

Story Telling: SuperCookies Store

	A	B	C	D	E	F	G	H	I
1	Sales_Date	Day-of-Week	Salesclerk	Temperature	Tweets	Cost of Good Sold	Price	Sales	Profit
2	1/16/2019	Wednesday	Ada	56	6	64.4	0.3	106	39.25%
3	1/25/2019	Friday	Ada	59	7	64.45	0.3	84	23.27%
4	1/15/2019	Tuesday	Ada	60	6	64.4	0.5	137	52.99%
5	1/17/2019	Thursday	Ada	60	2	64.2	0.3	85	24.47%
6	1/23/2019	Wednesday	Ada	60	7	64.45	0.3	87	25.92%
7	1/10/2019	Thursday	John	61	10	85.6	0.5	100	14.40%
8	1/14/2019	Monday	John	64	8	85.5	0.5	135	36.67%
9	2/3/2019	Sunday	John	65	6	85.4	0.5	140	39.00%
10	1/6/2019	Sunday	Ada	66	8	64.5	0.5	120	46.25%
11	2/4/2019	Monday	Ada	67	3	64.25	0.3	94	31.65%
12	2/6/2019	Wednesday	Ada	68	5	64.35	0.3	114	43.55%
13	2/11/2019	Monday	John	68	2	85.2	0.5	145	41.24%
14	1/3/2019	Thursday	John	69	5	85.35	0.5	150	43.10%
15	1/5/2019	Saturday	Ada	69	6	64.4	0.3	116	44.48%
16	1/9/2019	Wednesday	John	69	8	85.5	0.5	177	51.69%
17	1/26/2019	Saturday	John	69	0	85.1	0.5	125	31.92%
18	2/2/2019	Saturday	John	69	9	85.55	0.5	128	33.16%
19	1/27/2019	Sunday	Ada	70	6	64.4	0.3	120	46.33%

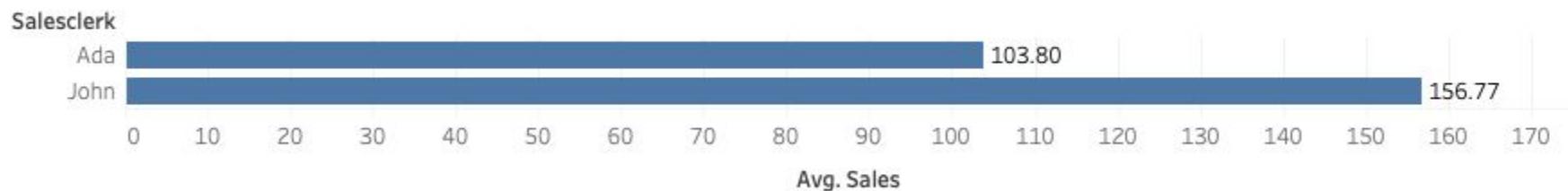
Story Telling: Fire or Keep Decision

Total Sales for each Sales Clerk



Sum of Sales for each Salesclerk.

Average Sales for each Sales Clerk



Average of Sales for each Salesclerk.

Boss: Ada's total sales volume and average sales volume are both lower than John's from 1/1/2019 to 19/2/2019. Looks like Ada is bad at selling.

Story Telling: Fire or Keep Decision

I observed a huge performance difference between your sales employees. What are you going to do to fix this problem?



Me: Hi boss, I will do more researches by examining more data to understand Ada's performance and make a decision.

Story Telling: Fire or Keep Decision

Average Profit for each Sales Clerk



Average of Profit for each Salesclerk.

Me: Looks like Ada's average profit rate(36.609%) is also lower than John's(44.021%) during the period from 1/1/2019 to 19/2/2019. I think Ada really is a bad salesperson. I should fire her.

Story Telling: Fire or Keep Decision

What????? She
is terrible in sales!
Ada is got to go!



Me: Hi Ada, please sit. Today I would like to talk about your recent job performance. The boss had seen a big performance difference between you and John. Please check the 3 graphs in next slide. During the period from 1/1/2019 to 19/2/2019, your total sales, average sales and average profit rates are all lower than your colleague John. I'm not sure about the reason behind this. Maybe you are just not working hard enough?

