



AtliQ Hardwares

Data-Driven Insights for Smarter Business Decisions

Domain: Consumer Goods

BACKGROUNDS

- Leading computer hardware producer in **India**
- Expanded internationally
- Facing challenges in deriving **quick insights**

PROBLEM STATEMENT

- Management lacks **data-informed decision-making ability**
- Director **Tony Sharma** wants to hire analysts skilled in:
 - Technical SQL problem-solving
 - Soft skills – storytelling with data
- A **SQL Challenge** was launched to evaluate candidates

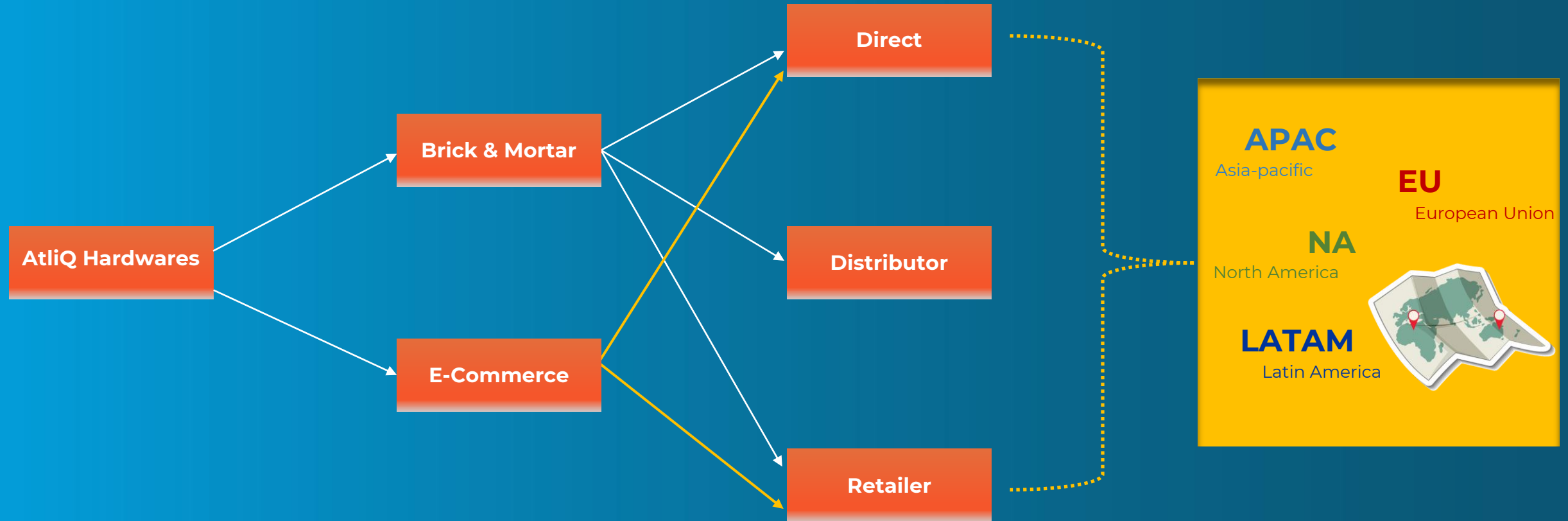


MY OBJECTIVE

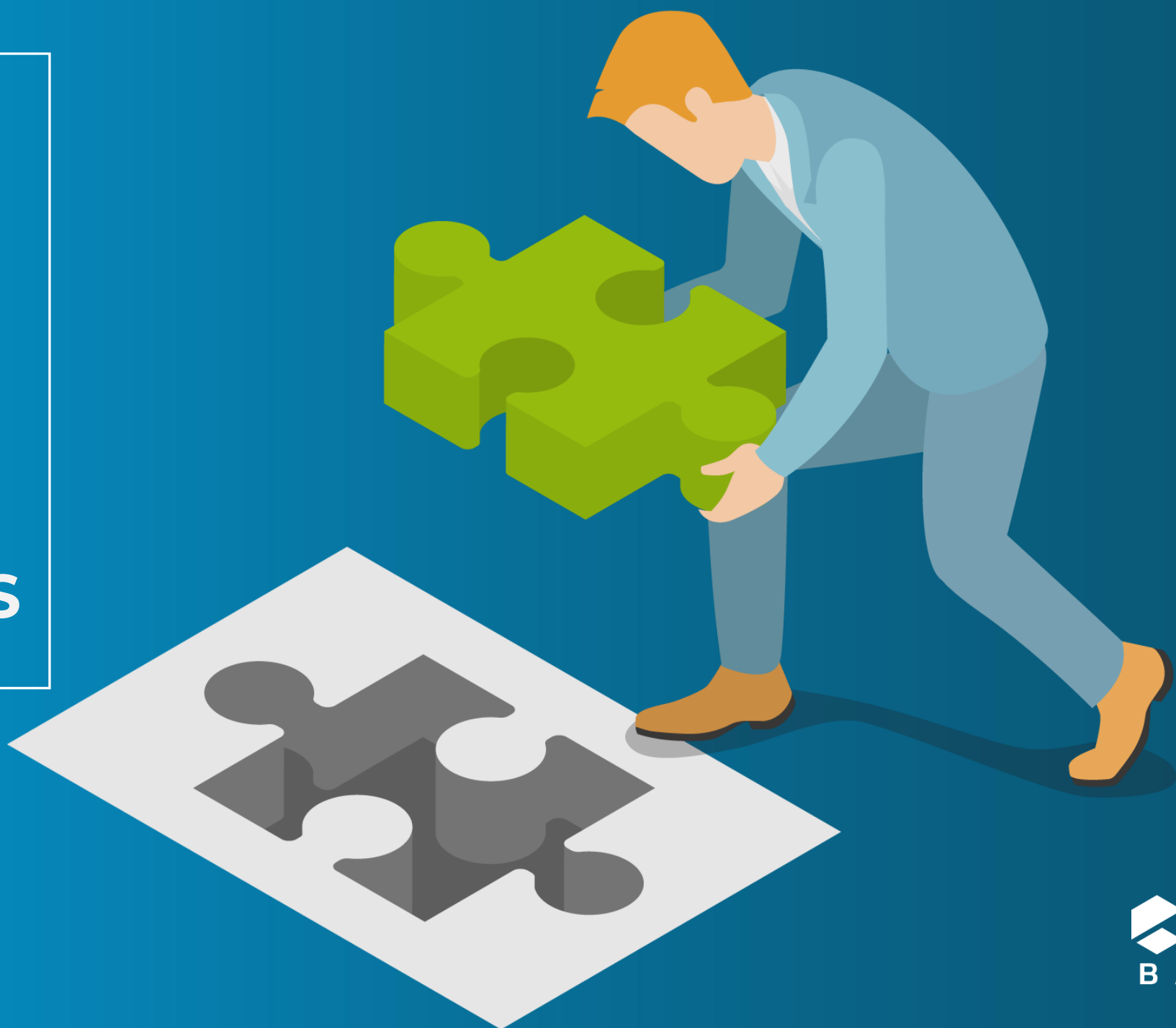
- Use SQL to answer Tony's business questions
- Extract insights from raw data
- Present findings in a **clear, business-focused** manner



