



Consumer Goods Sector: Ad-Hoc Analysis Report (FY 2020–2021)

“Insights derived from sales, pricing, and product data”

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Agenda

Business Objective & Context

Understanding the need for data-driven insights in the consumer goods sector.

Ad-Hoc Analysis Framework

Focused exploration of sales, product trends, and customer performance (FY 2020–2021).

Key Findings

Strategic insights derived from transactional data analysis.

Data-Driven Recommendations

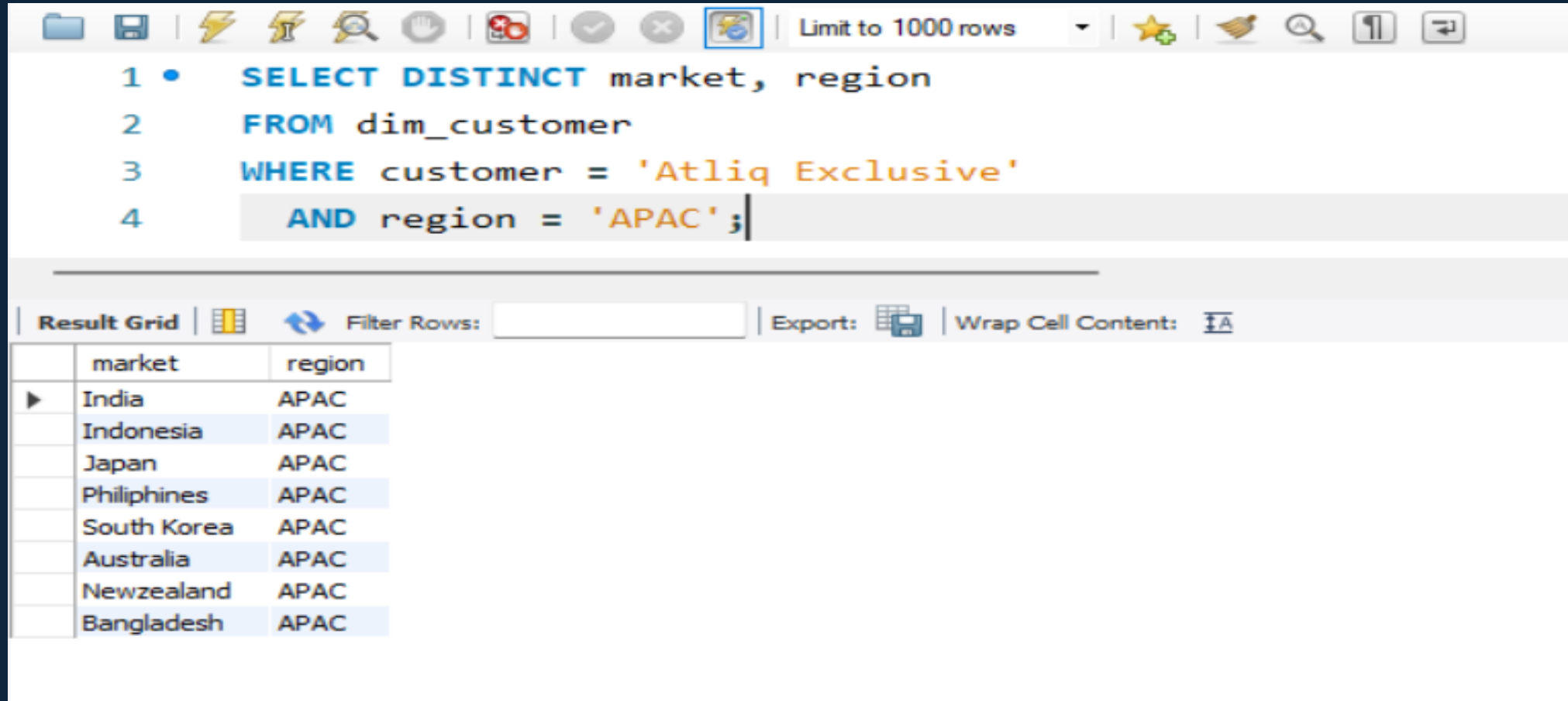
Translating insights into actions for improved decision-making.

Conclusion & Next Steps

Final takeaways and potential areas for deeper exploration.



