Course 2 Capstone

The OSEMN Process

Give at least two example questions you would want to answer as an analyst that relates to Inu + Neko's business problem.

Remember a good question includes a focus on something that is actionable and follows the SMART goal principles (specific, measurable, attainable, relevant, & timely).

1. What are purchases trend by month and days?
2. What are purchases made by title and categories?
3. What are the purchases quantities by ages?
4. What are total sales monthly and by categories?

What information do you think would be particularly important to your analysis for Inu + Neko?

1. Dates (trans_month and trans_day)
2. Cust_age
3. Trans_quantity
4. Prod_title and Prod_category
5. Total_sales

How would you go about gathering this information?

1. Look for first hand sources from Inu + Neko past purchases for last few years (2017-2020)
2. Liaise with other similar parties that have second hand sources for these data
3. Source from website or buy data if there is a possibility

What are some potential issues or roadblocks can you see in trying to get this information to address Inu + Neko's business problem?

1. Legal and privacy issues of customer data
2. Data may be incomplete or missing
3. Potential of biases in data
4. Data entry mistakes
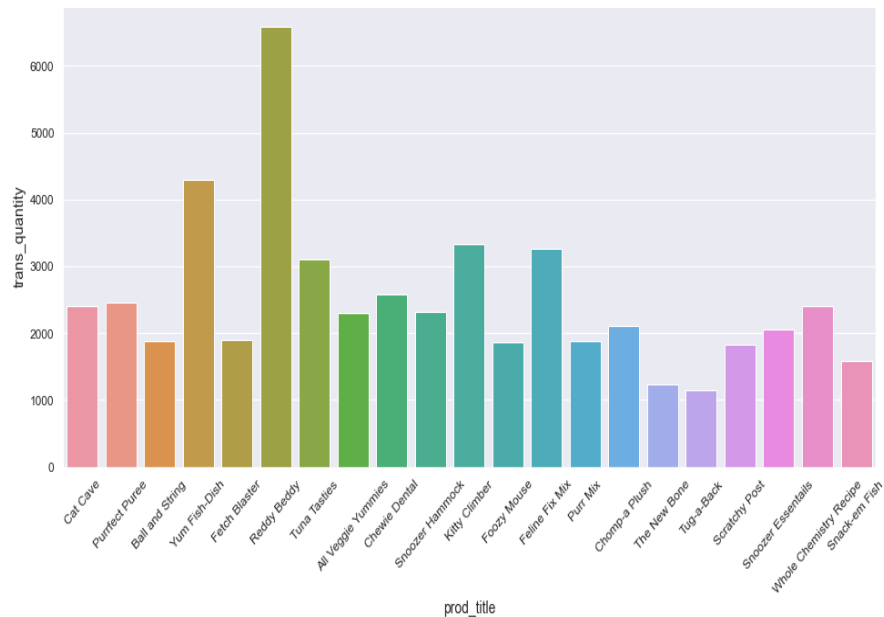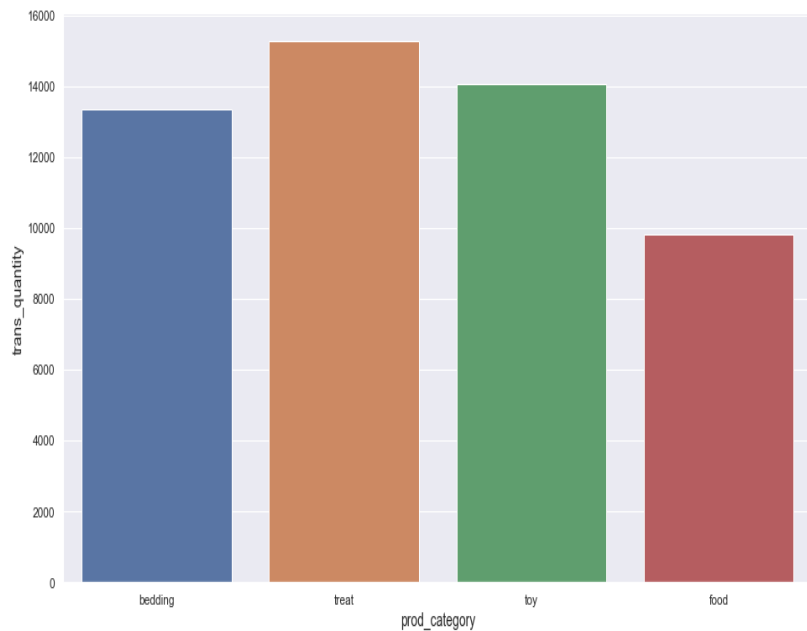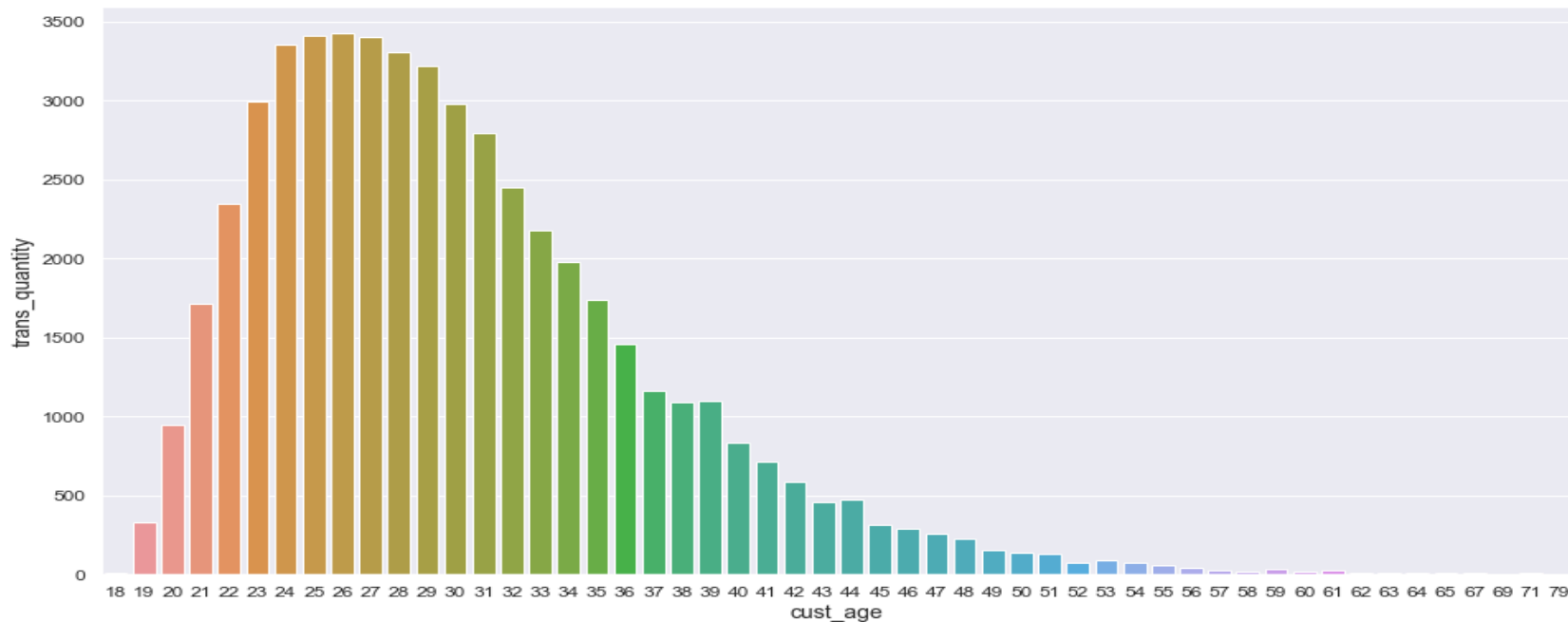5. Data trustworthiness

