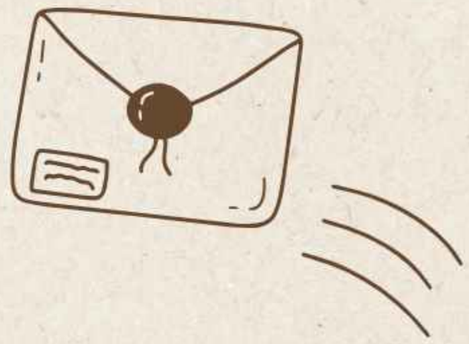
Finance Analytics

AtliQ Hardware

Introduction



Problem Statement & Project Overview

Reports, Outcome & Visualization

Insights and Conclusion

The Problem Statement

AtliQ Hardware is currently facing performance challenges due to the increasing size and complexity of its Excel files. To address this, the company has formed a dedicated team of data analysts to leverage MySQL for extracting valuable insights and enhancing operational efficiency.

Project Overview

The scope of this project is conducting an in-depth analysis of the dataset provided by AtliQ Hardware. The Primary goal is to derive actionable insights regarding sales performance, Market dynamics, Customer behaviour.

Business Questions

1. How many customers are there?
2. how many products are there?
3. how many markets are there?
4. how many unique region are there?

5.how many divisions are there?

6. product categories, segment and variant

7. unique platforms and channels

```sql
# GETTING FAMILIAR WITH DATA
--  how many customers are there?
select count(distinct customer) as No_of_customers from dim_customer;

# how many products are there?
select count(distinct product) as No_of_products from dim_product;

# how many markets are there?
select count(distinct market) as No_of_market from dim_customer;

#how many unique region are there?
select distinct region from dim_customer;
```

```sql
# how many divisions are there ?
select distinct division from dim_product;

# product categories, segment and variant
select distinct segment from dim_product;
select distinct category from dim_product;
select distinct variant from dim_product;

# unique platforms and channels of atliq hardware
select distinct platform from dim_customer;
select distinct channel from dim_customer;
```

yearly sales & How does the monthly gross sales trend over the last two fiscal years?

```sql
# 1. yearly sales & How does the monthly gross sales trend over the last two fiscal years?
select
	fiscal_month,
	round(sum(total_gross_price)/1000000,2) as gross_price
from net_sales
where fiscal_year in (2021,2022)
group by fiscal_month;
```

fiscal_month	gross_price
September	683.06
October	861.52
November	1173.86
December	1241.36
January	120.95
February	117.17
March	122.18
April	122.38
May	120.34
June	116.56
July	122.49
August	121.47

What is the region-wise contribution to total sales revenue?

region	fiscal_year	total_net_sales
APAC	2022	882.68
APAC	2021	441.98
APAC	2020	147.98
APAC	2019	71.33
APAC	2018	20.67
EU	2022	362.08
EU	2021	200.77
EU	2020	55.79
EU	2019	17.22
EU	2018	1.75
LATAM	2022	6.04
LATAM	2021	3.16
LATAM	2020	2.00
LATAM	2019	0.83
LATAM	2018	0.20
NA	2022	392.10
NA	2021	177.94