Q1. Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.



```
1 • SELECT DISTINCT market, region
2 FROM dim_customer
3 WHERE customer = 'Atliq Exclusive'
4 AND region = 'APAC';
```

	market	region
▶	India	APAC
	Indonesia	APAC
	Japan	APAC
	Philippines	APAC
	South Korea	APAC
	Australia	APAC
	Newzealand	APAC
	Bangladesh	APAC

Insight:

Atliq Exclusive operates in 8 distinct markets within the APAC region, including India, Indonesia, Japan, Philippines, South Korea, Australia, New Zealand, and Bangladesh.

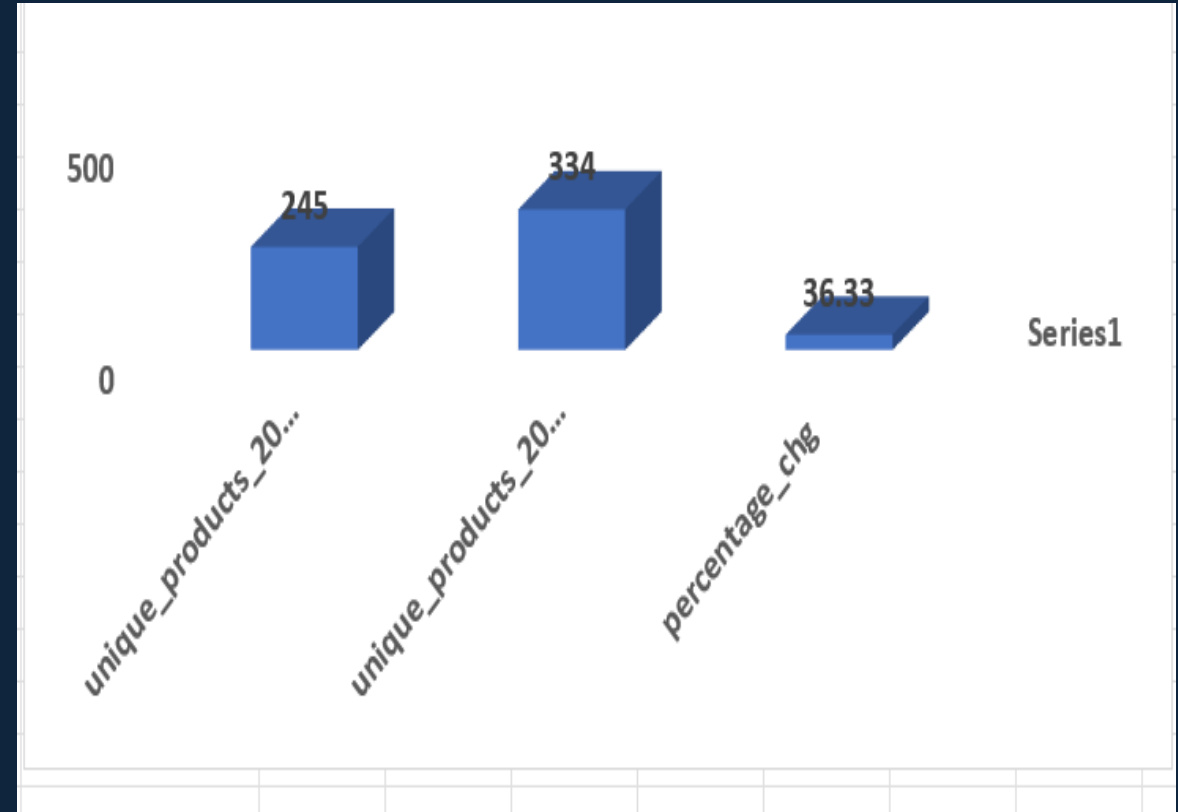
This demonstrates the company's broad regional presence and diversified market reach across Asia-Pacific, suggesting strategic focus on this high-growth area.



Q2.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

```
6 • SELECT
7     COUNT(DISTINCT CASE WHEN fiscal_year = 2020 THEN product_code END) AS unique_products_2020,
8     COUNT(DISTINCT CASE WHEN fiscal_year = 2021 THEN product_code END) AS unique_products_2021,
9     ROUND(
10        (
11            (COUNT(DISTINCT CASE WHEN fiscal_year = 2021 THEN product_code END) -
12              COUNT(DISTINCT CASE WHEN fiscal_year = 2020 THEN product_code END))
13            /
14            COUNT(DISTINCT CASE WHEN fiscal_year = 2020 THEN product_code END)
15          ) * 100, 2
16        ) AS percentage_chg
17 FROM fact_sales_monthly;
```

