

How to work with CSV:

Direct Import

CSV data can be added directly into the Data menu in Data Manager of Einstein Analytics or can be uploaded as a dataset by using the Create Dataset option. The dataset can then be used to create a recipe or be added to a lens to create visualizations, dashboards etc. The data can also be combined with other data in a dataflow or recipe.

Einstein Analytics Connector for Excel

The Salesforce Einstein Analytics Connector for Excel makes it easy to import data from Excel to Analytics.

External Data API

The External Data API can be used to create a single dataset based on external data in the .csv format.

Insights

Looking at the ad-stock effect we saw that it made sense to invest in tvAds as the sales rate increased by some amount as compared to the sales without investing in any form of ads. Spending on radio Ads didn't seem to have any effect on the sales.

This could be probably be because of the following reasons. TV might be more popular among users and is reflected in the sales. Radio might not be the best medium for advertising in case of this product.

Radio advertising might also show delayed ad stock effects depending on the decay value and we aren't able to conclude about it's individual contribution to the sales from the given data.

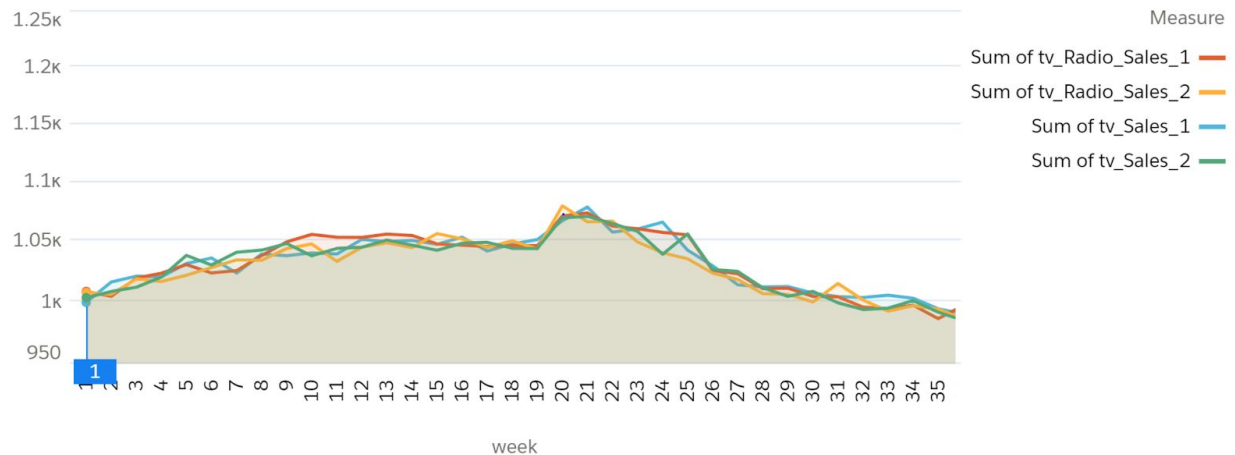
Temperature might also affect the sales depending on the product which is currently unknown . Even if the ad has made an impact on the users , they might not immediately buy it as the temperature might not be favorable for that product.

The data given

base_sales	Sales without ad spending
tv_Sales_1	Sales with TV spending + adstock model 1
temp	Temperature (normalized)
tv_spend	Spending on TV ads
week	Week number
adstock_TV_1	Adstock contribution for model 1
tv_Sales_2	Sales with TV spending + adstock model 2
tv_Radio_Sales_1	Sales with TV spending + Radio spending + adstock model 1
tv_Radio_Sales_2	Sales with TV spending + Radio spending + adstock model 2
radioSpend	Spending on Radio ads
tv_Sales_2_Adstock	Adstock contribution for model 2
tv_Radio_Sales_1_Adstock	Adstock contribution for model 3
tv_Radio_Sales_2_Adstock	Adstock contribution for model 4

Assumptions made- radioSpend and tvSpend is in USD

How is sales related to week numbers?