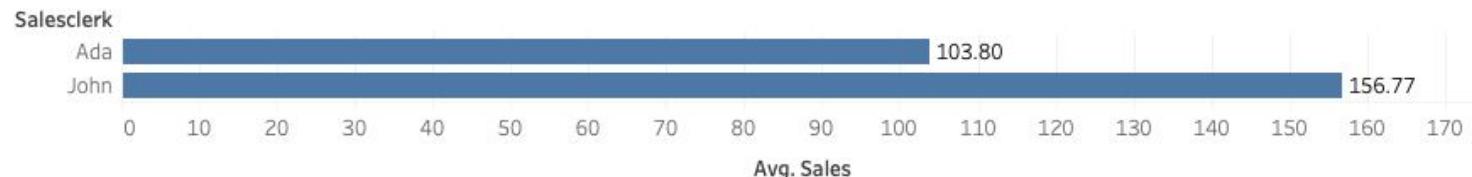
Story Telling: Fire or Keep Decision

Total Sales for each Sales Clerk



Sum of Sales for each Salesclerk.

Average Sales for each Sales Clerk



Average of Sales for each Salesclerk.

Average Profit for each Sales Clerk



Average of Profit for each Salesclerk.

Story Telling: Fire or Keep Decision

You are fired!



Me: I think I should give you a termination of your job contract.

Ada: Please boss, no! I think I'm working very hard. Could you please give me an opportunity to use data to prove myself? I believe I can show you that I'm working very hard and I deserve this job.

Me: Okay, I will give you 3 days to prepare and give me a presentation 3 days later.

Story Telling: Fire or Keep Decision

What should I do?



Story Telling: Fire or Keep Decision

Can you help me?