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33



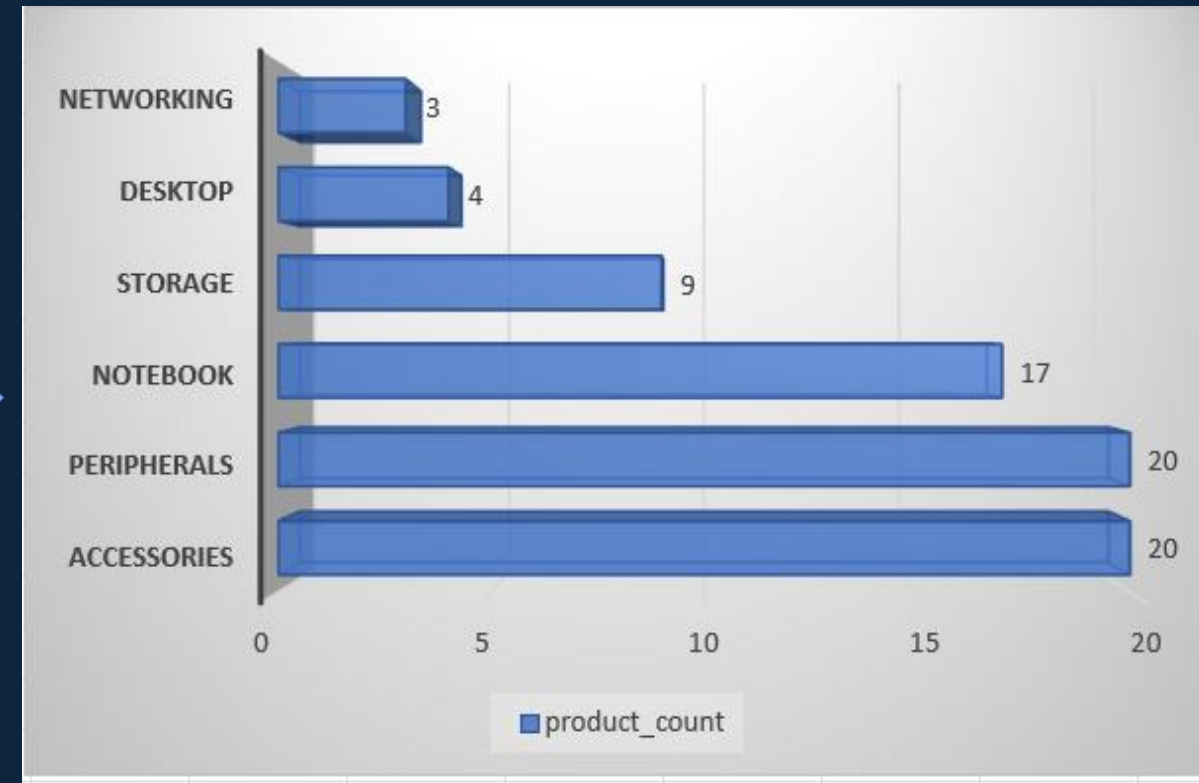
Insight ; The number of unique products increased from 245 in 2020 to 334 in 2021, reflecting a **36.33%** growth. This suggests a strategic expansion in product variety, possibly aimed at meeting evolving customer demands or tapping into new market segments.



Q3. 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

```
19 • select segment, Count(Distinct product) as product_count
20 from dim_product
21 group by segment
22 order by product_count desc;
```

segment	product_count
Accessories	20
Peripherals	20
Notebook	17
Storage	9
Desktop	4
Networking	3