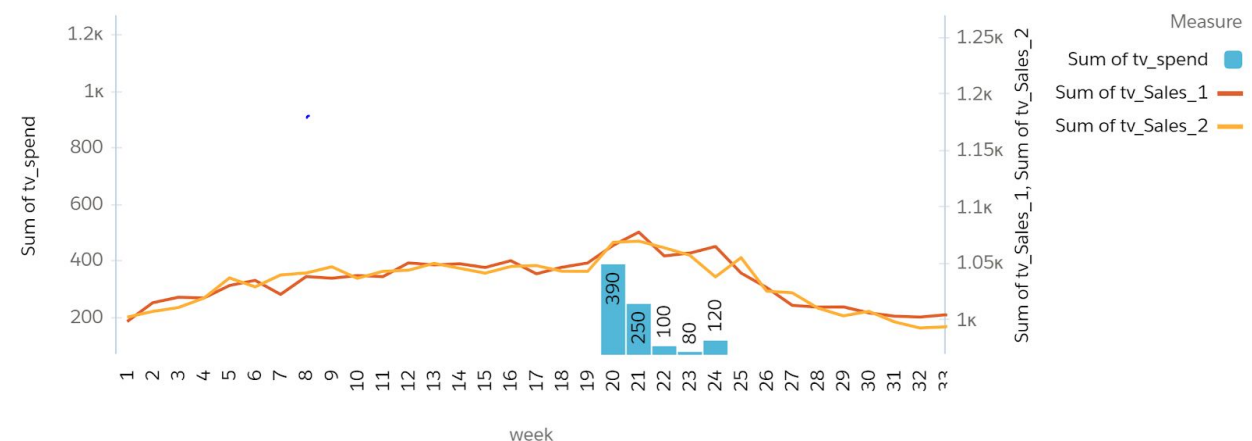


We have analyzed the sales over 260 weeks of data that was given.

The above graph shows the sale trends based on the adstock models 1,2,3 and 4 .

Week 220 to Week 224 showed the highest sales. There is not much difference in the sale trends as the chart shows overlapping lines.

How does TV spending affect sales? Can you quantify it?

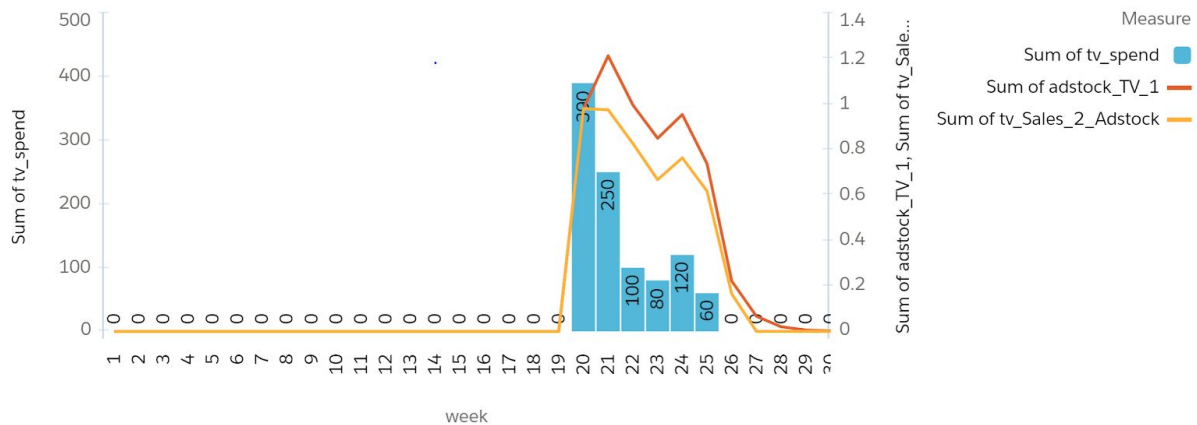


The graph shows the Tv_spend, tv_Sales1 and tv_Sales2 over the week numbers.

From the graph it is clear that tvSpend does have an influence on the sales as there is a sudden spike on the weeks when money has been invested on tv Ads and it's also important to notice that there is a decay effect which gradually shows over the weeks.

