B2B Sales Performance & Pipeline Analysis
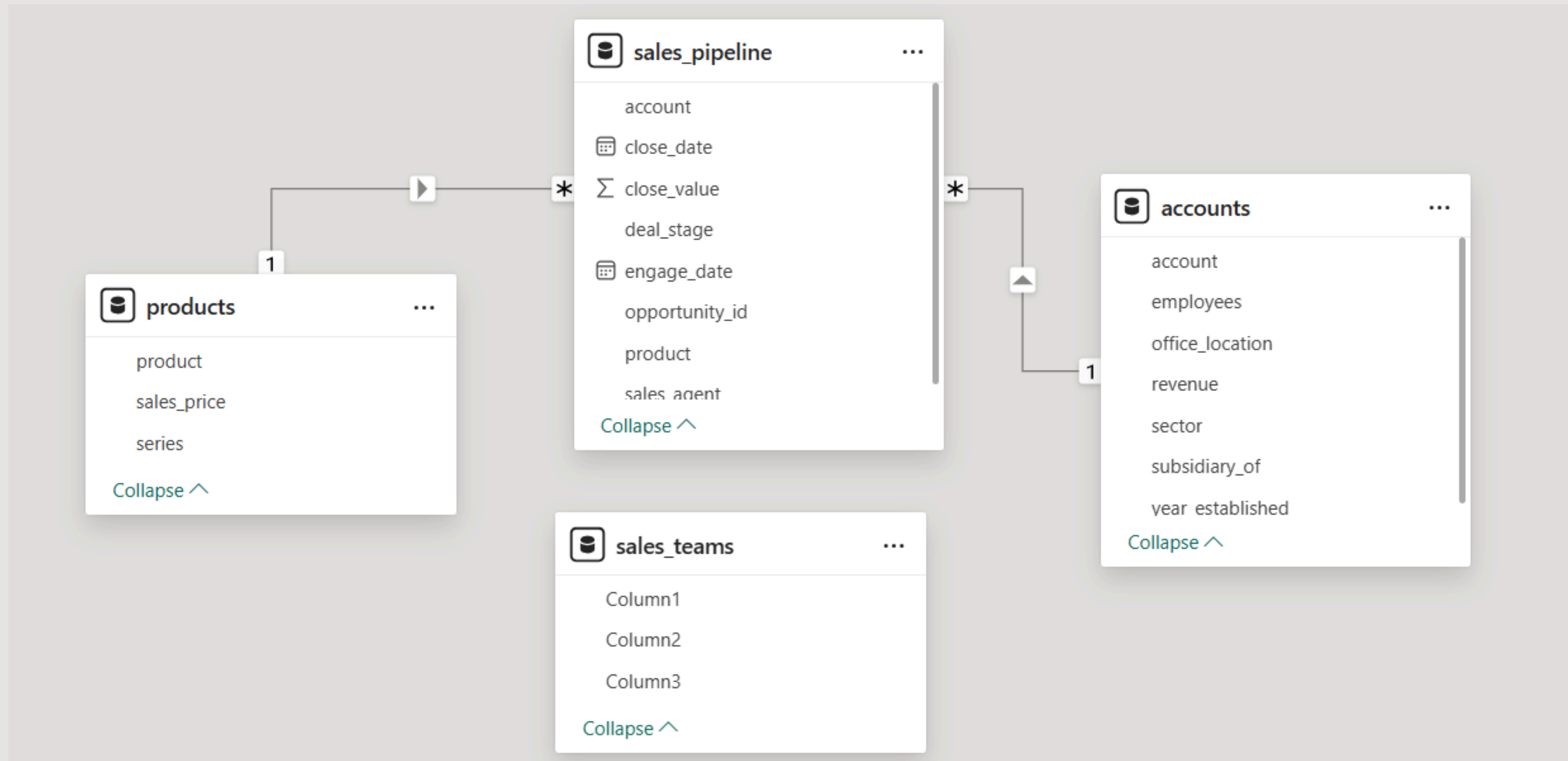
SQL Case Study: Optimizing Revenue and Sales Efficiency

Author :

Atharva Thakare

SCHEMA

sales_pipeline
- account
- close_date
- close_value
- deal_stage
- engage_date
- opportunity_id
- product
- sales_agent