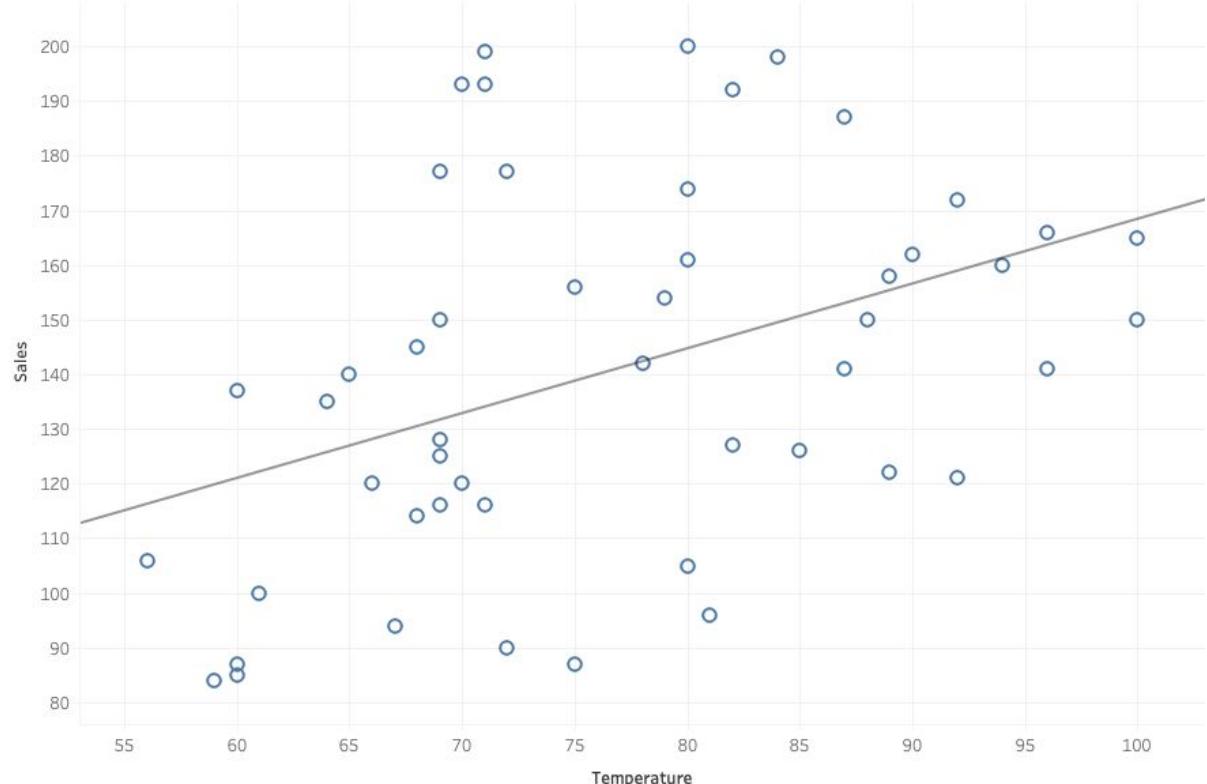


Story Telling: Fire or Keep Decision



Story Telling: Fire or Keep Decision

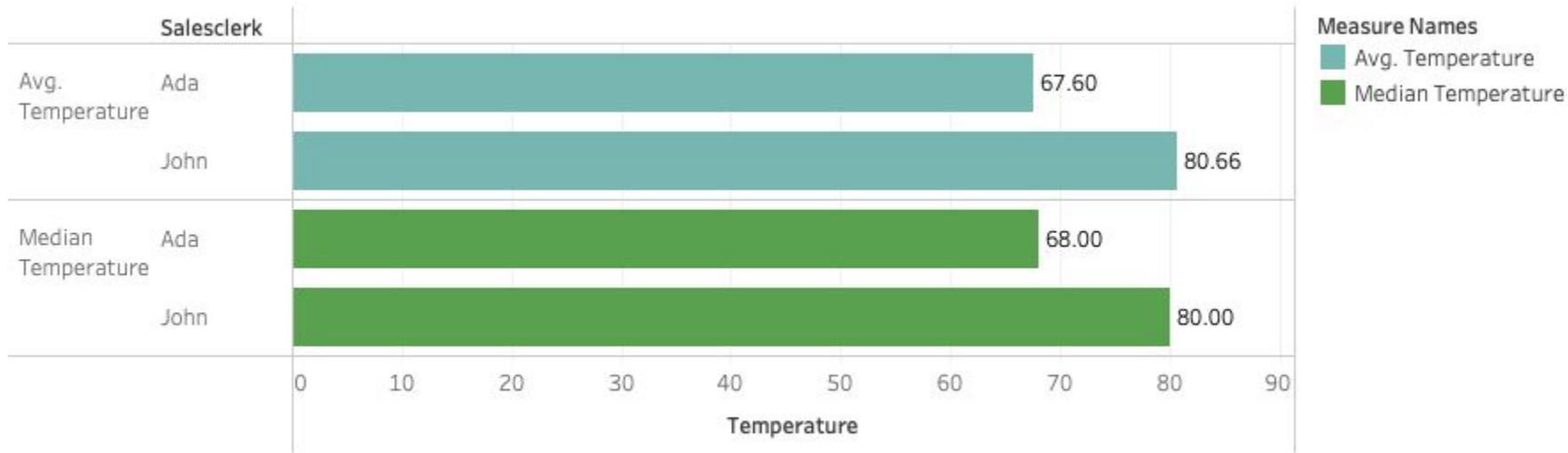
Relationship between Temperature & Sales



From this graph, we can see that between 55 to 100 degrees, Temperature and Sales have a positive relationship, which means when temperature increases, the sales volume increases.

Story Telling: Fire or Keep Decision

Average & Median Temperature for each Sales Clerk

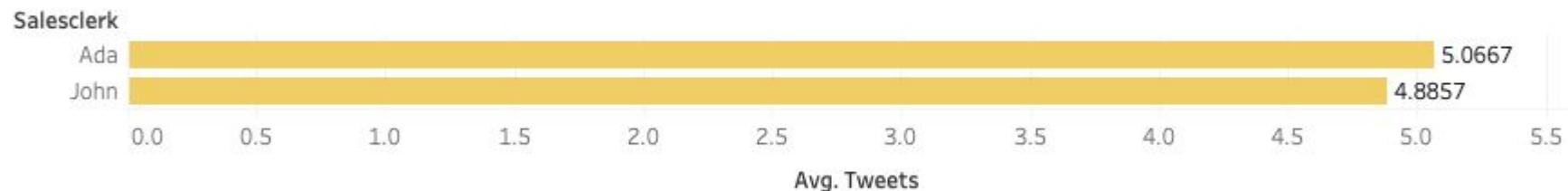


Avg. Temperature and Median Temperature for each Salesclerk. Color shows details about Avg. Temperature and Median Temperature.

Ada: firstly, we can see that the average temperature and median temperature are both lower for days when I was working, combined with the conclusion we had from last slide, I believe that John had more advantages because those days he was working are hotter, and hotter days are more likely to have more sales. Maybe customers are more willing to do shopping when the weather is nice. If I work in hotter days, I will have more sales.

