

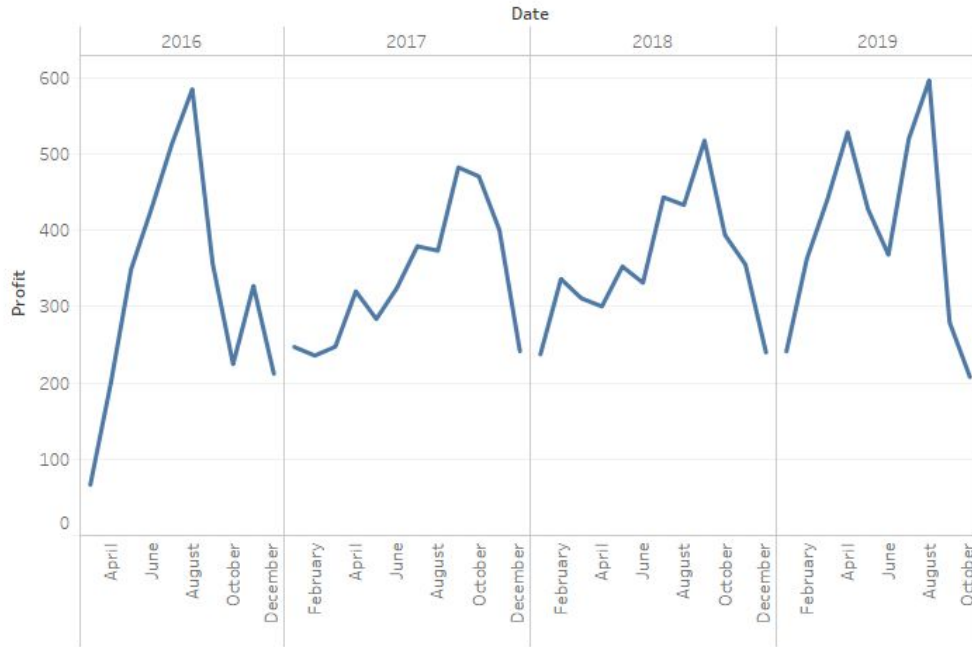
Grocery Retail Sales Data



Members: Subhiksha, Ayushi, Sahana, Prathamesh

Trends With Respect To Time: Asian Veggies

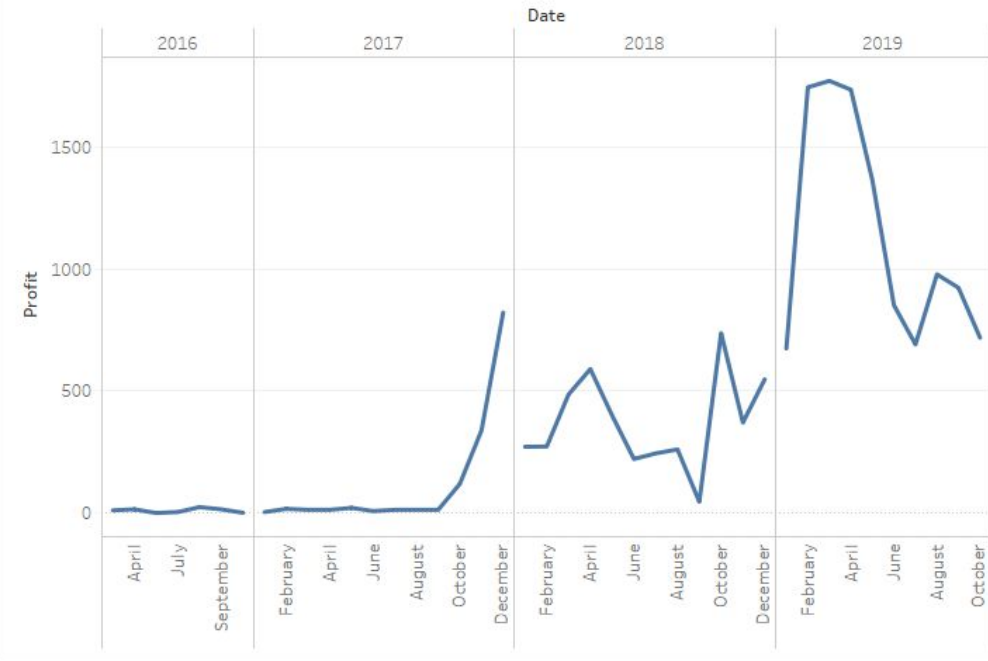
Asian Veggies



- The profit for the **Asian Veggies category** follows a seasonal pattern for every year.
- The profit rises up steadily through the start of the year, and starts dropping after Aug-September.
- One exception for this is the year 2019, where we see a sudden dip around April.

Trends With Respect To Time: Flowers

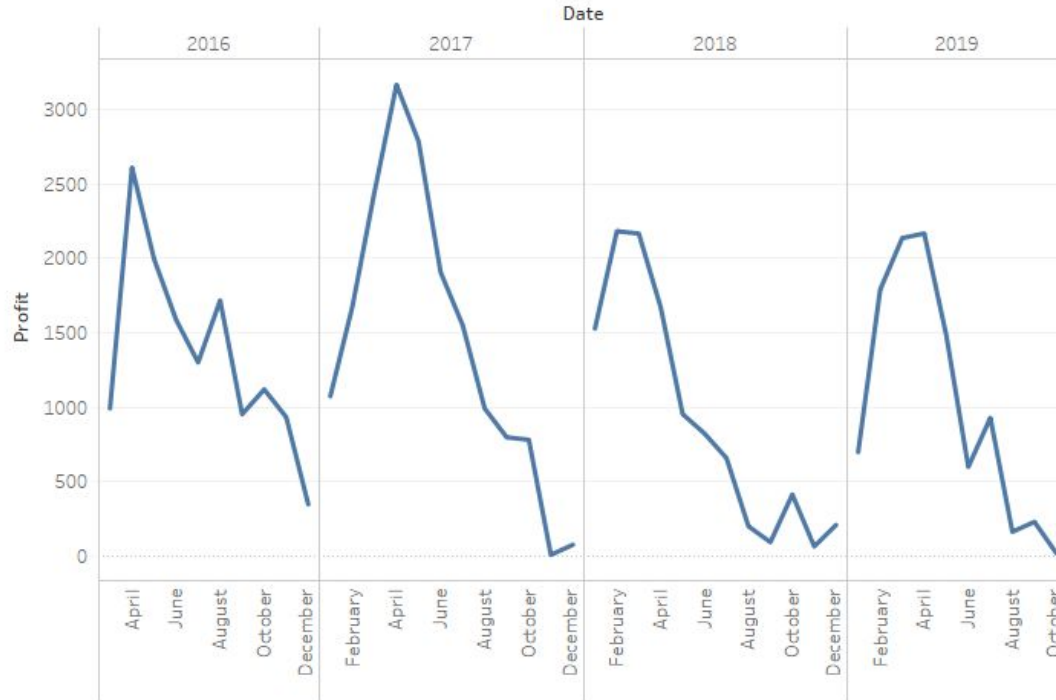
Flowers



- The profit for the **Flowers category** is the one that stands out the most.
- The profits were very low till October 2017, until the shop introduced the '**Flower Pot**' product in addition to the '**Bunch roses**' product it had before
- This introduction exponentially increased the profit for the Flowers category for the rest of the year.
- In 2019, the store introduced the product '**Flower Bunch**' which increased the profits even more.
- This increase also coincides with the Valentine's Day, where people buy a lot of flowers.
- Finally, the 'Flower Bunch', which was a hit when it was introduced, gradually lost its charm, thus bringing the profits for the Flowers category down.