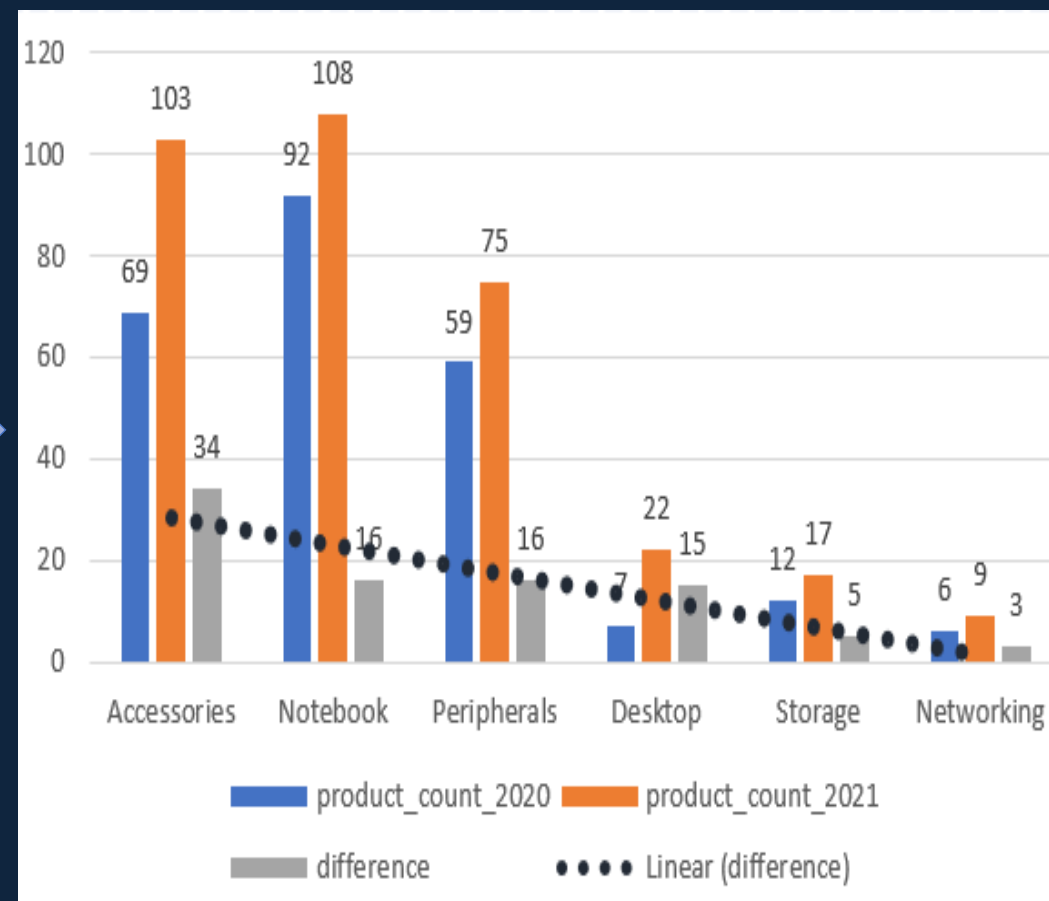
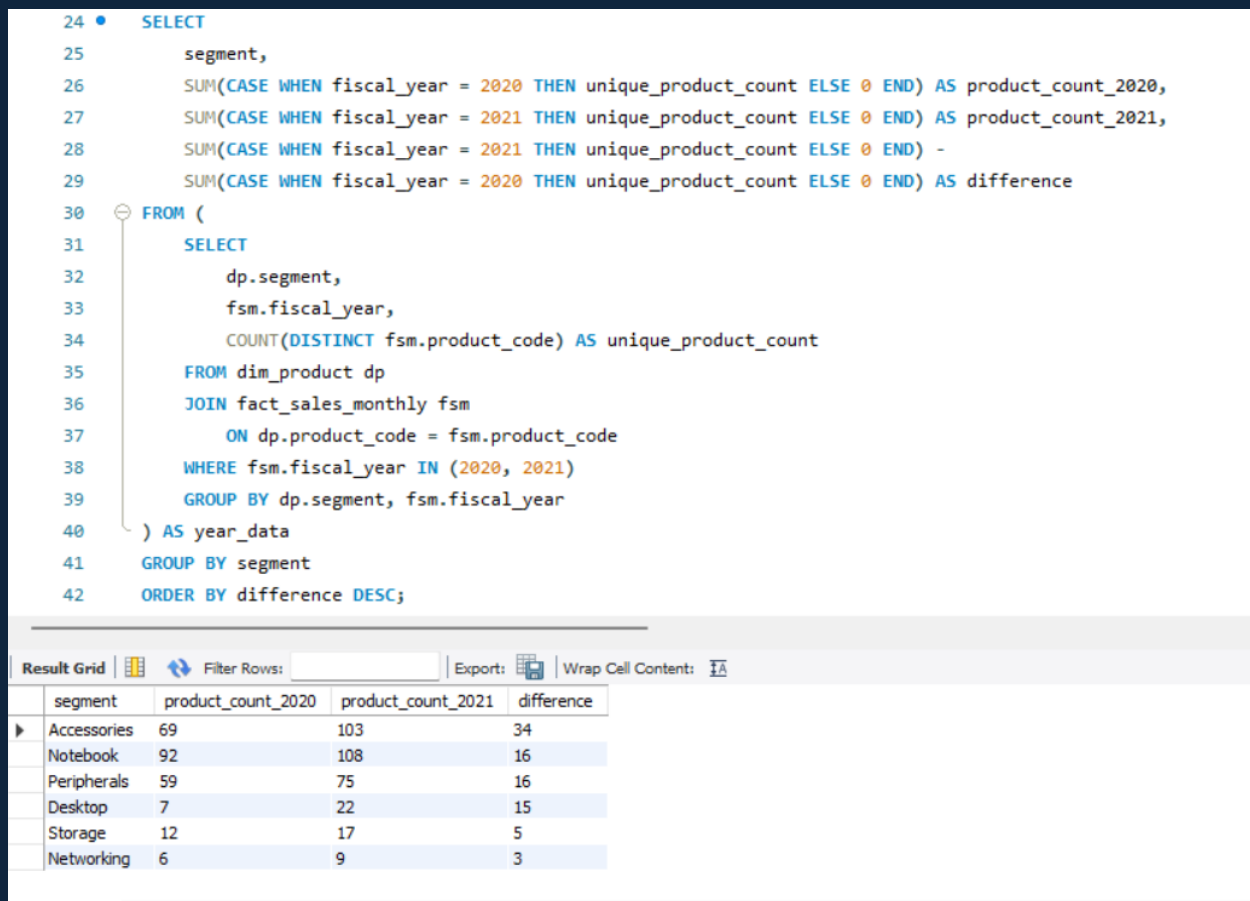


