Report

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Data collection

The data collection process was more difficult than expected. Most of the time coca cola in 0,5l was not available, instead of putting a NA we choose an alternative in 0,5l, pepsi or limonade. If those were not available, we took water or beer even though beer is usually more expensive. We decided to sort them in three categories : soft(Coca, Pepsi, Lemonade), water and beer. For the extra measures we recorded, numbers of pizzas they offered, opening hours (which we converted into minutes opened in this analysis and took the usual opening hours), as well as rating on Google and the number of ratings they received. The number of ratings is important since it gives the rating more credibility. We also recorded the longitude and latitude to calculate the distance from CEU and estimate the fairness of the delivery compare to the distance to CEU.

Descriptive Statistics

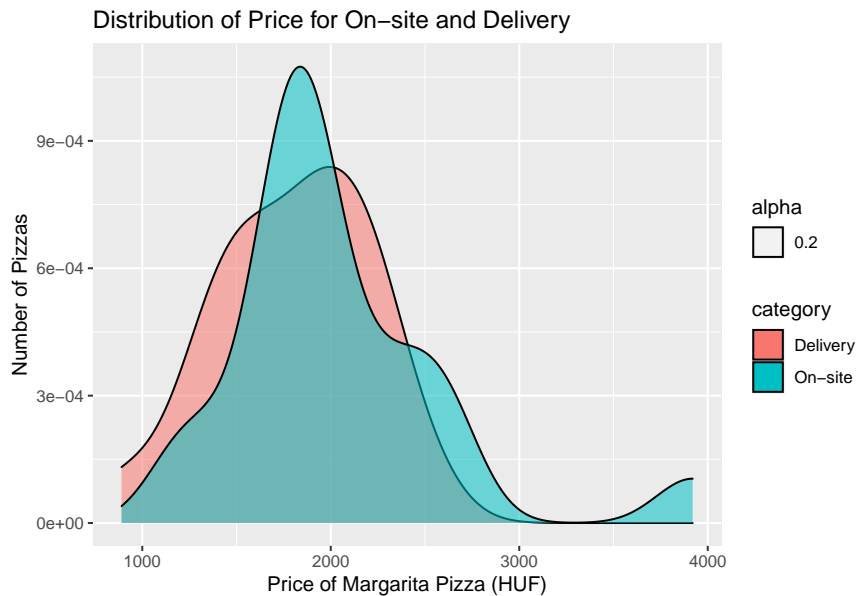| n	mean	median	min	max	sd	skew
40	1916.525	1885	890	3920	510.6978	1.3210519
40	554.500	490	350	980	203.0404	0.8711092

Distributions

Price of pizza margarite and beverage
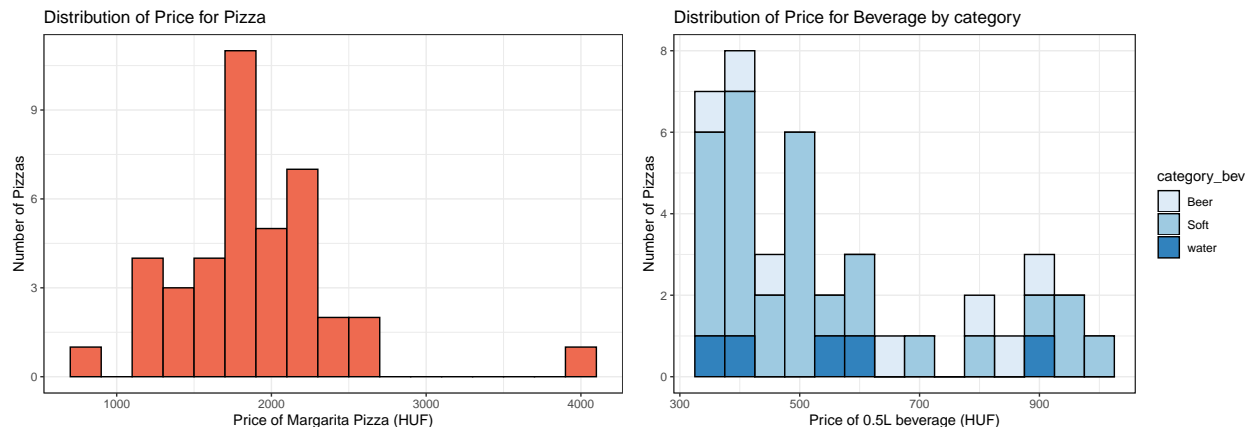
Price distribution on-site vs delivery

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## Warning: Ignoring unknown parameters: binwidth
```


Distribution of Price for On–site and Delivery

In order to avoid confusion on the analysis between On-site and Delivery, we took out the beverage and just analyse the margarita price. (Due to the beverages not being uniform)

T-test

Hypothesis

Null mean(on-site)=mean(delivery) Alternative mean(on-site) not = mean(delivery)

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## Warning: package 'pander' was built under R version 4.0.3
```

Table 2: Welch Two Sample t-test: `price_offline` and `price_online`

Test statistic	df	P value	Alternative hypothesis	mean of x	mean of y
1.457	33.89	0.1542	two.sided	2033	1800

Summary and Conclusion

Overall the distribution of price of the beverages has a larger range than the prices of the pizza. And overall the prices of the pizzas on-site were more expensive then the ones for delivery, although with the delivery fee this may be evened out. The t-test also comes to the same conclusion where