

## Datafest Presentation

Advertising has a major influence over customer behavior and we have the following insights to report.

### 1. Advertising has a positive correlation with sales.

Using ad-view info with transaction, and applying confusion matrix, we have formed the following conclusion highlighted by the example below.

EX.

Confusion Matrix		
	View Hyndai's ads	Not View
Buy Hyundai	4.11%	1.44%
Buy other brand	37.59%	56.87%
	PPV	1-NPV
	9.85%	2.46%

#### CONCLUSION:

According to PPV and FP/PV, we can infer that exposing customers to an ad results in a greater likelihood of purchase of the company's product.

### 2. Measure the information gain.

Knowing that customer exposed to ad, reduces uncertainty of the their decision. (i.e. ads is informative for us to understand customers behavior)

EX.

Make	Entropy	Newinfo	PIG(Percentage of Info Gain)
CADILLAC	0.058655	0.046518	20.69%

#### CONCLUSION:

Having a customer exposed to an ad gives us behavior information which resulting in reduced uncertainty of their decision (whether buying the company's product or not.)