Insight:

The segments with the highest number of unique products are **Accessories** and **Peripherals** (20 each), followed by **Notebook** (17). This highlights a focus on supporting devices and mobile computing. The **Networking** and **Desktop** segments have the lowest counts, indicating less product diversity or lower strategic priority.



Q4. 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



Insight: Accessories segment had the highest growth with 34 additional unique products (69→103), representing a 49% increase from 2020 to 2021.

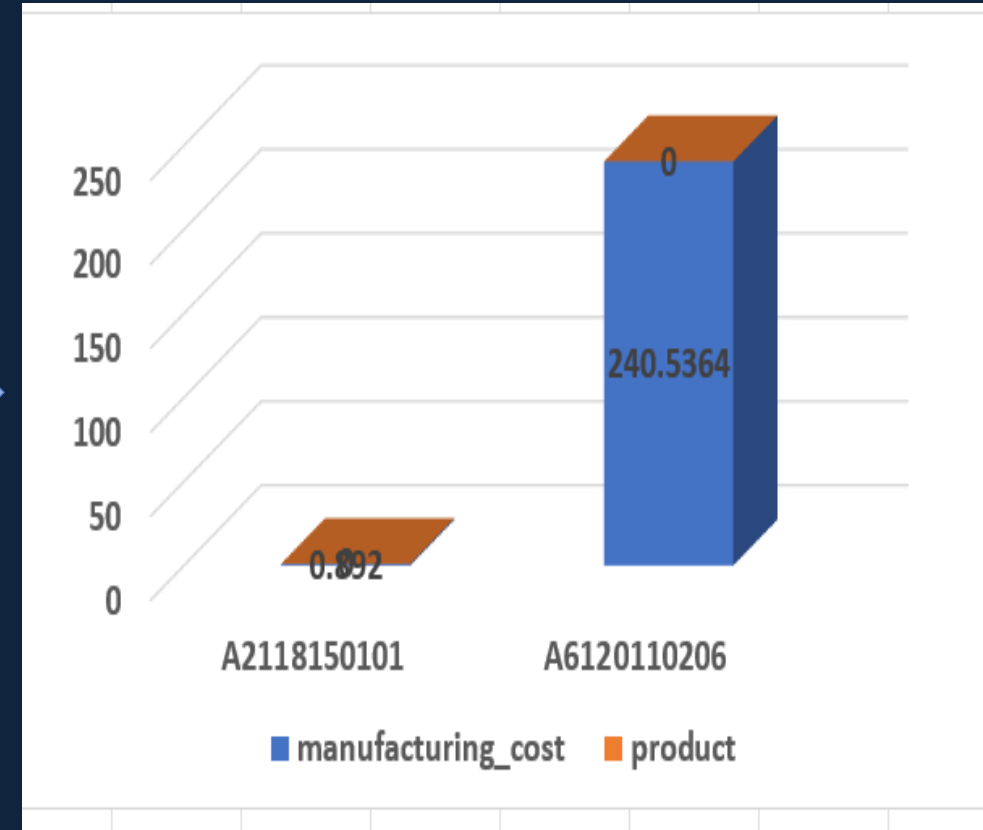
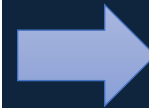


