

SEPT 02, 2020

# CONSUMERS' PURCHASE INTENTION

TOWARDS ONLINE SHOPPING

Presented by Sylvia Andriani



# Presentation Outline

---

## Key topics for discussion

Introduction

Problem

Business Value

Workflow

Business Insights

Best Model

Conclusion





# My Profile

## Sylvia Andriani

### *Education*

- Bachelor's Degree in Economics (Financial Management)

### *Job Experiences*

- Administration and financial specialist for 3 years.

# Project Overview

## About Dataset

The dataset consists of feature vectors belonging to 12,330 sessions.

## Dataset

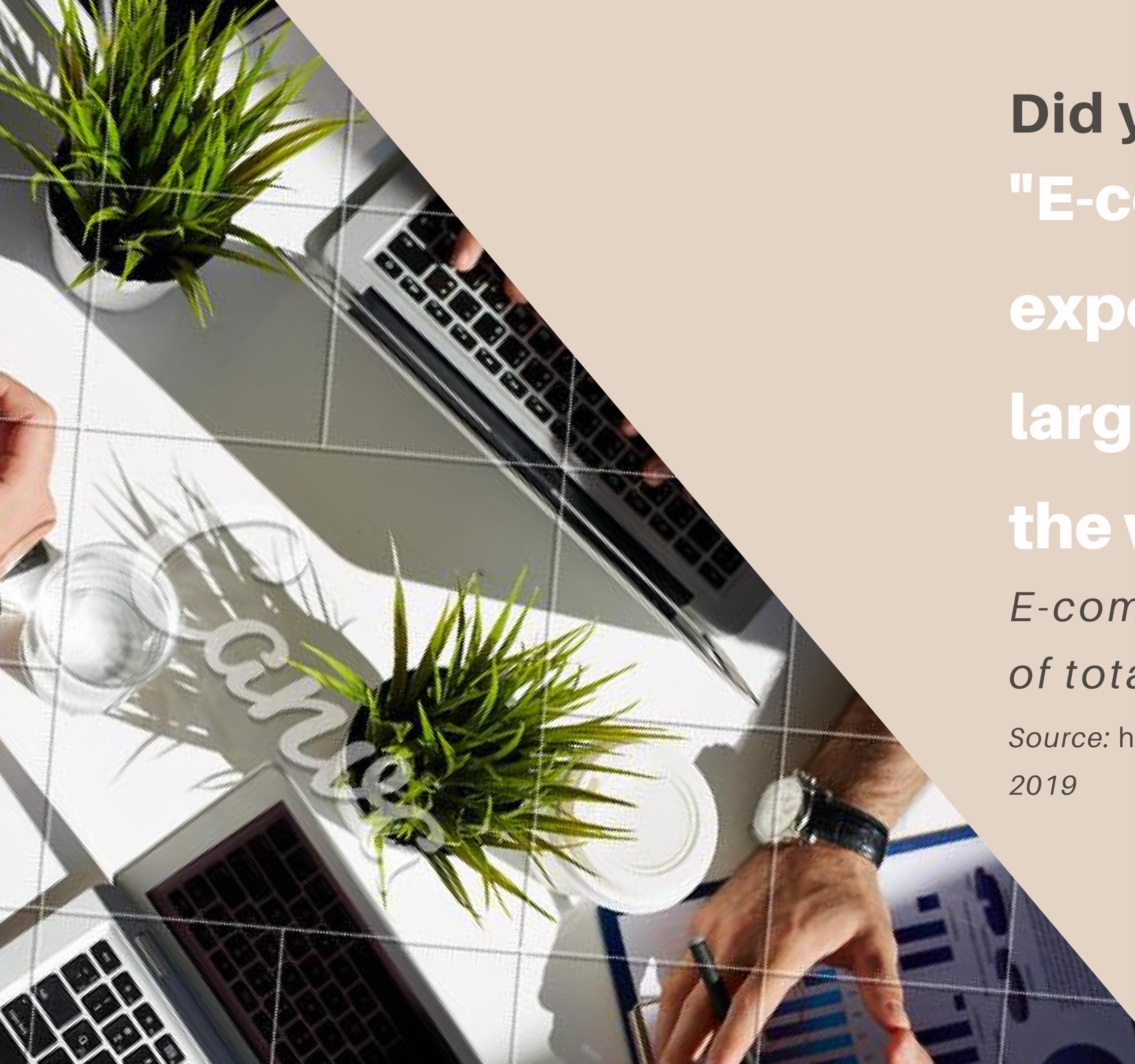
The dataset has been collected from [www.columbia.com.tr](http://www.columbia.com.tr) which was provided by the Turkish Gözalan Group.

