

Department of Computer Science and Engineering

High value customers identification for an E-Commerce company

Date: 19 Apr, 2021

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Abstract

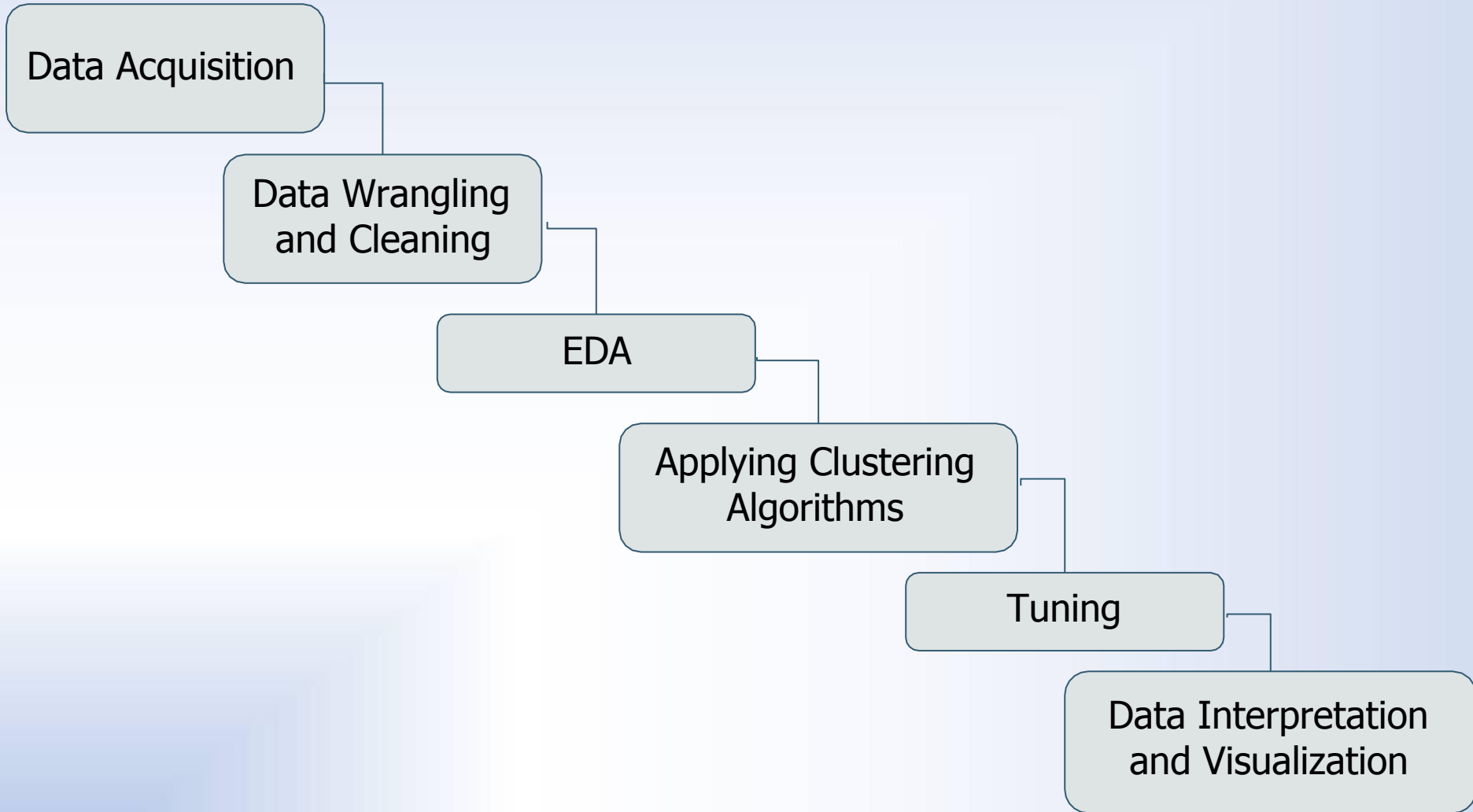
Problem Statement:

A UK-based online retail store has captured the sales data for different products for the period of one year (Nov 2016 to Dec 2017). The organization sells gifts primarily on the online platform. The customers who make a purchase consume directly for themselves. There are small businesses that buy in bulk and sell to other customers through the retail outlet channel.

