



AtliQ Hardwares

AD HOC BUSINESS INSIGHTS
REQUESTS

BY: JOÃO PEDRO

PURPOSE

THE PURPOSE OF THIS PRESENTATION IS TO SHOW STAKEHOLDERS FROM ATLIQ HARDWARES STORE INSIGHTS FROM THE COMPANY'S DATA THROUGH AD HOC ANALYSIS OF THEIR DATABASE

THIS WILL INCREASE KNOWLEGDE TO FACILITATE DATA DRIVEN BUSINESS DECISIONS

ALL DATA IS AVAILABLE IN THE PROJECT'S FOLDER ON [GITHUB](#),
INCLUDING DATABASE **SQL** FILE AND **SQL** QUERIES

MARKETS IN WHICH CUSTOMER ATLIQ EXCLUSIVE OPERATES IT'S BUSINESS IN THE APAC REGION.



market
Japan
India
South Korea
Indonesia
Australia
Newzealand
Philiphines
Bangladesh

ATLIQ EXCLUDE OPERATES IN 5 OF THE TOP 6 GPD COUNTRIES IN THE APAC REGION
(CHINA IS THE ONLY NOT INCLUDED COUNTRY)

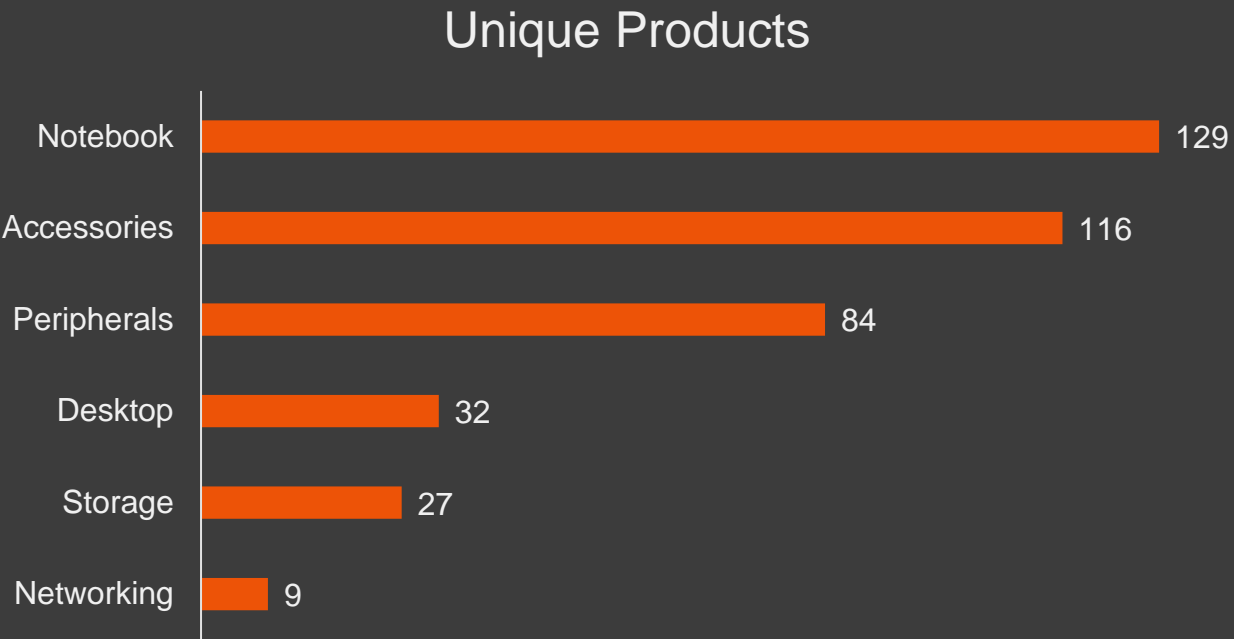
WHAT IS THE PERCENTAGE OF UNIQUE PRODUCT INCREASE IN 2021 VS. 2020?

