



Products or services with highest number of sales should be always kept in stock



Businesses should examine and create a plan that can be used to increase the sales of the products or services lacking popularity.



Businesses may need to swap out products or services that are not causing are not bringing in a large number of sales like the other popular categories of products and services

Introduction

The Purpose of Merchandise Popularity Predictions (MPP)



The merchandise information is used to make customized promoting and a custom shopping experience for every client that can construct faithfulness and increment store income.



Biggest organizations had the assets to put resources into what were once organization claimed exclusive frameworks that assembled, broke down and utilized client information to dependably anticipate purchasing practices.



Cloud innovation, even independent companies can convey and profit by predictive marketing.

What Are a Few Advantages of MPP?



Deals, productivity, adequacy, and promoting achievement depends on introducing the correct message to the perfect client at the perfect time.



Predictive marketing advances assemble and break down all the information that organizations require to



figure out who are the best clients and how to keep them.

Advancements focusing on the correct advancement to the





correct client is one of the large advantages of predictive promoting. From the client's viewpoint, Organizations see higher the offers they get are those change rates from the that are most actually advancements they run and, important. at last, higher income.

Additional Advantages of

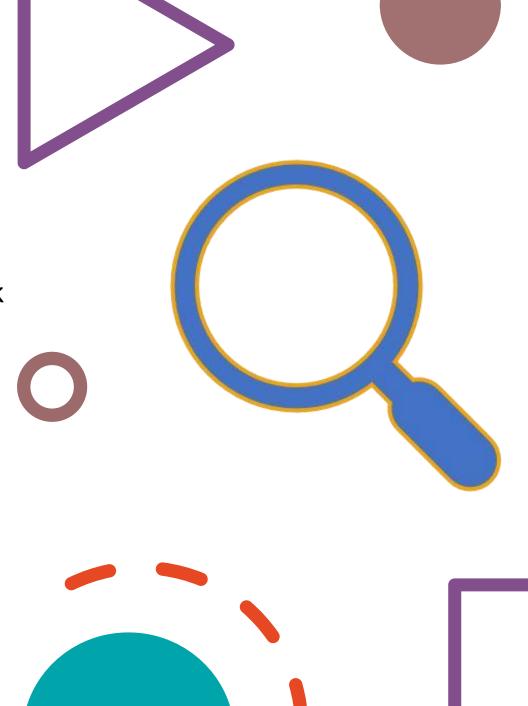


MPP

- Better stock administration and predictive promoting can empower independent ventures to more precisely estimate stock necessities
- Decreases overloading and related expenses
- More compelling publicizing procedure utilizes predictive models dependent on your business' client information
- Promoting dollars can be spent more successfully to reach and change over possibilities that take after the practices of your best clients.
- Improved situating over contenders
- Helps organizations with all things considered, and types contend more viable in the present commercial center.
- This critical apparatus assists with night the battleground with regards to building and holding a bigger client base while additionally improving business procedure and smoothing out tasks.

MPP Models

- Conduct examination Customized in-store insight • Customized in-store insight •
 Examination on activity and inventory network
- Exchange advancement enhancement



Predictive
Promoting In
Other
Business
Regions

- · Exactness of monetary gauging
- Production network cost the executives
- · Danger the board
- · Benefit and income development projections exactness
- · In general, essential business dynamic
- · Business insight and revealing
- · Information sharing, coordinated effort and perception
- · Why utilize predictive promoting programming?

MPP Business Questions

- How can businesses benefit from MPP?
- Can MPP increase sales?
- · How can businesses use MPP?
- · What are the pros for using MPP?
- · What are cons of using the predictions?
- Which categories had the highest amounts of sales? What is the accuracy percentage of merchandising predictions?
- Does the dataset provide enough information to predict the merchandise?
- Can the business have a competitor advantage if they used the merchandise predictor model? Are there any types of merchandise that cannot be used by the predictor?

MPP Methods

Obtained the train and test datasets from referenced website.

