## Data Vision Analytics

WHO ARE WE!

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#### Mission statement

- Help businesses to analyze customer data
- Help businesses to make data driven decision
- Find models to group customers for marketing strategy
- Explore data & identify customers' consumer behavior
- Suggest implementation for desired results.

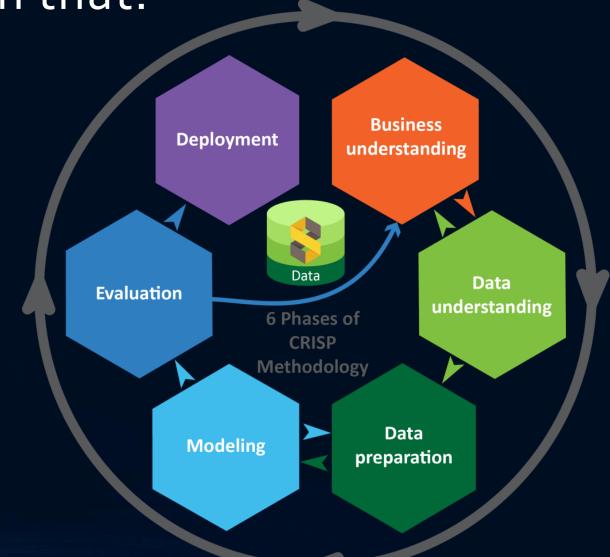


Our job is to Join the dots!

How do we accomplish that!

#### CRISP-DM

- Business understanding
- Data Understanding
- Data preparation
- Modelling
- Evolution
- Deployment



# Goal: successful marketing campaign strategy for a hotel

- Nationality
- Age
- When they book
- Their requests

Know the customers

Identify their behaviors

- What young or old customer do
- Who ask for quiet room

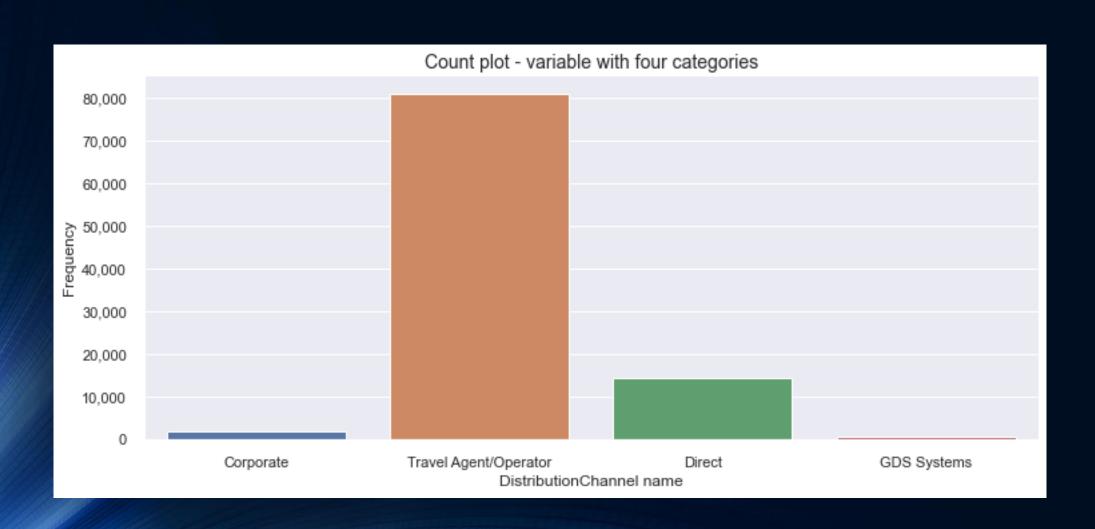
- High value customers
- Regular ones
- Popular request

