# A Guide to Build a Recommendation Engine

**1. What is the problem I want to solve?**

Recommendation engines are an automated form of a “shop counter guy”. You ask him for the product. Not only he shows that product, but also the related ones which you could buy. The ability of these engines to recommend personalized content, based on past behavior is incredible. It brings customer delight and gives them a reason to keep returning to the website.

**2. Who is my client and why do they care about this problem? In other words,**

**what will my client DO or DECIDE based on my analysis that they wouldn’t**

**have otherwise?**

**Objective**

Many online businesses rely on customer reviews and ratings. Explicit feedback is especially important in the entertainment and ecommerce industry where all customer engagements are impacted by these ratings. Netflix relies on such rating data to power its recommendation engine to provide the best movie and TV series recommendations that are personalized and most relevant to the user.

**3. What data are I going to use for this?**

**The Data :** The MovieLens DataSet

I will be using the MovieLens dataset for this purpose. It has been collected by the GroupLens Research Project at the University of Minnesota. MovieLens 100K dataset consists of:

* **100,000 ratings** (1-5) from 943 users on 1682 movies.
* Each user has rated **at least 20 movies.**
* Simple demographic info for the users (age, gender, occupation, zip)
* Genre information of movies

**4. In brief, outline my approach to solving this problem.**

**Approach**

Finding out the movies which a user might be interested into after seeing something else, base on the special class of algorithms like **Content based algorithms, Collaborative filtering algorithms** which are tailor-made for solving the recommendation problem. This part would be completed later.

**5. What are my deliverables?**

**Deliverables**

Associated code for prediction in Jupyter Notebook and a Visualization Dashboard displaying the summary of the project and the end-results.