

## Case Study: *Best Practices for Presenting & Storytelling*

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- For this specific case, we want to look at the final parts of the data analytics process: **Interpreting & Communicating Results**. In particular, best practices for presenting and **storytelling**!
- The company is **Ferrero**, the largest privately held chocolate and confectionary company in the world

The Ferrero logo is displayed in a bold, dark brown, serif typeface. The letters are thick and closely spaced, with a classic, slightly ornate design. The 'F' and 'R's have prominent serifs, and the 'O' is a simple, solid circle.

## Case Study: *Best Practices for Presenting & Storytelling*

- Let's learn more about the business **context**:
  - In 2018, Ferrero had recently acquired significant additional brands, including Nestle's US confectionary business and Kellogg's cookies and fruit snacks business

More info about AIAB's [Analytics Accelerator](https://aiab.wharton.upenn.edu/students/student-analytics-accelerators/) and other real-world data analytics case studies:  
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- Let's learn more about the business **context**:
  - In 2018, Ferrero had recently acquired significant additional brands, including Nestle's US confectionary business and Kellogg's cookies and fruit snacks business
  - Given these acquisitions, there was a business need to better optimize the advertising spending across the brands

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## Case Study: *Best Practices for Presenting & Storytelling*

- Ferrero wanted to solve the following business **objective**:
  - To build a **Marketing Mix Model** to understand if there are opportunities to test the re-allocation of advertising spend (specifically on TV advertising spend)
    - A Marketing Mix Model is a multivariate regression that uses marketing data to predict sales or volume outcomes

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  - To build a **Marketing Mix Model** to understand if there are opportunities to test the re-allocation of advertising spend (specifically on TV advertising spend)
    - A Marketing Mix Model is a multivariate regression that uses marketing data to predict sales or volume outcomes
  - Ferrero was specifically interested in the existence of 'halo' interactions, or times in which one product's advertising benefitted another product
    - For example, if they saw a statistically significant increase in Tic Tac Mint sales when Tic Tac gum was advertised on TV

## Case Study: *Best Practices for Presenting & Storytelling*

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- What follows are some highlights from their final presentation to demonstrate some *best practices for presenting and storytelling*

## Case Study: *Best Practices for Presenting & Storytelling*

- After completing the analysis, the student analysts ***interpreted and communicated their results*** in a presentation to Ferrero stakeholders
- What follows are some highlights from their final presentation to demonstrate some *best practices for presenting and storytelling*
- Following these best practices can:
  - Lead to a more effective and impactful presentation of a data analytics project
  - Help to convey the information clearly and engagingly to the audience

## Case Study: *Best Practices for Presenting & Storytelling*

- A good agenda gives the audience a clear structure of your presentation and what's to be expected



# Case Study: *Best Practices for Presenting & Storytelling*

- A brief background provides the audience with a contextual framework for better understanding the subject matter of your presentation

**FERRERO**

Ferrero is the largest privately held chocolate and confectionary company in the world



Founded in 1946  
and family owned  
since creation



Product portfolio has  
grown significantly  
throughout multiple  
decades



Currently owns 4  
brands of  
confectionary, with  
recent acquisition of  
more



Headquartered in  
Switzerland, with  
dominant share in  
Italy and Germany

3

# Case Study: *Best Practices for Presenting & Storytelling*

- A brief background provides the audience with a contextual framework for better understanding the subject matter of your presentation

Recent acquisitions  
create need to  
optimize heavy  
advertising spend  
across brand  
portfolios

**FERRERO**

16-01-2018  
**FERRERO TO ACQUIRE NESTLÉ'S U.S. CONFECTIONARY BUSINESS**

The Ferrero Group and its affiliated companies ("Ferrero"), a global confectionary group, today announced a definitive agreement pursuant to which it will acquire the U.S. confectionary business from Nestlé for \$2.8 billion in cash. Nestlé's U.S. confectionary business generated sales of approximately \$900 million in 2016.

