Fundamentals of Data Science

Data Visualisation

Data encodings

Data encodings

- Encoding is mapping data to a visual object
- Different data require different encodings

| Discrete	Continuous	Nominal
Data with a finite, identifiable number	Values which cannot be exactly determined	Categories of data with no order
E.g., number of cars owned	E.g., amount of rain in the UK this summer	E.g., favourite football team

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Encoding data on a plane

Often, data will be represented using *dimensions*

- e.g. a 2D scatter chart where the X-axis represents a factor, and the Y-axis represents the *level* of that factor
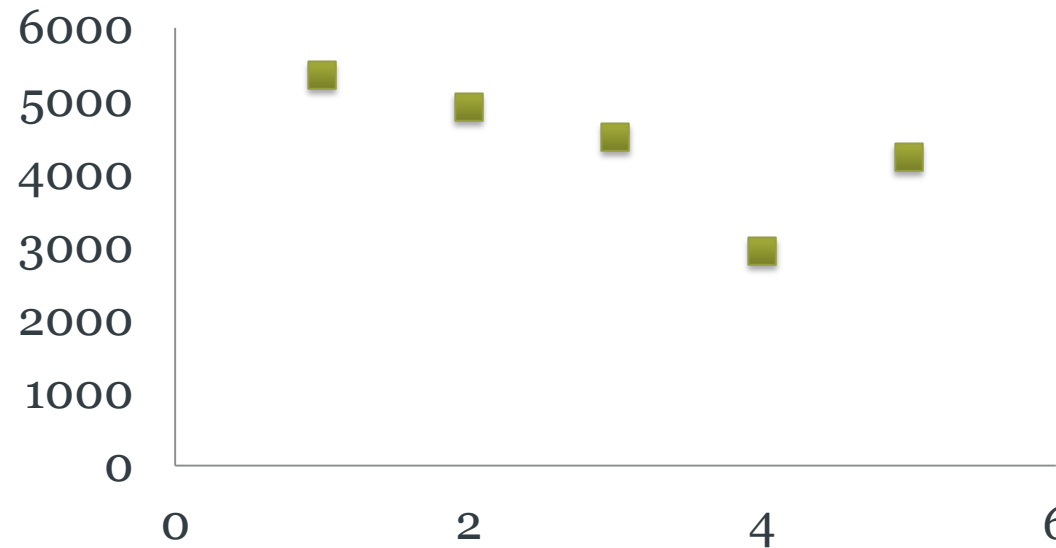
Encoding data on a plane
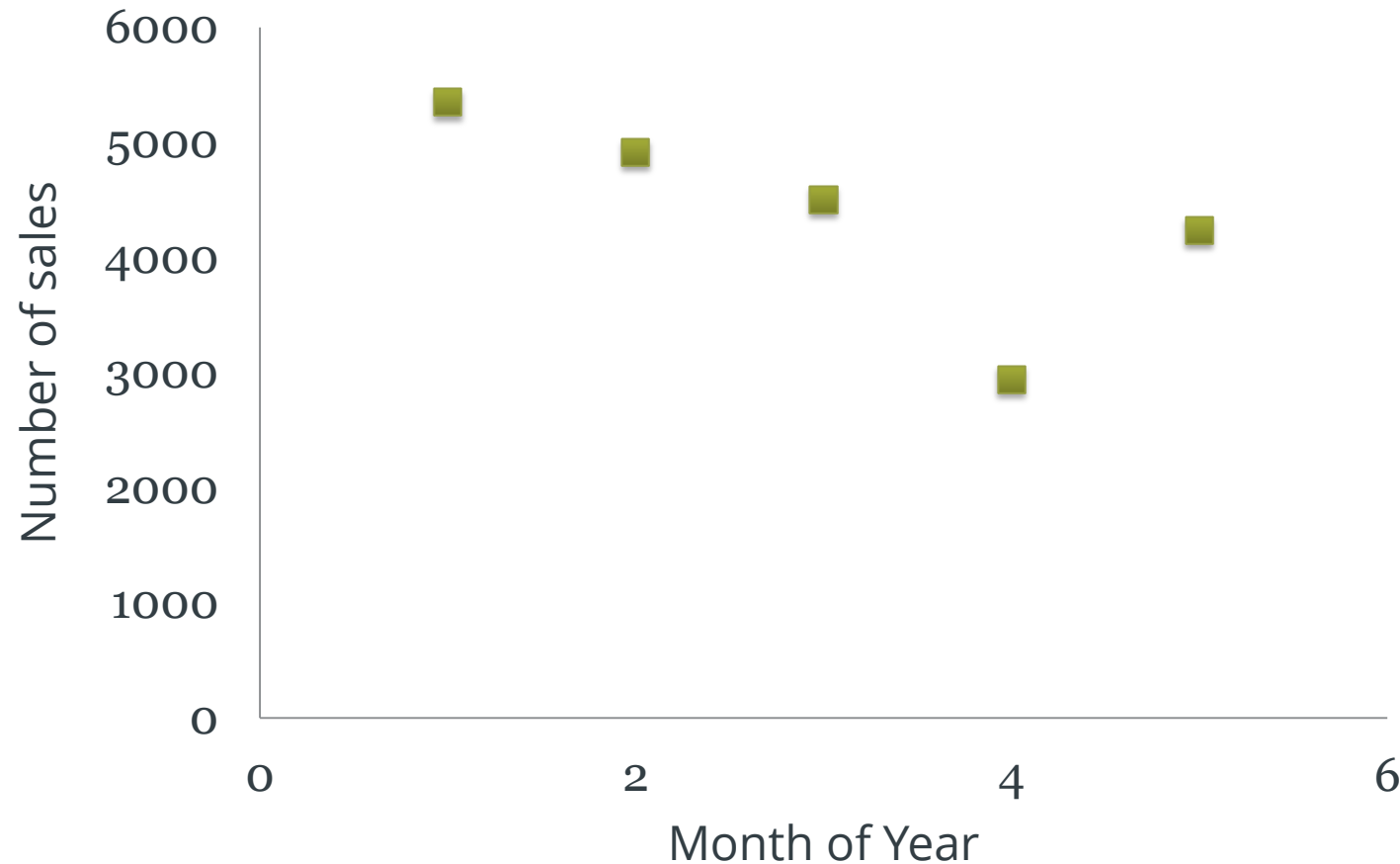
Encoding more data

To add more information to this graph you could

- Add more 'dimensions'
    - A 3D one will just about work
    - How would you add a 4th dimension?

- Instead, retinal variables, or variables that humans are sensitive to changes to, can be used.