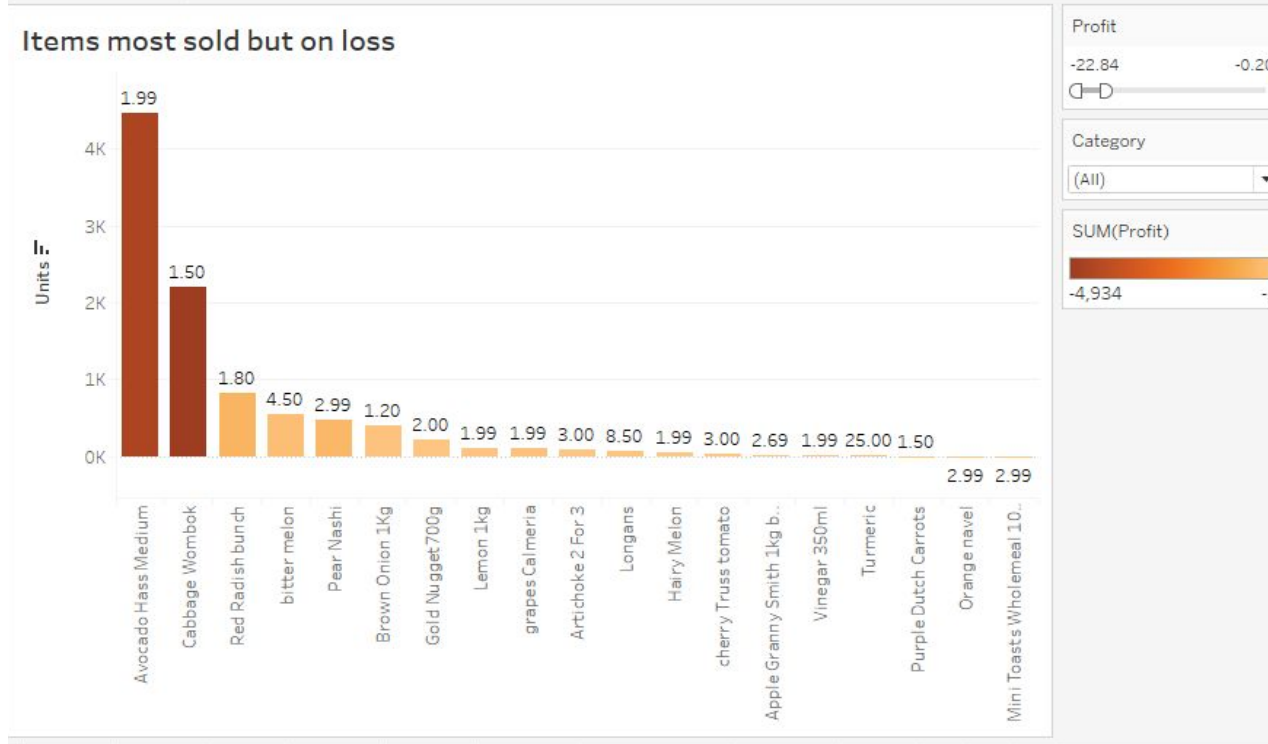
Trends with respect to Time: Grapes

Grapes



- In Australia, the peak season to grow fresh grapes runs for 6-7 months which starts in December, peaks around March and closes in May. (AustralianGrapes)
- As seen from the graph, this seasonality of Grapes is established as majority of grape sales are made between February and April with steep decline in sales as season goes away.

Items most sold but on loss



- We see that a few items like **'Avocado Hass Medium'** and **'Cabbage Wombok'** are being sold in large units, but are currently giving maximum losses.
- Thus, it would be recommended to increase the price of these two items so that the overall profit increases.

