



# **Ad\_hoc Insights**

## **Consumer goods**

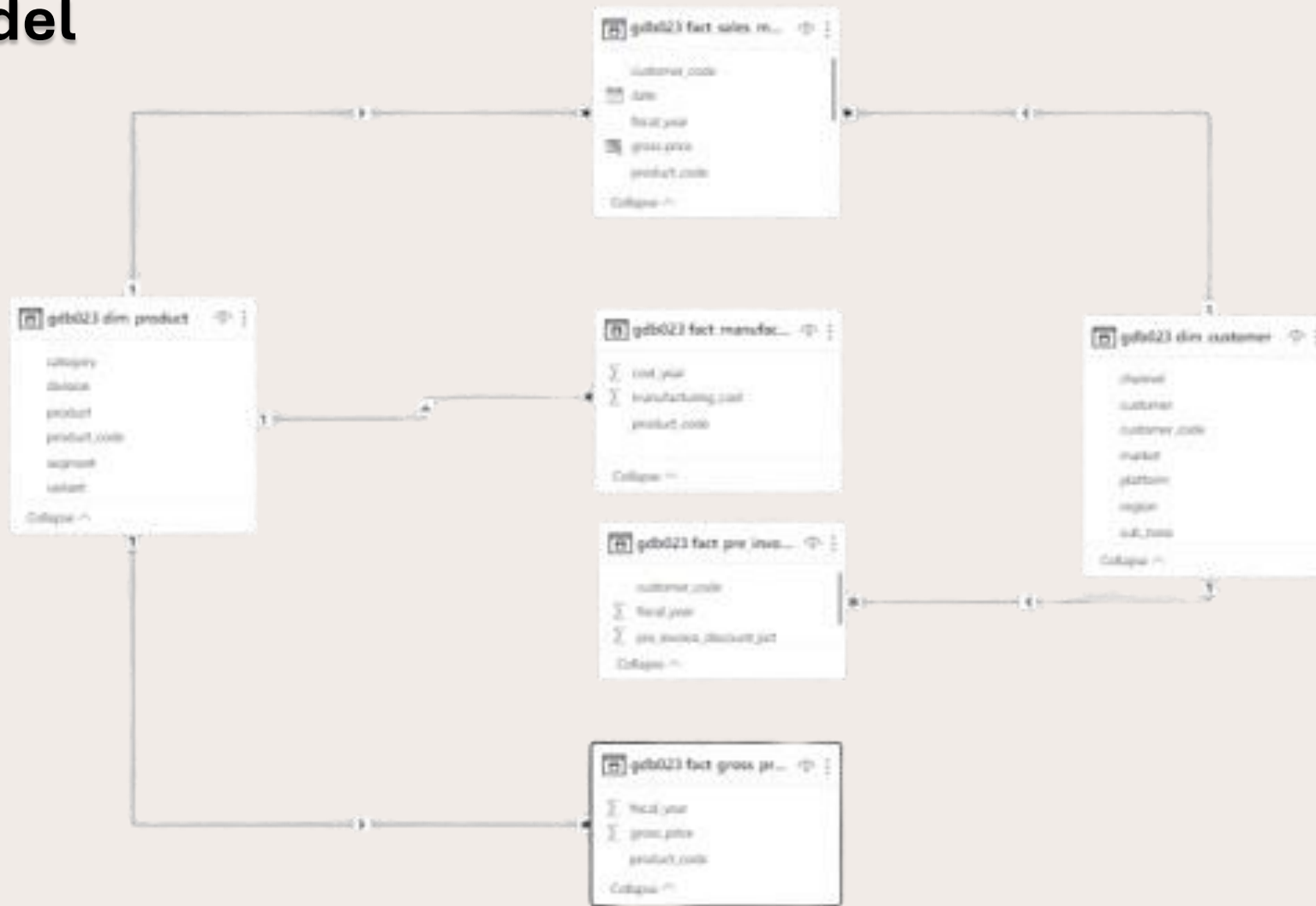
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# Objective