unique_products_2020	unique_products_2021	percentage_chg
245	334	+36%

REPORT WITH ALL THE UNIQUE PRODUCT COUNTS FOR EACH SEGMENT
AND SORT THEM IN DESCENDING ORDER OF PRODUCT COUNTS

NUMBER OF UNIQUE PRODUCTS FOR EACH SEGMENT

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



NOTEBOOKS HAVE THE HIGHEST NUMBER OF UNIQUE PRODUCTS, A VARIETY OF 129 PRODUCTS
NETWORKING PRODUCTS ONLY HAVE 9, THE LOWEST VARIETY

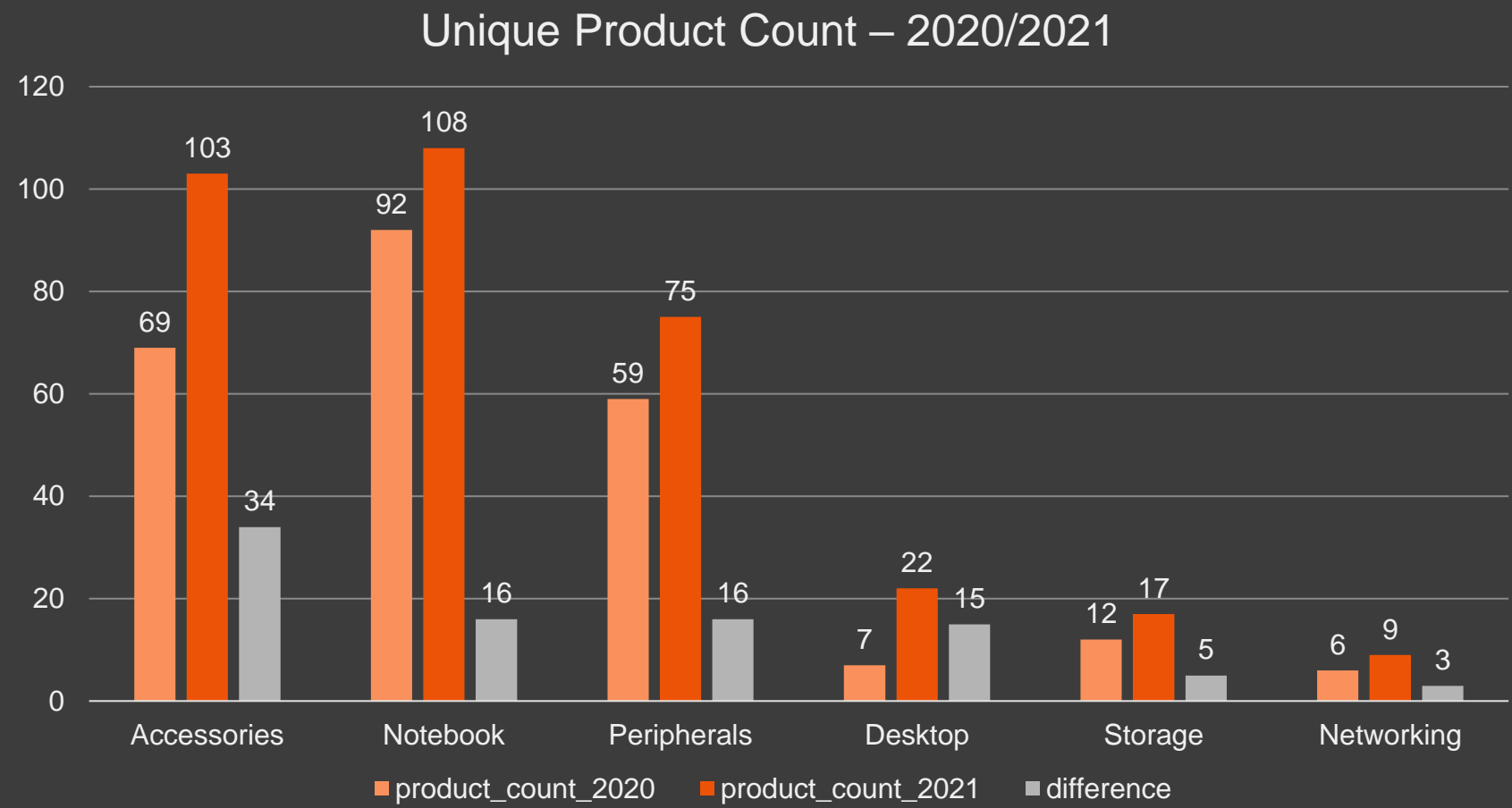
WHICH SEGMENT HAD THE MOST INCREASE IN UNIQUE PRODUCTS IN 2021 VS 2020?