Items with higher profits

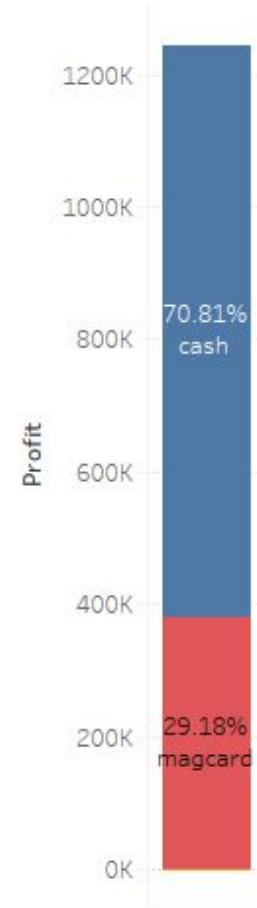


- Similarly, we see that items like '**Flower Pot**' are being sold in large quantities and yet have a high profit.
- This makes flower pot an **opportunity item** which means that we should increase the price of this item to cash on the fact that these items are sold in such large quantities.

Payment Methods Analysis

- From the graph we can see that MagCard contributes towards a third (400k/1200k) of the profit generated for the store. However, this is a little misleading as out of all the sales in our dataset, almost 30% of the sales were made by MagCard.
- Hence, it is almost evident that both **MagCard** and **Cash** Payment Methods produce same amount of Profits.
- However, membership cards are expected to generate more profits. Thus, we need to increase MagCard users either by giving free memberships in the first few months or by giving them more such benefits.

