



# Italian Bakery Online Store Sales Analysis



# Objective

In November, 2022, an Italian bakery introduced a new, fancier box to package cannoli for customers.

The objective of this project is to create a visualization that will allow the bakery owners to see how sales of cannoli have changed (if at all) after the introduction of this new packaging.

See .ipynb file of the project here:

<https://github.com/stephensavoia/stephensavoia.github.io/blob/58508d217a5e7ac4c15909ba5d0adea46bb72d55/bakery/analysis.ipynb>



New



Old

# Data Collection

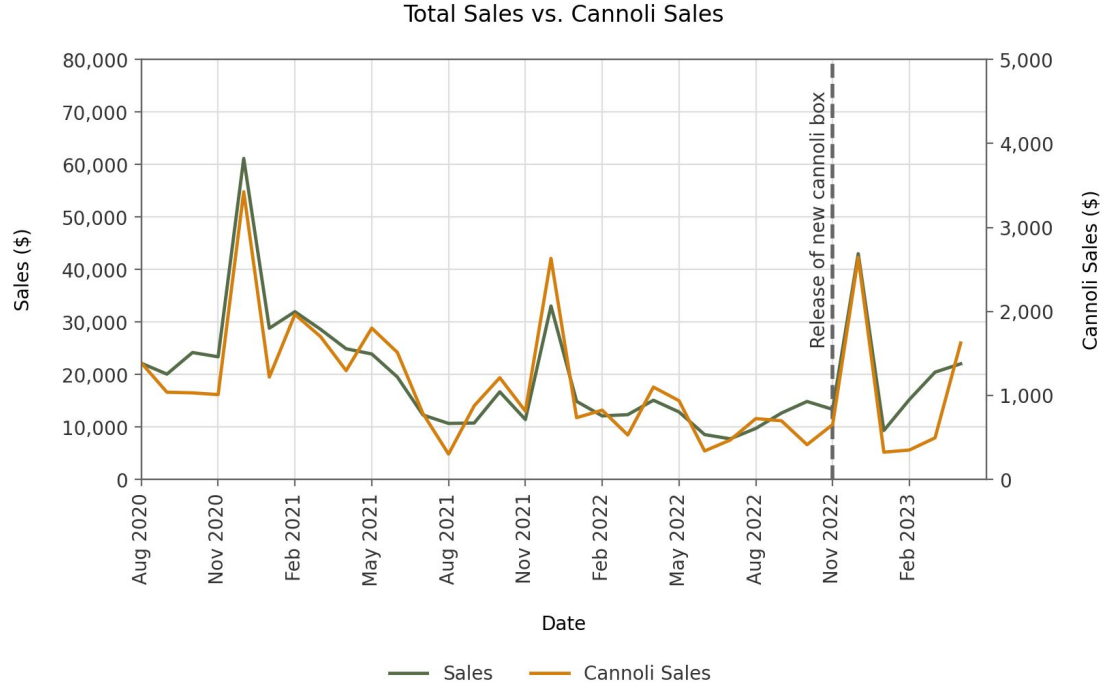
Sales data was collected from the Italian bakery's Shopify store. Cannoli sales data was isolated using a regex mask on the product name column. Data was then grouped by month, to be displayed in a dual-axis line graph.

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	Date	Sales	Cannoli Sales
0	Aug 2020	22146.22	1388.50
1	Sep 2020	20073.92	1039.00
2	Oct 2020	24186.98	1031.33
3	Nov 2020	23369.68	1010.50
4	Dec 2020	61151.69	3424.57
5	Jan 2021	28811.09	1219.45
6	Feb 2021	31963.16	1964.74
7	Mar 2021	28604.46	1701.25
8	Apr 2021	24900.26	1296.14

# Visualization/Findings



The visualization suggests that, from month to month, cannoli sales have remained a more or less consistent fraction of total sales.

In the 5 months following the bakery's adoption of the new cannoli packaging, there does not seem to have been any increase (or decrease) in cannoli sales relative to total sales.

# Limitations/Next Steps

The vast majority of this Italian bakery's sales are in-store sales. Since in-store sales data was not available for analysis, it is impossible to say how (if at all) the new cannoli box affected in-store cannoli sales.

It is also important to consider that it has only been 5 months since the release of this new cannoli box. It is possible that, in time—as more and more customers share cannoli at holiday gatherings—cannoli sales will increase beyond what would be expected from past sales data.

