

Online Retail

Data analysis

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Today's Agenda

Project Recap

Project Problem Statement

Process

Dashboard

Data Analysis



Content:

Project Recap:

- Brief Project introduction

Project Problem Statement

- Outline of CEO and CMO problem

Process

- Data Exploration
- Data Cleaning
- Data Modelling
- Data Analysis

Dashboard

- CEO Dashboard
- CMO Dashboard
- Detail Product Report Dashboard
- Target customer Dashboard

Data Analysis

- Customer Retention And Purchase Trend
- TOP 5 Stocks And Products
- Region
- Top Priority Countries
- Month
- Ideal Latency
- Target Customers



PROJECT RECAP:

Online retail store business has been performing well and want to expand it further.

Management aspire to analyze data and receive valuable insights so they can strategically plan for next year.

I hired as consultant to review their data and provide insights that would assist stakeholders to improve business.



Project Problem Statement:

CEO and CMO of online store desire data insights to plan strategy for next year.

CEO:

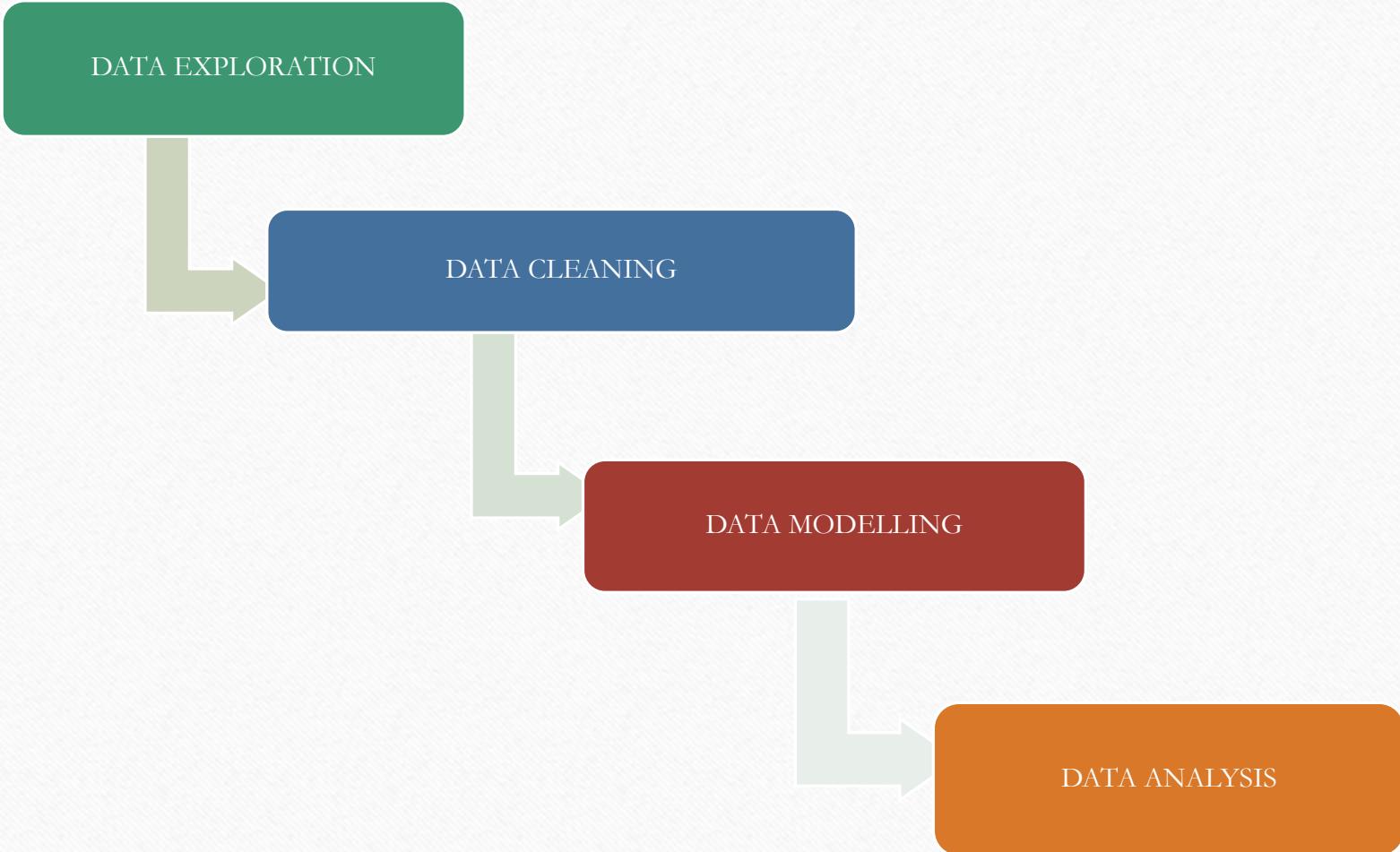
- Region is generating the highest and lowest revenue
- Monthly trend of revenues and their revenue statistics
- Top Customers and their impact on business

