PROJECT:

COFFEE SHOP EXPANSION ANALYSIS

Made by: Ha Manh Cuong
@cuonghahmc@gmail.com

COFFEE SHOP EXPANSION ANALYSIS

200

STANDARD CUP TO PAYPACK

3

TOTAL RENTAL

CHECK

340!

Goal: 200 (-140)

82a PHAN XICH LONG

LINK TO DASHBOARD

LOCATION	ADDRESS	SQUARE	COST	QUANTITY BY DAY TO PAYPACK	CHECKED
BINH TAN	33 HUONG LO 2	42m2	220,000,000	178	✓ YES
BINH THANH	269 NGUYEN GIA TRI	30m2	120,000,000	97	✓ YES
GO VAP	12a PHAN VAN TRI	26m2	240,000,000	194	✓ YES
PHU NHUAN	82a PHAN XICH LONG	32m2	420,000,000	340	✗ NO
Q1	68 NGUYEN HUE	80m2	600,000,000	485	✗ NO
Q2	69 TRAN NAO	40m2	290,000,000	235	✗ NO
Q7	128 NGUYEN VAN LINH	35m2	310,000,000	251	✗ NO
TAN BINH	16 LAM SON	22m2	220,000,000	250	✗ NO

PROJECT INTRODUCTION

PROJECT OBJECTIVE:

- Analyze the potential for expanding coffee shop branches.
- Calculate the breakeven point and profitability of different coffee shop locations.
- Provide data-driven decisions for expanding new branches.

TOOL USED:

- **SQL Server (SSMS):** Data management and processing.
- **Power BI:** Data visualization and analysis.

DATABASE CREATION IN SQL SERVER

CREATING DYNAMIC DATA TABLE:

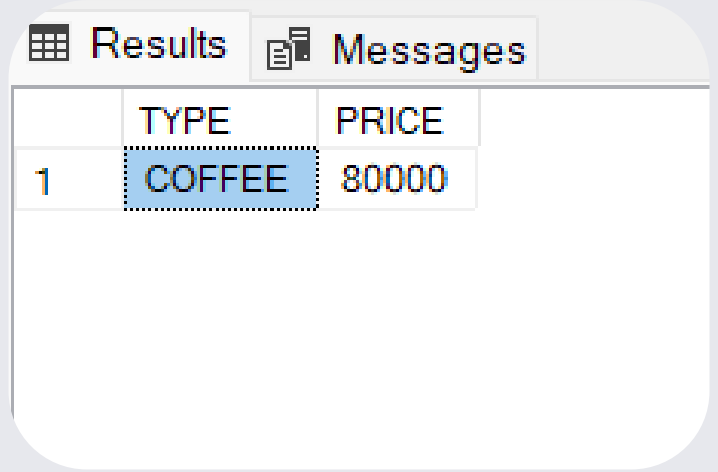
Table structure:

```
CREATE TABLE PRICE_AVG (
          TYPE NVARCHAR(30),
 PRICE INT
 )
```

Sample data:

```
INSERT INTO PRICE_AVG(TYPE, PRICE)
VALUES ('COFFEE', 80000)
```

This table stores the average price of each beverage type. In this example, coffee is priced at 80,000 VND.



DATABASE CREATION IN SQL SERVER

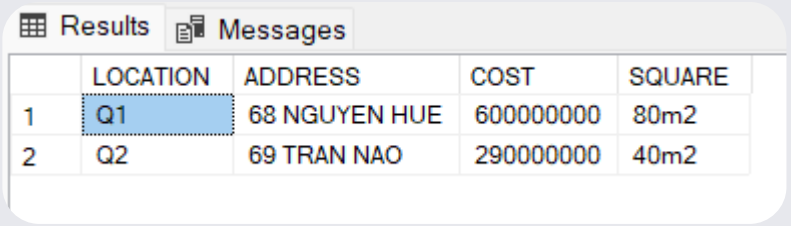
CREATING STATIC DATA TABLE:

Table structure:

```
CREATE TABLE RENTAL_COST (
    LOCATION NVARCHAR(100),
    ADDRESS NVARCHAR(200),
    COST FLOAT ,
    SQUARE NVARCHAR(50)
)
```

Sample data:

```
INSERT INTO RENTAL_COST
(LOCATION, ADDRESS, COST, SQUARE)
VALUES ('Q1', '68 NGUYEN HUE', 600000000, '80m2')
, ('Q2', '69 TRAN NAO', 290000000, '40m2')
```


Results Messages

	LOCATION	ADDRESS	COST	SQUARE
1	Q1	68 NGUYEN HUE	600000000	80m2
2	Q2	69 TRAN NAO	290000000	40m2

CACULATION

Rental Cost Analysis:
The rental cost and square footage data helps in calculating the fixed costs for each location.
This is used to assess the feasibility of expanding coffee shop branches.

