--BUSINESS METRICS UNICORN

--What is the Revenue Growth Rate?

WITH revenue AS(

SELECT

EXTRACT(YEAR FROM o.order\_date) AS Years,

SUM(od.order\_sales) AS total\_revenue

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

JOIN product p

ON od.product\_id=p.product\_id

GROUP BY Years

ORDER BY Years)

SELECT

years,

total\_revenue,

COALESCE(LAG(Years) OVER(ORDER BY Years), 0) AS previous\_Year,

COALESCE(LAG(total\_revenue) OVER( ORDER BY years),0) AS total\_revenue\_in\_previous\_year,

CASE WHEN COALESCE(LAG(Years) OVER(ORDER BY Years), 0)!=0

THEN total\_revenue-COALESCE(LAG(total\_revenue) OVER( ORDER BY years),0)

ELSE 0 END AS yearly\_revenue\_diference,

CASE WHEN COALESCE(LAG(Years) OVER(ORDER BY Years), 0)!=0

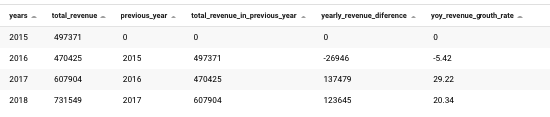
THEN ROUND((total\_revenue-COALESCE(LAG(total\_revenue) OVER( ORDER BY years),0))/GREATEST(COALESCE(LAG(total\_revenue) OVER( ORDER BY years),0),1)\*100.00,2)

ELSE 0 END AS YoY\_Revenue\_Grouth\_Rate

FROM revenue

ORDER BY years

;



--Annual Recurring Revenue   
–(ARR) ARR = Monthly Recurring Revenue (MRR) × 12

--COSTS =REVENUE-PROFIT, REVENUE, PROFIT BY CUSTOMER

WITH revenue\_per\_customer AS(

SELECT

c.customer\_id,

SUM(od.order\_sales) AS total\_revenue

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

JOIN product p

ON od.product\_id=p.product\_id

GROUP BY c.customer\_id

),

costs AS (

SELECT

c.customer\_id,

SUM(od.order\_sales-od.order\_profits) AS total\_costs

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

JOIN product p

ON od.product\_id=p.product\_id

GROUP BY c.customer\_id

),

profits AS (

SELECT

c.customer\_id,

SUM(od.order\_profits) AS total\_profits

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

JOIN product p

ON od.product\_id=p.product\_id

GROUP BY c.customer\_id

)

SELECT

r.customer\_id,

r.total\_revenue,

cc.total\_costs,

pp.total\_profits

FROM revenue\_per\_customer r

JOIN costs cc

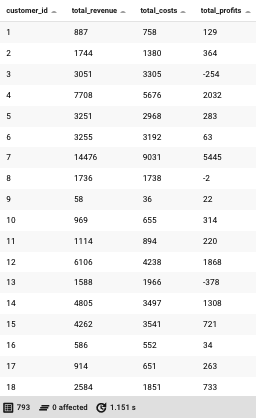
ON r.customer\_id=cc.customer\_id

JOIN profits pp

ON cc.customer\_id=pp.customer\_id

ORDER BY r.customer\_id

;



--COSTS =REVENUE-PROFIT, REVENUE, PROFIT YEARLY

WITH revenue\_per\_customer AS(

SELECT

EXTRACT(YEAR FROM o.order\_date) AS Years,

SUM(od.order\_sales) AS total\_revenue

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

JOIN product p

ON od.product\_id=p.product\_id

GROUP BY years

),

costs AS (

SELECT

EXTRACT(YEAR FROM o.order\_date) AS Years,

SUM(od.order\_sales-od.order\_profits) AS total\_costs

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

JOIN product p

ON od.product\_id=p.product\_id

GROUP BY Years

),

profits AS (

SELECT

EXTRACT(YEAR FROM o.order\_date) AS Years,

SUM(od.order\_profits) AS total\_profits

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

JOIN product p

ON od.product\_id=p.product\_id

GROUP BY Years

)

SELECT

r.Years,

r.total\_revenue,

cc.total\_costs,

pp.total\_profits

FROM revenue\_per\_customer r

JOIN costs cc

ON r.Years=cc.Years

JOIN profits pp

ON cc.Years=pp.Years

ORDER BY Years

;



--KPIs: Profit per customer, Profit per product, Profit per month (YEARLY)

