



Project 1

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Kanishk

Predicting future product pricing
using facebook prophet

A tool for
forecasting future
time series
model
by ~~Facebook~~ ~~Facebook~~

STEPS:-

① Importing all libraries &
datasets.

② Get some info about data.

.describe() → stats info

.info() → Datatypes
Information

③ Sorting data based on dates.

④ Now let's see the change in
av. price wrt. time. (fig)

normal
graph

⑤ Making distribution plot of
Average price to know ~~about~~
to visualize better.

distribution
plot.

⑥ Now let's make a violin plot to get to know types of avocados.

violin plot

(Av. price for organic avocado is higher than conventional avocados).

⑦ Now we will check how many samples do we have per region.

count plot
bar graph

~~is that~~ Using Count Plot?

⑧ Same for 'years' that is that data equally distributed for different years using count plot.

→ about me

⑨ Look at different prices at ~~very~~ different regions using cat plot.

⑩ We ~~are~~ are arranging our dataset to feed it to prophet & prophet takes data as dx & dy → feature.

P.B Prophet

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⇒ Prophet is a procedure for forecasting time series data based on an additive model where non-linear trends are fit with yearly, weekly & daily seasonality, plus holiday effects.

⇒ Prophet implements an additive regression model with 4 elements.

- i) A piecewise linear, prophet automatically picks up change point in the data and identifies any change in trends.
- ii) Yearly seasonal component modelled using Fourier series.
- iii) Weekly seasonal component.
- iv) A holiday list can be provided manually.

⇒ No data preprocessing required.