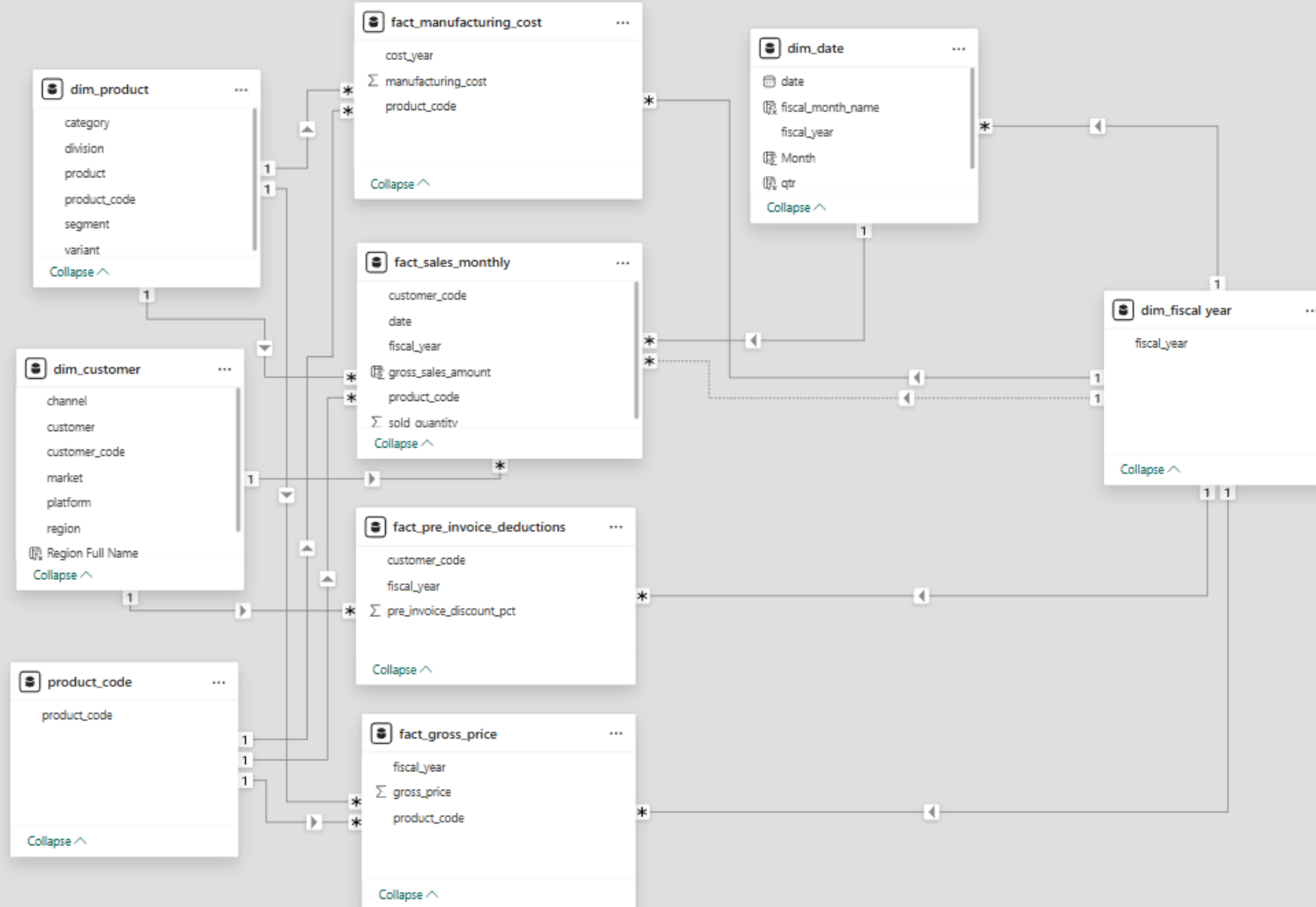
UNDERSTANDING THE BUSINESS



**LET'S DIG
INTO THE
PROBLEM
AND
SOLUTIONS**



DATA MODEL I USED FOR VISUALIZATION



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

From SQL Query

region	market	customer
APAC	Australia	Atliq Exclusive
APAC	Bangladesh	Atliq Exclusive
APAC	India	Atliq Exclusive
APAC	Indonesia	Atliq Exclusive
APAC	Japan	Atliq Exclusive
APAC	Newzealand	Atliq Exclusive
APAC	Philiphines	Atliq Exclusive
APAC	South Korea	Atliq Exclusive

From Power BI

region	market	customer
APAC	Australia	Atliq Exclusive
APAC	Bangladesh	Atliq Exclusive
APAC	India	Atliq Exclusive
APAC	Indonesia	Atliq Exclusive
APAC	Japan	Atliq Exclusive
APAC	Newzealand	Atliq Exclusive
APAC	Philiphines	Atliq Exclusive
APAC	South Korea	Atliq Exclusive



