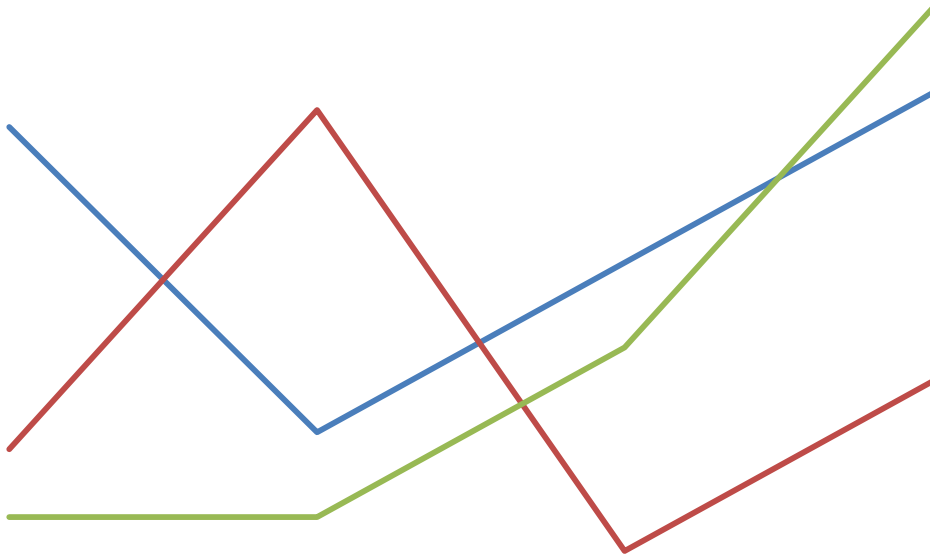# E-kirana

# Sales Analysis

*Presented by Wasim Alam*

# About

- **E-kirana** is a self-service supermarket offering a wide variety of food, beverages and household products, organized into sections.

- It also provides online portal for shopping different varieties of products.

- The supermarket has more then **23,000+** outlets across **182 countries**.

- As of 2017, **E-kirana** - the online/offline retail store had the highest market share among all retail stores in the world at **over 35% market share**.

# Problem Statment

Due to covid-19 there're many people which fear to step outside the home to purchase the daily essential items, so the demand of market is to increase the online services in this pandemic or in general.

# Analysis Stage 1

- The data set collected consists past 7 years of data.
- The dataset is having 10,000 records( from 2010-2017), collected from 23,000+ outlets.
- They sale their products across 182 countries and distribute it across countless regions.

| Region | Country | Item Type | Sales Channel | Order Priority | Order Date | Order ID | Ship Date | Units Sold | Unit Price | Unit Cost | Total Revenue | Total Cost | Total Profit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sub-Saharan Africa | Central African Republic | Vegetables | Online | H | 1/1/2010 | 506209075 | 2/4/2010 | 7369 | 154.06 | 90.93 | 1135268.1 | 670063.17 | 465204.97 |
| Asia | China | Cereal | Online | C | 1/1/2010 | 863776719 | 2/10/2010 | 9581 | 205.7 | 117.11 | 1970811.7 | 1122030.9 | 848780.79 |
| Europe | Sweden | Clothes | Online | H | 1/2/2010 | 907228076 | 2/21/2010 | 7803 | 109.28 | 35.84 | 852711.84 | 279659.52 | 573052.32 |
| Sub-Saharan Africa | Equatorial Guinea | Snacks | Offline | M | 1/2/2010 | 335552775 | 2/12/2010 | 6378 | 152.58 | 97.44 | 973155.24 | 621472.32 | 351682.92 |
| Asia | Mongolia | Cosmetics | Offline | C | 1/2/2010 | 695167052 | 1/22/2010 | 4234 | 437.2 | 263.33 | 1851104.8 | 1114939.2 | 736165.58 |
| Australia and Oceania | Kiribati | Baby Food | Offline | C | 1/3/2010 | 728149211 | 1/12/2010 | 4387 | 255.28 | 159.42 | 1119913.4 | 699375.54 | 420537.82 |
| Australia and Oceania | Solomon Islands | Beverages | Online | C | 1/3/2010 | 994366824 | 1/23/2010 | 4095 | 47.45 | 31.79 | 194307.75 | 130180.05 | 64127.7 |
| Australia and Oceania | Tonga | Personal Care | Offline | H | 1/3/2010 | 578549325 | 2/6/2010 | 4457 | 81.73 | 56.67 | 364270.61 | 252578.19 | 111692.42 |
| Europe | Iceland | Clothes | Offline | M | 1/3/2010 | 898569476 | 1/5/2010 | 5531 | 109.28 | 35.84 | 604427.68 | 198231.04 | 406196.64 |
| Sub-Saharan Africa | Sao Tome and Principe | Cosmetics | Offline | C | 1/3/2010 | 588900506 | 2/3/2010 | 7601 | 437.2 | 263.33 | 3323157.2 | 2001571.3 | 1321585.9 |
| Europe | Kosovo | Clothes | Online | L | 1/3/2010 | 416433608 | 1/16/2010 | 814 | 109.28 | 35.84 | 88953.92 | 29173.76 | 59780.16 |
| Central America and the Caribbean | Haiti | Personal Care | Offline | M | 1/3/2010 | 501643741 | 2/7/2010 | 6385 | 81.73 | 56.67 | 521846.05 | 361837.95 | 160008.1 |

