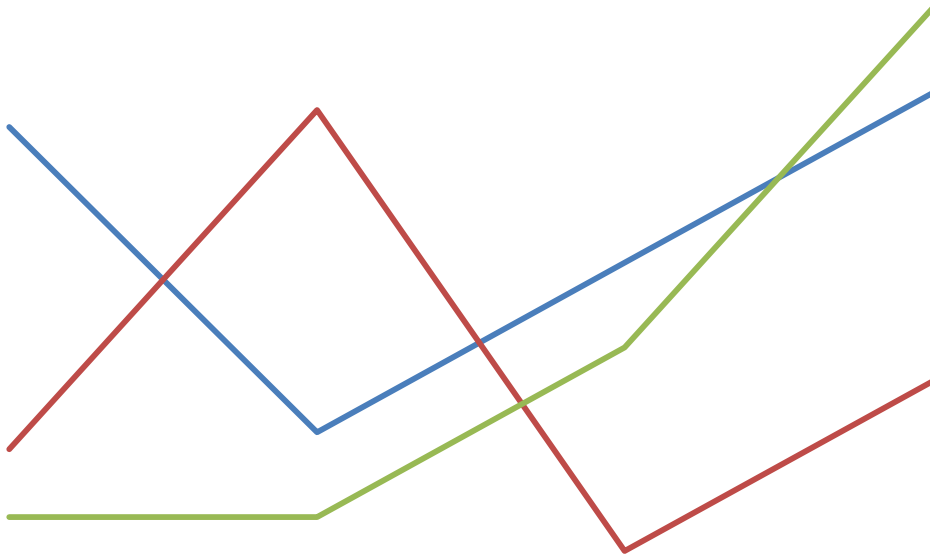


E-kirana

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 than **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		Order		Order ID	Ship Date	Units Sold	Unit Price	Unit Cost	Total		
			Channel	Priority	Order Date							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

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Sales			Order			Total							
Region	Country	Item Type	Channel	Priority	Order Date	Order ID	Ship Date	Units Sold	Unit Price	Unit Cost	Revenue	Total Cost	Total Profit
Europe	United Kingdom	Snacks	?	M	1/26/2010	155964505	2/16/2010	2218	152.58	97.44	338422.44	216121.92	122300.52
Central America and the Caribbean	Antigua and Barbuda	Cereal		M	5/6/2010	311989676	6/3/2010	3533	205.7	117.11	726738.1	413749.63	312988.47



A	B	C	D	E	F	G	H	I	J	K	L	M	N
Sales			Order			Total							
Region	Country	Item Type	Channel	Priority	Order Date	Order ID	Ship Date	Units Sold	Unit Price	Unit Cost	Revenue	Total Cost	Total Profit
Null	Liechtenstein	Personal Care	Online	C	1/19/2010	727009379	1/26/2010	7086	81.73	56.67	579138.78	401563.62	177575.16
Null	Tonga	Cosmetics	Online	H	1/20/2010	142818248	1/21/2010	1948	437.2	263.33	851665.6	512966.84	338698.76
Null	Jordan	Household	Online	L	1/24/2010	210593163	1/27/2010	8052	668.27	502.54	5380910	4046452.1	1334458
Null	Bangladesh	Cosmetics	Offline	M	1/31/2010	315089452	2/17/2010	826	437.2	263.33	361127.2	217510.58	143616.62
Null	Nicaragua	Personal Care	Offline	L	2/9/2010	801594960	2/12/2010	8617	81.73	56.67	704267.41	488325.39	215942.02
Null	Sri Lanka	Baby Food	Online	C	2/16/2010	195403277	3/18/2010	3027	255.28	159.42	772732.56	482564.34	290168.22
Null	Federated States of Micronesia	Vegetables	Online	M	2/27/2010	286557614	3/21/2010	7621	154.06	90.93	1174091.3	692977.53	481113.73
Null	Nicaragua	Household	Offline	L	3/14/2010	830132806	4/22/2010	3599	668.27	502.54	2405103.7	1808641.5	596462.27
Null	Slovakia	Cosmetics	Offline	H	3/24/2010	657588231	5/8/2010	3825	437.2	263.33	1672290	1007237.3	665052.75