PAYBACK Point Calculation Formula:
The formula used to calculate the number of drinks needed to break even, with the assumption that each location has different costs and revenue:

$$\textbf{QUANTITY BY DAY TO PAYBACK} = \frac{RENTAL\ \ COST}{(AVERAGE\ PRICE\ *\ 0.515)}/30$$

0.515 = Gross profit margin assumption:

- **Raw materials** = 27%
- **Labor** = 16%
- **Utilities** = 2%
- **Packaging** = 3.5%

This formula calculates how many drinks need to be sold each day to reach the breakeven point.

DATA VISUALIZATION

Connecting Power BI to SQL Server:

DATA VISUALIZATION

CREATE FOMULAR WITH DAX:

```
STANDARD CUP TO PAYPACK = 200
```

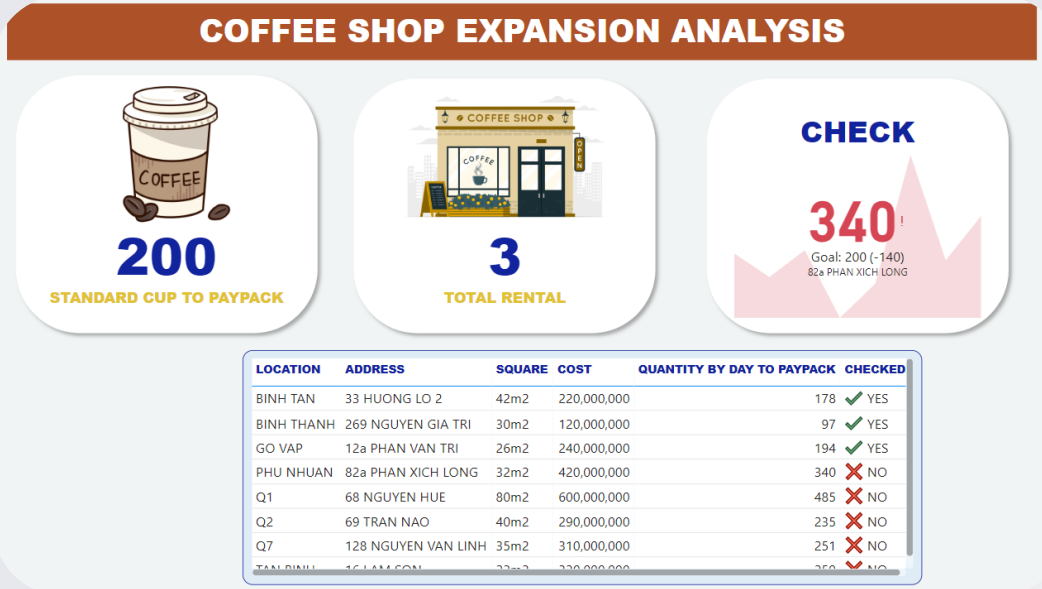
#Assume the KPI for the number of drinks required to break even in a day is 200.

```
QUANTITY BY DAY TO PAYPACK =
    (SUM('RENTAL_COST'[COST]) / (SUM(PRICE_AVG[PRICE]) * 0.515)) / 30

TOTAL RENTAL =
CALCULATE(COUNT('RENTAL_COST'[LOCATION]),'RENTAL_COST'[CHECKED]="YES")
```

DATA VISUALIZATION

CREATING REPORTS IN POWER BI



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Update Data in SQL Server:
Add new data or update records using SQL

Example:

```
INSERT INTO RENTAL_COST
(LOCATION, ADDRESS, COST, SQUARE)
VALUES (‘NEW LOCATION', ‘NEW ADRESS’,
200000000, ‘40m2')
```

Refresh Data in Power BI:
After updating the SQL database, go to Power BI and click Refresh on the Home tab to load the latest data.

CONCLUTION

SUMMARY:

- The project has successfully calculated the breakeven point for coffee shop locations.
- The analysis helps to determine the feasibility of expanding the business by opening new branches.

THANKS