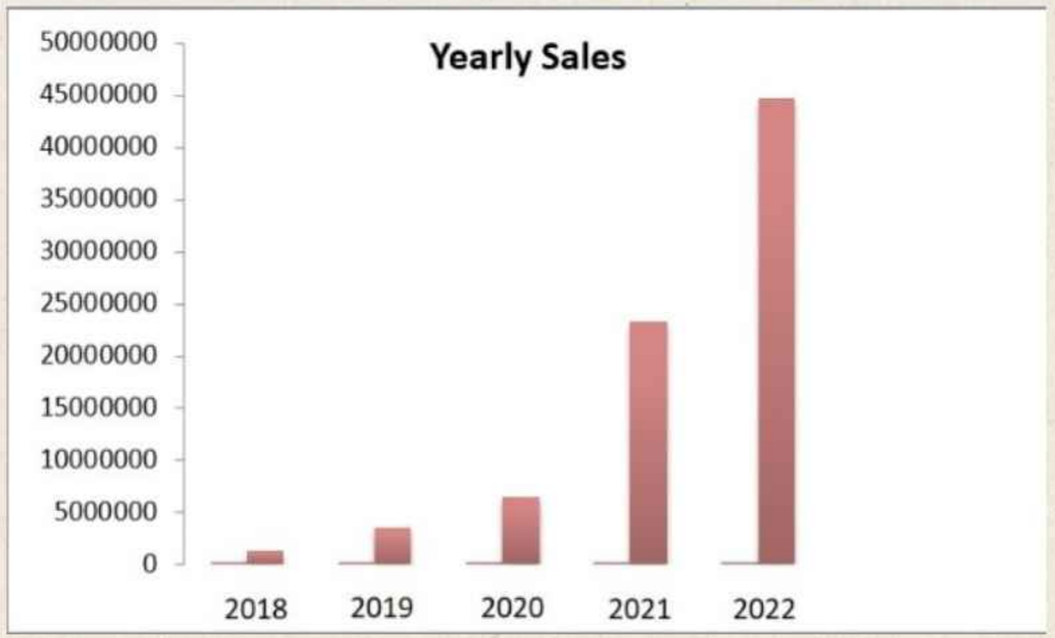
```sql
# What is the region-wise contribution to total sales revenue?
select c.region,n.fiscal_year,
       round(sum(net_sales)/1000000,2) as total_net_sales
from net_sales n
join dim_customer c
on c.customer_code = n.customer_code
group by c.region, n.fiscal_year
order by c.region, n.fiscal_year desc;
```

yearly total sales

```sql
 # yearly total sales
SELECT
      get_fiscal_year(date) as fiscal_year,
      round(sum(g.gross_price * s.sold_quantity),2) as yearly_sales
FROM fact_sales_monthly s
join fact_gross_price g
on
     g.product_code = s.product_code and
     g.fiscal_year = get_fiscal_year(s.date)
where customer_code = '90002002'
group by get_fiscal_year(date)
order by fiscal_year;
```

Result Grid | Filter Rows:

fiscal_year	yearly_sales
2018	1324097.44
2019	3555079.02
2020	6502181.91
2021	23216512.22
2022	44638198.92



Generate a report detailling the individual product sales for croma india customer throughout the fiscal year2021

	date	product_code	product	variant	sold_quantity	gross_price_per_item	total_gross
▶	2020-09-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	202	19.0573	3849.57
	2020-09-01	A0118150102	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Plus	162	21.4565	3475.95
	2020-09-01	A0118150103	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Premium	193	21.7795	4203.44
	2020-09-01	A0118150104	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Premium Plus	146	22.9729	3354.04
	2020-09-01	A0219150201	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Standard	149	23.6987	3531.11
	2020-09-01	A0219150202	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Plus	107	24.7312	2646.24
	2020-09-01	A0220150203	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Premium	123	23.6154	2904.69
	2020-09-01	A0320150301	AQ Zion Saga	Standard	146	23.7223	3463.46
	2020-09-01	A0321150302	AQ Zion Saga	Plus	236	27.1027	6396.24
	2020-09-01	A0321150303	AQ Zion Saga	Premium	137	28.0059	3836.81
	2020-09-01	A0418150103	AQ Mforce Gen X	Standard 3	23	19.5235	449.04
	2020-09-01	A0418150104	AQ Mforce Gen X	Plus 1	82	19.9239	1633.76
	2020-09-01	A0418150105	AQ Mforce Gen X	Plus 2	86	20.0766	1726.59
	2020-09-01	A0418150106	AQ Mforce Gen X	Plus 3	48	19.9365	956.95
	2020-09-01	A0519150201	AQ Mforce Gen Y	Standard 1	138	22.3984	3090.98
	2020-09-01	A0519150202	AQ Mforce Gen Y	Standard 2	72	24.9298	1794.95

```
select
    s.date, s.fiscal_year,
    s.customer_code,c.market,p.product_code,
    p.product, p.variant, s.sold_quantity,
    g.gross_price as gross_price_per_item,
    round(g.gross_price * s.sold_quantity,2) as total_gross_price,
    pre.pre_invoice_discount_pct
from fact_sales_monthly s
join dim_customer c
   on c.customer_code = s.customer_code
join dim_product p
   on p.product_code=s.product_code
join fact_gross_price g
   on g.product_code = s.product_code and
   g.fiscal_year = s.fiscal_year
join fact_pre_invoice_deductions pre
   on pre.customer_code = s.customer_code and
   pre.fiscal_year = s.fiscal_year
where
    get_fiscal_year(s.date) = 2021 and
    s.customer_code = 90002002;
```