segment	product_count_2020	product_count_2021	difference	percentage
Accessories	69	103	34	+49%
Notebook	92	108	16	+17%
Peripherals	59	75	16	+27%
Desktop	7	22	15	+214%
Storage	12	17	5	+42%
Networking	6	9	3	+50%

THE ACCESSORIES SEGMENT HAD THE GREATEST INCREASE IN RAW AMOUNT OF PRODUCT DIVERSITY

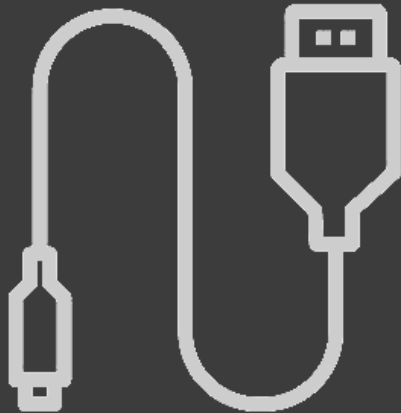
BUT THE DESKTOP SEGMENT HAD THE GREATEST INCREASE PERCENTAGE-WISE

WHICH SEGMENT HAD THE MOST INCREASE IN UNIQUE PRODUCTS IN 2021 VS 2020?



PRODUCTS THAT HAVE THE HIGHEST AND LOWEST MANUFACTURING COSTS

product_code	product	manufacturing_cost
A6120110206	AQ HOME Allin1 Gen 2	240,54
A2118150101	AQ Master wired x1 Ms	0,89