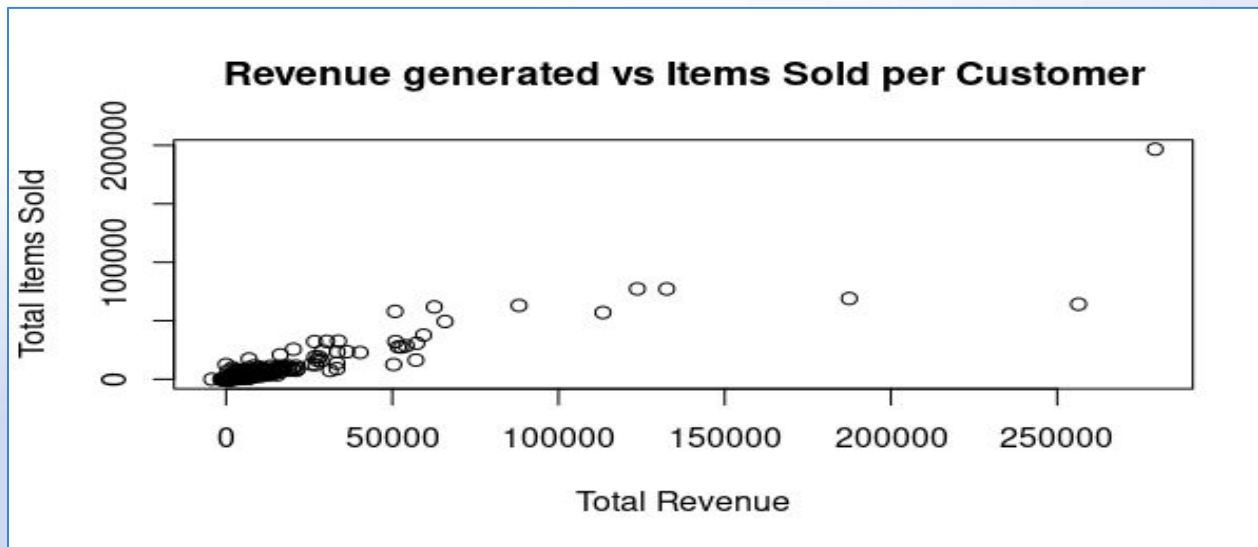
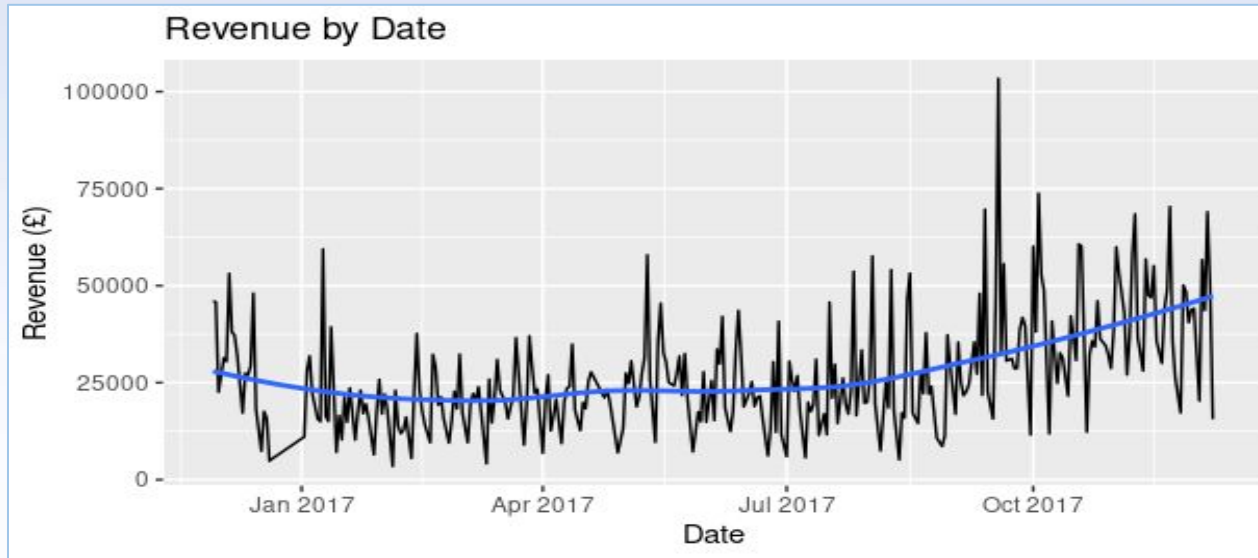
Project Objective:

The organization wants to roll out a loyalty program to the high-value customers after identification of segments. To use the clustering methodology to segment customers into Retail and wholesale (high and low valued) groups.

Architecture



Data Exploration



System Requirements

Environment	Specifications
Hardware	128GB SSD 8GB RAM Intel I5 Core Processor
Software	RStudio and Utilities R (v4.0+) Any operating system

Technology Stack

➡ Unsupervised Machine Learning

➡ R Language

Packages Used:

✓ ggplot2 3.3.3	✓ purrr 0.3.4
✓ tibble 3.1.0	✓ dplyr 1.0.5
✓ tidyr 1.1.3	✓ stringr 1.4.0
✓ readr 1.4.0	✓ forcats 0.5.0

Timeline

Review 0	<ul style="list-style-type: none">● Identifying Business Case● Requirements & Specifications
Review 1	<ul style="list-style-type: none">● Data Cleaning and Wrangling● Exploratory Data Analysis
Review 2	<ul style="list-style-type: none">● Segmentation using Clustering Algorithms(K-Means, Hierarchical)● Tuning
Review 3	<ul style="list-style-type: none">● Visualisation and Interpretation of results● Report of the Project

References

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Thank you