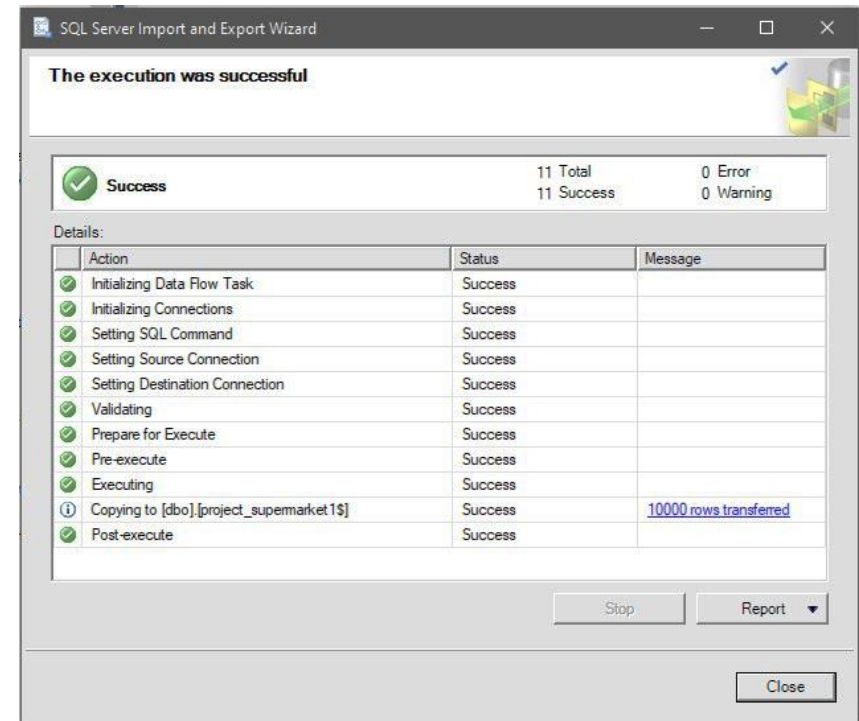
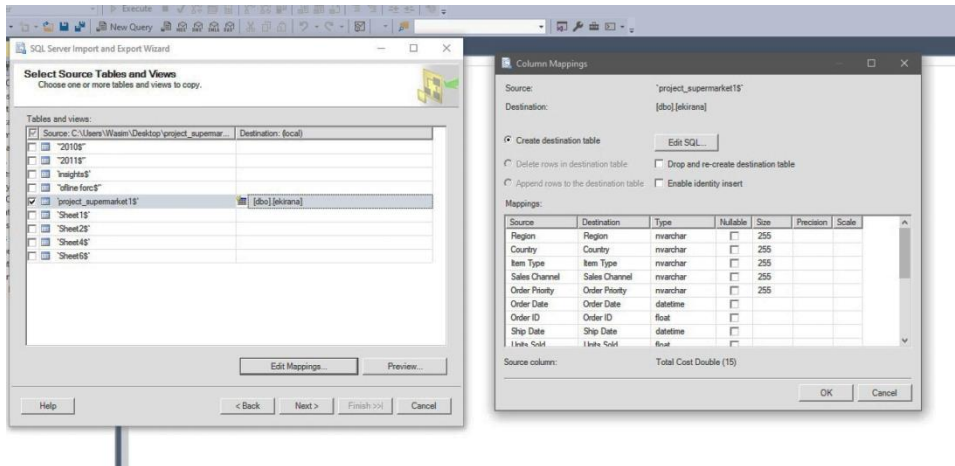
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Order			Total										
Region	Country	Item Type	Sales Channel	Priority	Order Date	Order ID	Ship Date	Units Sold	Unit Price	Unit Cost	Revenue	Total Cost	Total Profit
Sub-Saharan Africa	Central African Republic	Vegetables	Online	H	1/1/2010	506209075	2/4/2010	7369	154.06	90.93	1135268.1	670063.17	465204.93
Asia	China	Cereal	Online	C	1/1/2010	863776719	2/10/2010	9581	205.7	117.11	1970811.7	1122030.9	848780.8
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	736185.6
Australia and Oceania	Kiribati	Baby Food	Offline	C	1/3/2010	728149211	1/12/2010	4387	255.28	159.42	1119913.4	699375.54	420517.86
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	111619.42
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

- 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.

