

#### KPI 1: Total Net Inflows

Definition: Total dollar amount of sales minus redemptions.

Chart: KPI card / Area chart over time

SQL:

sql

Copy

Edit

```
SELECT SUM(dollar_amount) AS total_net_inflows
FROM transactions
WHERE trade_class IN ('Sale', 'Redemption');
DAX:
```

dax

Copy

Edit

```
Total Net Inflows = SUM('transactions'[dollar_amount])
```

#### ✓ KPI 2: Gross Sales

Definition: Sum of all sales.

Chart: Bar chart by Fund Name / KPI card

SQL:

sql

Copy

Edit

```
SELECT SUM(dollar_amount) AS gross_sales
FROM transactions
WHERE trade_class = 'Sale';
DAX:
```

dax

Copy

Edit

```
Gross Sales = CALCULATE(SUM('transactions'[dollar_amount]), 'transactions'[trade_class] = "Sale")
```

#### ✓ KPI 3: Total Redemptions

Definition: Total redemption value (negative amounts).

Chart: Line chart over time

SQL:

sql  
Copy  
Edit  
SELECT SUM(dollar\_amount) AS total\_redemptions  
FROM transactions  
WHERE trade\_class = 'Redemption';  
DAX:

dax  
Copy  
Edit  
Total Redemptions = CALCULATE(SUM('transactions'[dollar\_amount]),  
'transactions'[trade\_class] = "Redemption")  
✔ KPI 4: Net Flows by Fund  
Definition: Sales - Redemptions grouped by fund.

Chart: Stacked bar / Waterfall

SQL:

sql  
Copy  
Edit  
SELECT fund\_name, SUM(dollar\_amount) AS net\_flow  
FROM transactions  
WHERE trade\_class IN ('Sale', 'Redemption')  
GROUP BY fund\_name;  
DAX:

dax  
Copy  
Edit  
Net Flow by Fund = SUM('transactions'[dollar\_amount])  
✔ KPI 5: Number of Unique Investors  
Definition: Count of distinct investor accounts.

Chart: Card or Bar by Office

SQL:

sql  
Copy

Edit

```
SELECT COUNT(DISTINCT investor_account_number) AS unique_investors  
FROM transactions;
```

DAX:

dax

Copy

Edit

Unique Investors = DISTINCTCOUNT('transactions'[investor\_account\_number])

✓ KPI 6: Transactions by Trade Class

Definition: Count of each type of trade class.

Chart: Pie / Donut / Clustered column

SQL:

sql

Copy

Edit

```
SELECT trade_class, COUNT(*) AS transaction_count  
FROM transactions  
GROUP BY trade_class;
```

DAX:

dax

Copy

Edit

Transactions by Class = COUNTROWS('transactions')

✓ KPI 7: Monthly Net Flow

Definition: Total net flow each month.

Chart: Line chart / Area chart

SQL:

sql

Copy

Edit

```
SELECT DATE_TRUNC('month', trade_date) AS month, SUM(dollar_amount) AS net_flow  
FROM transactions  
GROUP BY month;
```

DAX:

dax

Copy

Edit

Monthly Net Flow =

```
CALCULATE(
    SUM('transactions'[dollar_amount]),
    DATESINPERIOD('transactions'[trade_date], MAX('transactions'[trade_date]), -1, MONTH)
)
```

✓ KPI 8: Top 5 Funds by Net Inflow

Definition: Funds bringing highest net investments.

Chart: Horizontal bar / Column chart

SQL:

sql

Copy

Edit

```
SELECT fund_name, SUM(dollar_amount) AS net_flow
FROM transactions
GROUP BY fund_name
ORDER BY net_flow DESC
LIMIT 5;
```

DAX:

dax

Copy

Edit

Net Flow = SUM('transactions'[dollar\_amount])

✓ KPI 9: Sales Rep Performance

Definition: Total net sales per rep.

Chart: Horizontal bar

SQL:

sql

Copy

Edit

```
SELECT sales_representative, SUM(dollar_amount) AS total_sales
FROM transactions
GROUP BY sales_representative;
```

DAX:

dax

Copy

Edit

Rep Sales = SUM('transactions'[dollar\_amount])

✅ KPI 10: Average Transaction Value

Definition: Avg dollar value per transaction.

Chart: KPI Card

SQL:

sql

Copy

Edit

```
SELECT AVG(dollar_amount) AS avg_txn_value
```

```
FROM transactions;
```

DAX:

dax

Copy

Edit

```
Avg Txn Value = AVERAGE('transactions'[dollar_amount])
```

✅ KPI 11: Redemption Rate

Definition: Redemptions as % of total.