Profits by Payment Method

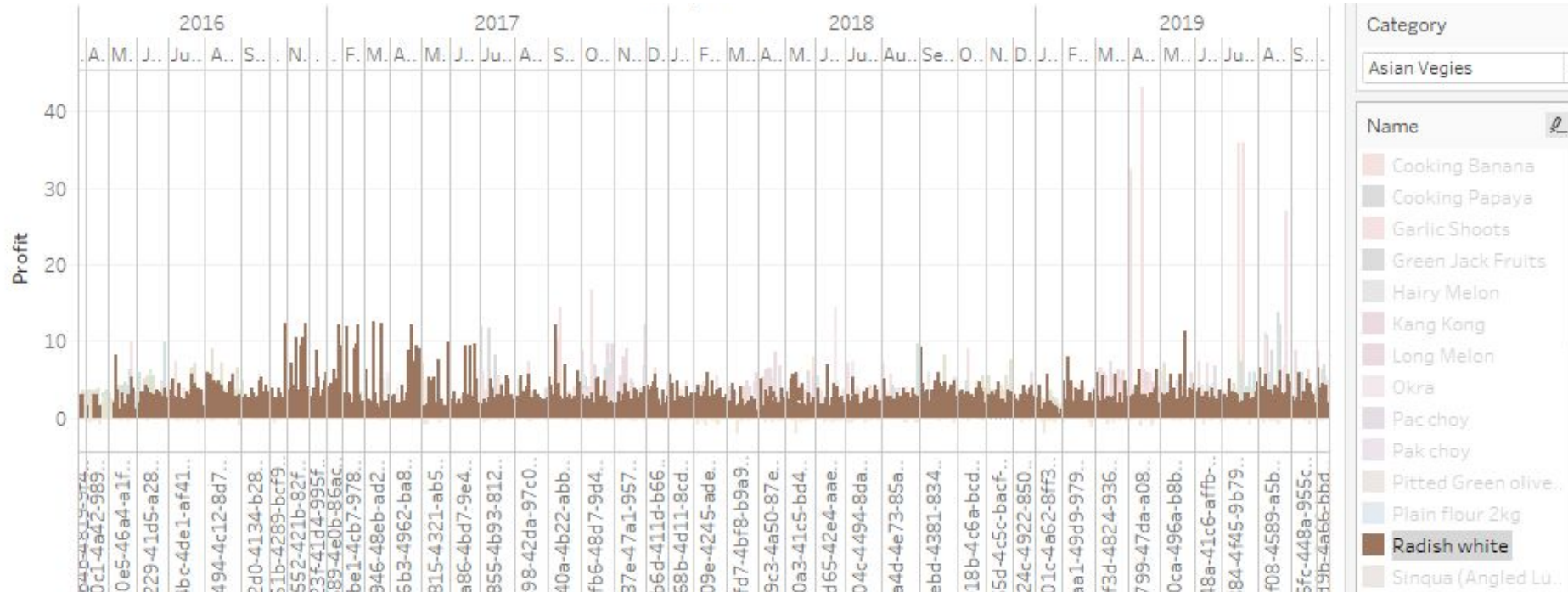


Product Placement

- By grouping tickets, we noticed that there were products commonly bought together
 - Potatoes and tomatoes
 - Apples and bananas
 - Bananas and berries
 - Tomatoes and onions, etc
- Placing these products together in the store can lead to customers picking them up more often

