



IMPaper Customer Review Analysis Report

Dataset overview:

The dataset consists of 5 variables and 683 records out of which 48 records were duplicate. After data preprocessing below is my analysis.

Star rating analysis:

From the analysis, ETSY has got very positive feedback from customers. There are a total of 683 unique people who had given ratings on the website and the rating breakdown is as follows.

Star Rating	Count
5	662
4	17
3	3
1	1
Total	683

The above table shows us, ~97% of the customers are extremely happy with the product and services.

From ratings, ~0.5% are little disappointed by the **quality of paper, print, delivery time, and the text on the card!** I've listed and highlighted those comments in the below table.

Message analysis:

Overall, we have 325 customer message reviews on the website and 358 customers have just given the star ratings and left blank messages.

- 52% of customers didn't leave message feedback!
- All the customers who left blank messages have given a 5-star rating on the website.
- Customers who have given message feedback are positive except a few. I would say hardly, 3-4 customers. I have listed them down in the table along with their **order_id's**, which would help you to send a personal email or message to the customer.

Here are the reviews that we need to really think about:

reviewer	date_reviewed	star_rating	message	order_id
Johanna	04/28/2020	3	The card is very cute, but the quality is pretty much as if they'd used a standard printer at home.	1611681587
Devin	12/30/2019	3	Took forever to get to me. But the card was great quality and I loved the saying.	1519255394
M	12/02/2019	3	My fault for not noticing before I ordered, but it says "I've benedicted to you". I think it should be "I'm" unless I'm missing something? Good quality though. I would order from this shop again, but pay more attention to the text.	1511822293
Leslie	02/18/2019	1	Maybe I didnt read all the details but its just a piece of paper. No frame. Doesnt seem worth the money for something I could have printed myself. Came fast.	1412169364

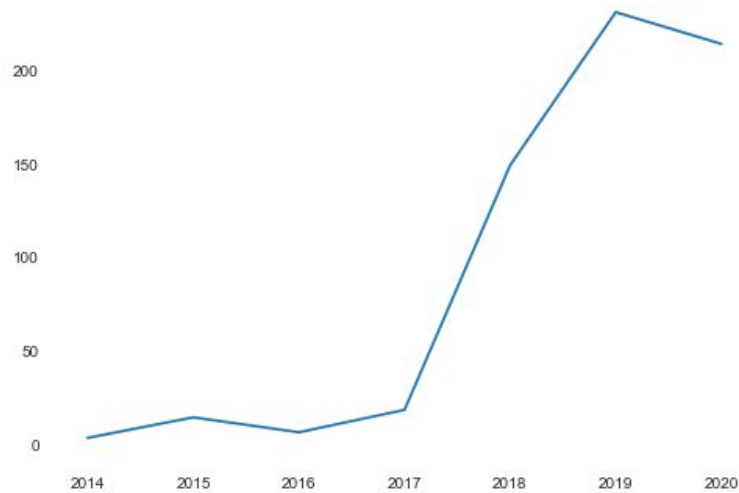
From reviews, we can see very few customers are a little disappointed about product delivery. The product seems to be a little bent during shipping. Stiff and hard box packing may help to solve the problem. Otherwise, they are happy with the product.

Sales time series analysis:

From the data, we can see that, although the business had started in 2014, the business had started full time throughout the year from 2018. The business had not run full time throughout the year until 2018. Sales by year and month also attached in the project folder. The peak time for business is the month of December and a successful year for sales until now is 2020.

- Peak month for sales: December
- A successful year in sales: 2020 (214 orders until 05/29/2020)

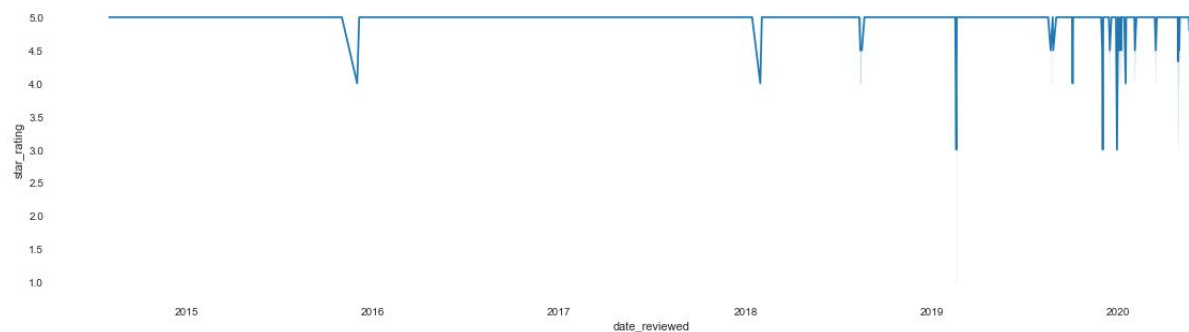
date_reviewed	sales
2014	3
2015	14
2016	6
2017	18
2018	149
2019	231
2020	214



Rating time series:

From the graph, it is clear that we have got more sales in 2019 and 2020 (until 05/29/2020). There is a peak in sales in 2019 and 2020. And we can see that, the drop in rating to 3 stars and 1 star in 2019 and 2020.

date_reviewed	star_rating
04/28/2020	3
12/30/2019	3
12/02/2019	3
02/18/2019	1



Word cloud:

Wordcloud helps us in understanding the high-frequency words used in reviews. The size of words in the word cloud is displayed based on their frequency. Bigger the size most frequent is the word used in reviews.

- Print quality
- Packaging - product bent during shipping

Recommendation:

Maybe a stiff and hard packaging would definitely help in creating a very good impression during the product delivery time. It also can help deliver the product as is, without any damage.

Areas of improvement:

1. Packaging
2. Print quality

Conclusion:

From my analysis, the company is doing great with their product and services. Customers are extremely happy with the quality of the product and the speedy delivery. When running an organization, it is quite common that mistakes are made sometimes. Only 3 customers are disappointed with the product and service. Sending a personal email or text may help to retain the customer.