Downloaded cat boost via pip install

Imported libraries and modules

Unzipped the dataset

Read the train and test datasets into a dataframe

Viewed the first 5 rows of the dataset

View, print, plot, and display the data in graphs

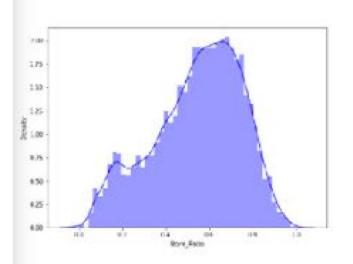
Display the visualizations

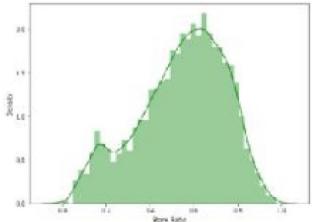
Used Python and Machine Learning



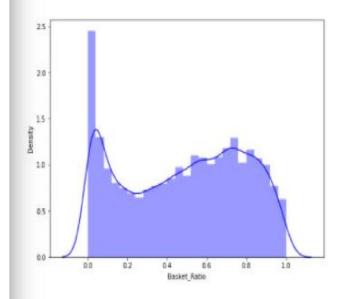
Store_Ratio

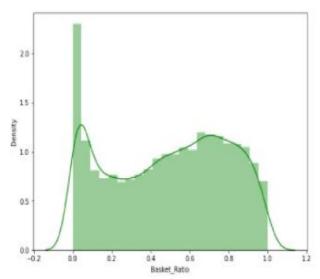
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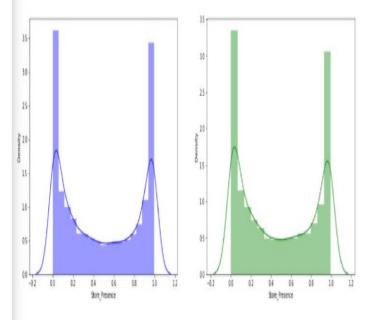
Basket_Ratio