## Data Types

Primarily the dataset consists of 10 numerical and 8 categorical attributes. Revenue is the class label (target).

# Why do we need Online Shopping?

*Online shopping is the easy solution for busy life in today's world. In the past decade, there had been a massive change in the way of customer's shopping. Despite consumers' continuation to buy from a physical store, the users or buyers feel very convenient to online shopping. Online shopping saves crucial time for modern people because they get so busy that they cannot or unwilling to spend much time shopping.*



**Did you know?  
"E-commerce is  
expected to become the  
largest retail channel in  
the world by 2021."**

*E-commerce will account for 14%  
of total retail sales in that year.*

Source: <https://www.forbes.com/sites/michellegrant>,  
2019

# Objective

---

## Problem Statement

---

Predict the purchasing intention of the visitor using user information and aggregated pageview data track during the visit along with some session.

The objective of this project is **to evaluate the actions taken by the visitors on E-commerce environment in real time.**

## Background

---

COVID-19 Pandemic drives E-commerce upward.

## Stakeholders

The aim of this study is to evaluate the actions taken by the visitors on e-commerce and help decision making for **Digital Marketers, UI/UX Designers, and Content Creators.**

# Business Value

## ***Know Consumer Attitudes***

Consumer attitudes toward online shopping usually been determined by two factors; one is trust, and another is perceived benefits (Hoque, Ali, & Mahfuz, 2015).