# Analysis Stage 2

Data validation, Data Cleaning & Data profiling are done using Microsoft Excel



- Data Cleaning, Data Profiling, Data Transformation & loading to the database:

- For data cleaning & profiling, Microsoft excel is used.

# Analysis Stage 3

**Data Transformation**

For data transformation & loading, Microsoft SQL server management studio is used. The filtered data is first extracted from excel sheets then loaded into the database. Some of the columns present in the excel sheet are being made non- null columns in the database.
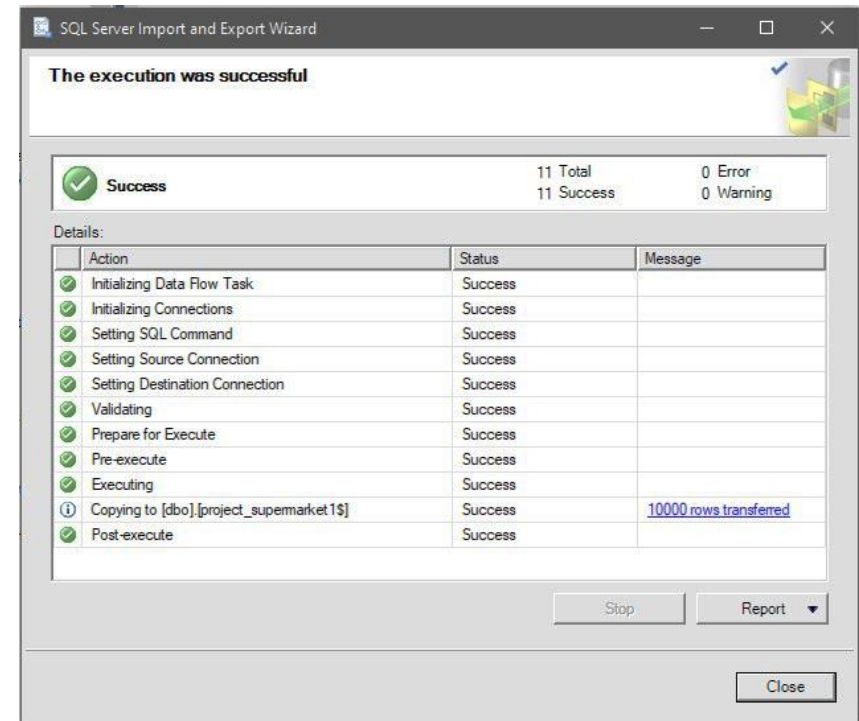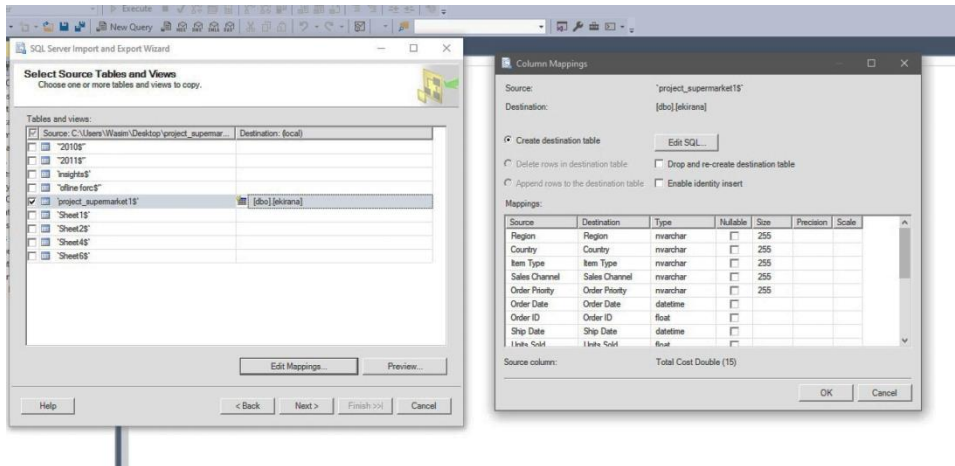
# Analysis Stage 4