CMO:

- Customers behaving pattern
- Customer revenue outlook
- Most frequently purchased products



Process:



CEO Dashboard



CMO Dashboard

TATA
CEO DASHBOARD
CMO DASHBOARD
DETAIL PRODUCT REPORT

SELECT CUSTOMER

CustomerID	Month	Orders	Revenue
12347	December	11	\$224.8
12358	December	7	\$683.
12362	December	30	\$529.0
12364	December	27	\$310.3
Total		41277	\$15,28,238.86

TREND IN REVENUE

SELECT DATE

Date	Revenue
Jan 2011	\$1,27,225
Feb 2011	\$91,467
Mar 2011	\$1,28,298
Apr 2011	\$59,641
May 2011	\$1,36,270
Jun 2011	\$1,14,417
Jul 2011	\$1,55,894
Aug 2011	\$2,14,422
Sep 2011	\$45,809
Oct 2011	
Nov 2011	

SELECT COUNTRY

Country	Order	Revenue
Netherlands	193550	\$2,76,661.86
EIRE	134890	\$2,56,448.58
Germany	112289	\$2,13,472.66
France	106439	\$1,99,318
Australia	83434	\$1,37,488.46
Spain	27066	\$59,714.83
Switzerland	29368	\$55,139.03
Total	866222	\$15,28,238.86

MONTH CLASSIFICATION

Month	Orders	Product Quantity	Revenue
October	5800	116875	\$2,14,422.32
November	5708	97756	\$1,80,954.22
September	4390	90232	\$1,55,883.51
August	3896	87272	\$1,46,856.13
June	3468	82693	\$1,36,270.46
March	3161	72197	\$1,28,297.57
January	3070	70823	\$1,27,224.98
Total	41277	866222	\$15,28,238.86

QUANTITY

REVENUE

StockCode	Description	Orders	Product Quantity	Revenue
M	Manual	2	2	\$8,322.12
M	Manual	5	5	\$6,090.84
M	Manual	2	2	\$6,068.06
23084	RABBIT NIGHT LIGHT	3	2472	\$5,120.88
23084	RABBIT NIGHT LIGHT	4	2184	\$3,909.36
M	Manual	2	2	\$3,374.34
Total		41277	866222	\$15,28,238.86

PRODUCT CLASSIFICATION

Detail Product Report Dashboard

[CEO DASHBOARD](#)
[CMO DASHBOARD](#)
[DETAIL PRODUCT REPORT](#)

SELECT PRODUCT

- 4 PURPLE FLOCK DINNER CANDLES
- 50'S CHRISTMAS GIFT BAG LARGE
- DOLLY GIRL BEAKER
- I LOVE LONDON MINI BACKPACK
- I LOVE LONDON MINI RUCKSACK
- NINE DRAWER OFFICE TIDY
- OVAL WALL MIRROR DIAMANTE
- RED SPOT GIFT BAG LARGE
- SET 2 TEA TOWELS I LOVE LONDON
- SPACEBOY BABY GIFT SET
- TRELLIS COAT RACK
- 10 COLOUR SPACEBOY PEN
- 12 COLOURED PARTY BALLOONS
- 12 DAISY PEGS IN WOOD BOX
- 12 EGG HOUSE PAINTED WOOD
- 12 IVORY ROSE PEG PLACE SETTINGS
- 12 MESSAGE CARDS WITH ENVELOPES
- 12 PENCIL SMALL TUBE WOODLAND
- 12 PENCILS SMALL TUBE RED RETROSPOT
- 12 PENCILS SMALL TUBE SKULL
- 12 PENCILS TALL TUBE POSY

406
CUSTOMERS
41.28K
ORDERS
866K
PRODUCT QUANTITY
\$1.53M
REVENUE

Jan 2011 Apr 2011 Jul 2011 Oct 2011

Jan 2011 Apr 2011 Jul 2011 Oct 2011

Jan 2011 Apr 2011 Jul 2011 Oct 2011

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PRODUCT	COUNTRY	ORDERS	PRODUCT QUANTITY	REVENUE
SET 2 TEA TOWELS I LOVE LONDON	USA	1	3	\$9
12 PENCILS SMALL TUBE	USA	1	72	\$4
Total		41277	866222	\$15,28,238

