# IFOOD DATA ANALYSIS

Food delivery apps have exploded in popularity in recent years, offering a convenient way to satisfy our cravings. With a plethora of options available, like Swiggy, Zomato, and Doordash, the market continues to grow. As a food enthusiast with a keen interest in these services, I decided to delve into the data behind a major player: iFood.

iFood, the dominant force in Brazil's online food ordering and delivery space, boasts a staggering market share of over 80%. This project looks at sales and campaign information for iFood, a Brazilian food delivery app. By studying this data, I hope to learn more about what is the annual sales figure for a typical food delivery app ? which demographic groups are typically making more purchases ?

## Key Findings:

After retrieving the data from here, this is what I have learned from the dataset through Analysis.

- Customers spent a total of R$1.25 million on iFood in 2018.
- Income level explained a significant portion (67%) of spending variations.
- Age groups 36-50 and 51-65 were the biggest spenders.
- Customers with income between R$61,000-80,000 spent the most.
- Campaign 6 achieved the highest acceptance rate (334), while Campaign 2 had the lowest (30).

## ANALYSIS

My initial step involved importing the data set into Excel. After checking if data is clean created, I proceeded with the analysis phase. To facilitate visualization, I transferred the data to a spreadsheet and connected it to Looker Data Studio and created additional required fields such as Age_group, Income_group and Month fields using group and calculated fields present in the data studio.

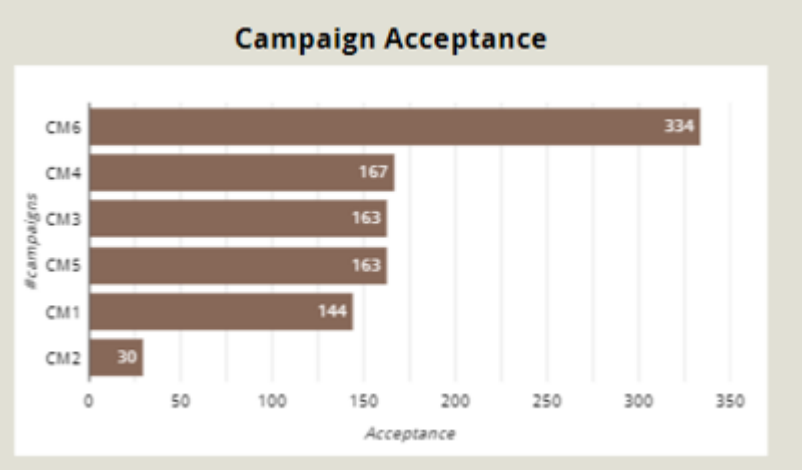
As a starting point, I summarized the data to gain a foundational understanding. This revealed key metrics such as:

- Customer Count: **2,240**
- Total Customer Spending: **R$1.26 Million**
- Top-selling Product: **Wine**

- Least-selling Product: **Fruits**
- Total Purchases: **33,300**
- Number of Campaigns Run (2018): **6**



For Key Metrics, I utilized scorecards. Subsequently, I shifted my focus to campaign performance, aiming to identify the most and least successful ones. A bar chart proved to be an effective tool, clearly demonstrating that Campaign 6 achieved the highest acceptance rate (334 deals), while Campaign 2 lagged behind with only 30 accepted deals.

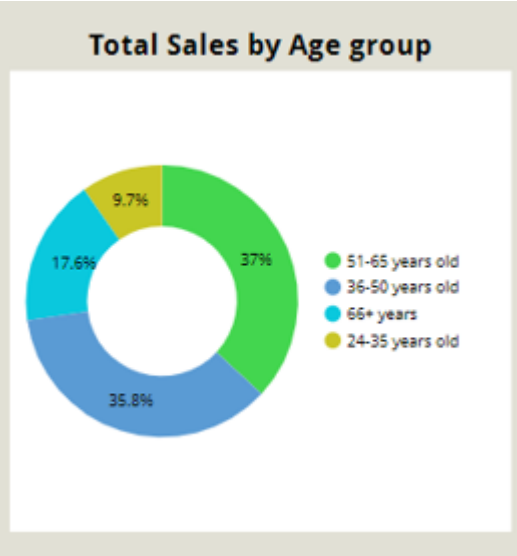


Intrigued by customer segmentation and campaign acceptance, I employed a table visualization to analyze data by age group. This exploration revealed that customers within the 36-50 and 51-65 age groups had the highest deal acceptance rates compared to other segments.