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

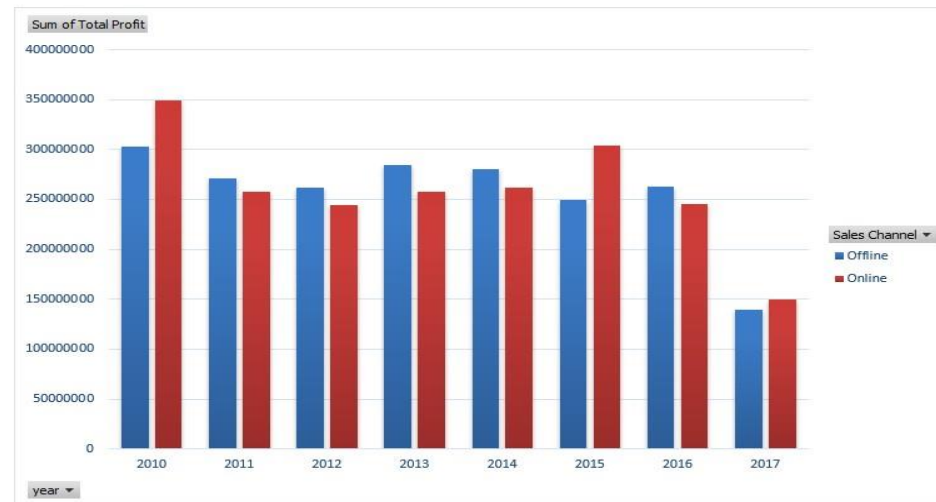
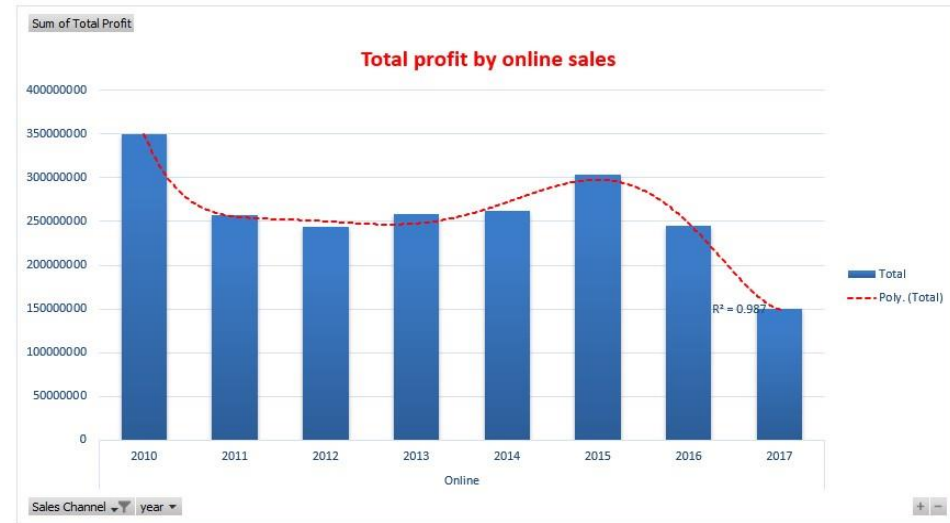
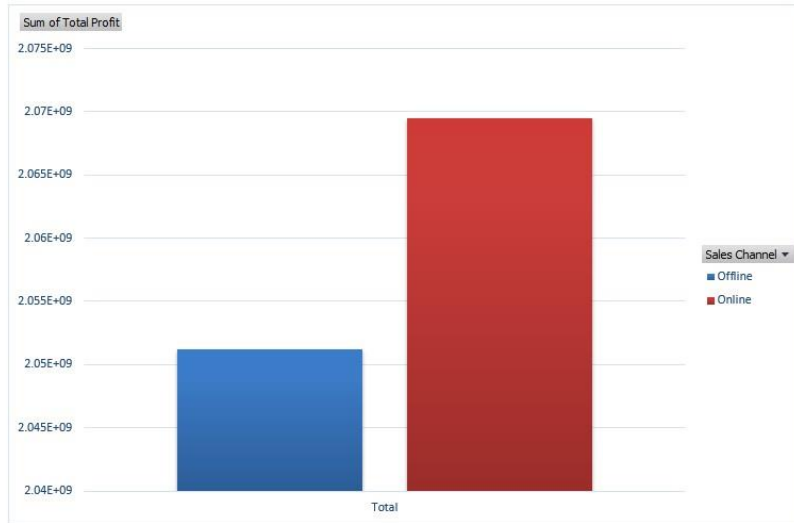
Results		Messages
offline_sales_by_country		
1	5125	

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.