gross sales report monthly

```sql
#gross sales report monthly
select s.date,
       sum(round(g.gross_price * s.sold_quantity,2)) as total_gross_price
from fact_sales_monthly s
join fact_gross_price g
on g.product_code = s.product_code and
   g.fiscal_year = get_fiscal_year(s.date)
where s.customer_code = 90002002
group by s.date;
```

date	total_gross_price
2017-09-01	122407.57
2017-10-01	162687.56
2017-12-01	245673.84
2018-01-01	127574.73
2018-02-01	144799.54
2018-04-01	130643.92
2018-05-01	139165.06
2018-06-01	125735.36
2018-08-01	125409.90
2018-09-01	343337.14
2018-10-01	440562.10
2018-12-01	653944.72
2019-01-01	359025.06
2019-02-01	356607.19
2019-04-01	379549.74
2019-05-01	340152.29
2019-06-01	343792.08

TOP 5 MARKETS IN THE YEAR 2021

```sql
# TOP 5 MARKETS IN THE YEAR 2021
SELECT market,
       round(sum(net_sales)/1000000,2) as net_sales
FROM gdb0041.net_sales
where fiscal_year = 2021
group by market
order by net_sales desc limit 5;
```

	market	net_sales
▶	India	210.67
	USA	132.05
	South Korea	64.01
	Canada	45.89
	United Kingdom	44.73

TOP 5 CUSTOMERS BY NETSALES

```sql
#TOP 5 CUSTOMERS BY NETSALES
select c.customer,
       round(sum(net_sales)/1000000,2) as net_sales_mln
from dim_customer c
join net_sales n
on n.customer_code = c.customer_code
where n.fiscal_year = 2021 and c.market = "india"
group by c.customer
order by net_sales_mln desc limit 5 ;
```

	customer	net_sales_mln
▶	Amazon	30.00
	Atliq Exclusive	23.98
	Flipkart	12.96
	Electricalsocity	12.31
	Propel	11.86

get top n products n each division by their quantity sold

```sql
# get top n products n each division by their quantity sold
with cte1 as (
                select division, product,
                       sum(sold_quantity) as total_qty
                from net_sales
                where fiscal_year = 2021
                group by division, product
              ),
     cte2 as(
                select *,
                      dense_rank() over(partition by division order by total_qty desc) as drnk
                from cte1
               )
select * from cte2 where drnk <=3;
```

	division	product	total_qty	drnk
▶	N & S	AQ Pen Drive DRC	2034569	1
	N & S	AQ Digit SSD	1240149	2
	N & S	AQ Clx1	1238683	3
	P & A	AQ Gamers Ms	2477098	1
	P & A	AQ Maxima Ms	2461991	2
	P & A	AQ Master wireless x1 Ms	2448784	3
	PC	AQ Digit	135092	1
	PC	AQ Gen Y	135031	2
	PC	AQ Elite	134431	3

Thank You