**Performing SQL Queries to analyse the data insights.**

Query to get the total profit collected by both sales channel

select **SUM**([total profit]) as online_profit
from Sheet
where [Sales Channel]='online';

select **SUM**([total profit]) as offline_profit
from Sheet
where [Sales Channel]='offline';

| | Results | Messages |
|---|---|---|
| | online_profit | |
| 1 | 2069460563.19 | |

| | offline_profit | |
|---|---|---|
| 1 | 2051193463 | |

Query to get the list of countries where people prefer more offline sale channel for purchasing.

```sql
select COUNT(country) as offline_sales_by_country
from Sheet where [Sales Channel]='offline';
```

| | offline_sales_by_country |
|---|---|
| 1 | 5125 |

**After hiring the data analyst what changes have been made to increase the sale of online in various countries ?**

- Need more focus in the countries where the numbers of online sale is less.

- Analyzing the list of countries where the most items sold via offline mode.

- Increase the door to door services for better online shopping experience.

# Analysis Stage 5

## Visualization & Insights
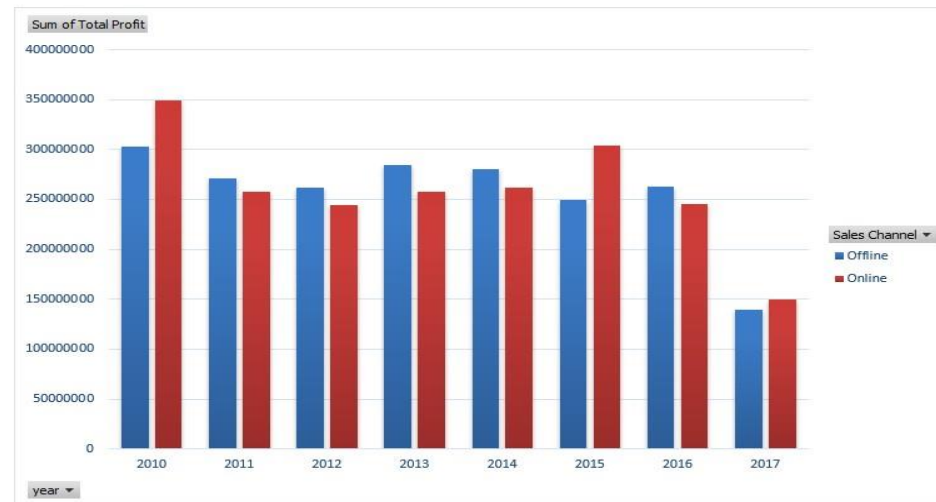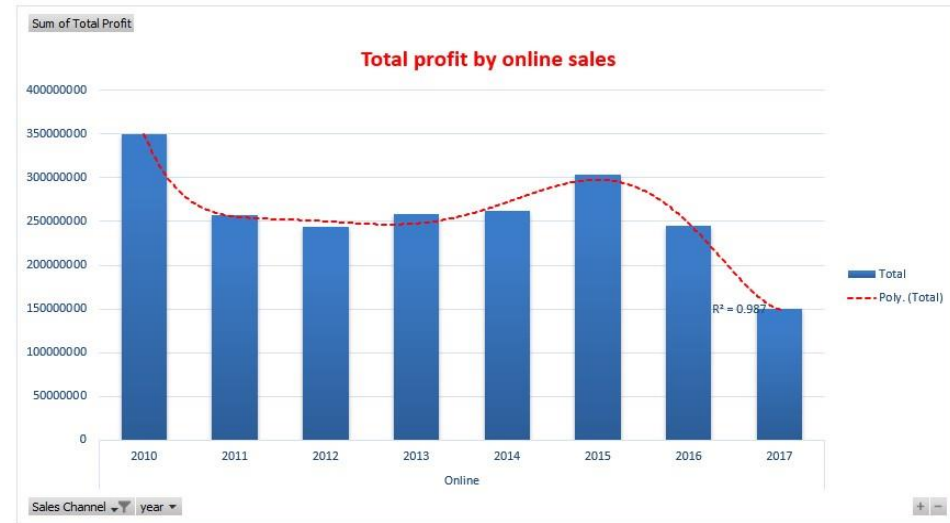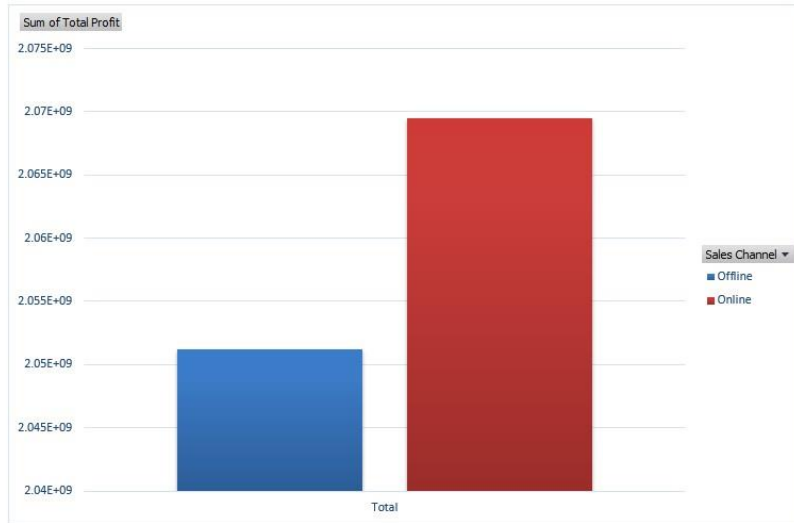
# CHANGES NEED TO CONSIDER

- Give first order free for online first purchase via app.

- Should provide Free delivery on amount of min Rs.1000

- Give additional discounts to your loyal customers on purchasing more.

- Give discount 20% to 50% discount on online customers.

- Provide them with a points card where they can store their discount price and purchase those products at free of cost at the end of the month.

# ADVANTAGES

- After the free delivery service, the sales of online will increase.

- Additional offers will attract more numbers of new customers.

- It'll increase the growth of online sales in countries where people are usually use offline mode for shopping.

# Disadvantages

- It will increase your expenditure.
- The Profit margin will reduce.

# Conclusion

E-kirana can go for more investment on it's online services. Because, it's the demand of market. Due to pandemic the shopping of goods from online store increased gradually and the demand will continue till this pandemic is over. It'll not just increase the growth of the company but add values among people that the company is stand with them in such worst condition.