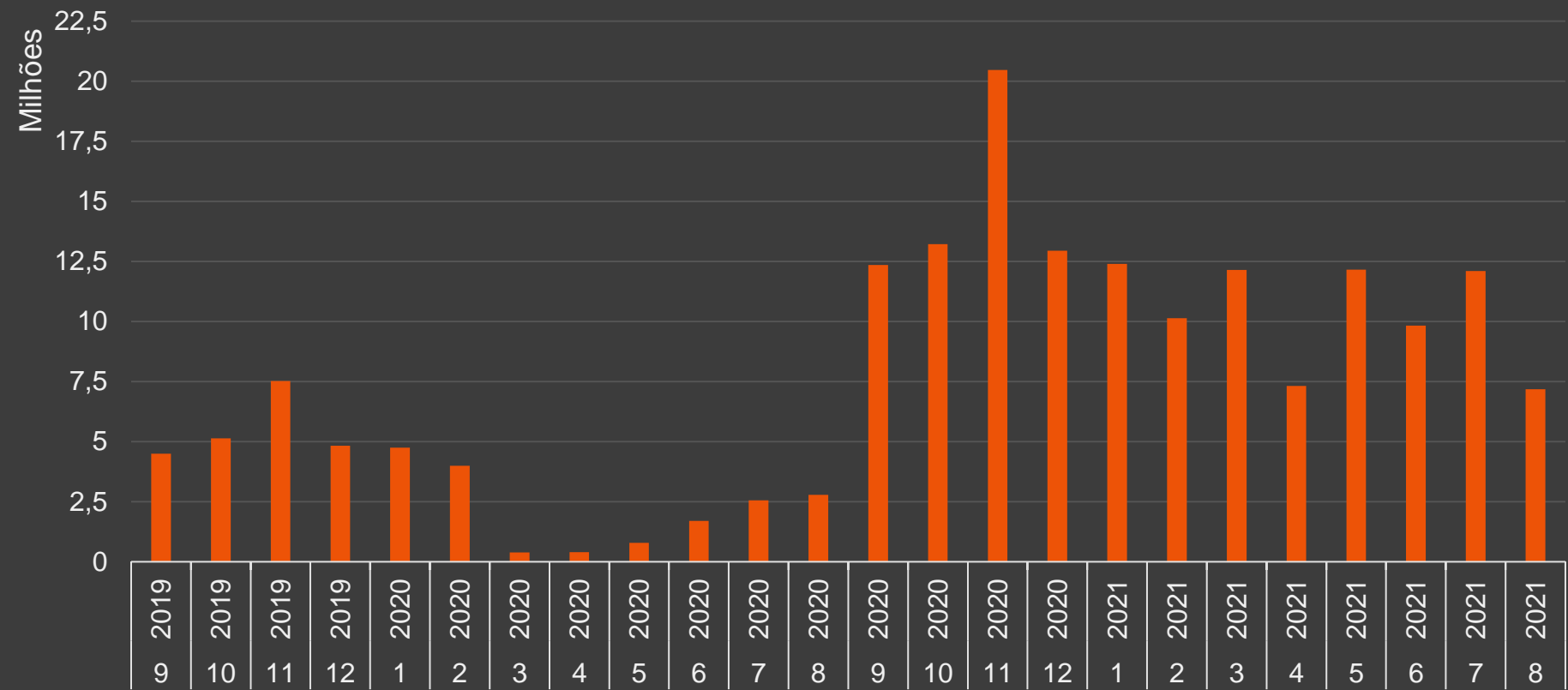
REPORT WHICH CONTAINS THE TOP 5 CUSTOMERS WHO RECEIVED AN AVERAGE HIGH PRE INVOICE DISCOUNT PCT FOR THE FISCAL YEAR 2021 AND IN THE INDIAN MARKET

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%

THE TOP 5 CUSTOMERS WITH HIGHEST PRE INVOICE DISCOUNT PCT HAVE AROUND 30% DISCOUNT

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



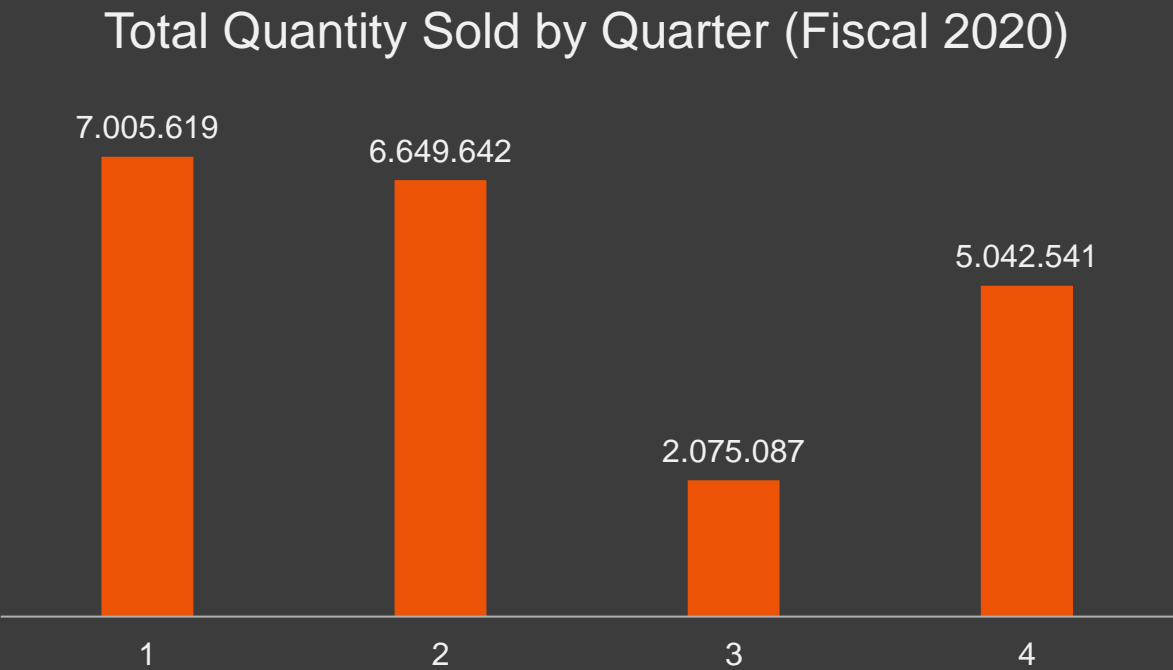
THE HIGHEST GROSS SALES AMOUNT WAS ON NOVEMBER-2020: **20.463.999,00**