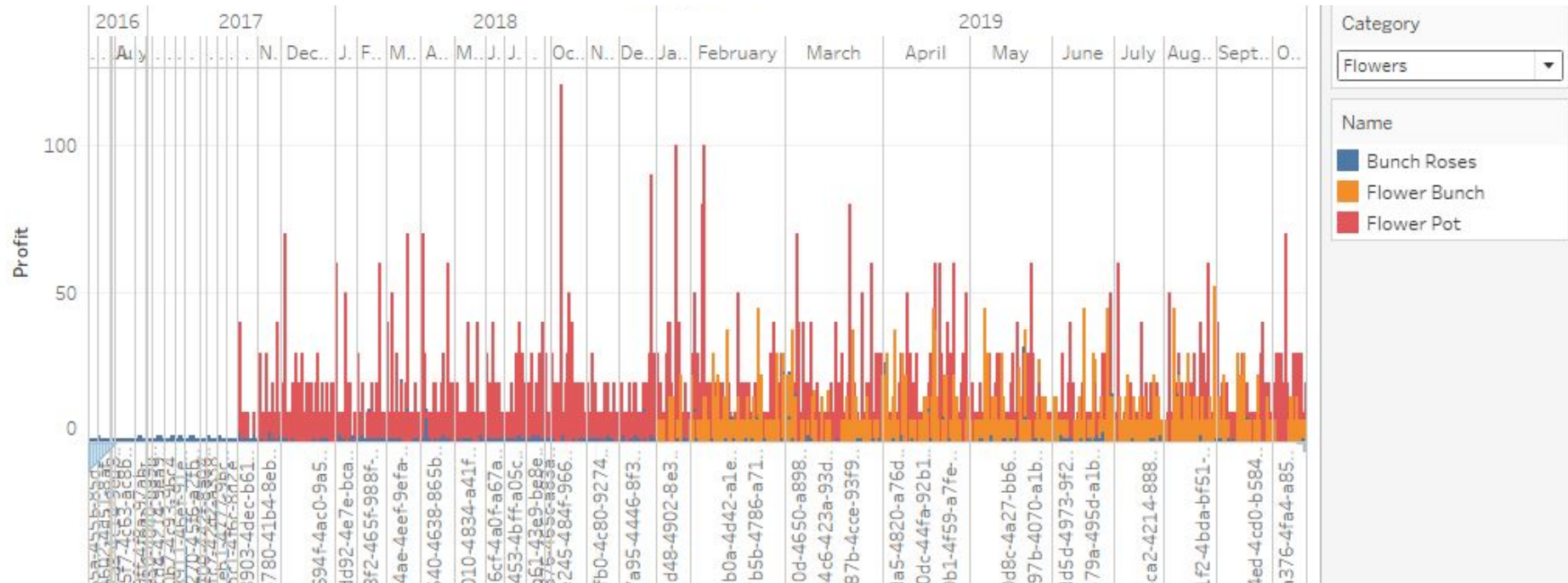


Inventory Management



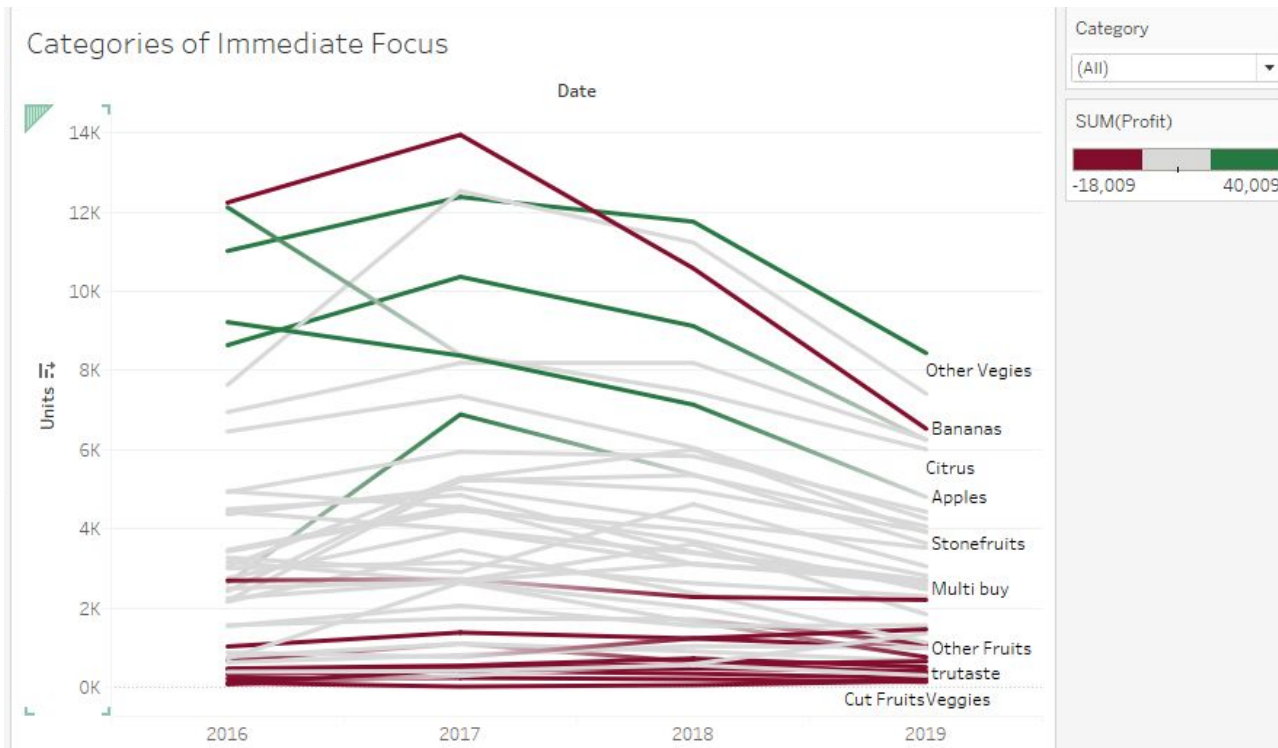
Items like **Radish White** are bought all throughout the year and should not go out of stock in the inventory

Inventory Management



- Items like **Bunch Roses** can be removed from the inventory as they are not bought so often and do not give much profits
- **Flower Pots** should be increased as they are adding on to profits in the latter years

Categories for Immediate focus



- Items like **Other Veggies** need to be stored in the inventory.
- **Bananas** are leading to losses but yet are being sold at large units hence need to be stocked up.
- Items like **Cut Fruit Veggies** and **trutaste** are not sold often and lead to losses hence can be removed

More Recommendations

- Right now, we only have the transaction level data. If we could get hold of some customer level data as well, we can use that data to perform some RFM (Recency, Frequency and Monetary) analysis and develop some customer acquisition or retention strategies.
- Increasing the number of **MagCard** users can help in tracking and incentivizing on customer lifetime value.
- Loyalty points can be added based on the “dollars for purchase” approach
- Discounted items could be given to the **MagCard** users (items which are sold the least and are cheaper) based on their usage and membership loyalty points they collect.

Thank You