Collapse ∧

products
- product
- sales_price
- series

Collapse ∧

sales_teams
- Column1
- Column2
- Column3

Collapse ∧

accounts
- account
- employees
- office_location
- revenue
- sector
- subsidiary_of
- year_established

Collapse ∧

Brief list of Accounts, Products, Sales Teams, and Pipeline

Conversion Mastery by Manager (**Win Ratio**)

```sql
WITH team_performance AS (
    SELECT
        t.manager,
        COUNT(p.opportunity_id) AS total_deals,
        COUNT(CASE WHEN p.deal_stage = 'Won' THEN 1 END) AS won_deals
    FROM sales_pipeline p
    JOIN sales_teams t ON p.sales_agent = t.sales_agent
    GROUP BY t.manager
)
SELECT
    manager,
    total_deals,
    won_deals,
    ROUND((won_deals::numeric / total_deals) * 100, 2) AS win_rate
FROM team_performance
ORDER BY win_rate DESC;
```

Used CTEs and Case Statements to calculate Win %

OUTPUT

manager character varying (255) 🔒	total_deals bigint 🔒	won_deals bigint 🔒	win_rate numeric 🔒
Rocco Neubert	1327	691	52.07
Cara Losch	964	480	49.79
Summer Sewald	1701	828	48.68
Dustin Brinkmann	1583	747	47.19
Celia Rouche	1296	610	47.07
Melvin Marxen	1929	882	45.72

Sales Velocity: Who Closes Fastest?

```sql
WITH cte AS (
  SELECT t.manager ,
    AVG(p.close_date - p.engage_date) AS avg_close_time
  FROM sales_pipeline p
  JOIN sales_teams t
  ON p.sales_agent = t.sales_agent
  WHERE p.close_date IS NOT NULL
  GROUP BY t.manager
)
SELECT manager, ROUND(avg_close_time, 2) AS avg_days_to_close
FROM cte
ORDER BY avg_days_to_close;
```

Used Date Math to calculate time from engagement to close

	manager character varying (255)	avg_days_to_close numeric
1	Rocco Neubert	45.84
2	Celia Rouche	47.45
3	Melvin Marxen	47.82
4	Summer Sewald	48.47
5	Cara Losch	49.04
6	Dustin Brinkmann	49.44

"Internal Knowledge Transfer: Conduct a deep-dive into Rocco Neubert's team's workflow. Since they maintain the highest win rate while having the shortest sales cycle, their 'Sales Playbook' should be the blueprint for training lagging agents."

Quarter - Over - Quarter Growth

```sql
WITH quarterly_revenue AS (
  SELECT
    DATE_TRUNC('quarter',close_date) AS quarter,
    SUM(close_value) AS current_revenue
  FROM sales_pipeline
  WHERE deal_stage = 'Won' AND close_value IS NOT NULL
  GROUP BY quarter
),
revenue_comparison AS (
  SELECT
    quarter,
    current_revenue,
    LAG(current_revenue) OVER(ORDER BY quarter) AS previous_revenue
  FROM quarterly_revenue
)
SELECT
    quarter,
    current_revenue,
    previous_revenue,
    ROUND(current_revenue - previous_revenue, 2) AS revenue_change,
    ROUND(((current_revenue - previous_revenue) / NULLIF(previous_revenue, 0)) * 100,2) AS
qoq_growth_percentage
FROM revenue_comparison
ORDER BY quarter;
```

Used CTEs & Window Functions (LAG) to compare quarterly revenue

OUTPUT

	quarter timestamp with time zone	current_revenue numeric	previous_revenue numeric	revenue_change numeric	qoq_growth_percentage numeric
1	2017-01-01 00:00:00+05:30	1134672	[null]	[null]	[null]
2	2017-04-01 00:00:00+05:30	3086111	1134672	1951439.00	171.98
3	2017-07-01 00:00:00+05:30	2982255	3086111	-103856.00	-3.37
4	2017-10-01 00:00:00+05:30	2802496	2982255	-179759.00	-6.03

3 Ways to Grow Revenue

1. Double down on Entertainment Sector : It has our highest average deal value.
2. Standardize Discounting: High discounts on GTK 500 are hurting margins.
3. Cross-Train Teams: Use the "Velocity" data to train slower teams.