Story Telling: Fire or Keep Decision

Average Tweets for each Sales Clerk

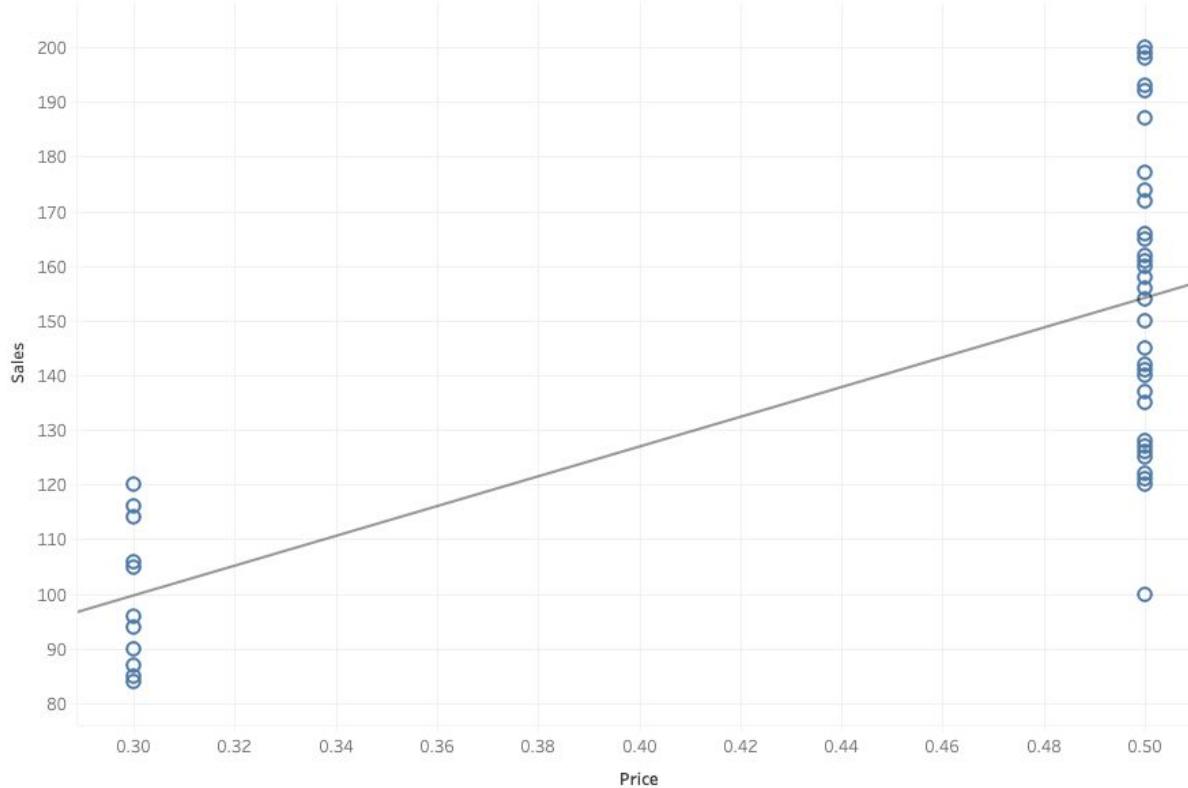


Average of Tweets for each Salesclerk.

Ada: secondly, on average, I tweeted 5.0667 times a day, which is higher than John. This can prove I'm working very hard and try to attract more customers by using social media.

