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**Churn Analysis : Supermarket (CRM 7105)**

-- SELECT CUST\_CODE, LEFT(CAST(SHOP\_DATE AS STRING),6) AS MTH FROM `supermarket-331410.supermarket.supermarket`

-- where CUST\_CODE is not null LIMIT 1000;

with churnrate as (

SELECT CUST\_CODE,

CASE WHEN M200802=1 AND M200604+M200605+M200606+M200607+M200608+M200609+M200610+M200611+M200612 +M200701+M200702+M200703+M200704+M200705+M200706+M200707+M200708+M200709+M200710+M200711+M200712

+M200801=0 THEN 'NEW'

WHEN M200802=1 AND M200801=1 THEN 'REPEAT'

WHEN M200802=1 THEN 'REACTIVATE'

WHEN M200802=0 AND M200801=1 THEN 'CHURN' END AS AT200802,

CASE WHEN M200801=1 AND M200604+M200605+M200606+M200607+M200608+M200609+M200610+M200611+M200612 +M200701+M200702+M200703+M200704+M200705+M200706+M200707+M200708+M200709+M200710+M200711+M200712=0 THEN 'NEW'

WHEN M200801=1 AND M200712=1 THEN 'REPEAT'

WHEN M200801=1 THEN 'REACTIVATE'

WHEN M200801=0 AND M200712=1 THEN 'CHURN' END AS AT200801,

FROM

(

SELECT CUST\_CODE,

SUM(M200604) AS M200604,

SUM(M200605) AS M200605,

SUM(M200606) AS M200606,

SUM(M200607) AS M200607,

SUM(M200608) AS M200608,

SUM(M200609) AS M200609,

SUM(M200610) AS M200610,

SUM(M200611) AS M200611,

SUM(M200612) AS M200612,

SUM(M200701) AS M200701,

SUM(M200702) AS M200702,

SUM(M200703) AS M200703,

SUM(M200704) AS M200704,

SUM(M200705) AS M200705,

SUM(M200706) AS M200706,

SUM(M200707) AS M200707,

SUM(M200708) AS M200708,

SUM(M200709) AS M200709,

SUM(M200710) AS M200710,

SUM(M200711) AS M200711,

SUM(M200712) AS M200712,

SUM(M200801) AS M200801,

SUM(M200802) AS M200802,

SUM(M200803) AS M200803,

SUM(M200804) AS M200804,

SUM(M200805) AS M200805,

SUM(M200806) AS M200806,

SUM(M200807) AS M200807

FROM

(

SELECT CUST\_CODE,

CASE WHEN MTH = '200604' THEN 1 ELSE 0 END AS M200604,

CASE WHEN MTH = '200605' THEN 1 ELSE 0 END AS M200605,

CASE WHEN MTH = '200606' THEN 1 ELSE 0 END AS M200606,

CASE WHEN MTH = '200607' THEN 1 ELSE 0 END AS M200607,

CASE WHEN MTH = '200608' THEN 1 ELSE 0 END AS M200608,

CASE WHEN MTH = '200609' THEN 1 ELSE 0 END AS M200609,

CASE WHEN MTH = '200610' THEN 1 ELSE 0 END AS M200610,

CASE WHEN MTH = '200611' THEN 1 ELSE 0 END AS M200611,

CASE WHEN MTH = '200612' THEN 1 ELSE 0 END AS M200612,

CASE WHEN MTH = '200701' THEN 1 ELSE 0 END AS M200701,

CASE WHEN MTH = '200702' THEN 1 ELSE 0 END AS M200702,

CASE WHEN MTH = '200703' THEN 1 ELSE 0 END AS M200703,

CASE WHEN MTH = '200704' THEN 1 ELSE 0 END AS M200704,

CASE WHEN MTH = '200705' THEN 1 ELSE 0 END AS M200705,

CASE WHEN MTH = '200706' THEN 1 ELSE 0 END AS M200706,

CASE WHEN MTH = '200707' THEN 1 ELSE 0 END AS M200707,

CASE WHEN MTH = '200708' THEN 1 ELSE 0 END AS M200708,

CASE WHEN MTH = '200709' THEN 1 ELSE 0 END AS M200709,

CASE WHEN MTH = '200710' THEN 1 ELSE 0 END AS M200710,

CASE WHEN MTH = '200711' THEN 1 ELSE 0 END AS M200711,

CASE WHEN MTH = '200712' THEN 1 ELSE 0 END AS M200712,

CASE WHEN MTH = '200801' THEN 1 ELSE 0 END AS M200801,

CASE WHEN MTH = '200802' THEN 1 ELSE 0 END AS M200802,

CASE WHEN MTH = '200803' THEN 1 ELSE 0 END AS M200803,

CASE WHEN MTH = '200804' THEN 1 ELSE 0 END AS M200804,

CASE WHEN MTH = '200805' THEN 1 ELSE 0 END AS M200805,

CASE WHEN MTH = '200806' THEN 1 ELSE 0 END AS M200806,

CASE WHEN MTH = '200807' THEN 1 ELSE 0 END AS M200807

FROM

(

SELECT DISTINCT LEFT(CAST(SHOP\_DATE AS STRING),6) AS MTH ,CUST\_CODE

FROM `supermarket-331410.supermarket.supermarket`

WHERE CUST\_CODE IS NOT NULL

)

)

GROUP BY 1

)

)

SELECT \*

FROM

(

SELECT 'M200802' as month,

AT200802 as churn,

count(CUST\_CODE) as num

FROM churnrate

group by 1,2

UNION ALL

SELECT 'M200801' as month,

AT200801 as churn,

count(CUST\_CODE) as num

FROM churnrate

group by 1,2

)

WHERE churn IS NOT NULL

Chart, bar chart

Description automatically generated