SELECT

c.customer\_id,

SUM(od.order\_profits) AS Profit\_per\_customer

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

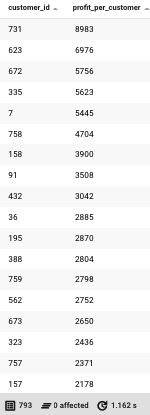
JOIN product p

ON od.product\_id=p.product\_id

GROUP BY c.customer\_id

ORDER BY Profit\_per\_customer DESC

;



–Profit\_per\_product

SELECT

p.product\_id,

SUM(od.order\_profits) AS Profit\_per\_product

FROM customers c

JOIN orders o

ON c.customer\_id=o.customer\_id

JOIN order\_details od

ON o.order\_id=od.order\_id

JOIN product p

ON od.product\_id=p.product\_id

GROUP BY p.product\_id

ORDER BY Profit\_per\_product DESC

;



--Profit\_per\_Month

SELECT

EXTRACT(MONTH FROM o.order\_date) AS month\_number,

TO\_CHAR(o.order\_date, 'Month') AS delivr\_month,

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2015 THEN od.order\_profits ELSE 0 END) AS "2015",--Profit\_per\_Month

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2016 THEN od.order\_profits ELSE 0 END) AS "2016",

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2017 THEN od.order\_profits ELSE 0 END) AS "2017",

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2018 THEN od.order\_profits ELSE 0 END) AS "2018",

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2019 THEN od.order\_profits ELSE 0 END) AS "2019"

FROM customers c

JOIN orders o ON c.customer\_id = o.customer\_id

JOIN order\_details od ON o.order\_id = od.order\_id

JOIN product p ON od.product\_id = p.product\_id

GROUP BY TO\_CHAR(o.order\_date, 'Month'),EXTRACT(MONTH FROM o.order\_date)

ORDER BY month\_number

;



-SALES\_per\_Month

SELECT

EXTRACT(MONTH FROM o.order\_date) AS month\_number,

TO\_CHAR(o.order\_date, 'Month') AS delivr\_month,

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2015 THEN od.order\_sales ELSE 0 END) AS "2015",--SALES\_per\_Month

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2016 THEN od.order\_sales ELSE 0 END) AS "2016",

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2017 THEN od.order\_sales ELSE 0 END) AS "2017",

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2018 THEN od.order\_sales ELSE 0 END) AS "2018",

SUM(CASE WHEN EXTRACT(YEAR FROM o.order\_date) = 2019 THEN od.order\_sales ELSE 0 END) AS "2019"

FROM customers c

JOIN orders o ON c.customer\_id = o.customer\_id

JOIN order\_details od ON o.order\_id = od.order\_id

JOIN product p ON od.product\_id = p.product\_id

GROUP BY TO\_CHAR(o.order\_date, 'Month'),EXTRACT(MONTH FROM o.order\_date)

ORDER BY month\_number;



--ARPU V.S. Profit per customer

SELECT

c.customer\_id,

ROUND(AVG(od.order\_sales),2) AS ARPU,

ROUND(AVG(od.order\_profits):: NUMERIC,2) AS average\_profit\_by\_custimer,

CASE WHEN od.order\_sales>0 THEN ROUND(od.order\_profits ::NUMERIC/od.order\_sales ::NUMERIC ,2) ELSE 0 END AS profit\_ratio

FROM customers c

JOIN orders o ON c.customer\_id = o.customer\_id

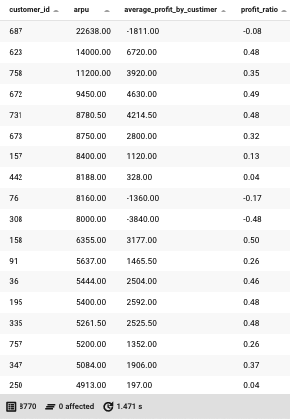
JOIN order\_details od ON o.order\_id = od.order\_id

JOIN product p ON od.product\_id = p.product\_id

GROUP BY c.customer\_id,profit\_ratio

ORDER BY ARPU DESC

;



--Products\_Profit

SELECT

p.product\_name,

ROUND(AVG(od.order\_sales),2) AS average\_sales\_per\_product,

ROUND(AVG(od.order\_profits):: NUMERIC,2) AS average\_profit\_by\_product,

CASE WHEN od.order\_sales>0 THEN ROUND(od.order\_profits ::NUMERIC/od.order\_sales ::NUMERIC ,2) ELSE 0 END AS profit\_ratio

FROM customers c

JOIN orders o ON c.customer\_id = o.customer\_id

JOIN order\_details od ON o.order\_id = od.order\_id

JOIN product p ON od.product\_id = p.product\_id

GROUP BY p.product\_id,profit\_ratio

Order by profit\_ratio ASC

;

