# Reasoning/Overview

* How YUM brands is performing in fast-food business using a dashboard.

# Codes

* For DAX Codes refer the .pbix file in the repository.

# Challenges

* Manual collection of data from spreadsheets and pdf.

# Project Workflow/Plan



# Methodology

* Exploratory Data Analysis
* Dashboard

# Tools in Play

* MS Excel
* POWER BI

# Project Objectives

* Create Dashboard to represent and monitor key financial information for decision-making.

# Data Sources

[https://investors.yum.com/financial-information/financial-reports/#](https://investors.yum.com/financial-information/financial-reports/)

# Data Storage and Management

A diagram of a software process

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# Business and Data Understanding

## About Restaurants

### YUM

<https://www.yum.com/wps/portal/yumbrands/Yumbrands/company>

### KFC

KFC was founded in Corbin, Kentucky by Colonel Harland D. Sanders, an early developer of the quick service food business and a pioneer of the restaurant franchise concept. The Colonel perfected his secret blend of 11 herbs and spices for Kentucky Fried Chicken in 1939 and signed up his first franchisee in 1952. KFC restaurants across the world offer fried and non-fried chicken products such as sandwiches, chicken strips, chicken-on-the-bone and other chicken products marketed under a variety of names.

### Taco Bell

The first Taco Bell restaurant was opened in 1962 by Glen Bell in Downey, California, and in 1964, the first Taco Bell franchise was sold. Taco Bell specializes in Mexican-style food products, including various types of tacos, burritos, quesadillas, salads, nachos and other related items.

### Pizza Hut

The first Pizza Hut restaurant was opened in 1958 in Wichita, Kansas, and within a year, the first franchise unit was opened. Today, Pizza Hut is the largest restaurant chain in the world specializing in the sale of ready-to-eat pizza products. Pizza Hut operates in the delivery, carryout and casual dining segments around the world.

## Income Statement

* An income statement, also known as a profit and loss statement or statement of earnings.
* Quarterly data is unaudited, so, the total will be verified with **Annual Report** or **10-K filings.**

## Balance Sheet – Overall and By Restaurants

* Balance Sheet gives you the financial position.
* A balance sheet is a financial statement that contains details of a company's assets or liabilities at a specific point in time.

## Cash Flows

* The (total) net cash flow of a company over a period (typically a quarter, half year, or a full year).

## Restaurants/Units

* The total no. of restaurants or units established in a country.

# Data Extraction/Collection

* **Data to Collect**
  + **Income data** – quarterly data
  + **Balance Sheet data** – yearly data.
  + **Cashflow** - yearly data
  + **No. of restaurants by country and region** – yearly data
  + Market Cap. - **Live Data from Google Finance**
  + **Stock Market Data** – Historical Data from Yahoo Finance
* Data pertaining to period 2018 to 2023 will be collected for the above.
* Numbers and financial components pertaining to **GAAP** will only be extracted from the given data sources.

# Pre-processing and Dashboard

## Charts

### Revenue

1. Revenue and Growth Rate By Year.
2. Quarterly Revenue and Growth Rate ( Within Year).
3. Expenses – Overall – Expenditure by Year.
4. Expenses – Overall – Expenditure by Quarter.
5. Expenses – Others – Operating Expenditure by Year.
6. Expenses – Others – Interest and Tax Expenditure by Year.
7. Restaurant Sales By Year.
8. Company and Franchise Sales By Year.
9. Net Profit By Year.
10. Net Profit By Quarter.
11. Stock Prices.

### Balance

* Assets - Total Assets By Year
* Assets - Assets and Items for Year (Break Up)
* Property, Plant and Equipment
* Liabilities – Liabilities By Year
* Liabilities – Total Liabilities
* Equity – Total Equity By Year
* Equity - Breakup

### Units

* Top 5 Countries with highest restaurants
* Restaurants and Growth
* Restaurant Footprint
* Map and Matrix View of Restaurant in Countries
* FILTERS

### Restaurants

* Revenue and Growth Rate By Year.
* Expenditure By Year.
* Operating Profit By Year.
* Total Restaurant Sales
* Franchise and Company Split
* No. Of Restaurants

### Cashflow

* Sankey Diagram of Cashflow for 2023
* Sankey Diagram of Cashflow for 2022

## KPIs

### Revenue

1. Market Capitalization
   1. Live from Google Finances
   2. Formula:

***Market Cap. = Stock Price × Number of Outstanding Shares***

* 1. Growth Rate
     1. (Current Year Mar. Cap. – Previous Year Mar. Cap) / Previous Year Mar. Cap

1. Net Profit Margin
   1. Calculated using formula:  
      
   2. Net Profit = Total Revenue – Total Expenditure
2. Operating Margin
   1. Formula:

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* 1. Operating Income.

1. ROI – Return on Investment
   1. Formula:

**ROI = Net income / Cost of investment x 100**.

1. EPS – Earnings Per Share
   1. Formula:

A close-up of a logo

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### Balance

* Current Ratio
  + Formula:

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* + The current ratio is a liquidity ratio that measures a company's ability to pay its short-term liabilities.
* Debt to Equity Ration
  + Formula:

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* + The debt-to-equity ratio (D/E ratio) is a financial and liquidity ratio that shows how much debt a company has compared to its assets.
* Return on Assets
  + Formula:

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* + Return on assets (ROA) is a metric that measures a company's profitability in relation to its total assets.
* Return on Equity
  + Formula:

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* + Return on equity (ROE) is a percentage that measures a company's profitability relative to its shareholders' equity.

### Units

* Company Units
* Franchise Units

### Restaurants

* Restaurant Operating Margin
  + Formula

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## Validations

* Since the availability about the existing data is checked and verified, most validations used in DAX to show the data are constricted and are simple.

# Glossary of Terms, Notes and Definitions

* Check out ***Info Docs*** Folder.

# References

<https://www.macrotrends.net/stocks/charts/YUM/yum!-brands/financial-statements>

<https://www.google.com/finance/?hl=en>

https://finance.yahoo.com/quote/YUM?p=YUM&.tsrc=fin-srch