Ferrero will acquire more than 20 American brands with a rich heritage and strong awareness, including iconic chocolate brands such as Butterfinger®, BabyRuth®, 100Grand®, Raisinets®, Wonka® and the exclusive right to the Crunch® brand for confectionary and certain categories in the U.S., as well as sugar brands such as SweetTarts®, LaffyTaffy®, and Nerds®.

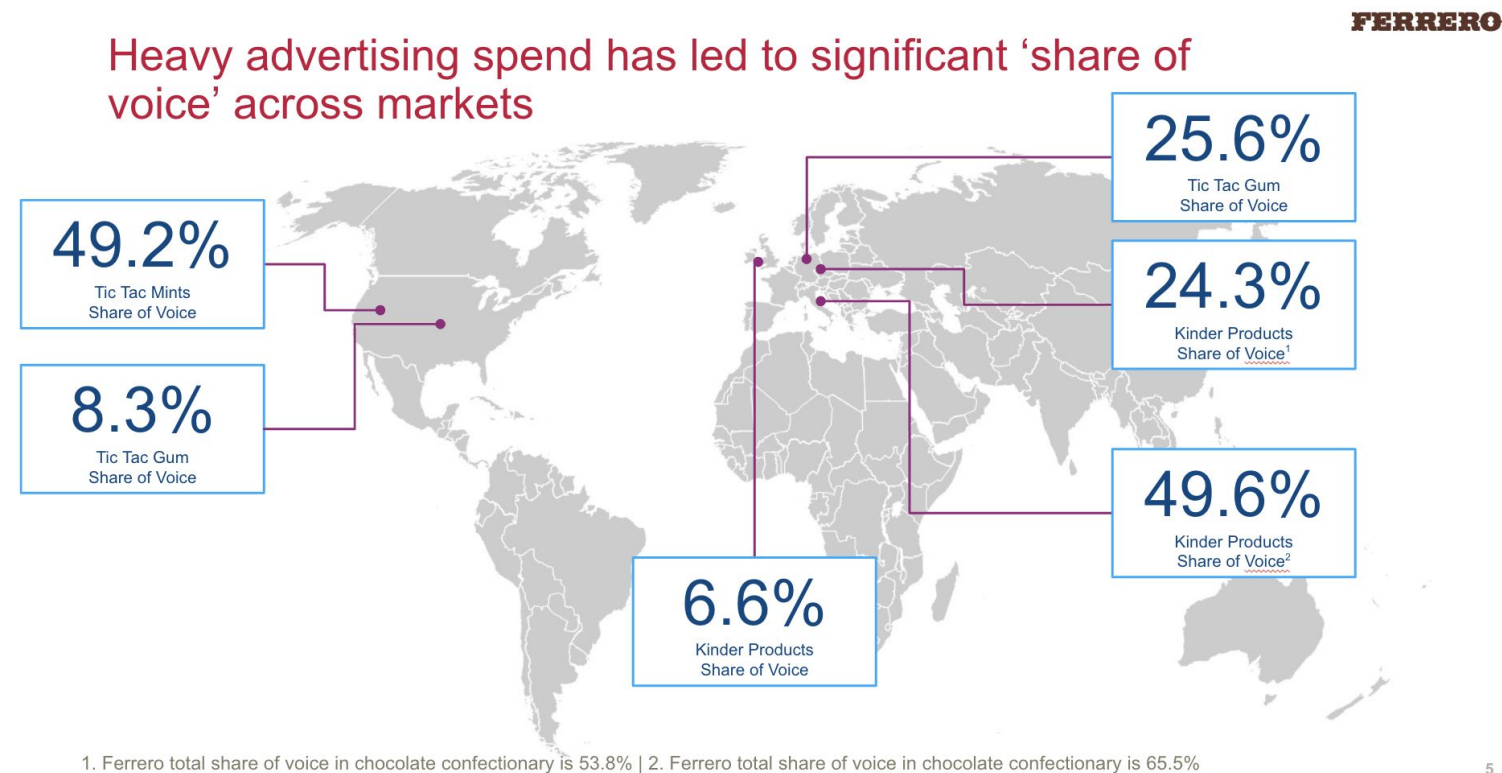
With this transaction, Ferrero will become the third-largest confectionary company in the U.S. market where it is best known