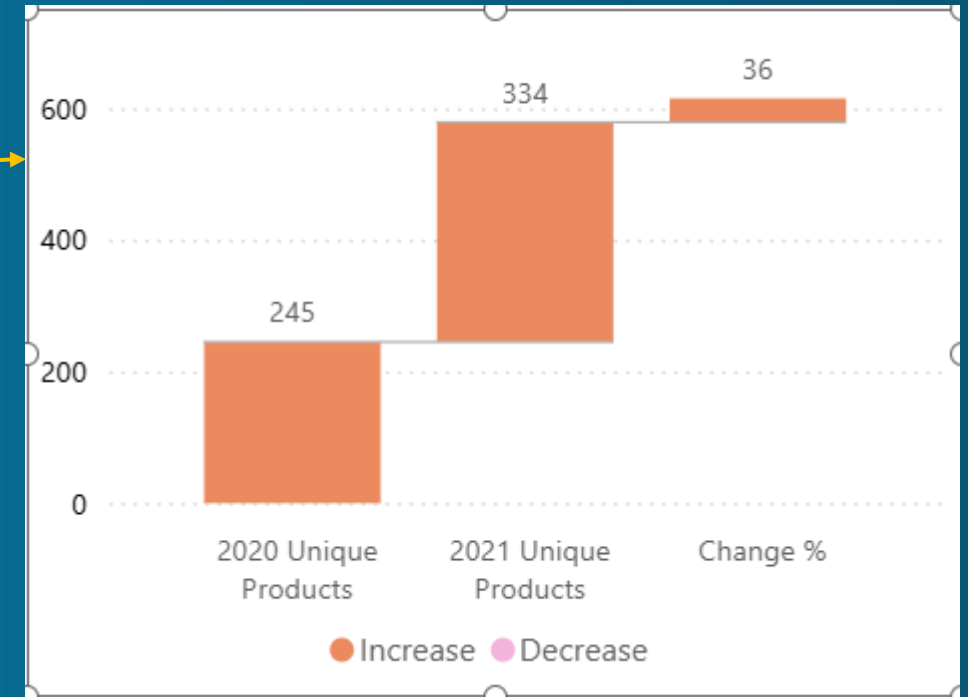
AtliQ Exclusive operates its business at **8 countries** in APAC region

2. What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields,
unique_products_2020
unique_products_2021
percentage_chg

From SQL Query

	unique_product_2020	unique_product_2021	pct_chg
►	245	334	36.3265

From Power BI



Demand of the product in 2021 increases by **36.32%** comparatively in 2020

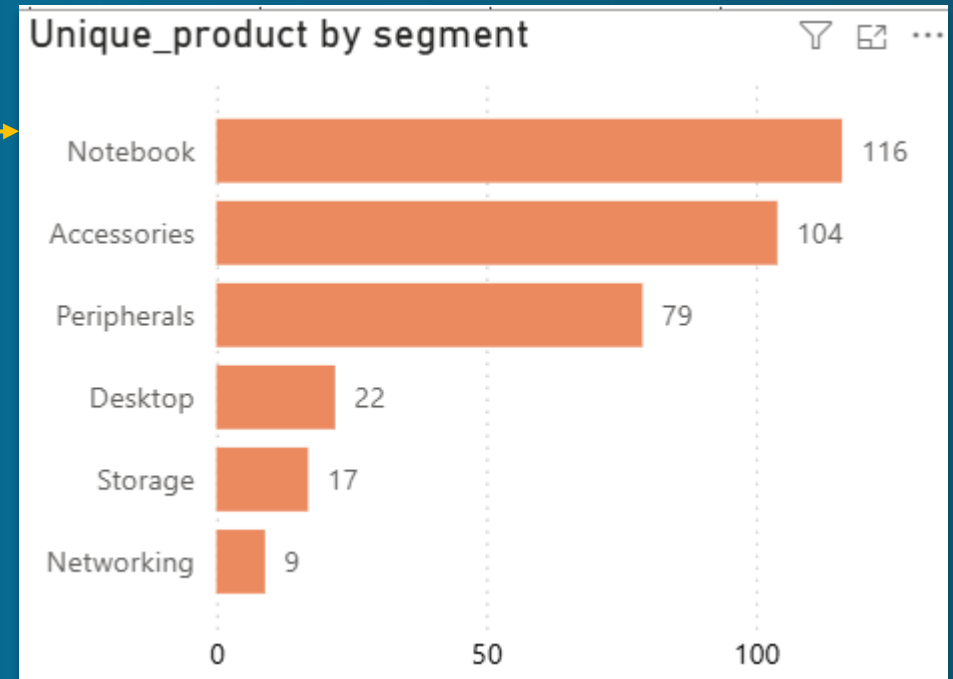
3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields,

segment
product_count

From SQL Query

	Segment	product_count
▶	Notebook	116
	Accessories	104
	Peripherals	79
	Desktop	22
	Storage	17
	Networking	9

