

## 18.2.6

## Data Transformation

**You** have done all this work to get your data ready to be passed into an unsupervised learning model, but what about when other teams need to use this data? The next step is transforming your data into a convenient way for others to use in the future.

Data transformation involves thinking about the future. More times than not, there will be new data coming into your data storage (a place where raw data is stored before being touched), with many people working on different types of data analysis. We want to make sure that whoever wants to use the data in the future can do so.

Let's return once more to our list of questions.

### Can I quickly hand off this data for others to use?

The data now needs to be transformed back into a more user-friendly format. It would be nice if everyone was as great with DataFrames as you two; unfortunately, that is not the case. You'll want to convert the final product into a common data type like CSV or Excel files.

Now that our data has been cleaned and processed, it is ready to be converted to a readable format for future use:

```
# Saving cleaned data
file_path = "<path to your folder>/shopping_data_cleaned.csv"
df_shopping.to_csv(file_path, index=False)
```

### SKILL DRILL

Try to export the data to a different format.

Now you know the questions to ask about your data and understand the Pandas processes used to help answer those questions. Different datasets have different issues. With practice, you'll get better at identifying these.