THE LOWEST GROSS SALES AMOUNT WAS ON MARCH-2020: **378.771,00**

SALES HAVE INCREASED DUE TO NEW STRATEGIES ADOPTED AT THE START OF 2021 FISCAL YEAR

WHICH QUARTER OF 2020, GOT THE MAXIMUM TOTAL SOLD QUANTITY?

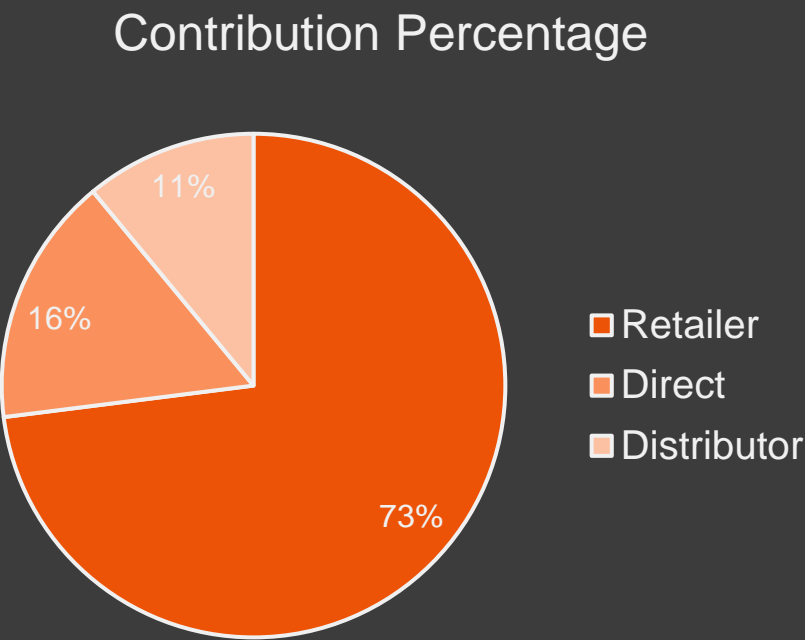
Quarter	total_sold_quantity
1	7.005.619
2	6.649.642
4	5.042.541
3	2.075.087



FIRST QUARTER OF THE FISCAL YEAR OF 2020 (SEP, OCT, NOV; 2019) HAD THE MAXIMUM SOLD QUANTITY: **7.005.619** SOLD PRODUCTS

WHICH CHANNEL HELPED TO BRING MORE GROSS SALES IN THE FISCAL YEAR 2021 AND HOW MUCH IT CONTIBUTED?