- **AtliqHardware** (fictitious corporation) is one of the major computer hardware manufacturers in India, with a strong presence in other nations.
- Nevertheless , the management did note that they **do not have sufficient insights** to make prompt, wise, and data-informed judgments.
- Plan to **expand** the data analytics team by adding junior data analysts.
- To assess candidates, Data analytics director, **TonySharma** plans to conduct **a SQL challenge** to evaluate both tech and soft skills.
- The company seeks insights for 10 ad hoc requests

# Data Model



## Tools Used



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



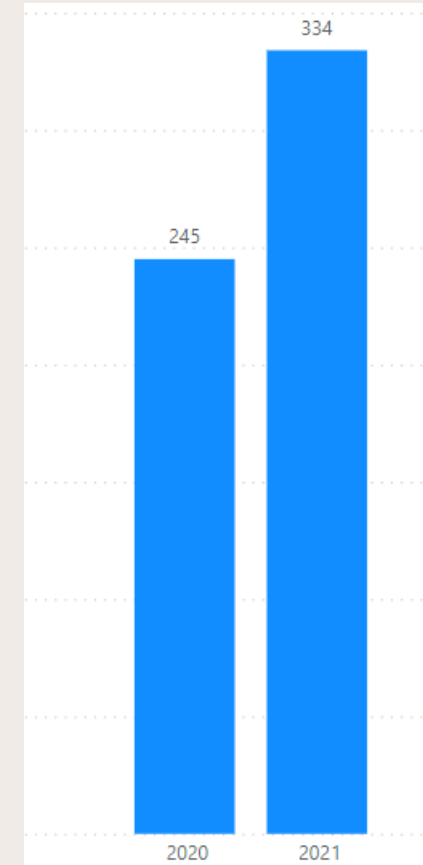
2. What is the percentage of unique product increase in 2021 vs. 2020?