Story Telling: Fire or Keep Decision

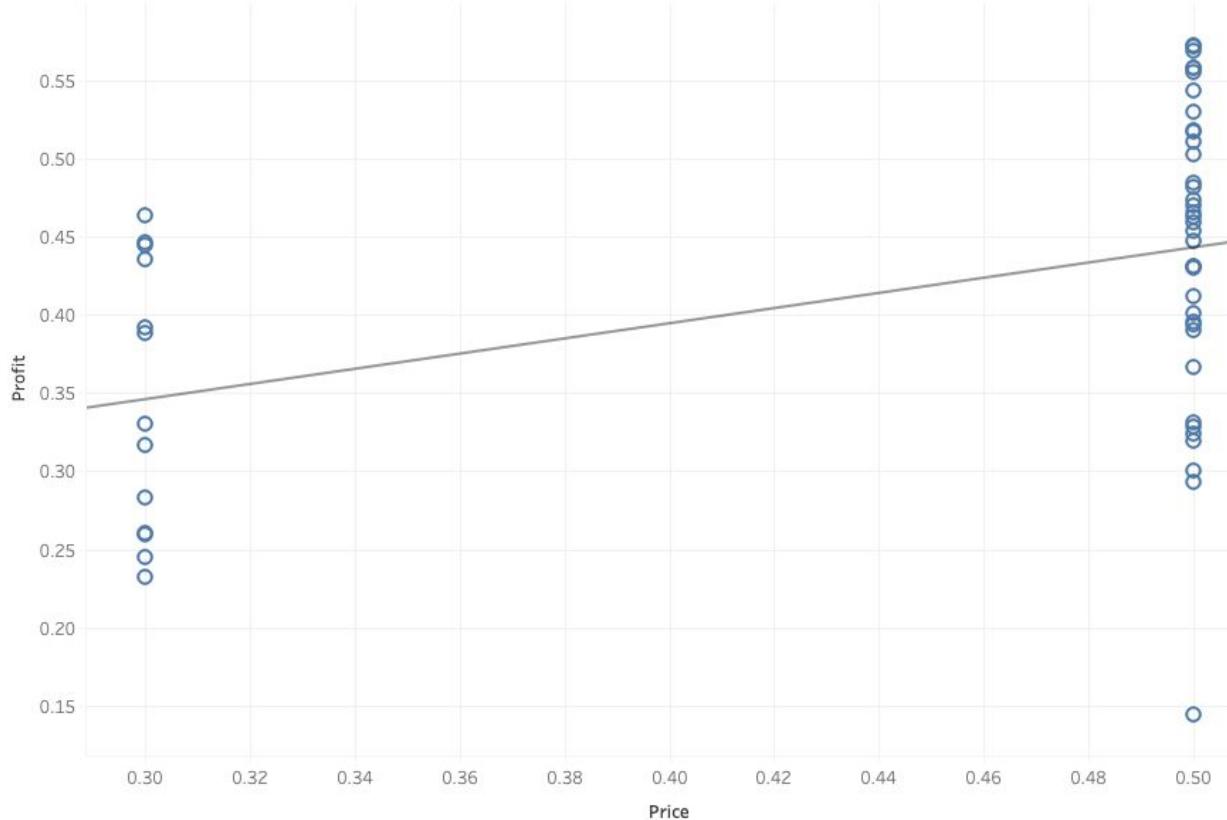
Relationship between Selling Price & Sales



This graph shows that when the selling price increases, the sales increases.

Story Telling: Fire or Keep Decision

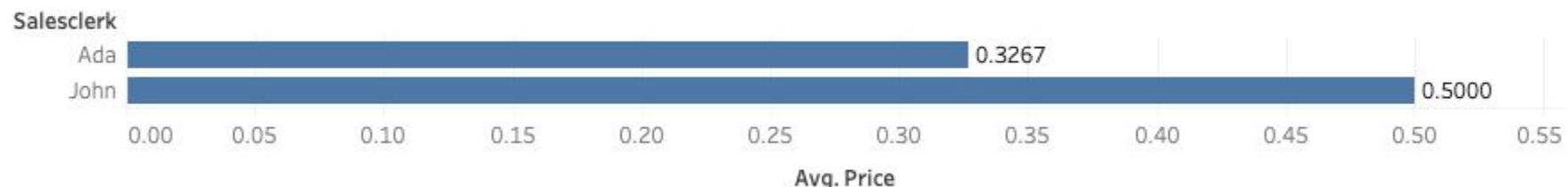
Relationship between Selling Price & Profit



This graph shows that when the selling price increases, the profit increases.

Story Telling: Fire or Keep Decision

Average Selling Price for each Sales Clerk



Average of Price for each Salesclerk.

Ada: thirdly, this graph shows that average selling price for me is 0.3267 and average selling price for John is 0.5. Based on the observations from last 2 slides, John's sales and profit will definitely be higher than me because he has a more advantageous selling price. If management adjust my selling price, I believe my sales and profit number will look way better than now.

Story Telling: Fire or Keep Decision

Showtime!



Story Telling: Fire or Keep Decision

Me: okay, after your presentation, I believe that it is not fair to only look at sales and profit numbers without taking temperature and selling price into consideration. Also, you are working hard by tweeting to attract customers. Ada, I think you can stay, congratulation!

Ada: thank you.