Chart: Gauge or Donut

SQL:

sql

Copy

Edit

```
SELECT
```

```
SUM(CASE WHEN trade_class = 'Redemption' THEN 1 ELSE 0 END) * 100.0 / COUNT(*) AS
```

```
redemption_rate
```

```
FROM transactions;
```

DAX:

dax

Copy

Edit

```
Redemption Rate =
```

```
DIVIDE(
```

```
CALCULATE(COUNTROWS('transactions'), 'transactions'[trade_class] = "Redemption"),
```

```
COUNTROWS('transactions'),
```

0

)

#### ✓ KPI 12: Daily Transaction Volume

Definition: Number of transactions per day.

Chart: Line chart

SQL:

sql

Copy

Edit

```
SELECT trade_date, COUNT(*) AS txn_count
```

```
FROM transactions
```

```
GROUP BY trade_date;
```

DAX:

dax

Copy

Edit

Daily Volume = COUNTROWS('transactions')

#### ✓ KPI 13: Fund Diversification (Top 10 funds % of total)

Definition: How much top funds dominate flow.

Chart: Pie / Donut

SQL:

sql

Copy

Edit

```
SELECT fund_name, SUM(dollar_amount) AS fund_flow
```

```
FROM transactions
```

```
GROUP BY fund_name
```

```
ORDER BY fund_flow DESC
```

```
LIMIT 10;
```

DAX:

dax

Copy

Edit

Fund Flow = SUM('transactions'[dollar\_amount])

#### ✓ KPI 14: Investor Retention

Definition: % of repeat investors (present in multiple months).

Chart: Line or KPI Card

SQL:

sql

Copy

Edit

```
WITH txn_months AS (  
    SELECT investor_account_number, DATE_TRUNC('month', trade_date) AS txn_month  
    FROM transactions  
    GROUP BY investor_account_number, txn_month  
)  
SELECT COUNT(*) AS repeat_investors  
FROM (  
    SELECT investor_account_number  
    FROM txn_months  
    GROUP BY investor_account_number  
    HAVING COUNT(*) > 1  
) AS repeated;
```

DAX:

Use Power BI visuals with filters + DAX COUNTROWS and DISTINCTCOUNT on investor-account grouped by month.

 KPI 15: Average Holding Duration

Definition: Avg time between sale and redemption.

Chart: Histogram / Line

SQL:

Complex – requires joining sale/redemption by account+fund. Can be added if needed.

I'll now continue with KPI 16 to 25 in the next message. Want me to proceed?

You said:

yes

ChatGPT said:

Great! Let's complete the remaining KPI 16 to KPI 25 for your Power BI Mutual Fund Dashboard, with SQL, DAX, definitions, and suggested chart types.

✅ KPI 16: Investor Growth Rate (Monthly)

Definition: % change in number of unique investors month-over-month.

Chart: Line chart with % growth

SQL:

sql

Copy

Edit

```
WITH monthly_investors AS (  
    SELECT DATE_TRUNC('month', trade_date) AS month,  
           COUNT(DISTINCT investor_account_number) AS investor_count  
    FROM transactions  
    GROUP BY month  
)  
SELECT month,  
       investor_count,  
       (investor_count - LAG(investor_count) OVER (ORDER BY month)) * 100.0 /  
       LAG(investor_count) OVER (ORDER BY month) AS investor_growth_rate  
FROM monthly_investors;
```

DAX:

dax

Copy

Edit

Investor Count = DISTINCTCOUNT('transactions'[investor\_account\_number])

Investor Growth Rate =

DIVIDE(  
 [Investor Count] - CALCULATE([Investor Count], DATEADD('transactions'[trade\_date], -1, MONTH)),  
 CALCULATE([Investor Count], DATEADD('transactions'[trade\_date], -1, MONTH))  
)

✅ KPI 17: Office-wise Net Flow

Definition: Net inflow by office location.

Chart: Bar / Map visual



SQL:

sql

Copy

Edit

```
SELECT office, SUM(dollar_amount) AS net_flow
FROM transactions
GROUP BY office;
```

dax

Copy

Edit

Office Net Flow = SUM('transactions'[dollar\_amount])

✓ KPI 18: Sales Conversion Rate

Definition: % of Sale transactions over all.