Purchases Trend by Month and Day
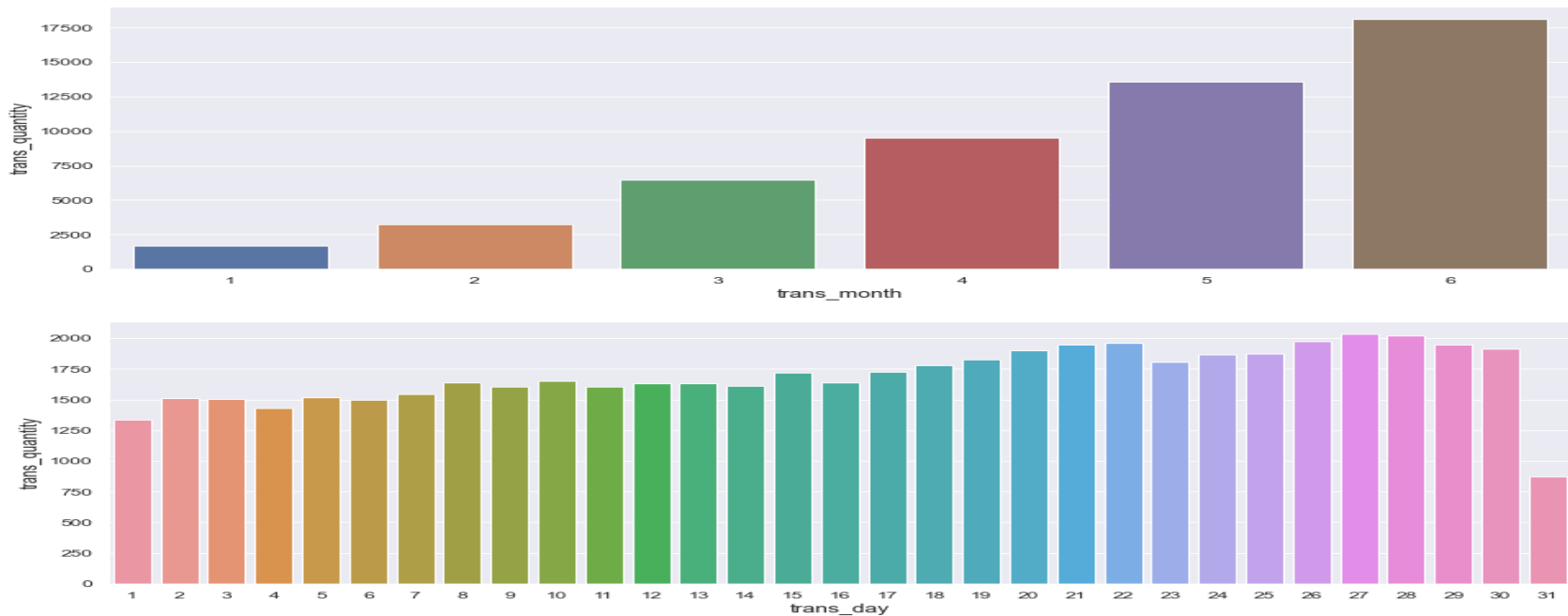
Purchases by Category and Title