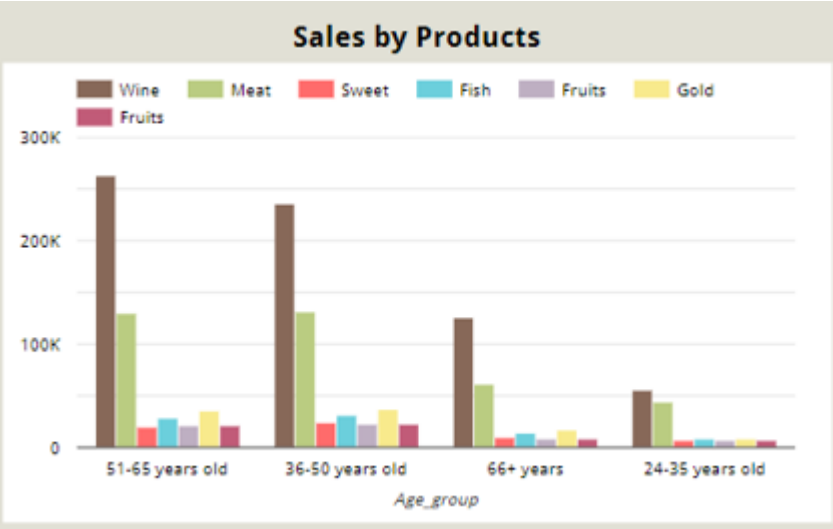
**Campaign 6 distribution by age group**

| | Age_group | Accepted |
|---|---|---|
| 1. | 36-50 years old | 149 |
| 2. | 51-65 years old | 100 |
| 3. | 66+ years | 49 |
| 4. | 24-35 years old | 35 |

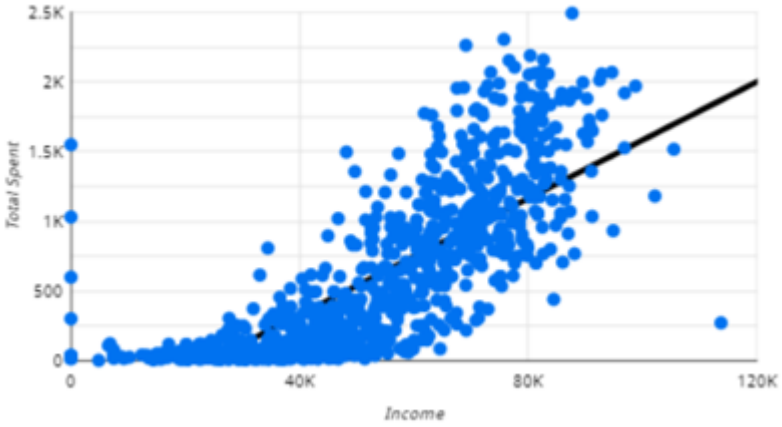
Diving deeper, I wondered if the age groups most likely to accept deals were also the ones spending the most money. To find out, I used a donut chart to see how sales were divided up by age group in 2018. Interestingly, Both the 36-50 and 51-65 year olds, who loved those deals, turned out to be the biggest spenders too in 2018! The 51-65 year olds were the real champions, spending a whopping 37% of the total, which is a lot of money - almost R$ 498Kand Right behind them were the 36-50 year olds, spending 35.8% or about R$ 483K. This donut chart showed a clear connection - these two age groups seemed to really enjoy using iFood and were happy to spend more money on it than other folks.

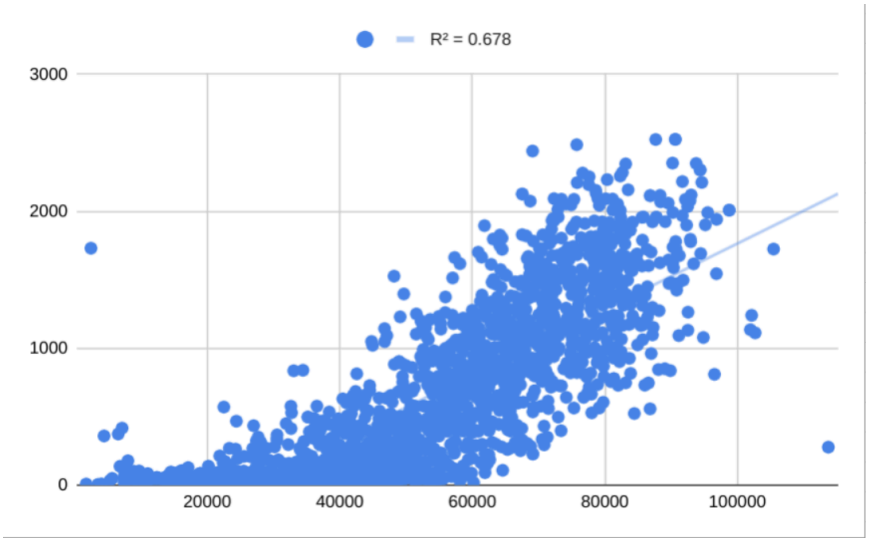


Now I was curious! What was the product that these age groups are interested in and what is the amount of sales this product as brought in. So, I delved further and created a column chart which gives us sales by product and from this we can clearly see that Wine is the one product which dominates the sales of ifood. It has high sales across all age groups, bringing in a whopping R$681,000 in sales! then next comes Meat products with sales up to R$ 370K. But the least popular item was Fruits product  with total sales of R$ 59K which  makes sense, since most people want to pick out their own fresh fruits, and maybe worry that delivery fruits might not be the best.