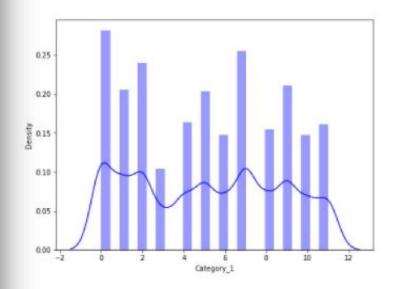


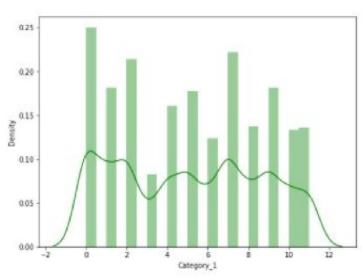
Store Presence

Store_Presence



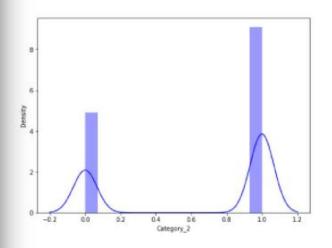
Category_1

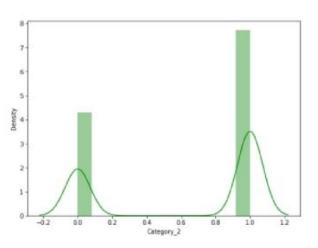




Category 2

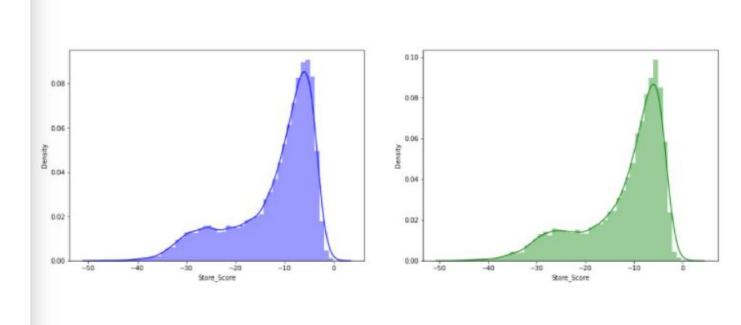
Category_2

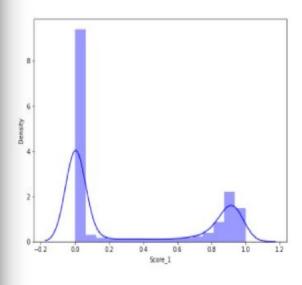


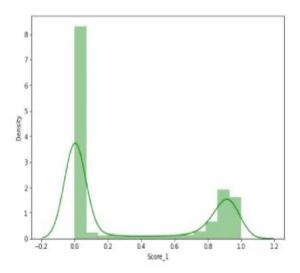


Store Score

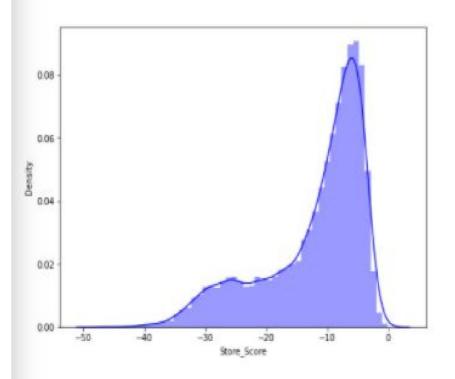
Store_Score

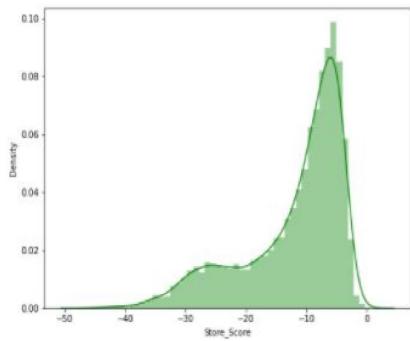


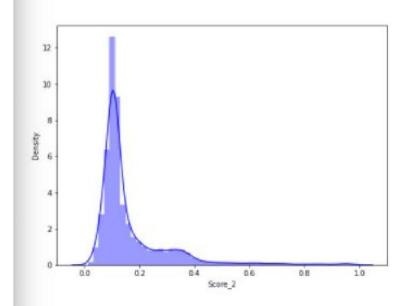


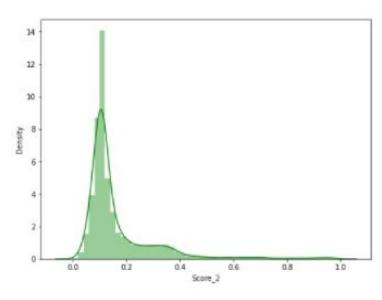


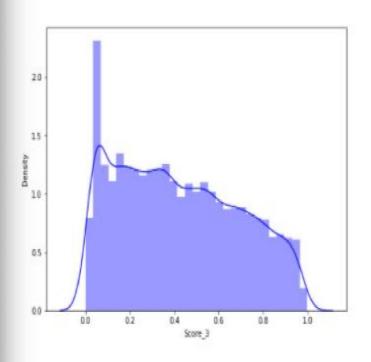
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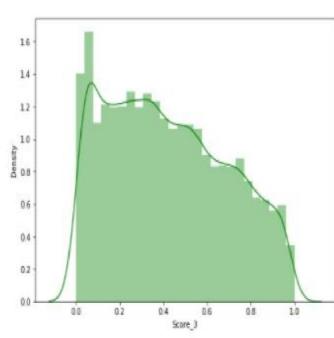


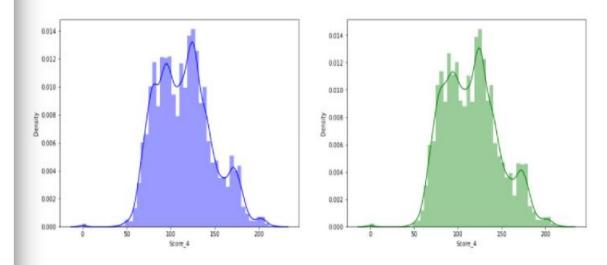


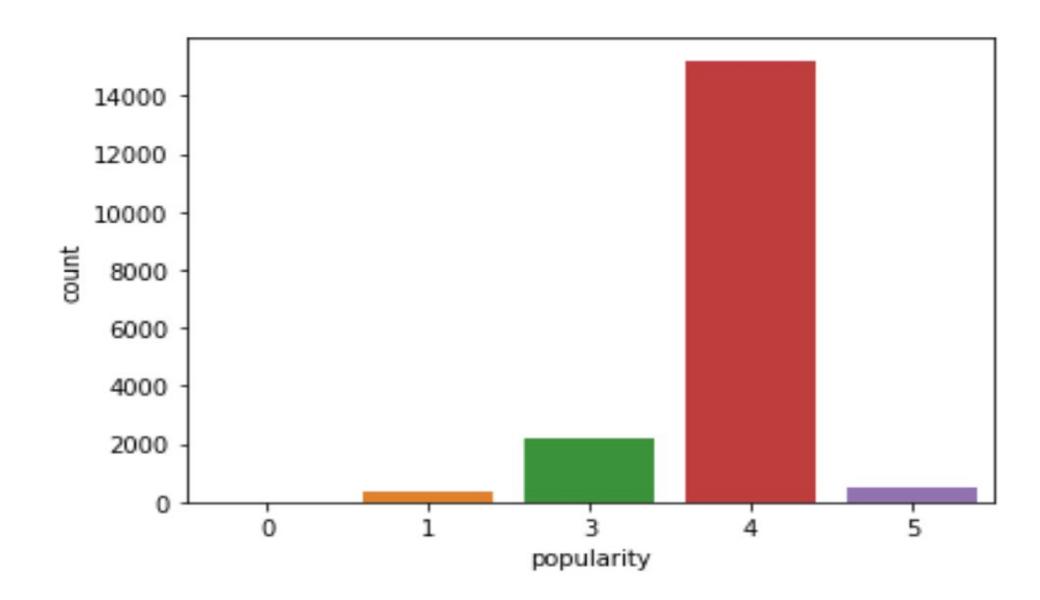












Conclusion

- The results displayed category 4 had the highest number of popularity predictions.
- I advised the business to maintain a constant supply for category 4.
- The business should consider keeping category 3 in stock because it had the second highest number of popularity.
- The other categories displayed a lower number of popularity.
- I advised the business to create a plan on how they will use specific tactics to increase the sales and its popularity ranking score.



