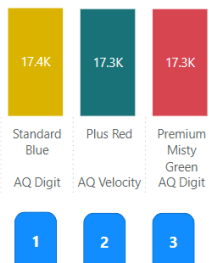


- Maximum sales is coming from **Retailer channel (73.22%)**
- The combined sale from Direct & Distributor channel is less than the sale from Revenue channel.

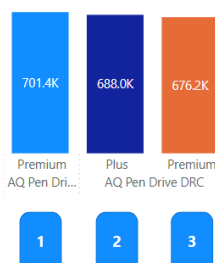
Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021?

	division	product_code	product	variant	total_sold_quantity	rank_order
▶	N & S	A6720160103	AQ Pen Drive 2 IN 1	Premium	701373	1
	N & S	A6818160202	AQ Pen Drive DRC	Plus	688003	2
	N & S	A6819160203	AQ Pen Drive DRC	Premium	676245	3
	P & A	A2319150302	AQ Gamers Ms	Standard 2	428498	1
	P & A	A2520150501	AQ Maxima Ms	Standard 1	419865	2
	P & A	A2520150504	AQ Maxima Ms	Plus 2	419471	3
	PC	A4218110202	AQ Digit	Standard Blue	17434	1
	PC	A4319110306	AQ Velocity	Plus Red	17280	2
	PC	A4218110208	AQ Digit	Premium Misty Green	17275	3

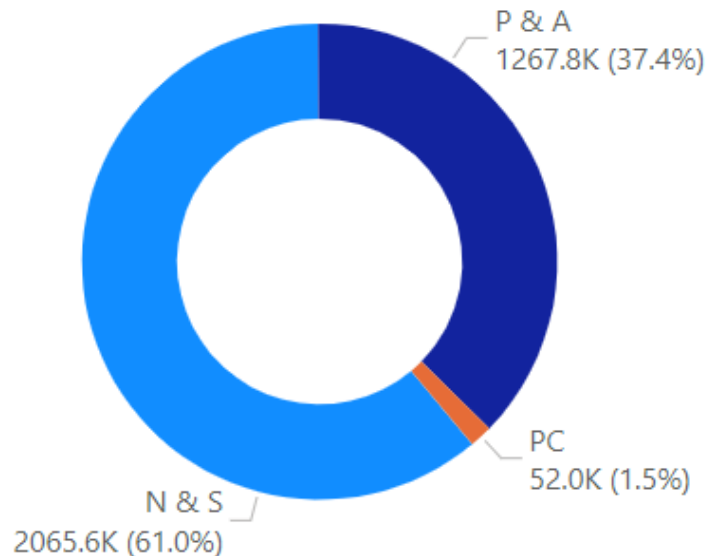
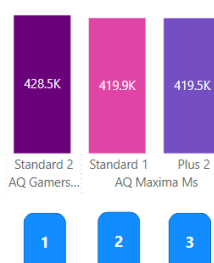
Top 3 Products - PC Division



Top 3 Products - N & S Division



Top 3 Products - P & A Division



- **61% of sales is coming from N & S division**
- The combined sales of PC & P & A division is less than that of N & S division
- The sales quantity for top 3 products in PC division is almost same



Thank You