Purchases by Age

Total Sales by Category (Month) and Product Title
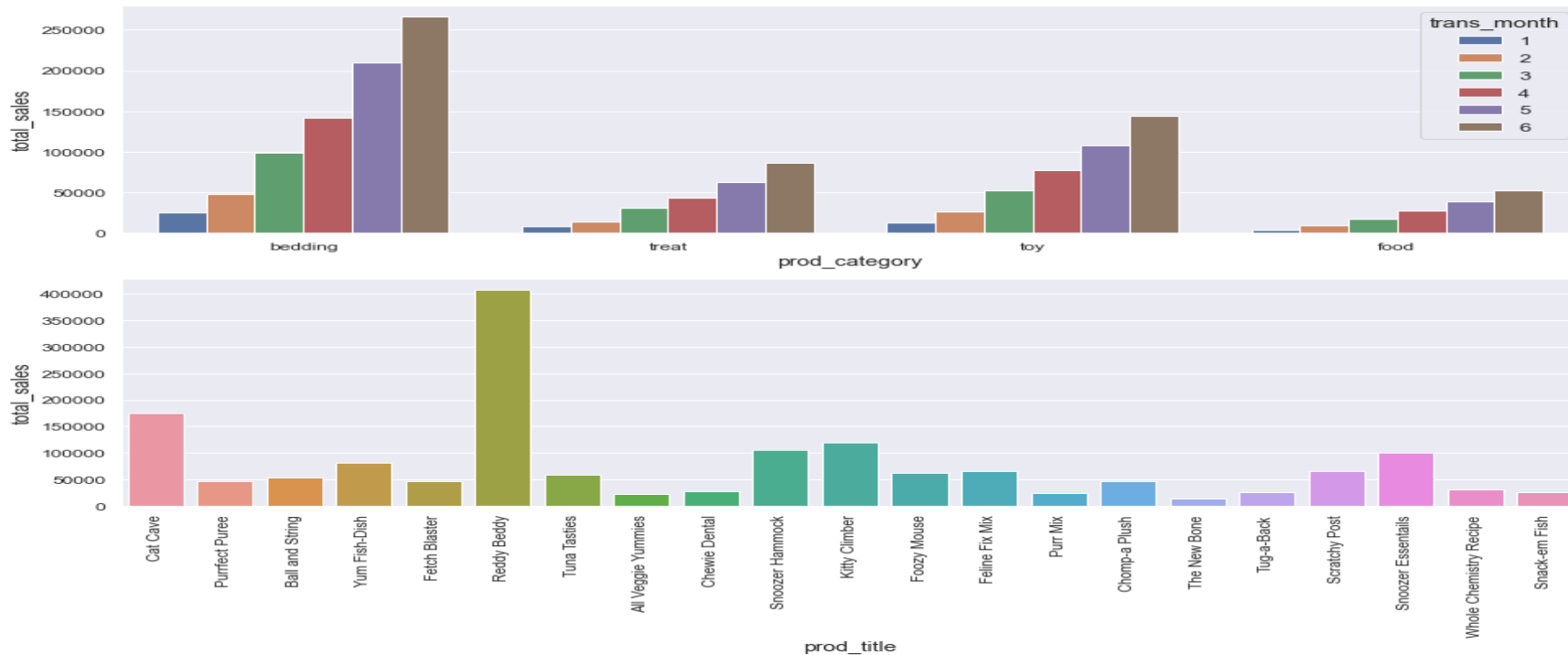
What does this visualization show about the data?

- Visual 1 shows purchases trending up each month. Purchases are high on day 20 to day 30 every month
- Visual 2 shows cat & dog treats are highest purchase overall. Product Reddy Beddy is most popular purchase
- Visual 3 shows customers in age range 22-33 purchased at least 2000 items in 6 months
- Visual 4 shows bedding racked in mostly total sales with Reddy Beddy ranked number one ($400k) alone

Does this visualization align with what we've seen so far from the data?

Yes, absolutely.

What recommendations would you give Inu + Neko based on the model results?

Focus on age group interest (22 to 33) range by marketing, promotions and surveying them to know what they like and fulfill their needs.

What recommendations would you give Inu + Neko based on the model results?

To increase sales and revenue, the company can focus on top 5 categories and product titles in stocking and publicity. It will be good to mix and match them, offer bundle prices, offer discounts for bulk purchases or membership drive.

What can you say about the current state of the business?

Since there is an increasing trend of purchases every month in 2021, the potential to grow is there.

What projections can you make about the future state of the business?

A note of caution is we need sales data for the remaining July to December 2021 to give an overall picture to determine the future state of business.

What would you recommend to Inu + Neko?

An insight found is New York, New Jersey and Pennsylvania is top 3 performing states in terms of total purchases.

Inu + Neko need to investigate why these states have done well and apply it for future expansions.

What more work could be done to expand on your analysis?

(You won't need to do this but state what would be good next steps for a follow-up analysis.)

It will be great to have past years of sales data for further analysis.