The next area I wanted to explore was income, Specifically I wanted to know how much influence one's income level has on whether or not they spend on food delivery app. So, I plotted a scatter plot to see the relationship between Income and Total spent in excel and Looker data studio.





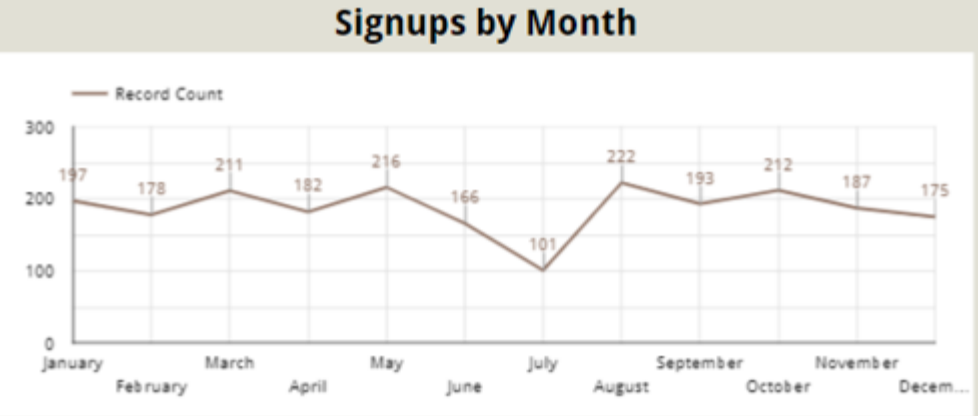

And as suspected, there is a strong positive correlation between two measures.As I mentioned before the R-squared value is 0.67, which tells us that **67% of the variability in spending can be explained by income**.

Since we have determined that there is positive correlation between Income and Total spent in the above scatter plot. I created to table visualization which summarizes the data such as count of customers, total spent and amount spent on each product grouped by income to know more on which income groups spends the highest and on what product that it spend ? is it wine ? or is it some other product ?

**Total Spent by Income**

| Income | Count of Customers | Total Spent... | Wine | Fish | Fruits | Meat | Sweet | Gold |
|---|---|---|---|---|---|---|---|---|
| 61K-80K | 596 | R$ 627.69K | R$ 339.56K | R$ 42.92K | R$ 30.22K | R$ 184.86K | R$ 30.14K | R$ 42K |
| 80K+ | 276 | R$ 336.09K | R$ 162.99K | R$ 21.75K | R$ 15.8K | R$ 118.84K | R$ 16.72K | R$ 17.81K |
| 41K-60K | 612 | R$ 228.23K | R$ 151.66K | R$ 12.09K | R$ 8.06K | R$ 47.78K | R$ 8.65K | R$ 24.76K |
| 20K-40K | 605 | R$ 49.17K | R$ 20.67K | R$ 5.67K | R$ 3.69K | R$ 15.44K | R$ 3.71K | R$ 10.3K |
| less than 20K | 151 | R$ 17.2K | R$ 5.95K | R$ 1.64K | R$ 1.15K | R$ 7.05K | R$ 1.41K | R$ 3.74K |
| **Grand total** | **2.2K** | **R$ 1.26M** | **R$ 680.82K** | **R$ 84.06K** | **R$ 58.92K** | **R$ 373.97K** | **R$ 60.62K** | **R$ 98.61K** |

A table visualization provided a deeper dive into income group analysis. Customers with income between 61k-80K spent the most (R$ 627.69K), accounting for nearly half of total sales. Interestingly, the group with the lowest spending was those with income below 20K (R$ 17.2K). Surprisingly, the  20K-40K group also spent relatively little (R$ 49.17K) despite having more customers.




Finally, used a line chart to identify any Monthly trends in signups. The findings indicated that signups peaked in March, May, August, and October (around 210+), with July seeing the fewest signups (101).

## Conclusion :

**By Delving into the data, valuable insights regarding customer behavior emerged.**

- There is a very strong/positive correlation between income and total spent with an $R^2$ value of 67%.
- we have seen that high income earners where the biggest spenders.
- The 51-65 and 36-50 age groups are the highest spenders which account to more than half of Total spent.
- Wine is the highest selling product with Meat being the next in line.
- The most successful campaign was 6 with 334 customer accepting the deal, the least successful campaign was 2 with only 30 customers saying yes.

# Final Report