Capstone Project Submission

Instructions:

i) Please fill in all the required information.

ii) Avoid grammatical errors

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1.1. Descriptive Analysis

1.1.1. Data frame description

1.1.2. Data frame shape

Analysis:

1.2.1. Extracting the information from the categorical variable,Numerical variables

1.2.2. univariate analysis,Description\_name,stock\_name,country \_name

1.3. feature Engineering

1.3.1 convert invoice date column to date time format

1.3.2 creating some new features from invoice\_date ,date\_num,hour,month\_num,day\_num

1.3.2 creating some new features total amount from product quality and unit price

1.4 most of the customer purchase gift month sep,oct,nov,dec

1.4.1 most of the customer purchase day Tuesday,Wednesday,thursday

1.4.2 most of the customer purchase day time in afternoon

1.5 creating RFM model(Recency,frequency,monetary)

1.5.1 calculating R,F,M

1.6.1 k-means silhouette method for RF

1.6.2 k-means with elbow method for rm

1.6.3 DB-sacan for RM

1.6.4 DB-scan for FM

1.6.5 DBSCAN for rfm

1.7.1 k-means cluster algorithm find a optimal number of cluster,then can separate customer based on purchase behavior ,we are applying k- mean clustering with silhouette score ,rf,fm,rfm, so we found optimal no of cluster 2,after we applying k- menas cluster with elbow method so we found optimal no of cluster,with the help of dendogram we found optimal no of cluster

GithubRepository link: https://github.com/Pradyumna9452/capstone-project-2