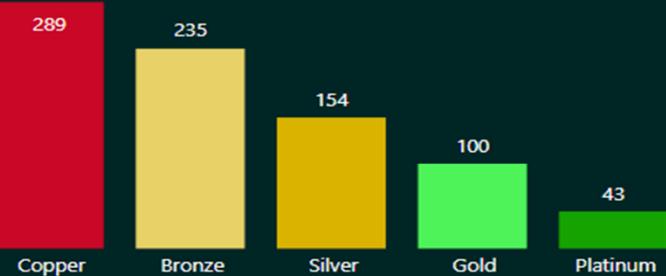
COUNTRY	ORDERS	PRODUCT QUANTITY	REVENUE
Australia	1150	83434	\$1,37,488.46
Austria	390	4830	\$9,921.48
Bahrain	17	260	\$548.4
Belgium	1936	21482	\$39,386.43
Brazil	32	356	\$1,143.6
Total	41277	866222	\$15,28,238.86

Target Customer Dashboard

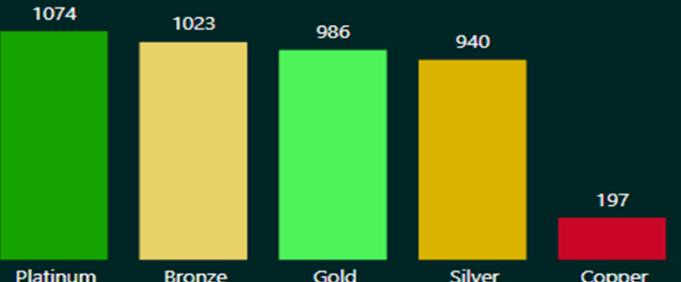


TITLE SUMMARY

Avg Days from Last Purchase



COUNT

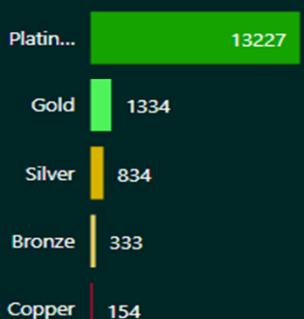


SELECT TITLE

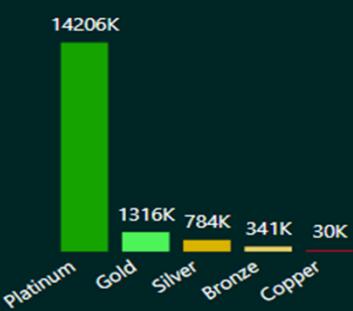
Bronze	Gold	Silver
Copper	Platinum	

TITLE	CUSTOMER_ID
Bronze	12353
Bronze	12355
Bronze	12375
Bronze	12384
Bronze	12390
Bronze	12391
Bronze	12403
Bronze	12418
Bronze	12420
Bronze	12427
Bronze	12430
Bronze	12436
Bronze	12448
Bronze	12450
Bronze	12452
Bronze	12478
Bronze	12479
Bronze	12491