01-04-2019  
**FERRERO TO ACQUIRE KELLOGG COMPANY'S COOKIES AND FRUIT SNACKS BUSINESSES**

4  
WCAI Ferrero

# Case Study: *Best Practices for Presenting & Storytelling*

- Using maps as a visualization tool helps to effectively illustrate the geographical distribution

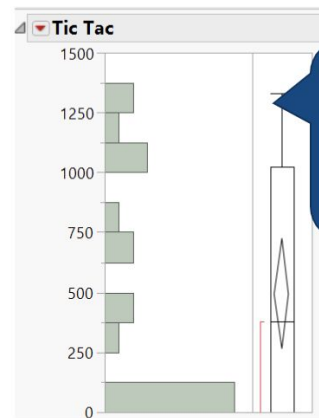


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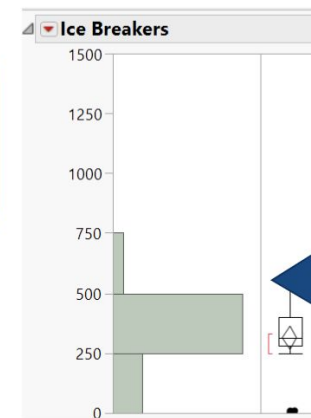
- Simplify complex concepts for the audience

Tic Tac and Ice Breaker Mint total annual spend almost equal, though distributed differently

**FERRERO**



Tic Tac has multiple 'high' spend weeks, driving up average weekly spend



Ice breakers "on" for twice as many weeks, but spend more consistent between week

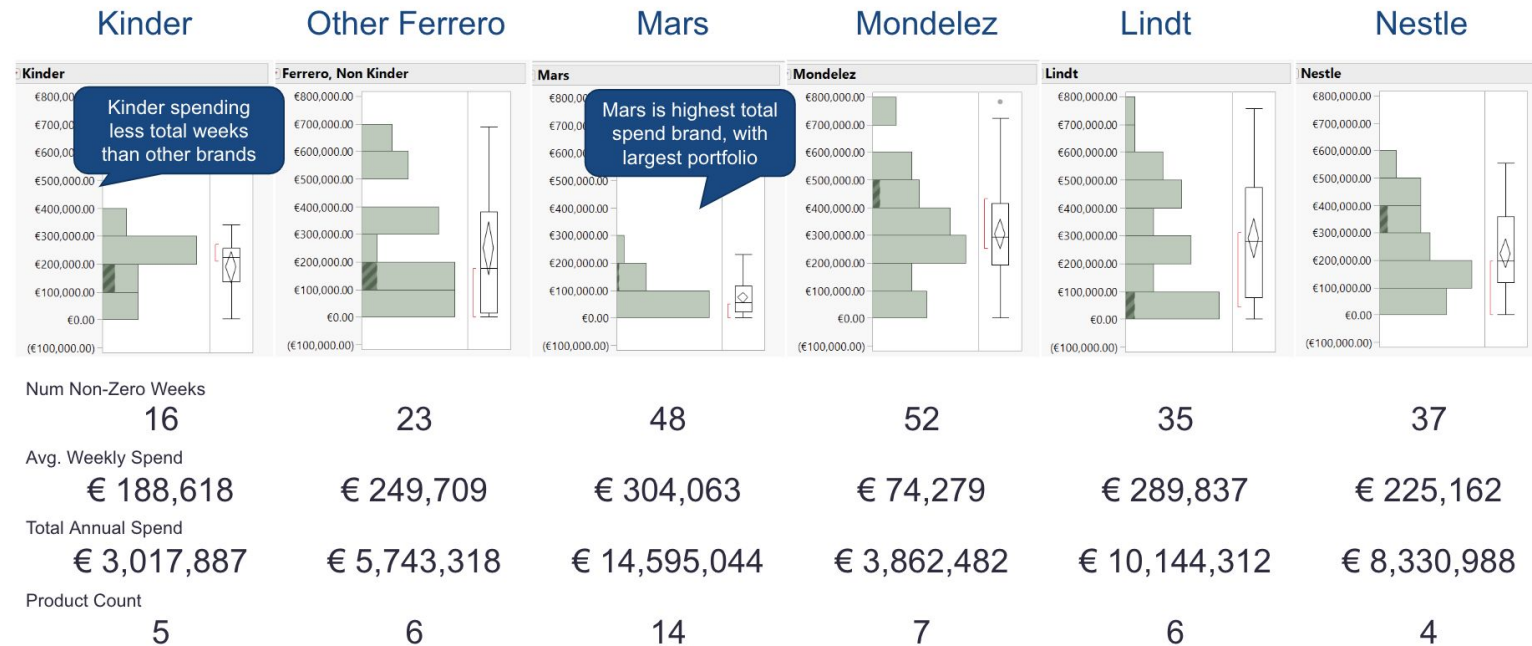
# Weeks "On"	16	33
Avg Spend When "On"	\$648	\$324
Median Spend When "On"	\$380	\$313
Total Spend	\$10,367	\$10,699