unique_product_2020	unique_product_2021	dif
245	334	36.3265



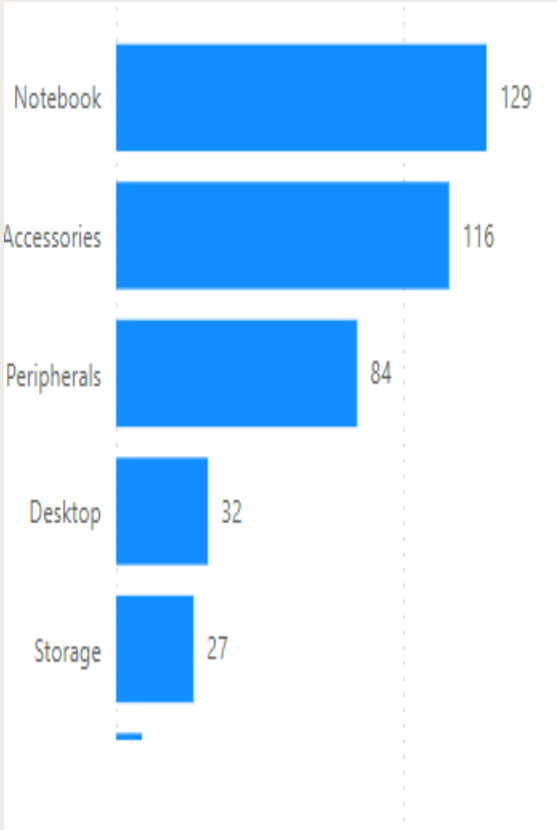
### Insight

- The production and demand is significantly increased



3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

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



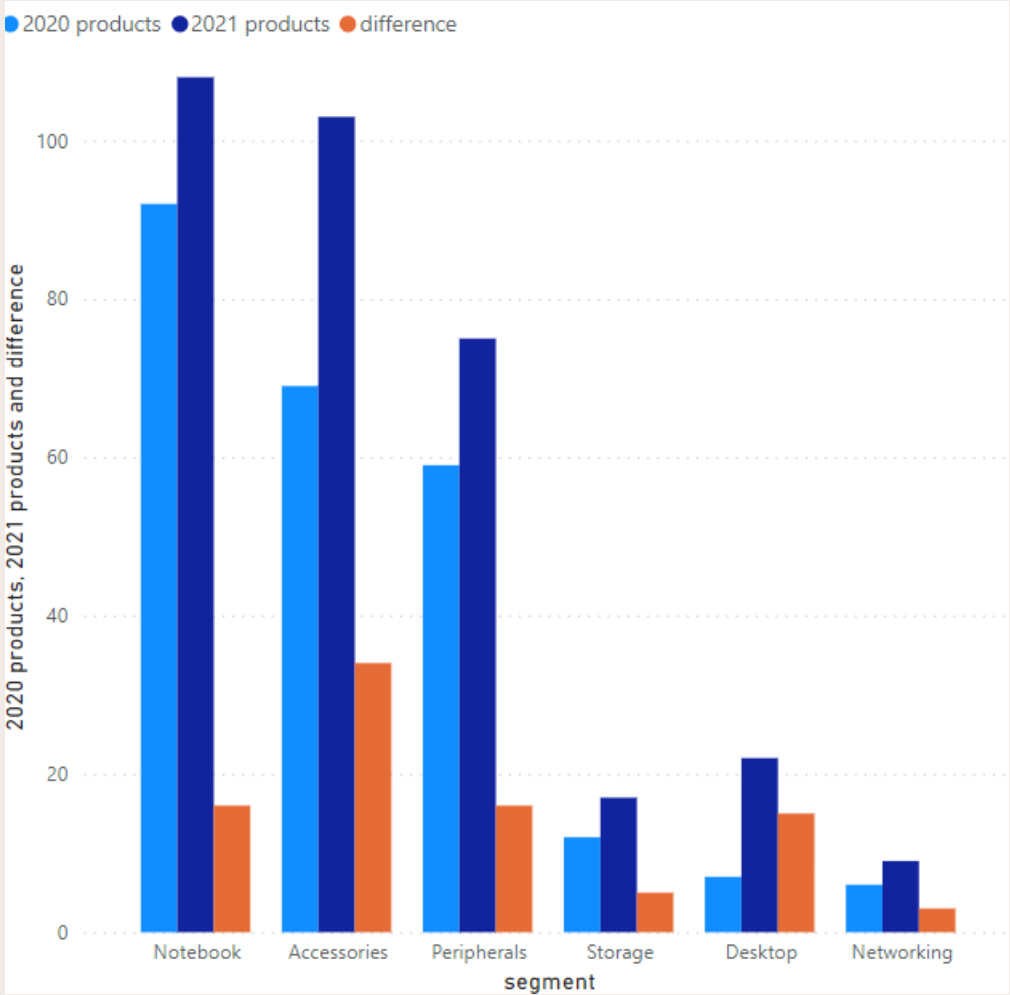
**Insights:** Segments: notebooks, accessories, and peripherals are showing significant manufacturing growth as compared to desktops, storage, and networking

4. Follow-up: Which segment had the most increase in unique products in 2021 vs 2020?

segment	2020_cnt	2021_cnt	difference
Accessories	69	103	34
Desktop	7	22	15
Networking	6	9	3
Notebook	98	108	16
Peripherals	59	75	16
Storage	12	17	5



**Insights:** Accessories had the largest increase in production. Storage and networking are experiencing slower production growth than other segments.



