



# Storytelling med dine regresjonsmodeller ved hjelp av SAS Visual Analytics

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# Why Data Storytelling?



# Questions to ask Ourselves

Telling a Story with Visualization



Who is our audience?



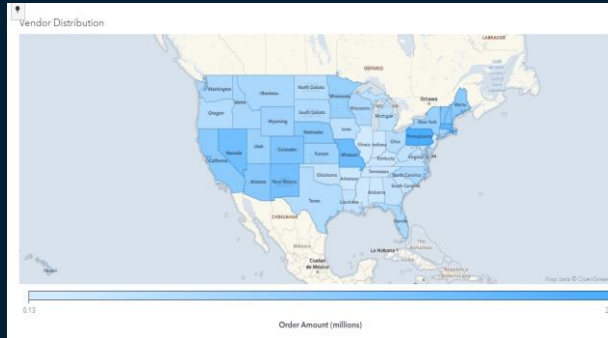
What is the goal of my visualization?



Is my visualization easy to navigate and understand?

# Where does Visualization come in?

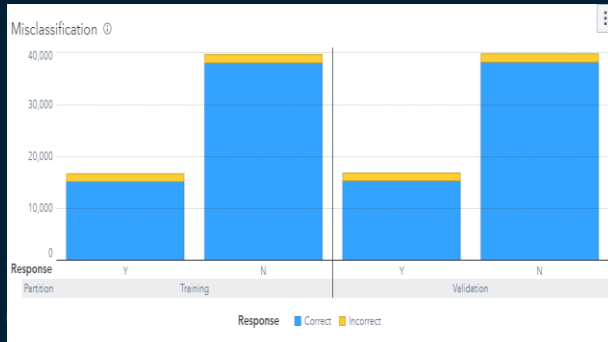
## Data Exploration



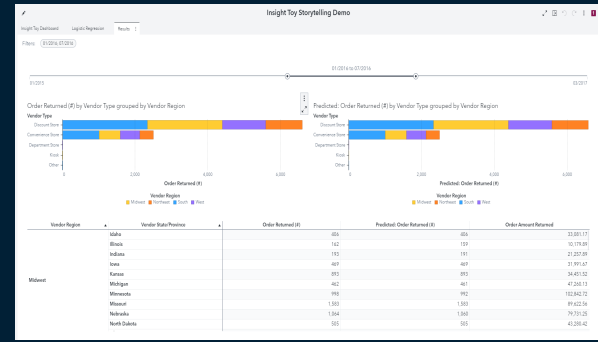
## Model Building



## Model Explainability



## Communication of Results



# Case Study

# Evaluation of Sales

## Insight Toy Company



Sales to your vendors have been slowly declining.

We want to investigate ways to increase profits. We have two years of data on business:

- what products are sold
- to which vendors they are sold
- the associated costs
- metrics about the sales reps and the vendors.

