FINAL PROJECT DATA 643 By Dieudonne Ouedraogo

Introduction

For this Final Project, I will explore several R packages dealing with recommender systems, I will also explore different algorithms displayed in the courses as well. The goal is to find and compare different methods used in recommendation system. I will make use of 1M MovieLense data set, even though, this is not a particular business dataset, understanding and building the right recommendation system is key to success in business. Recommendation systems can be view as a "customer relationship management" (CRM) which is an approach to managing a company's interaction with current and potential future customers; The CRM approach tries to analyze data about customers' history with a company, to improve business relationships with customers, specifically focusing on customer retention, and ultimately to drive sales growth. Clearly being able to build the right system on a movie dataset will enable us to build the right system on many types of businesses.

One important aspect of the CRM approach is the systems of CRM that compile information from a range of different communication channels, including a company's website, telephone, email, live chat, marketing materials, social media, and more. Through the CRM approach and the systems used to facilitate CRM, businesses learn more about their target audiences and how to best cater to their needs.

Some components or factors that are also crucial in business is the time and the location, I will attempt to integrate those factors into the analysis

Dataset

MovieLense

The goal and Strategy

Build and compare several recommender systems
Build a contextual recommender system with the optimal algorithm
Make inferences
Performance measurement