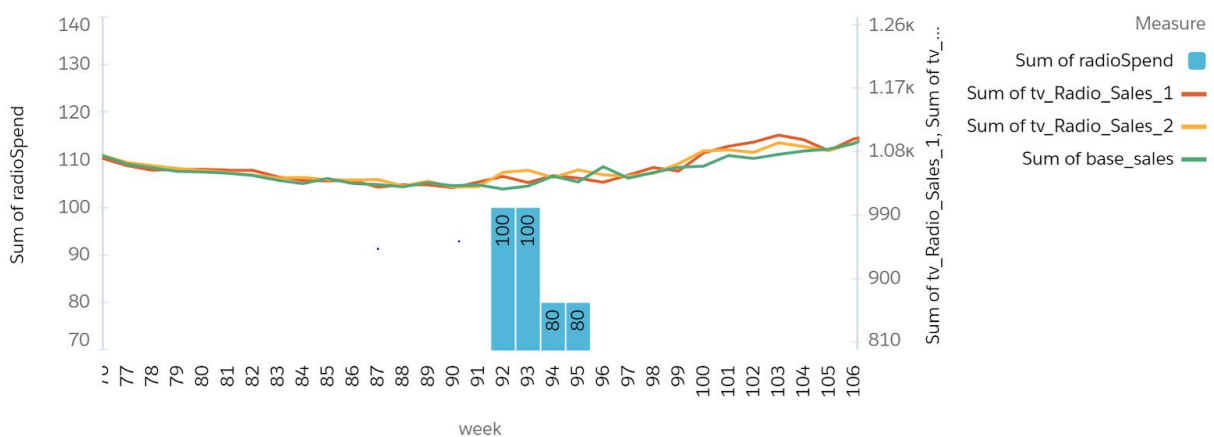
Considering TV spend to be common for adstock model 1 and adstock model 2, the total investment made is 5820, the additional revenue gained from both TV_Sales_1 1160.21 and TV_Sales_2 is 1049.5 – which is only a 19% return on what was invested for advertising for adstock model 1 and a 18% return on what was invested for advertising for adstock model 1

Are there any adstock effects for TV ad spending?



Yes it is clearly seen that there are adStock effects for TV ad spending. The graph shows the tvSpend, adstock contribution to model 1 and 2 over the weeks. From the graph it's evident that after each interval of tv expenditure there is an upward trend which shows a sudden surge in sales and then there is a decay effect observed after each interval as well.

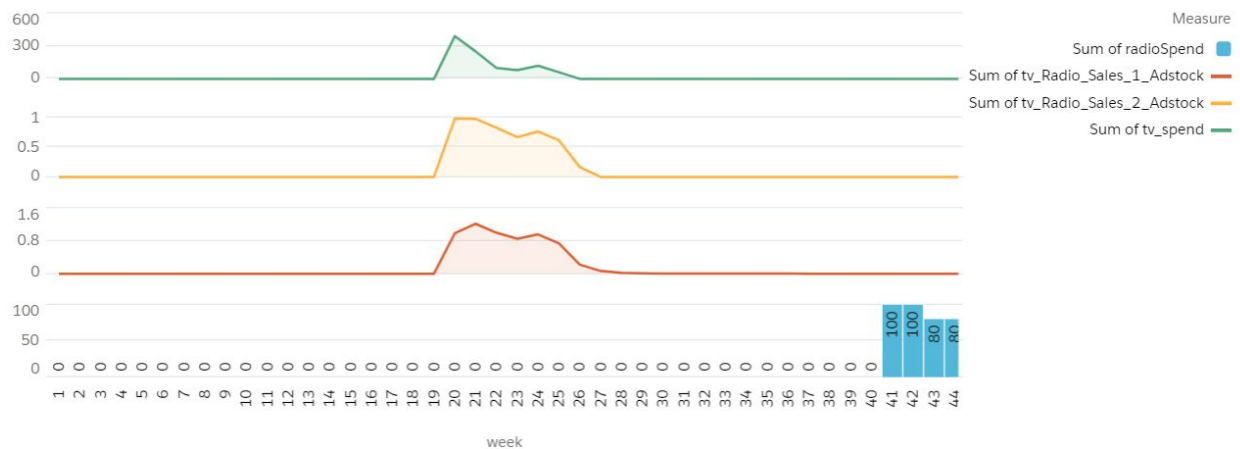
How does Radio spending affect sales? Can you quantify it?



Radio spending does not have a significant effect on sales. The above graph shows radio_spend, sum of sales_tv_radio 1, sum of sales sales_tv_radio 2 over the weeks.

TV_Radio_Sales_1 and TV_Radio_Sales_2 are dependent on TV_spend as well. Based on the results. TV_Radio_Sales_1 has gained an additional revenue of 1607.39 and TV_Radio_Sales_1 has gained an additional revenue of 1274.07

Are there any adstock effects for radio ad spending?



No. The interval after which money is invested on radio Ads, there is not much change and the decay effect wasn't observed as well.

Thank you