Avg Revenue



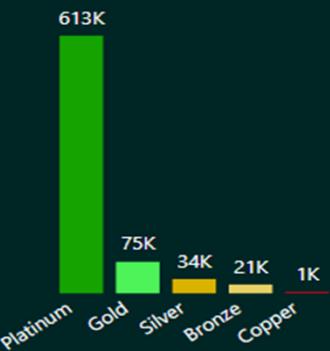
Total Revenue



Avg Order



Total Order



Data Analysis

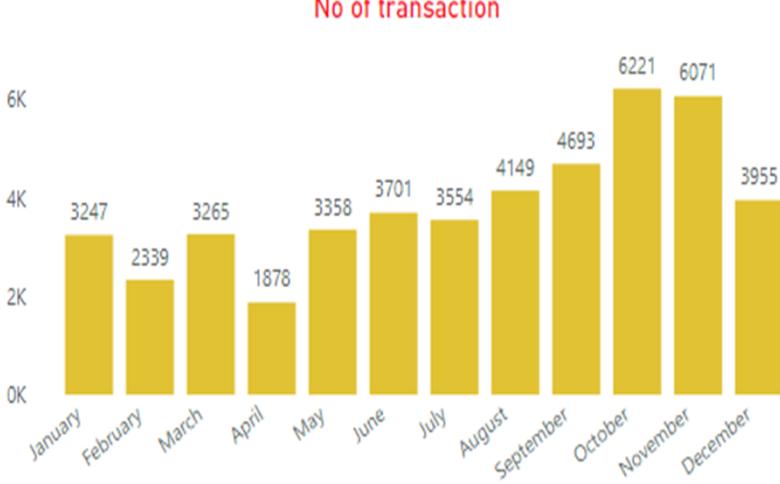
CUSTOMER
RETENTION

406
TOTAL CUSTOMER

65%
PERCENTAGE

264
REPEATING
CUSTOMER

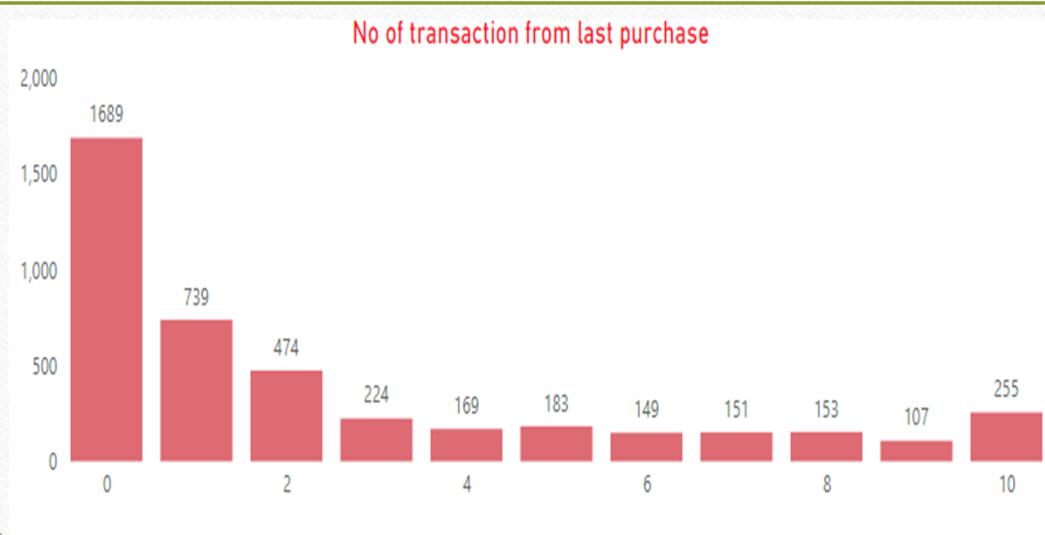
No of transaction



CUSTOMER PURCHASE TREND

- 45% of total transaction placed in September-December quarter.
- On average 5200 transaction placed in last quarter, 39% more than first 8 Months
- Dec month see 35% drop in transactions





TOP 5 STOCK

Description	Revenue
POSTAGE	\$64,604.94
Manual	\$33,580.99
REGENCY CAKESTAND 3 TIER	\$29,786.55
RABBIT NIGHT LIGHT	\$28,782.08
ROUND SNACK BOXES SET OF4 WOODLAND	\$16,957.45
Total	\$1,73,712.01

- 39% transaction placed within Month from last order whereas 56% transaction within 60 days
- Transaction frequency decreases with increase in interval
- Target: increase customer service to encourage him to place order within 30 days.

TOP 5 PRODUCT

Description	Order
RABBIT NIGHT LIGHT	15437
ROUND SNACK BOXES SET OF4 WOODLAND	6295
POSTAGE	2863
REGENCY CAKESTAND 3 TIER	2605
Manual	39
Total	27239



Data Analysis:

Region: Western Europe > Australia > Eastern Europe > Nordic region

- Europe is high revenue generating region. Data indicating that online store does not have enough customers in ASIA continent where data services penetrating at speed more than Europe
- Recommendation: Establish new department with resources which will concentrate on acquiring new customers from region.

Top priority Countries: Germany France Spain Netherland Ireland Australia

- This countries accounts 71-75% of total revenue and order
- Recommendation: improve customer post delivery services to improve retention rate
- Special country need to target: Czech republic only 1 customer which opposite of general trend. Potential to have more customers



Month: July-November

July-November quarter has maximum business in store. Probability that customer ordering products before Winter season set in Europe

Ideal latency: within 30 days

We could give discounts to regular customers to increase their order frequency.

Target customer:

- Platinum category customers
- Customers with ID: 14646 14911 12415 14156 17404
- Spending power: more than 4500\$

Associate problem: Too much dependency on top customer. Store need to diversified their business

Stock are Products: list of them provided in link

we need to concentrate on this 30 products. We need to formulate plan to handle supply chain so that this products are available in desired quantities in warehouse.



THANK YOU

Link: [diamond customers.xlsx](#)
[tataonlinestorelink.docx](#)

