

The Mystery of the Missing Meows

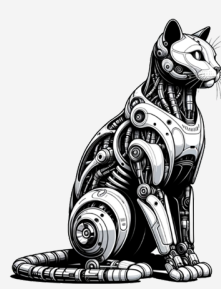
Missing Cat Food Data

Prompt



How to deal with missing data?

Strategy



Drop, fill, or impute?
Let's pick the easiest — drop!

Code & Results

1. Find missing values

This code shows how many times there are missing values in a column, and how many rows in total have at least one missing value.

```
# Check how many missing values per column
print(data.isnull().sum())

# Check how many rows contain at least one missing value
print(data.isnull().any(axis=1).sum())
```

company	0
price	28
weight	0
star_rating	35
total_comments	35
adult	0
chicken	0
wet	0
from_ocean	0
fish	0
tuna	0
salmon	0
mackerel	0
shrimps	0
milk	0
can	0
gravy	0
pouch	0
liver	0
grilled	0
turkey	0
ham	0
vegan	0
dtype: int64	54

We found 28 prices that were missing, 35 ratings that were missing, and comments that were missing. Some of the entries are the same, so we have a total of 54 missing values.



Tips

- First, find them
Look for blanks, "NA", "null", or weird placeholders like "?" or "-999".
- Ask why they're missing
Is it a mistake? A skipped question? Something not measured?
- Don't delete too fast
If only a few values are missing, it's okay to delete those rows — but don't throw away too much data.
- Fill smartly (impute)
For numbers: use the average or median
For categories: use the most common value
Or fill with "Unknown" if you're unsure
- Be consistent
Use the same method for similar columns — and don't mix different tricks unless you have a reason.
- Keep track of what you did
Write down how you handled missing data so you (and others) remember later.
- Sometimes, missing means something
A missing value might actually tell you something useful — for example, not filling in "Pet Type" could mean "No pet".
- Check again
After fixing, make sure there are no more surprises — double-check your cleaned data.

2. Delete missing values

This code **drops** missing values.

```
# Drop rows with any missing values
data = data.dropna()
len(data)
```

164

After dropping 54 missing values, only 164 of 218 entries remain.

Made by: [@katernakononova](#) / Machine learning: for humans on cats
Watch the short: https://youtube.com/shorts/Vqi9_er7PkE

Website: <https://katernakononova.github.io/meowlearning/>

Dive deeper into the world of AI with *Machine Learning: for Humans on Cats* — now on Amazon!

 <https://www.amazon.com/dp/BOCW9SFYXE>