From Power BI



Highest selling segment is **Notebook**

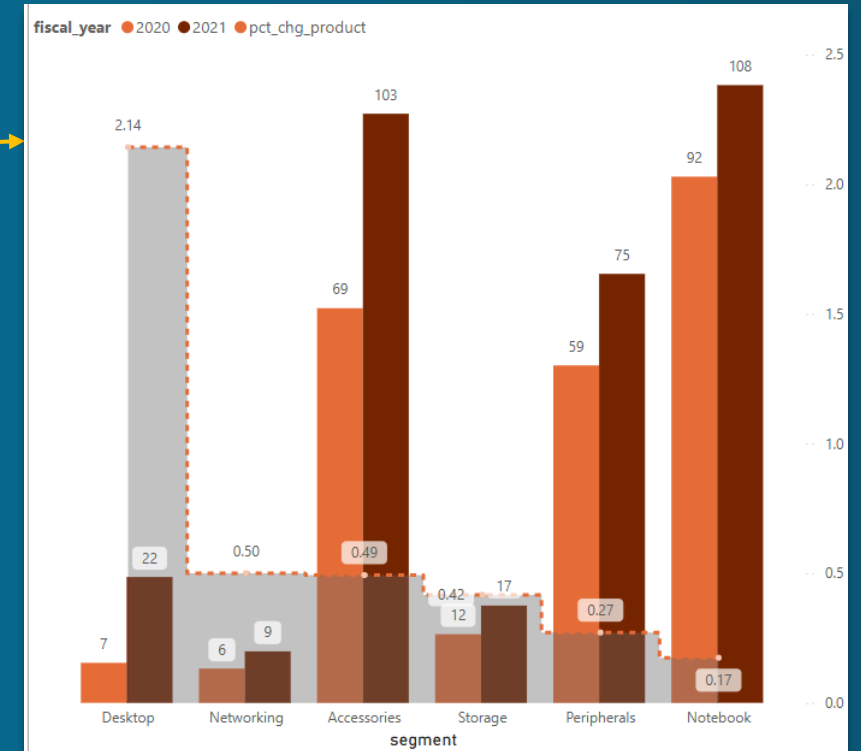
4. Follow-up: Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields,

Segment
product_count_2020
product_count_2021
difference

From SQL Query

	segment	2020_product	2021_product	product_chg_pct
▶	Desktop	7	22	214.29
	Networking	6	9	50.00
	Accessories	69	103	49.28
	Storage	12	17	41.67
	Peripherals	59	75	27.12
	Notebook	92	108	17.39

From Power BI



Demand of the desktop in 2021 increases by **214.29%** comparatively in 2020

5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields, **product_code**

Product

Manufacturing_cost

From Power BI

From SQL Query

	product_code	product	avg_manufacturing_cost
▶	A6120110206	AQ HOME Allin1 Gen 2	240.54
	A2118150101	AQ Master wired x1 Ms	0.91

product	avg_cost
AQ HOME Allin1 Gen 2	240.54
AQ Master wired x1 Ms	0.91

The highest manufacturing cost is INR **240.54** and the lowest manufacturing cost is INR **0.91**