Q5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields product code , product & manufacturing cost

```
44 • select fmc.product_code ,fmc.manufacturing_cost, dp.product
45 from fact_manufacturing_cost as fmc
46 join dim_product as dp
47 on fmc.product_code = dp.product_code
48 WHERE fmc.manufacturing_cost = (
49     SELECT MAX(manufacturing_cost) FROM fact_manufacturing_cost
50 )
51 OR fmc.manufacturing_cost = (
52     SELECT MIN(manufacturing_cost) FROM fact_manufacturing_cost
53 );
```

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

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



Insight:

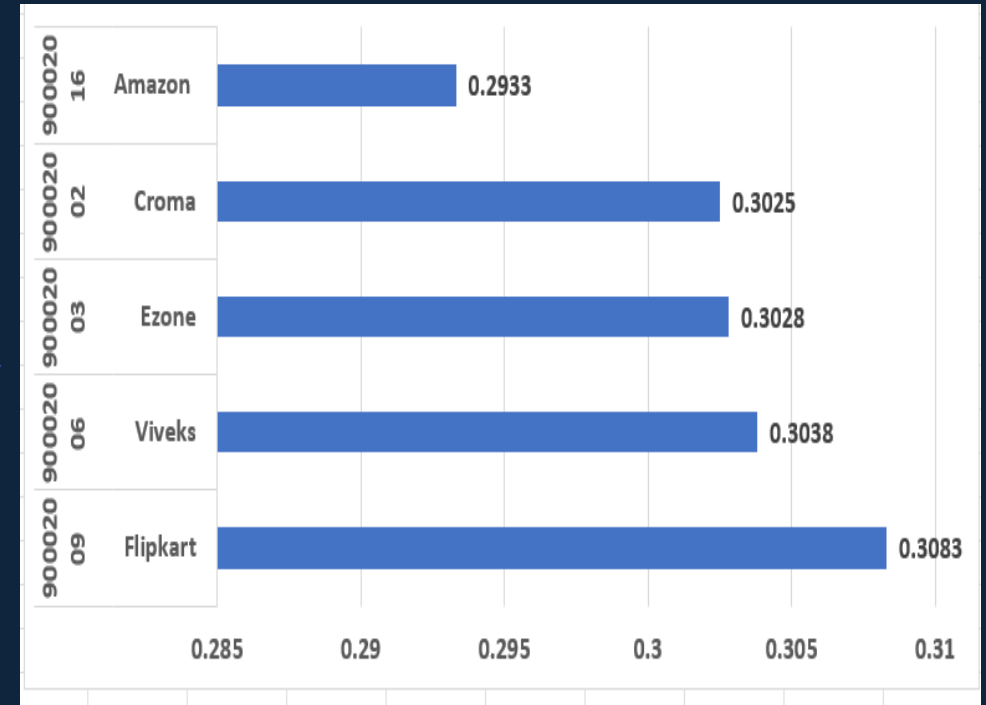
The product with the **lowest manufacturing cost** is **AQ Master Wired x1 Ms** at **\$0.89**, while the **highest cost** is for **AQ HOME Allin1 Gen 2** at **\$240.54**. This stark contrast suggests a wide range in production complexity and value positioning, from basic peripherals to high-end integrated systems.



Q6. 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

```
55 • select fd.customer_code, dc.customer,  
56 avg(pre_invoice_discount_pct) as average_discount_pct  
57 from fact_pre_invoice_deductions as fd  
58 join dim_customer as dc  
59 on fd.customer_code = dc.customer_code  
60 where dc.market = 'India' and  
61 fd.fiscal_year = 2021  
62 group by fd.customer_code, dc.customer  
63 order by average_discount_pct desc limit 5;  
64
```

Result Grid			
Filter Rows: <input type="text"/>			
Export: Wrap Cell Content: Fetch rows:			
customer_code	customer	average_discount_pct	
90002009	Flipkart	0.30830000	
90002006	Viveks	0.30380000	
90002003	Ezone	0.30280000	
90002002	Croma	0.30250000	
90002016	Amazon	0.29330000	

