Capstone Project 1: Project Proposal

Online shopping in current digital scenario is not uncommon. Online shopping is at the disposal of user with benefit of quick product look up and order. This saves time and removes distance constraints. With the use of mobile apps, the shopping behavior of users towards the online is the upward trend. Online retailers are striving to make the online shopping experience more promising for their customers. Just a glimpse of e-commerce sales trend worldwide:

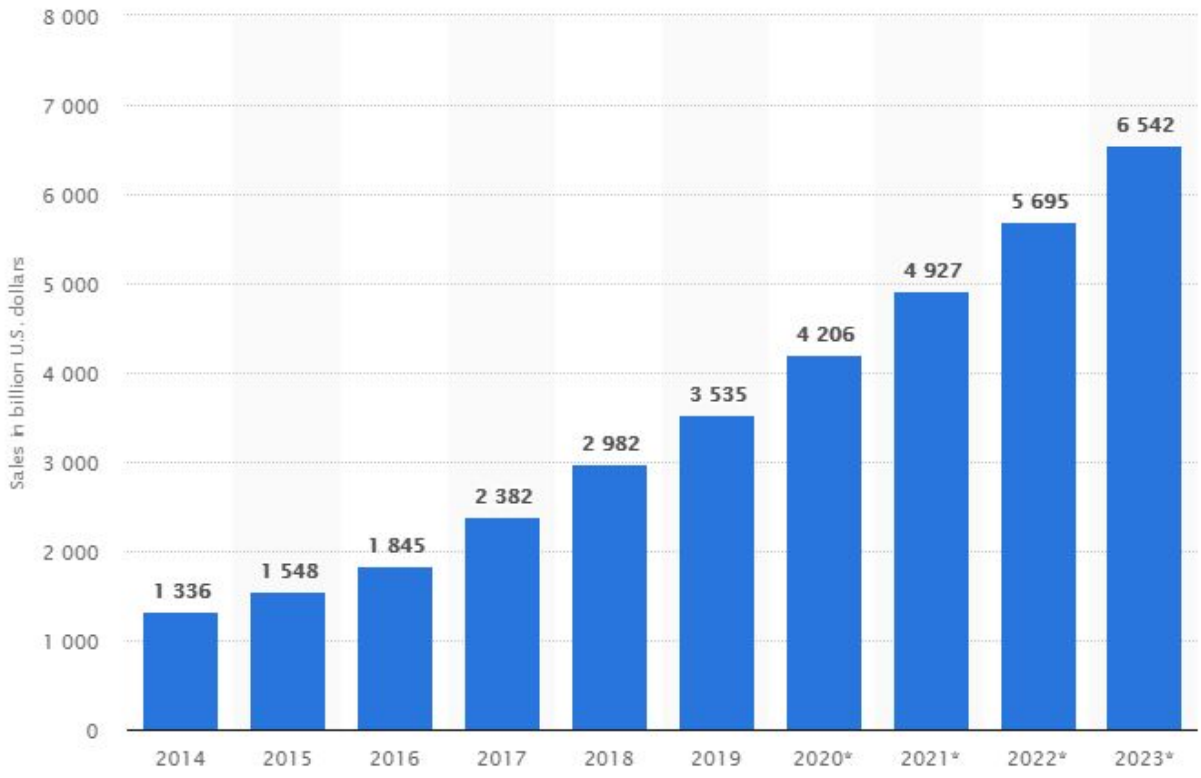

Figure1: Retail e-commerce sales worldwide from 2014 to 2023 (in billion U.S. dollars)

Data Source: UCI Online retail Dataset

Data Set Information:

This is a transnational data set which contains all the transactions occurring between 01/12/2010 and 09/12/2011 for a UK-based and registered non-store online retail.The company mainly sells unique all-occasion gifts. Many customers of the company are wholesalers.

Goal(s): Recommendation engines are powerful to capture the personalized shopping data and provide personalized experience to the customers. My capstone project will

1. Design an ML based recommendation engine based on the transaction history of the customer.
2. Design cross-sell product recommendation based on historical transactions

This project will use collaborative filtering to derive the model for recommendation engine. More details will be incorporated into this as curriculum progresses.
Since the online retailer sells all-occasion gifts, it's important to recommend the products ahead of time to save on shipping and avoid anxiety.

Deliverables:

1. Code
2. Presentation

References:

1. (n.d.). Retrieved from https://archive.ics.uci.edu/ml/datasets/online retail.
2. Global retail e-commerce market size 2014-2023. (n.d.). Retrieved from https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/.