

## Customer Movement Analysis

```

SELECT
  SHOP_MONTH,
  NEW_STATUS,
  REPEAT_STATUS,
  REACTIVE_STATUS,
  TOTAL , LAG(TOTAL, 1)OVER(ORDER BY SHOP_MONTH ASC) as PREVIOUS_TOTAL,
  REPEAT_STATUS - LAG(TOTAL, 1)OVER(ORDER BY SHOP_MONTH ASC) as CHURN_STATUS
FROM
  (SELECT
    SHOP_MONTH,
    COUNT(CASE WHEN STATUS = 'NEW' THEN CUST_CODE ELSE NULL END) as NEW_STATUS,
    COUNT(CASE WHEN STATUS = 'REPEAT' THEN CUST_CODE ELSE NULL END) as REPEAT_STATUS,
    COUNT(CASE WHEN STATUS = 'REACTIVE' THEN CUST_CODE ELSE NULL END) as REACTIVE_STATUS,
    COUNT(STATUS) as TOTAL
  FROM
    (SELECT
      PREVIOUS_MONTH, SHOP_MONTH, CUST_CODE,
      CASE
        WHEN DATE_DIFF(SHOP_MONTH, PREVIOUS_MONTH, MONTH) IS NULL THEN 'NEW'
        WHEN DATE_DIFF(SHOP_MONTH, PREVIOUS_MONTH, MONTH) = 1 THEN 'REPEAT'
        WHEN DATE_DIFF(SHOP_MONTH, PREVIOUS_MONTH, MONTH) > 1 THEN 'REACTIVE'
        ELSE NULL END AS STATUS
    FROM
      (SELECT
        LAG(SHOP_MONTH, 1)OVER(PARTITION BY CUST_CODE ORDER BY SHOP_MONTH ASC) as PREVIOUS_MONTH,
        SHOP_MONTH,
        CUST_CODE
      FROM
        (SELECT
          DISTINCT DATE_TRUNC(PARSE_DATE('%Y%m%d', CAST(SHOP_DATE as STRING)),MONTH) as SHOP_MONTH,
          CUST_CODE
        FROM `bads7105-crm-332412.Supermarket_Data.spmk`
        WHERE CUST_CODE IS NOT NULL
        )
      )
    )
  )
  GROUP BY SHOP_MONTH
ORDER BY SHOP_MONTH

```