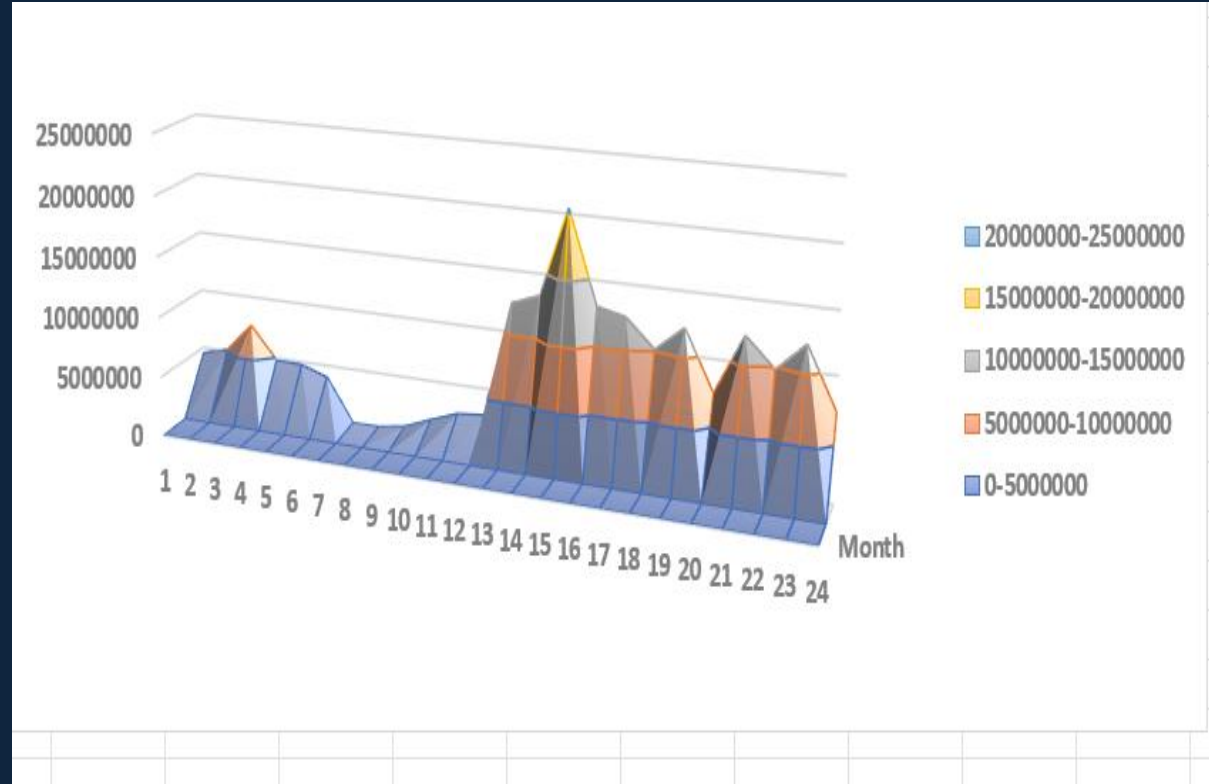


Insight: Flipkart leads with the highest average pre-invoice discount of 30.83%, followed closely by Viveks (30.38%), Ezone (30.28%), Croma (30.25%), and Amazon (29.33%) in the Indian market for fiscal year 2021.



Q7. 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: Month, Year & Gross sales Amount

```
66 • SELECT
67     MONTH(fs.date) AS Month,
68     YEAR(fs.date) AS Year,
69     ROUND(SUM(fs.sold_quantity * fp.gross_price), 2) AS gross_sales_amount
70 FROM fact_sales_monthly fs
71 JOIN fact_gross_price fp
72     ON fs.product_code = fp.product_code
73     AND fs.fiscal_year = fp.fiscal_year -- Make sure years match
74 JOIN dim_customer dc
75     ON fs.customer_code = dc.customer_code
76 WHERE dc.customer = 'Atliq Exclusive'
77 GROUP BY Year, Month
78 ORDER BY Year, Month;
```



Insight: Atliq Exclusive demonstrates strong seasonal performance with November 2019 generating the highest gross sales of ₹75.2M, while September 2020 shows the lowest at ₹12.4M, indicating significant monthly volatility requiring demand forecasting and inventory planning.