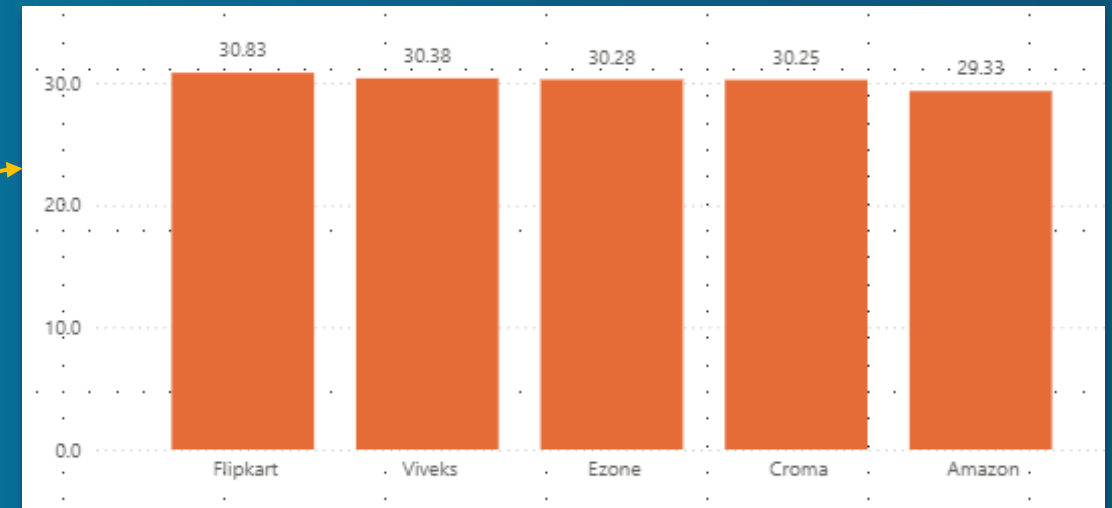
6. Generate a report which contains the top 5 customers who received an average high pre_invoice_discount_pct for the fiscal year 2021 and in the Indian market. The final output contains these fields,

customer_code
customer
average_discount_percentage

From Power BI

From SQL Query

	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



The highest pre invoice discount is given to Flipkart at **30.83%** for the financial year-2021 and market- India

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. The final report contains these columns:

From SQL Query

fiscal_month	sales_2020	sales_2021
1	4.50	12.35
2	5.14	13.22
3	7.52	20.46
4	4.83	12.94
5	4.74	12.40
6	4.00	10.13
7	0.38	12.14
8	0.40	7.31
9	0.78	12.15
10	1.70	9.82
11	2.55	12.09
12	2.79	7.18

Month Year
Gross sales Amount

From Power BI

fiscal_month_name	2020	2021	Total
September	\$4.50M	\$12.35M	\$16.85M
October	\$5.14M	\$13.22M	\$18.35M
November	\$7.52M	\$20.46M	\$27.99M
December	\$4.83M	\$12.94M	\$17.78M
January	\$4.74M	\$12.40M	\$17.14M
February	\$4.00M	\$10.13M	\$14.13M
March	\$0.38M	\$12.14M	\$12.52M
April	\$0.40M	\$7.31M	\$7.71M
May	\$0.78M	\$12.15M	\$12.93M
June	\$1.70M	\$9.82M	\$11.52M
July	\$2.55M	\$12.09M	\$14.64M
August	\$2.79M	\$7.18M	\$9.97M
Total	\$39.31M	\$142.21M	\$181.53M

The total Gross Sales Amount for “Atliq Exclusive” is **181.53** millions in the fiscal year 2020-2021