Grouping them

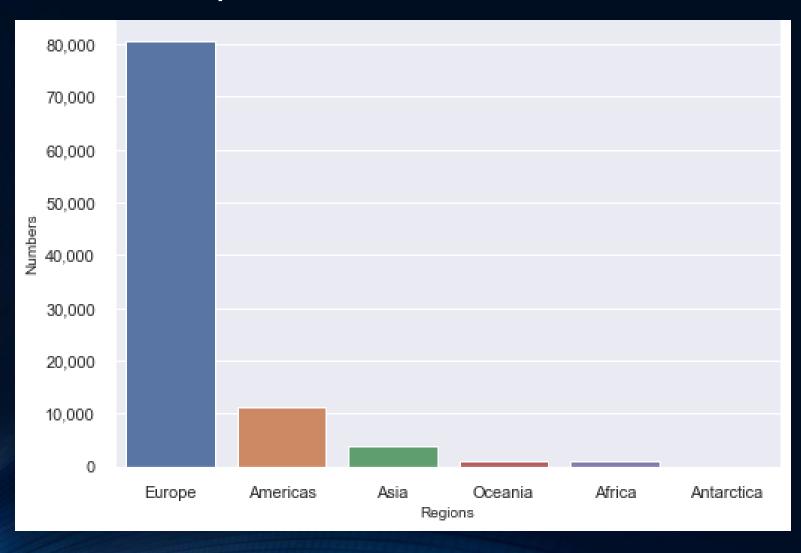
Finding the most efficient way for advertising

- Predicting their behavior for each group
- Targeting them in right time

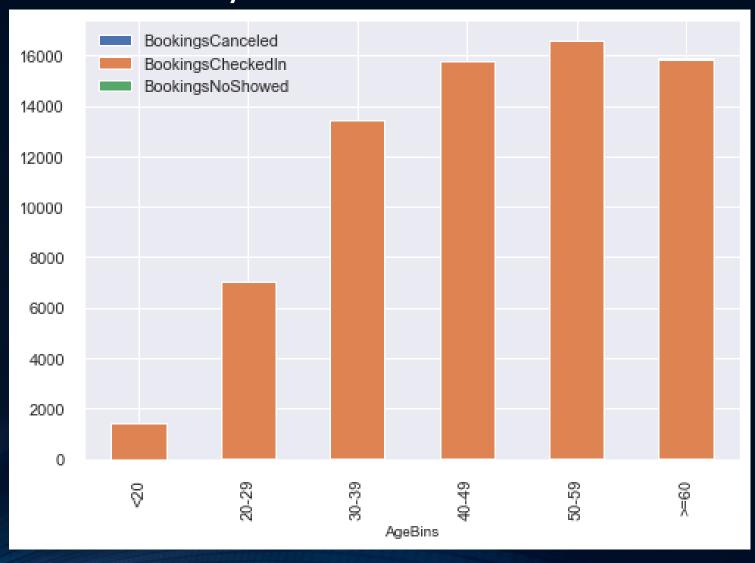
#### What distribution channel is the customer book?



## Where are they come from?



## How old are they?



#### Problems found in the data:

- Duplicated Values
- Duplicated NameHash and DocIDHash
- Incoherent values (age, average lead time)
- Missing values

#### The Model

- PCA was used to reduce dimensionality and improve the performance
- Using KMeans algorithm
- 7 clusters created. This number will help us in marketing strategies.

## The Results

## 7 Segments!

SEGMENTS	AGE_BINS	CHANNEL	REGION	TOTAL CUSTOMERS	TOTAL REVENUE	AVG_REVENUE	AVG PERSON_NIGHTS	AVG ROOMS_NIGHTS	AVG DAYS_SINCE_CREATION	AVG_LEADTIME
VHV	[40-59]	Travel Agent/Operator	Europe	3,028	5,712,450	1,886.54	16.03	6.91	540.61	113.10
HV	[40-59]	Travel Agent/Operator	Europe	15,297	11,300,376	738.73	10.34	4.78	677.71	80.87
MV	>=50	Travel Agent/Operator	Europe	10,498	4,443,758	423.35	5.78	2.93	641.47	243.11
LV	[30-59]	Travel Agent/Operator	Europe	19,130	6,857,554	358.47	4.13	2.38	352.49	47.80
VLV	[30-59]	Travel Agent/Operator	Europe	20,573	6,483,743	315.16	4.46	2.35	1,047.32	49.48
NV(A)	<20 & >=60	Travel Agent/Operator	Europe	17,590	0	0.00	0.00	0.00	376.17	0.00
NV(B)	<20 & [50-59]	Travel Agent/Operator	Europe	11,573	0	0.00	0.00	0.00	342.27	0.00

### What are the marketing strategies?

- Regular Updates
- Customer Feedback
- Revenue Management
- Cluster specific targeted marketing

## Why should this be deployed!

- Data driven decision making
- Increase revenue
- Serve current customer better and retain
- Attract new customers
- Build reputation

## Thank you

#### Question time

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