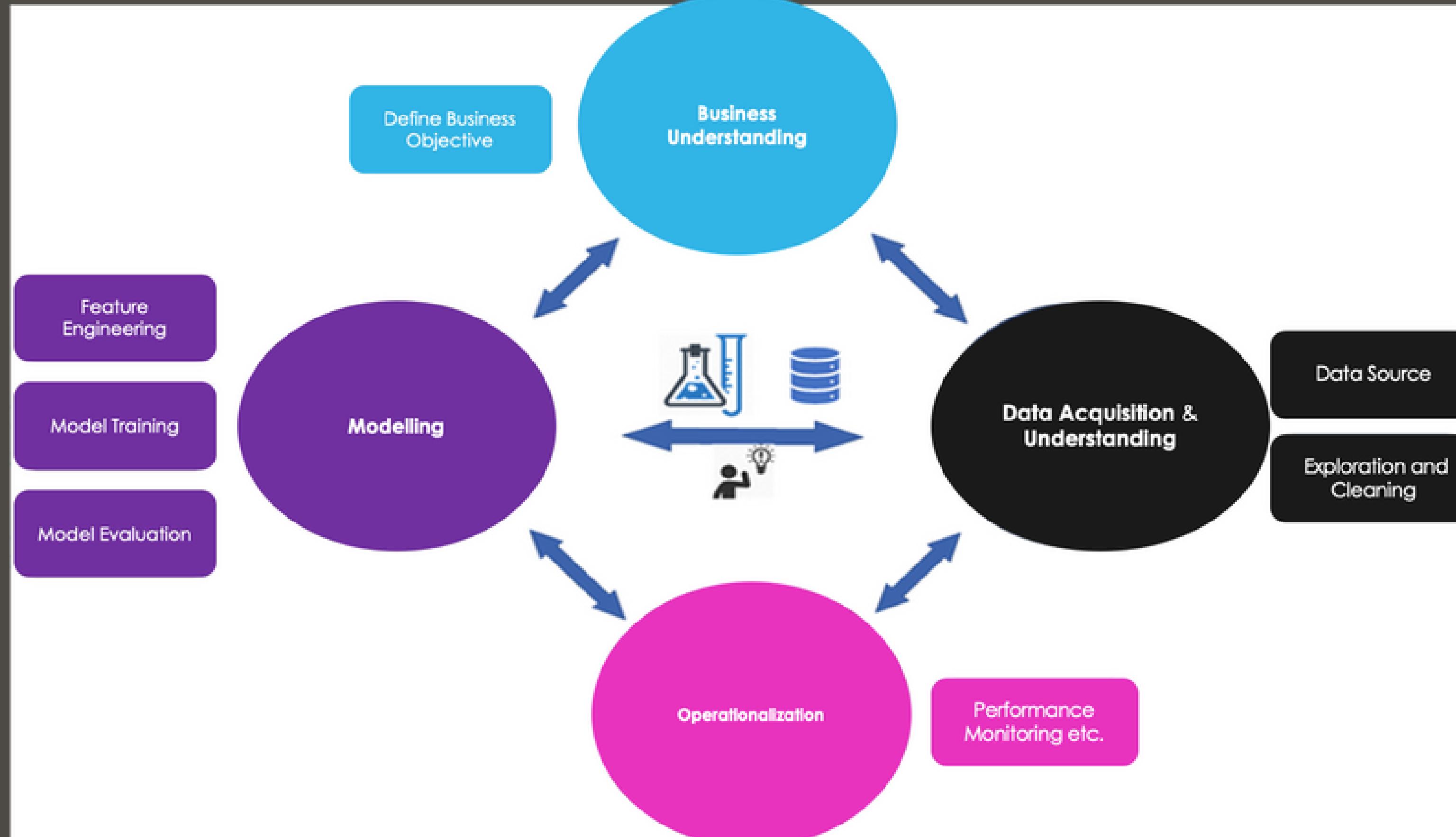
## ***Improve Marketing Strategy***

Offering customers more flexible prices and promotions or offering a one-stop shopping service are some more examples that online stores can use to make their business succeed (Yu and Wu, 2007)

## ***Develop User Friendly Website***

Customers can be influenced by the image of the web site when they decide what website or buyer they should buy from (Lim and Dubinsky, 2004)