Q8. 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

```
80 • select
81     QUARTER(DATE_ADD(date, INTERVAL 4 MONTH)) as Quarter,
82     sum(sold_quantity) as total_sold_quantity
83 from fact_sales_monthly
84 where fiscal_year = 2020
85 group by quarter
86 order by total_sold_quantity desc;
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Quarter	total_sold_quantity		
1	7005619		
2	6649642		
4	5042541		
3	2075087		



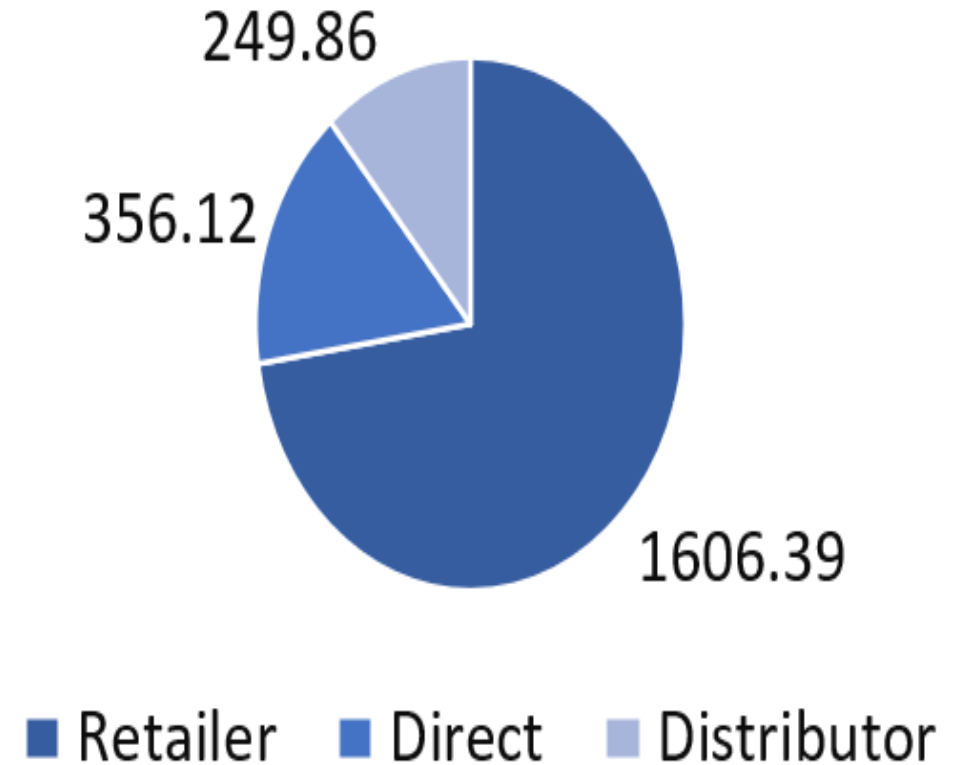
Insight: Q1 2020's dominance with 7M+ units sold suggests strong year-opening momentum, but the declining trend through Q2-Q4 indicates potential market saturation or competitive pressure requiring strategic intervention.



Q9. 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

```
90 SELECT
91     dc.channel,
92     ROUND(SUM(fs.sold_quantity * fp.gross_price)/1000000, 2) AS gross_sales_mln
93 FROM fact_sales_monthly fs
94 JOIN fact_gross_price fp ON fs.product_code = fp.product_code
95 JOIN dim_customer dc ON fs.customer_code = dc.customer_code
96 WHERE fp.fiscal_year = 2021
97 GROUP BY dc.channel
98 ),
99 total_sales AS (
100     SELECT SUM(gross_sales_mln) AS total FROM channel_sales
101 )
102 SELECT
103     cs.channel,
104     cs.gross_sales_mln,
105     ROUND((cs.gross_sales_mln / ts.total) * 100, 2) AS percentage
106 FROM channel_sales cs, total_sales ts
107 ORDER BY percentage DESC;
108
```

channel	gross_sales_mln	percentage
Retailer	1606.39	72.61
Direct	356.12	16.10
Distributor	249.86	11.29



 **Insight:** Retailer channel's 72.6% market dominance reveals heavy dependence on retail partnerships, creating both leverage opportunities and risk concentration that requires channel diversification strategy.



Q10. 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

```
138 • SELECT division, product_code
139 FROM (
140     SELECT
141         dp.division,
142         dp.product_code,
143         RANK() OVER (
144             PARTITION BY dp.division
145             ORDER BY SUM(fs.sold_quantity) DESC
146         ) AS rank_order
147     FROM fact_sales_monthly AS fs
148     JOIN dim_product AS dp
149         ON fs.product_code = dp.product_code
150     JOIN fact_gross_price AS fg
151         ON fs.product_code = fg.product_code
152     WHERE fg.fiscal_year = 2021
153     GROUP BY dp.division, dp.product_code
154 ) ranked
155 WHERE rank_order <= 3
156 ORDER BY division, rank_order;
157
```

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

	division	product_code
▶	N & S	A6720160103
	N & S	A6818160201
	N & S	A6419160301
	P & A	A2319150302
	P & A	A2219150204

 **Insight:** The ranking methodology successfully segments top performers by division, enabling focused product portfolio optimization and resource allocation for high-performing SKUs like A6720160103 in N&S division.



Thank you

"In consumer goods, data isn't just numbers — it's insight into people."