Chart: Gauge / Pie

SQL:

sql

Copy

Edit

```
SELECT
    SUM(CASE WHEN trade_class = 'Sale' THEN 1 ELSE 0 END) * 100.0 / COUNT(*) AS
sales_conversion_rate
FROM transactions;
```

dax

Copy

Edit

Sales Conversion Rate =

DIVIDE(  
 CALCULATE(COUNTROWS('transactions'), 'transactions'[trade\_class] = "Sale"),  
 COUNTROWS('transactions'))  
)

✓ KPI 19: Trade Volume by NSCC Number

Definition: Number of trades routed through each NSCC.

Chart: Column chart

SQL:

sql

Copy

Edit

```
SELECT nscs_number, COUNT(*) AS txn_count
FROM transactions
GROUP BY nscs_number;
DAX:
```

dax

Copy

Edit

NSSC Trade Volume = COUNTROWS('transactions')

✓ KPI 20: Peak Investment Day

Definition: The date with highest net inflow.

Chart: Single Value / Table

SQL:

sql

Copy

Edit

```
SELECT trade_date, SUM(dollar_amount) AS net_inflow
FROM transactions
GROUP BY trade_date
ORDER BY net_inflow DESC
LIMIT 1;
DAX:
Create a measure:
```

dax

Copy

Edit

Daily Net Flow = SUM('transactions'[dollar\_amount])

Use MAXX over ADDCOLUMNS filtered by 'Daily Net Flow'

✓ KPI 21: Investor Concentration Index

Definition: % of net inflows from top 5% investors.

Chart: KPI Card

SQL:

Complex percentile logic needed. Can be implemented via CTE ranking by total dollar amount and taking top N.

DAX:

Use RANKX to calculate investor rankings and calculate top 5% inflow contribution.

✅ KPI 22: Redemption-to-Sales Ratio

Definition: Ratio of redemptions to sales.

Chart: Gauge or KPI Card

SQL:

sql

Copy

Edit

SELECT

```
SUM(CASE WHEN trade_class = 'Redemption' THEN dollar_amount ELSE 0 END) /  
NULLIF(SUM(CASE WHEN trade_class = 'Sale' THEN dollar_amount ELSE 0 END), 0) AS  
redemption_sales_ratio
```

FROM transactions;

DAX:

dax

Copy

Edit

Redemption Sales Ratio =

DIVIDE(

```
CALCULATE(SUM('transactions'[dollar_amount]), 'transactions'[trade_class] = "Redemption"),  
CALCULATE(SUM('transactions'[dollar_amount]), 'transactions'[trade_class] = "Sale")  
)
```

✅ KPI 23: Month-over-Month Net Flow Change

Definition: % change in net flow compared to previous month.

Chart: Line chart with labels

SQL:

sql

Copy

Edit

WITH monthly\_flow AS (

```
SELECT DATE_TRUNC('month', trade_date) AS month, SUM(dollar_amount) AS net_flow  
FROM transactions
```

```

GROUP BY month
)
SELECT month,
       net_flow,
       (net_flow - LAG(net_flow) OVER (ORDER BY month)) * 100.0 /
       LAG(net_flow) OVER (ORDER BY month) AS mom_change
FROM monthly_flow;
DAX:

```

[dax](#)  
[Copy](#)  
[Edit](#)

MoM Net Flow Change =

```

DIVIDE(
    [Monthly Net Flow] - CALCULATE([Monthly Net Flow], DATEADD('transactions'[trade_date],
-1, MONTH)),
    CALCULATE([Monthly Net Flow], DATEADD('transactions'[trade_date], -1, MONTH))
)

```

✅ KPI 24: Dormant Investors (No transactions in 3+ months)

Definition: Count of investors inactive for last 3 months.

Chart: KPI / Table

SQL:

[sql](#)  
[Copy](#)  
[Edit](#)

```

SELECT COUNT(*) AS dormant_investors
FROM (
    SELECT investor_account_number, MAX(trade_date) AS last_txn
    FROM transactions
    GROUP BY investor_account_number
    HAVING MAX(trade_date) < CURRENT_DATE - INTERVAL '90 days'
) dormant;

```

DAX:

Use a calculated column with MAXX per investor and filter where last\_txn < TODAY() - 90

✅ KPI 25: Sales Rep Leaderboard (Based on Net Flow)

Definition: Ranking of reps by net flow.

Chart: Bar / Leaderboard Table

SQL:

sql

Copy

Edit

```
SELECT sales_representative, SUM(dollar_amount) AS net_flow  
FROM transactions  
GROUP BY sales_representative  
ORDER BY net_flow DESC;  
DAX:
```

dax

Copy

Edit

```
Net Flow = SUM('transactions'[dollar_amount])
```