Channel	gross_sales_mln	percentage
Retailer	705.532.519	73%
Direct	150.664.256	16%
Distributor	107.332.599	11%



THE RETAIL CHANNEL CONTRIBUTED IMMENSELY TO GROSS SALES VALUES: **73% CONTRIBUTION**

GET THE TOP 3 PRODUCTS IN EACH DIVISION THAT HAVE A HIGH TOTAL SOLD QUANTITY IN THE FISCAL YEAR 2021

N&S DIVISION

division	product_code	product	total_sold_quantity	rank_order
N & S	A6720160103	AQ Pen Drive 2 IN 1	701.373	1
N & S	A6818160202	AQ Pen Drive DRC	688.003	2
N & S	A6819160203	AQ Pen Drive DRC	676.245	3

GET THE TOP 3 PRODUCTS IN EACH DIVISION THAT HAVE A HIGH TOTAL SOLD QUANTITY IN THE FISCAL YEAR 2021

P&A DIVISION

division	product_code	product	total_sold_quantity	rank_order
P & A	A2319150302	AQ Gamers Ms	428.498	1
P & A	A2520150501	AQ Maxima Ms	419.865	2
P & A	A2520150504	AQ Maxima Ms	419.471	3

GET THE TOP 3 PRODUCTS IN EACH DIVISION THAT HAVE A HIGH TOTAL SOLD QUANTITY IN THE FISCAL YEAR 2021

PC DIVISION

division	product_code	product	total_sold_quantity	rank_order
PC	A4218110202	AQ Digit	17.434	1
PC	A4319110306	AQ Velocity	17.280	2
PC	A4218110208	AQ Digit	17.275	3

THANK YOU

Codebasics SQL Challenge

By João Pedro – [Github](#)

Requests:

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

Answer:

```
SELECT DISTINCT market
FROM fact_sales_monthly INNER JOIN dim_customer
ON fact_sales_monthly.customer_code = dim_customer.customer_code
WHERE customer = "Atliq Exclusive" AND region = "APAC"
```

market
India
Indonesia
Japan
Philippines
South Korea
Australia
New Zealand
Bangladesh

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

Answer:

```
WITH
result1 (unique_products_2020) AS (
  SELECT COUNT(DISTINCT product_code) AS unique_products_2020
  FROM fact_sales_monthly
  WHERE fiscal_year = "2020"
),
result2 (unique_products_2021) AS (
  SELECT COUNT(DISTINCT product_code) AS unique_products_2021
  FROM fact_sales_monthly
  WHERE fiscal_year = "2021"
),
result3 (percentage_chg) AS (
  SELECT ROUND(((unique_products_2021/unique_products_2020)-1)*100,2)
  FROM result1 JOIN result2
)
SELECT * FROM result1 JOIN result2 JOIN result3
```

unique_products_2020	unique_products_2021	percentage_chg
245	324	36.33

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

Answer:

```
WITH
count_column (segment, product_count) AS (
  SELECT segment, COUNT(DISTINCT product_code)
  FROM dim_product
  GROUP BY segment
)
SELECT * FROM count_column ORDER BY product_count DESC
```

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

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

Answer:

```
WITH
segment20_sel (segment, product_count_2020) AS (
  SELECT segment, COUNT(DISTINCT fact_gross_price.product_code)
  FROM fact_gross_price JOIN dim_product
  ON fact_gross_price.product_code=dim_product.product_code
  WHERE fact_gross_price.fiscal_year="2020"
  GROUP BY segment
),
segment21_sel (segment, product_count_2021) AS (
  SELECT segment, COUNT(DISTINCT fact_gross_price.product_code)
  FROM fact_gross_price JOIN dim_product
  ON fact_gross_price.product_code=dim_product.product_code
  WHERE fact_gross_price.fiscal_year="2021"
  GROUP BY segment
)
SELECT segment20_sel.segment, product_count_2020, product_count_2021,
product_count_2021-product_count_2020 as difference,
ROUND(100*((product_count_2021/product_count_2020)-1)) as percentage
FROM segment20_sel INNER JOIN segment21_sel
ON segment20_sel.segment = segment21_sel.segment
ORDER BY difference DESC
```

segment	product_count_2020	product_count_2021	difference	percentage
Accessories	69	103	34	49
Headbook	92	108	16	17
Peripherals	59	75	16	27
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Storage	12	17	5	42
Networking	6	9	3	50

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