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

product	product_code	manufacturing_cost
AQ HOME Allin1 Gen 2	A6120110206	240.5364
AQ Master wired x1 Ms	A2118150101	0.8920

**Insights:**

**Personal Desktop:** AQ Home Allin1 Gen2

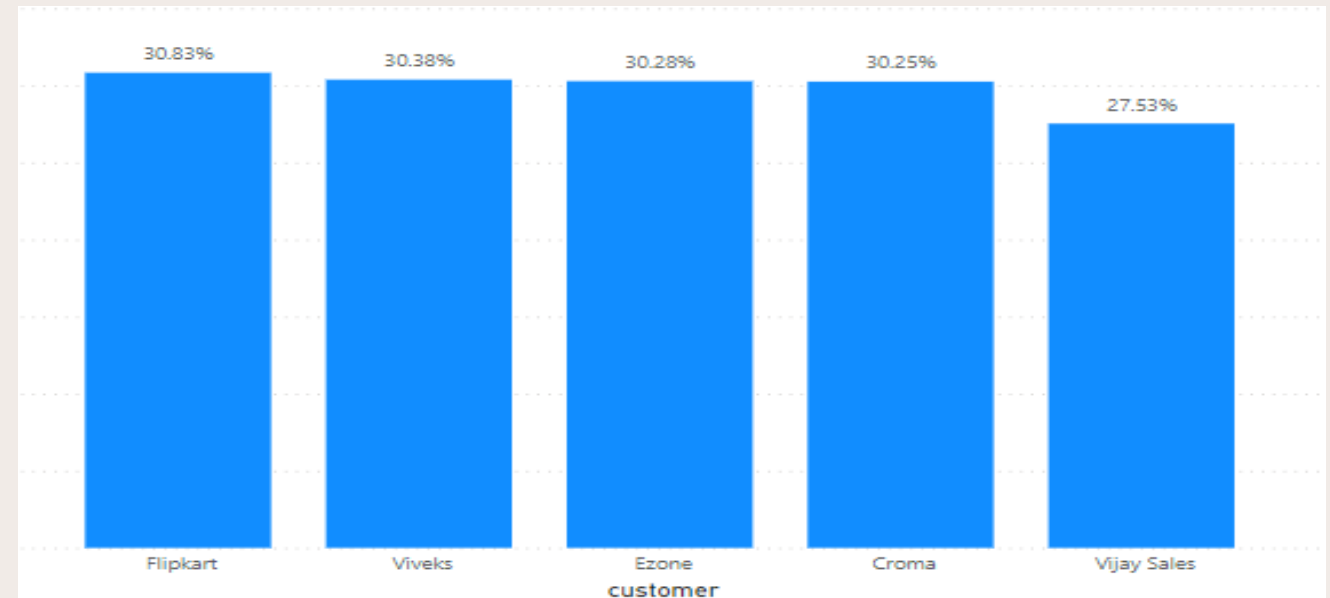
(Variant:Plus3) has the **highest manufacturing cost**

**Mouse:** AQ Master wired x1 Ms (Variant:Standard1) has the **lowest manufacturing cost**.



6. 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	avg pre invoice
Flipkart	30.83%
Viveks	30.38%
Ezone	30.28%
Croma	30.25%
Vijay Sales	27.53%
<b>Total</b>	<b>29.85%</b>



### Insight

The **largest average pre-invoice discount** was given to **Flipkart**

7. Get the complete report of the Gross sales amount for the customer“Atliq Exclusive”for each month. This analysis helps to get an idea of low and high-performing months and take strategic decisions.

**Insights:**

- The lowest Gross sales total for both fiscal years is in **March(2020)**.
- The highest Gross sales total for both fiscal years is in **November (2020)**. 73.8%ofthe total Gross sales figure is in FY2021