# WORKFLOW

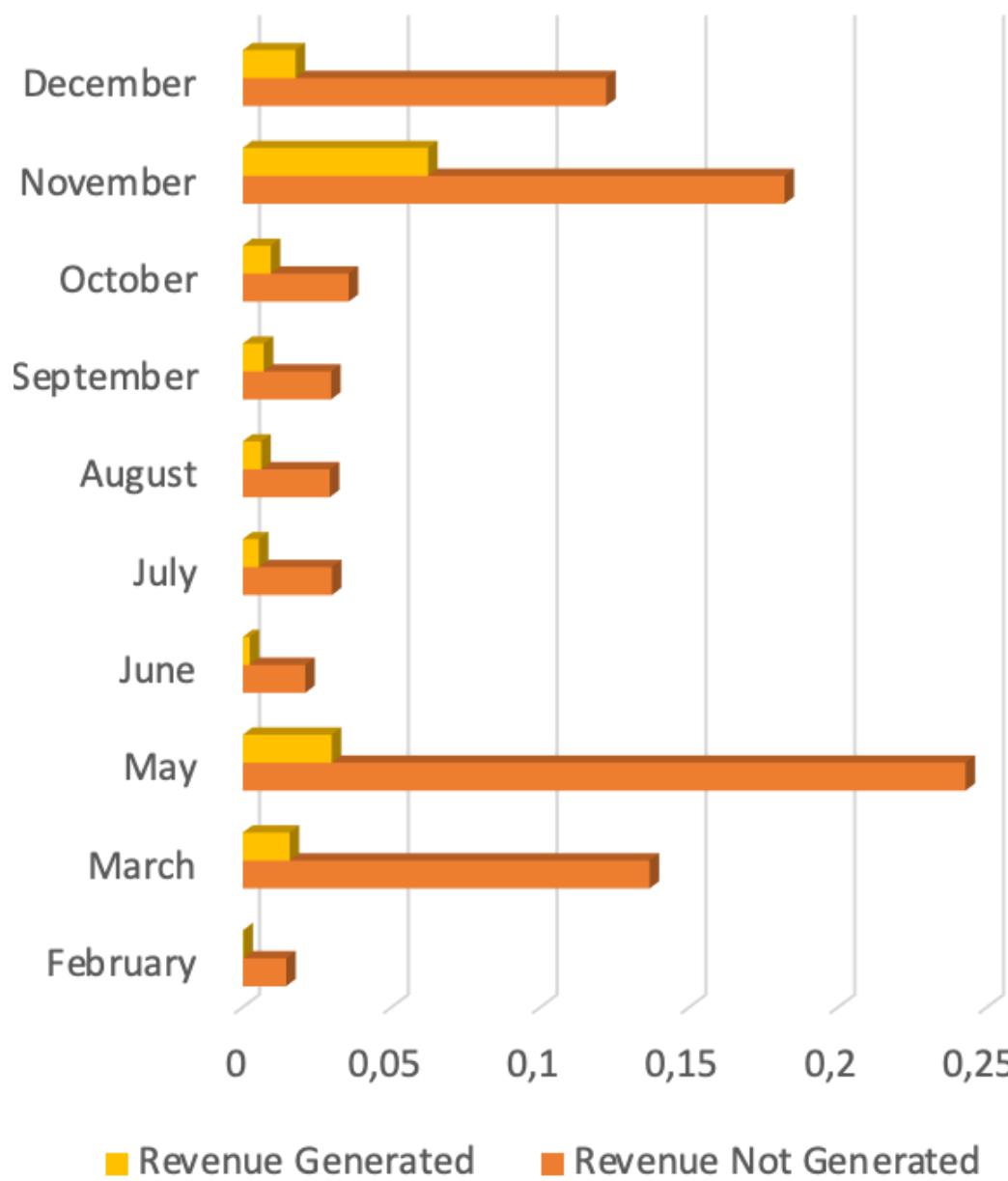


## Special Days Impact?

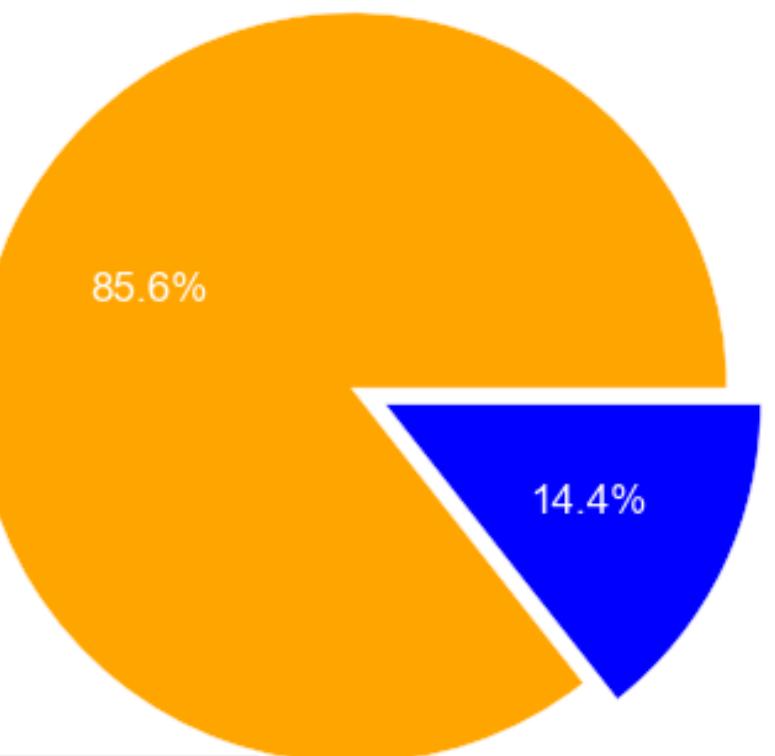
~90% Interactions on Non-Special Days\*

\*Due to Sportswear Company

### Monthly Conversion Rate



## REVENUE GENERATED OR NOT ?

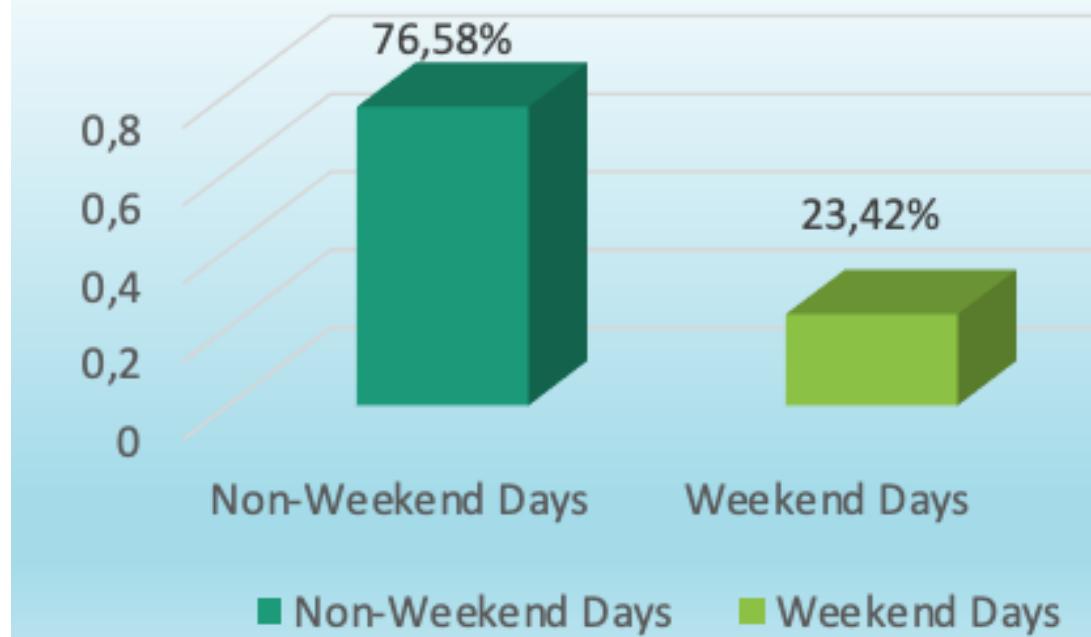


## Most Active Months

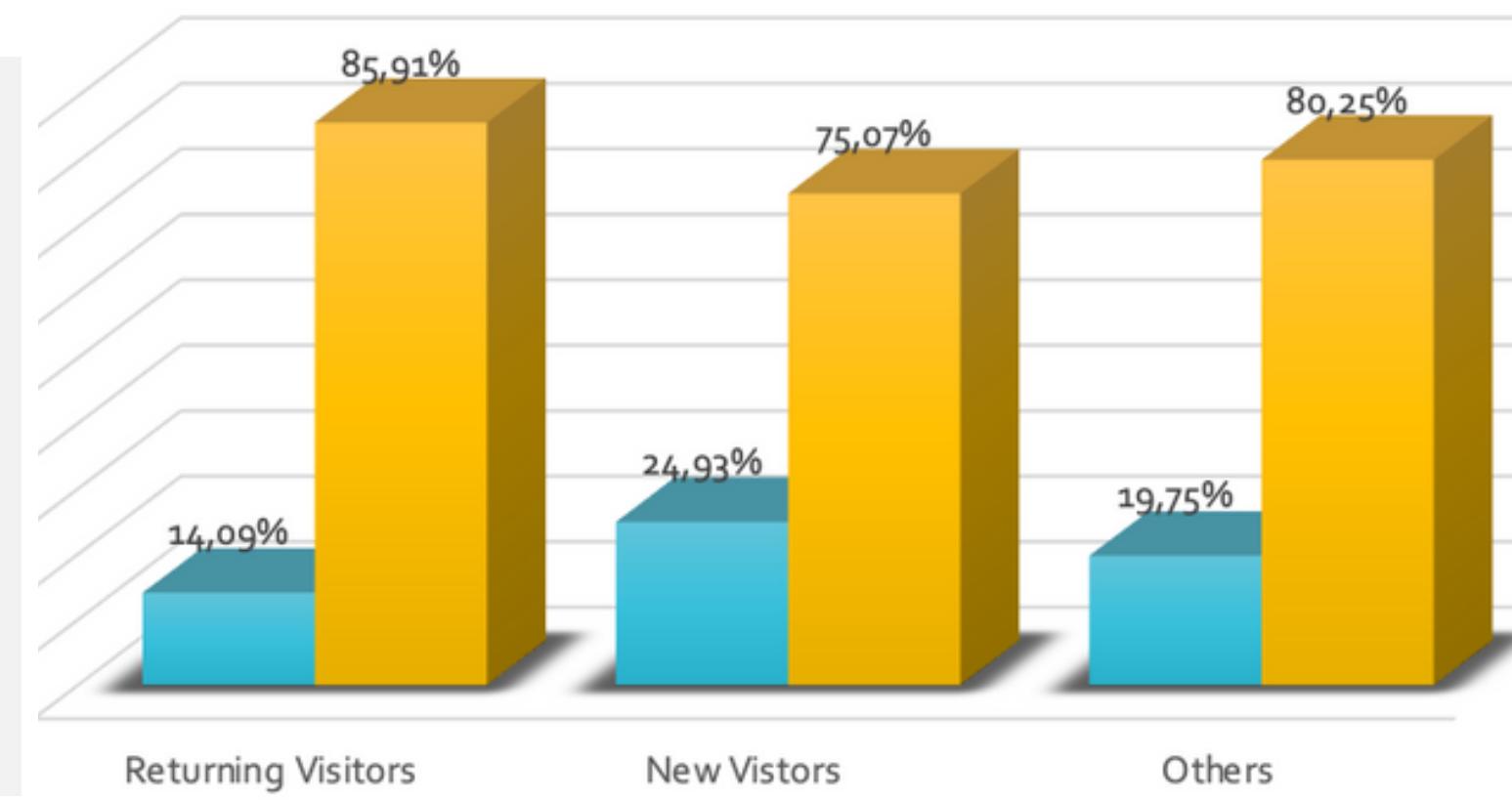
May | November | March | December

81,82% Active Users (Combined)

## Online Shopping on Weekend?



## Revenue Generation via Different Visitor Types



■ Revenue Generated ■ Revenue Not Generated

# Best Model

MODELLING – SPLIT 80%