### Insight Toy Company Dashboard

Order Profit  
**20M**

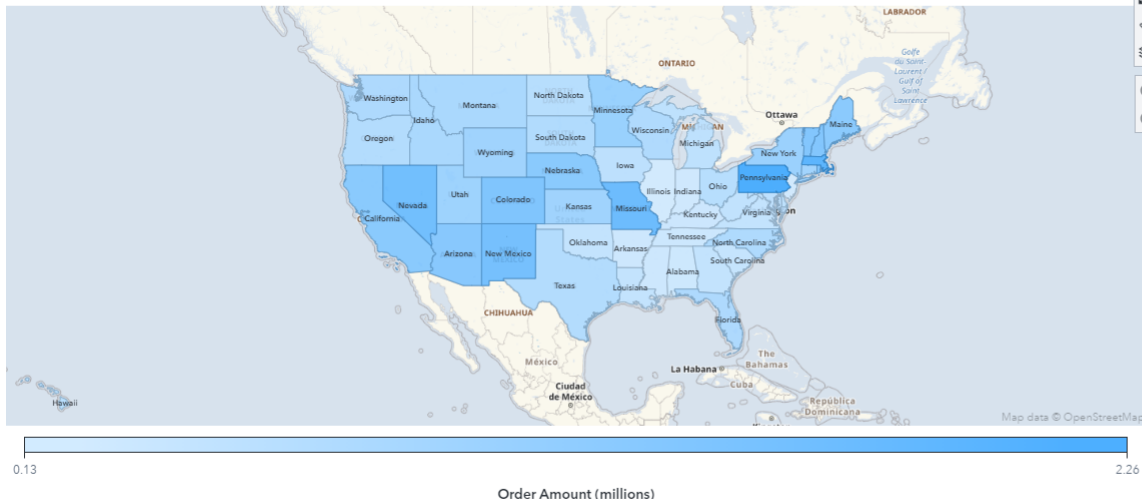


Order Size  
**1.2M**

Total Cost  
**7.9M**

Order Returned (#)  
**113K**

Vendor Distribution

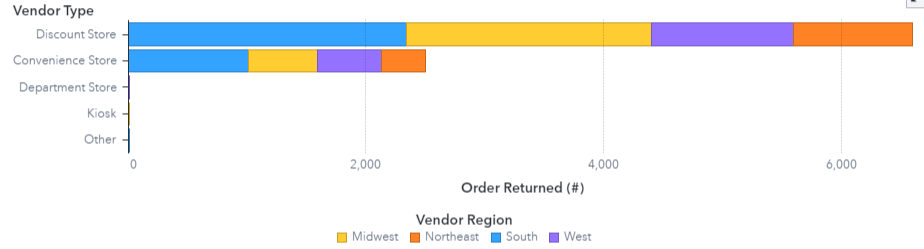


Vendor Region	Vendor State/Province	Order Amount
Midwest	Idaho	754,829.67
	Illinois	125,913.76
	Indiana	164,133.83
	Iowa	454,536.89
	Kansas	918,103.18
	Michigan	425,168.57
	Minnesota	1,022,075.75
	Missouri	1,740,272.33
	Nebraska	1,267,182.33
	North Dakota	547,944.12
Northeast	Ohio	555,951.47
	South Dakota	643,485.11
	Wisconsin	666,064.20
	Connecticut	884,418.19
	Maine	1,249,959.70
	Massachusetts	1,993,800.35
	New Hampshire	1,374,748.56
	New Jersey	129,383.91
New York	998,694.55	
Pennsylvania	2,261,561.61	

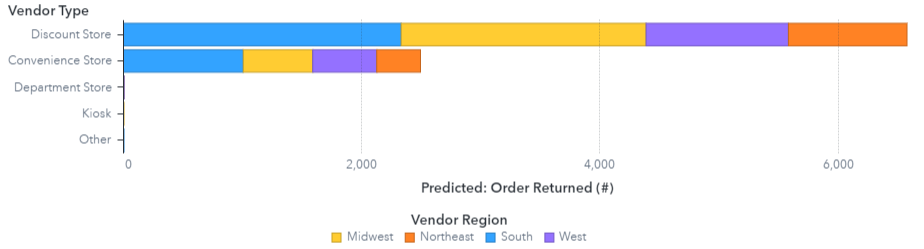
Filters: 01/2016; 07/2016



Order Returned (#) by Vendor Type grouped by Vendor Region



Predicted: Order Returned (#) by Vendor Type grouped by Vendor Region



Vendor Region	Vendor State/Province	Order Returned (#)	Predicted: Order Returned (#)	Order Amount Returned
Midwest	Idaho	406	406	33,081.17
	Illinois	162	159	10,179.89
	Indiana	193	191	21,257.89
	Iowa	469	469	31,991.67
	Kansas	893	893	34,451.52
	Michigan	462	461	47,260.13
	Minnesota	998	992	102,842.72
	Missouri	1,583	1,583	89,622.56
	Nebraska	1,064	1,060	79,731.25
	North Dakota	505	505	43,280.42



# Further Reading

## Importance of Storytelling in Data Science:

- <https://www.forbes.com/sites/brentdykes/2016/03/31/data-storytelling-the-essential-data-science-skill-everyone-needs/?sh=5f1dab7252ad>
- <https://hbr.org/2019/01/data-science-and-the-art-of-persuasion>

## Dataset used + Documentation:

- [https://go.documentation.sas.com/doc/en/vacdc/v\\_008/vaamgs/n06bfdhvcf7k1mn1fvny7nlipz27.htm](https://go.documentation.sas.com/doc/en/vacdc/v_008/vaamgs/n06bfdhvcf7k1mn1fvny7nlipz27.htm)

# Thanks!



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