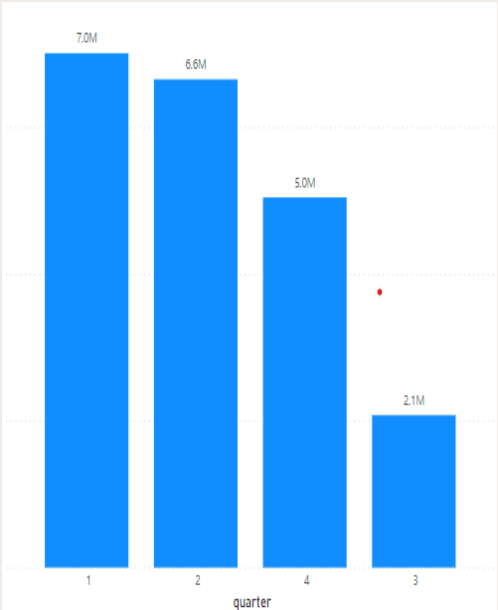
year	month	gross_sales
2019	9	9.09M
2019	10	10.38M
2019	11	15.23M
2019	12	9.76M
2020	1	9.58M
2020	2	8.08M
2020	3	0.77M
2020	4	0.80M
2020	5	1.59M
2020	6	3.43M
2020	7	5.15M
2020	8	5.64M
2020	9	19.53M
2020	10	21.02M
2020	11	32.25M
2020	12	20.41M
2021	1	19.57M
2021	2	15.99M
2021	3	19.15M
2021	4	11.48M
2021	5	19.20M
2021	6	15.46M
2021	7	19.04M
2021	8	11.32M

**FY 2020**

**FY 2021**

8. In which quarter of 2020, got the maximum total\_sold\_quantity? The final output contains these fields sorted by the total\_sold\_quantity

quarter	Sum of sold_quantity
1	7005619
2	6649642
3	2075087
4	5042541



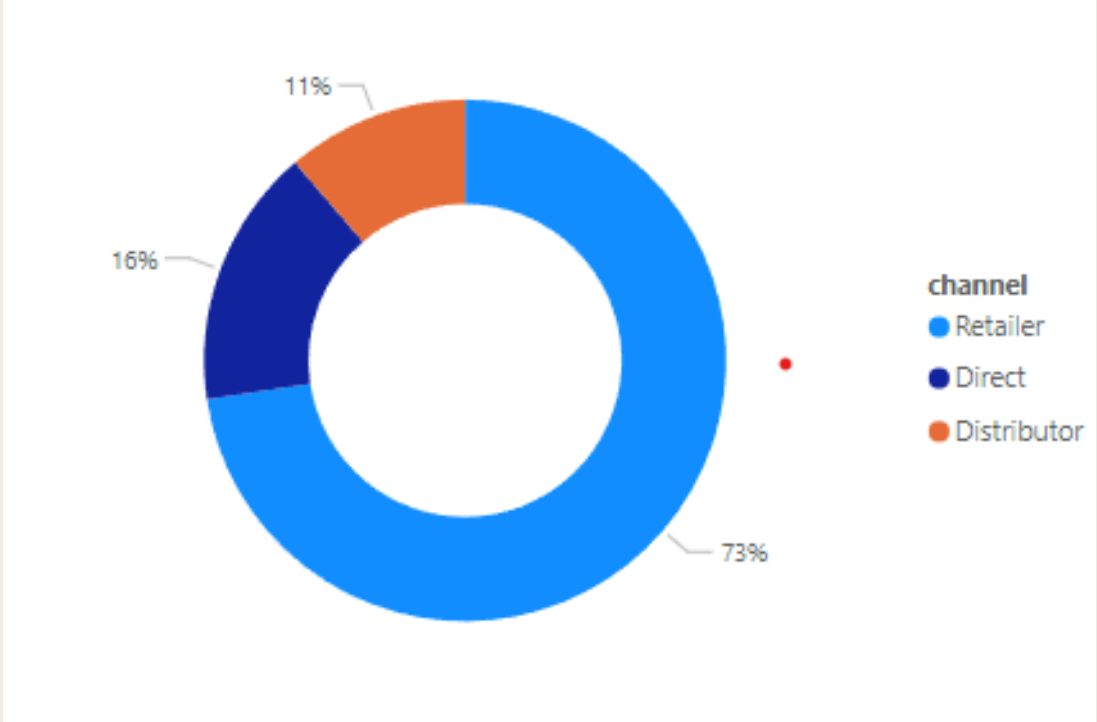
quarter	Month	Sum of sold_quantity
1	September	1764002
1	October	2190792
1	November	3050825
2	January	1762652
2	February	1702785
2	December	3184205
3	March	238961
3	April	819956
3	May	1016170
4	June	1559773
4	July	1692575
4	August	1790193

**insights:** Quarter 1 of FY2020 saw the most units sold overall, while Quarter3 had the fewest

The **highest** and **lowest** overall sold quantity is in December and March.