Models	Accuracy	Precision	Recall	F1-Score
Logistic Regression	88%	82%	48%	43%
Random Forest	91%	78%	58%	66%
Decision Tree	86%	54%	58%	57%
KNN	85%	90%	67%	12%

MODELLING – SPLIT 90%

Models	Accuracy	Precision	Recall	F1-Score
Logistic Regression	89%	82%	48%	59%
Random Forest	90%	74%	57%	66%
Decision Tree	85%	52%	56%	55%
KNN	85%	90%	7.6%	13%

**Best of the Best Model**

Random Forest with RandomSearch

Tuning Train 80%

# CONCLUSION

BUSINESS INSIGHT FOR UI/UX DESIGNERS & DIGITAL MARKETERS

1

## *Strategy 1*

The landing page has to be **very attractive and UI friendly**, provide minimum information and lot more icon features rather than too much information (words).

2

## *Strategy 2*

Introducing **ad banners (Promotions/ads/sales)** when the visitor tries to quit the page.

3

## *Strategy 3*

**Consumers' Relationship Management** and Engaging loyal customer by giving them loyalty badge.

4

## *Strategy 4*

Categorize/segmentize each visitor and send personalized emails. Personalized emails can improve loyalty to the brand.

# THANK YOU!

Words of Inspiration

The combination  
of hard work and  
smart work is  
efficient work.

Collab Space Central Pitch Deck

*Robert Half*