# Case Study: *Best Practices for Presenting & Storytelling*

- Highlight key insights

Kinder UK spend lower than other brands (driven by less weeks), even when considering total product count



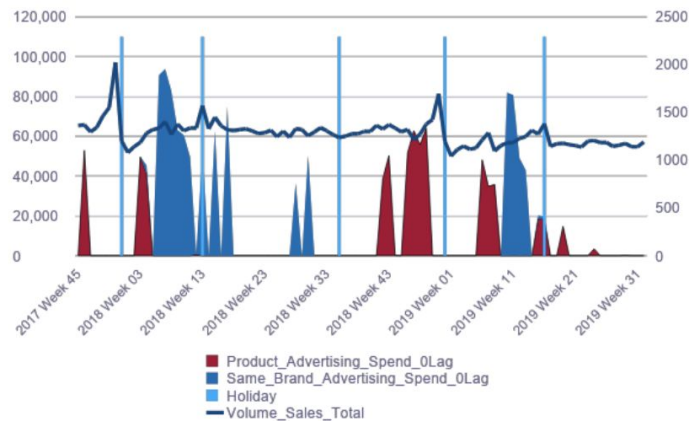


# Case Study: *Best Practices for Presenting & Storytelling*

- Identify patterns and trends

## Tic Tac Mint benefits when both gum or mint are promoted

FERRERO



Tic Tac Mint sales are seen to increase with its own advertising, as well as with gum's, making it a 'receiver' from any tic tac advertising.

The adjusted R-Squared is .14, which makes our confidence in this model lower than that of other products.

3.36  
 $\times 10^4$

### Promotional Intensity

- Statistical significance at the .01 level
- As the level of promotion increases in store, total sales expected to increase

4.196

### Tic Tac Mint Advertising Spend (Lagged)

- Statistical significance at the .05 level
- As expected, Mint sales increase with Mint advertising (lagged by 3 week)

2.359

### Tic Tac Gum Spend (Lagged 2)

- Gum appears to be a "donor" for Mint (lagged 2 weeks)

1.289

### Tic Tac Gum Spend (Lagged 3)

- 3 weeks lagged gum spend also appears to confirm "donor" of gum for mint

22

# Case Study: *Best Practices for Presenting & Storytelling*

- Provide insights and recommendations

**FERRERO**

## Other potential additions to the study

Study advertising interactions to determine significance

- We recommend analysing the interaction of different variables to identify the impact
- The interaction effect is the **multiplicative effect of two variables** together at the same moment
- For example, **having advertisement and promotions for the same product at the same time**, might have a **greater impact** on sales than each one independently may have
- The same can apply to other variables not analysed yet, such as: The effectiveness of the advertisement campaign

Increase number of data points

- As we only studied over a ~2 year horizon at a weekly level, our number of observations are limited
- This number is further reduced when considering the proportion of weeks when advertising is “turned on” (sometimes as low as 10 weeks / year)
- Hence the regression models might not capture the true effects of advertisement in sales
- Additionally, the limited amount of data **does not allow for true identification of seasonality** or autocorrelation, which may play a larger role than found in our study

60