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

channel	amount	pct
Retailer	1606393221.54	73.00%
Direct	356123812.90	16.00%
Distributor	249859245.99	11.00%

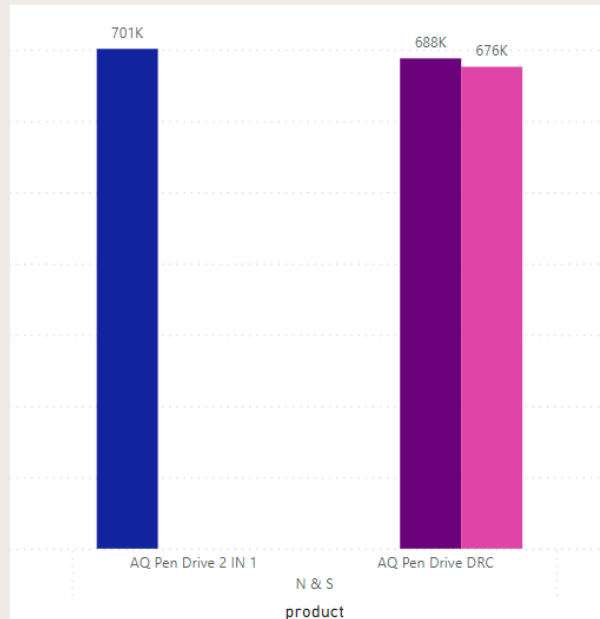


**Insights:** Channel: "Retailer " helped bring maximum sales to the company with 73% as the contribution percentage. Only a very small percentage of our sales happened through direct and distributor channels.

## 10. Get the Top 3 products in each division that have a high total sold quantity in the fiscal year 2021?

division	product_code	product	amount	rank_order
N & S	A6720160103	AQ Pen Drive 2 IN 1	701373	1
N & S	A6818160202	AQ Pen Drive DRC	688003	2
N & S	A6819160203	AQ Pen Drive DRC	676245	3
P & A	A2319150302	AQ Gamers Ms	428498	1
P & A	A2520150501	AQ Maxima Ms	419865	2
P & A	A2520150504	AQ Maxima Ms	419471	3
PC	A4218110202	AQ Digit	17434	1
PC	A4319110306	AQ Velocity	17280	2
PC	A4218110208	AQ Digit	17275	3

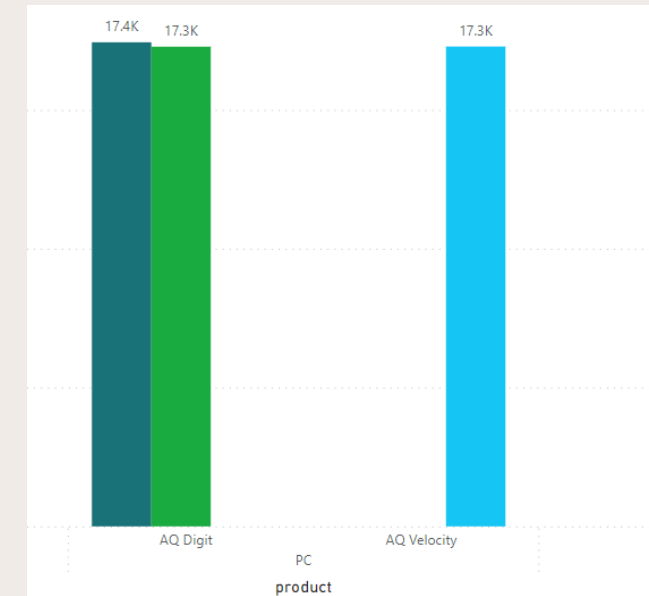
**Insight:** Every division has a product with different variants that appears twice in the top three products by division list



Division N&S



Division P&A



Division Pc