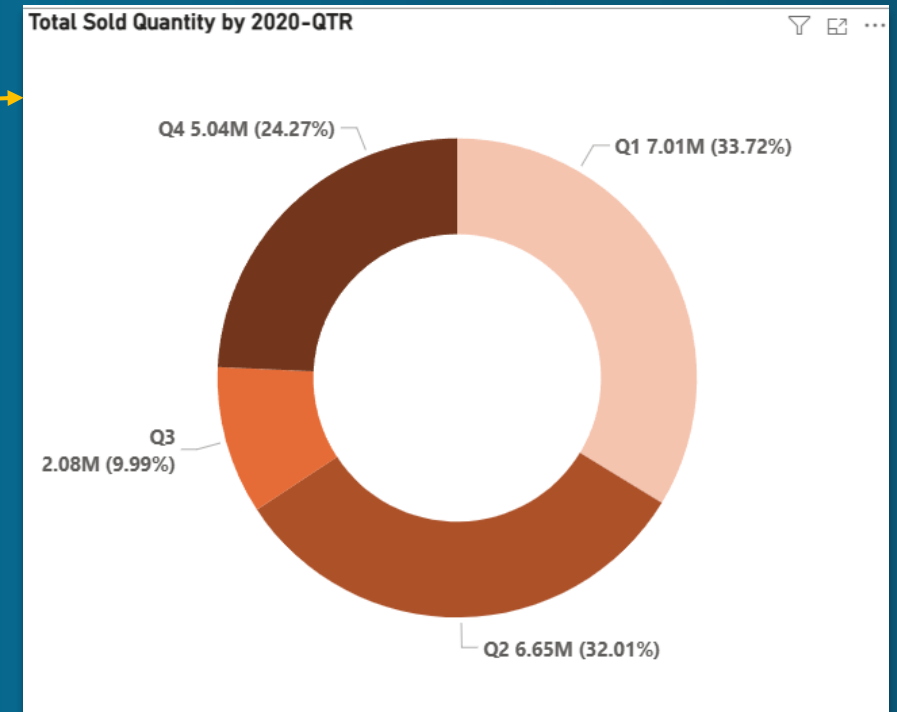
8.In which quarter of 2020, got the maximum total_sold_quantity? The final output contains these fields sorted by the

total_sold_quantity,
Quarter total_sold_quantity

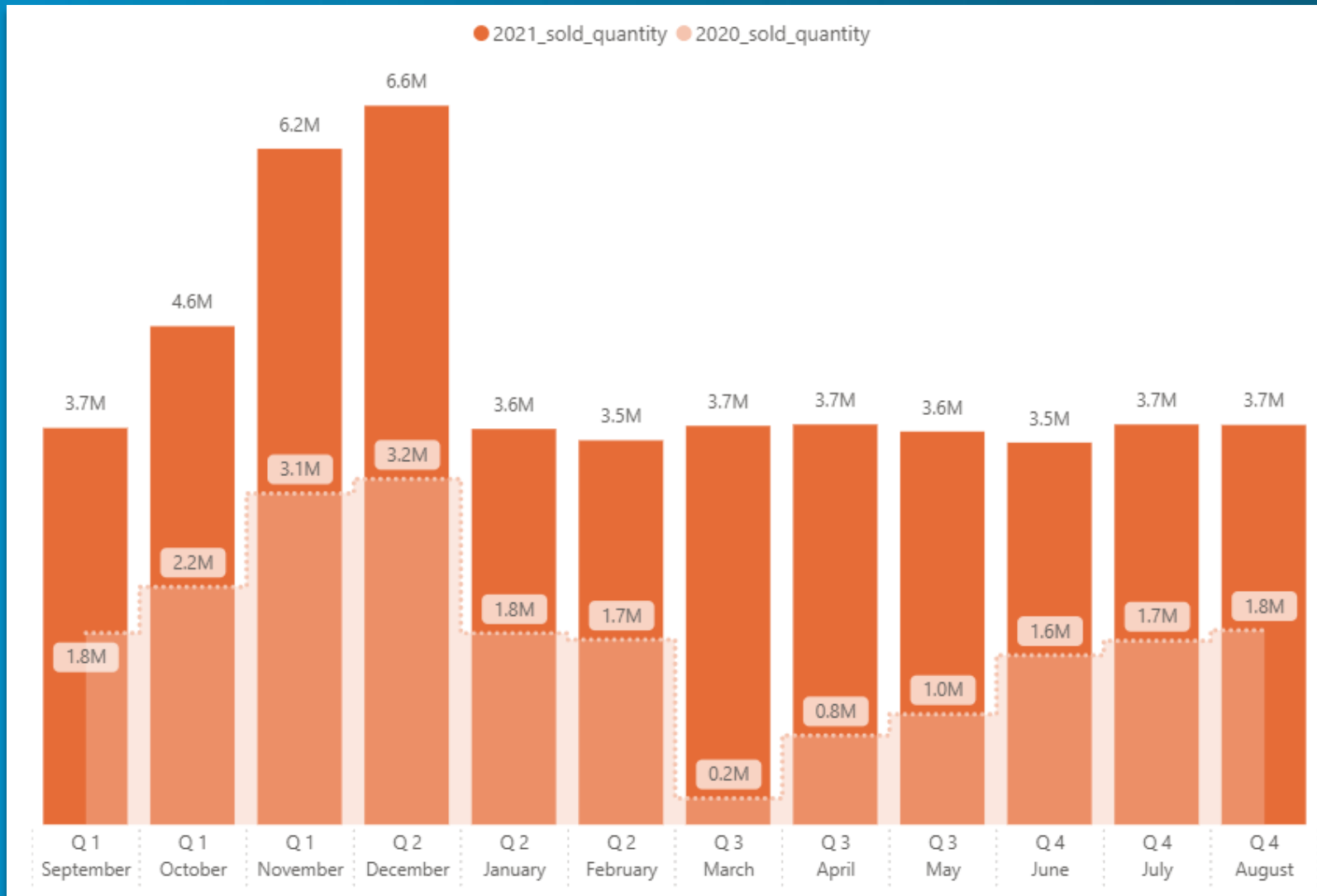
From SQL Query

qtr	total_sold_quantity
Q 1	7.01
Q 2	6.65
Q 3	2.08
Q 4	5.04

From Power BI



The lowest performing quarter in 2020 is Q3 at **2.08** millions which is **9.99%** of total sold quantity



We can clearly see that in Q3 performed at lowest. As we all know that **Covid-19** hit world-wide in this period

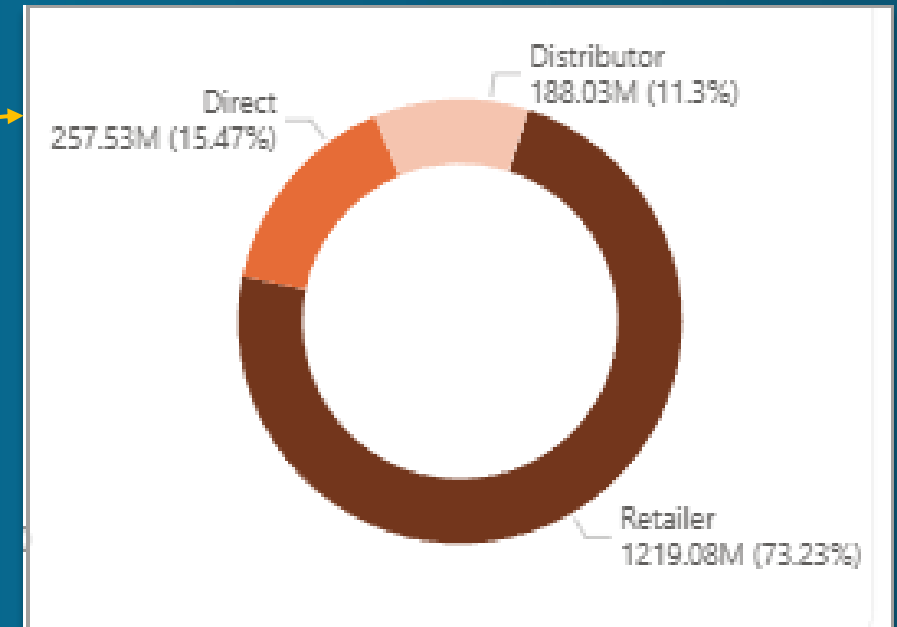
9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields,

channel
gross_sales_mln percentage

From SQL Query

channel	gross_sales_mln	percentage
Retailer	1219.08	73.23
Direct	257.53	15.47
Distributor	188.03	11.30

From Power BI



The highest contributing channel in **2021** is Retailer which contributed **1219.08** millions by **70.73%**

10. Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021? The final output contains these fields,

division
product_code
Product
total_sold_quantity
rank_order

From SQL Query

	division	product_code	product	total_sold_quantity	drank
▶	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

From Power BI

division	product_code	product	2021_sold_quantity	Product Rank
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

Each Division has its top 3 products by total sold quantity

THANK



Dhaval Patel



Hemanand Vadivel

 ODE
BASICS
TEAM