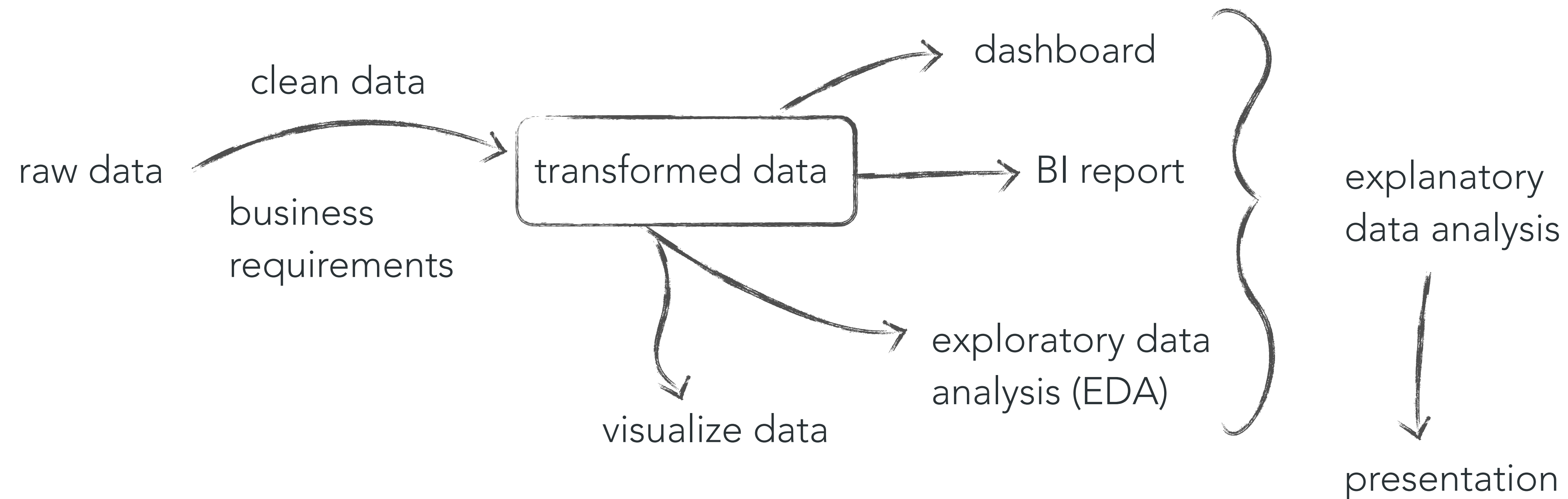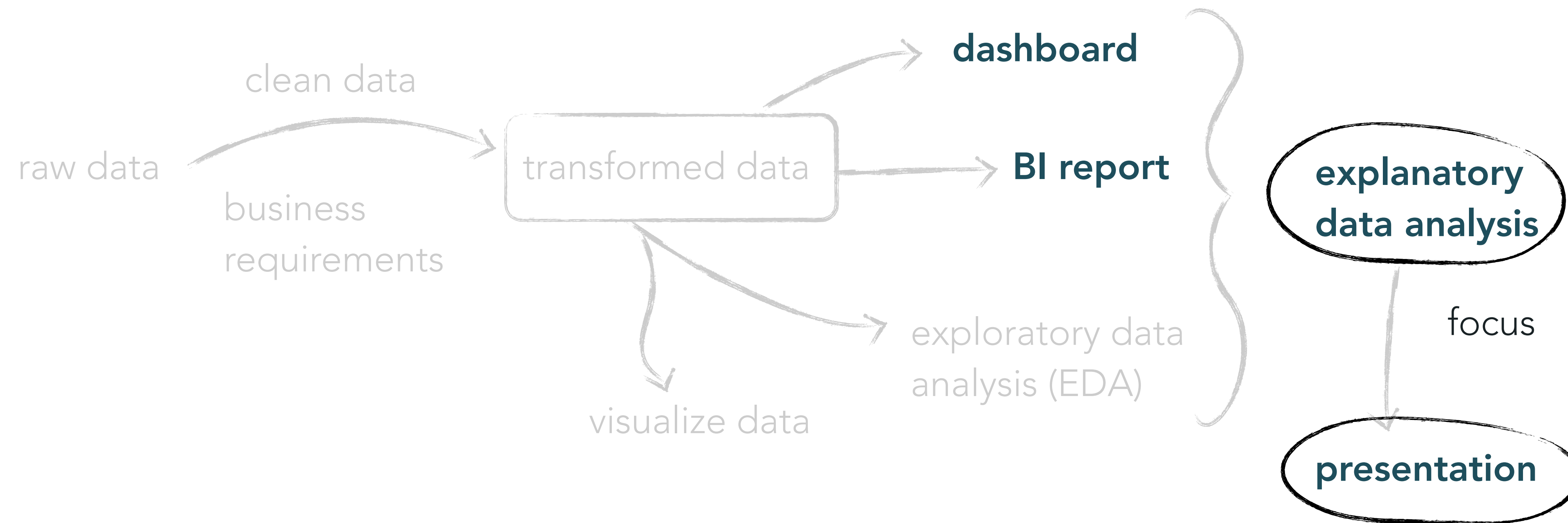kokchun giang

explaining your visualizations to business stakeholders using **data storytelling**
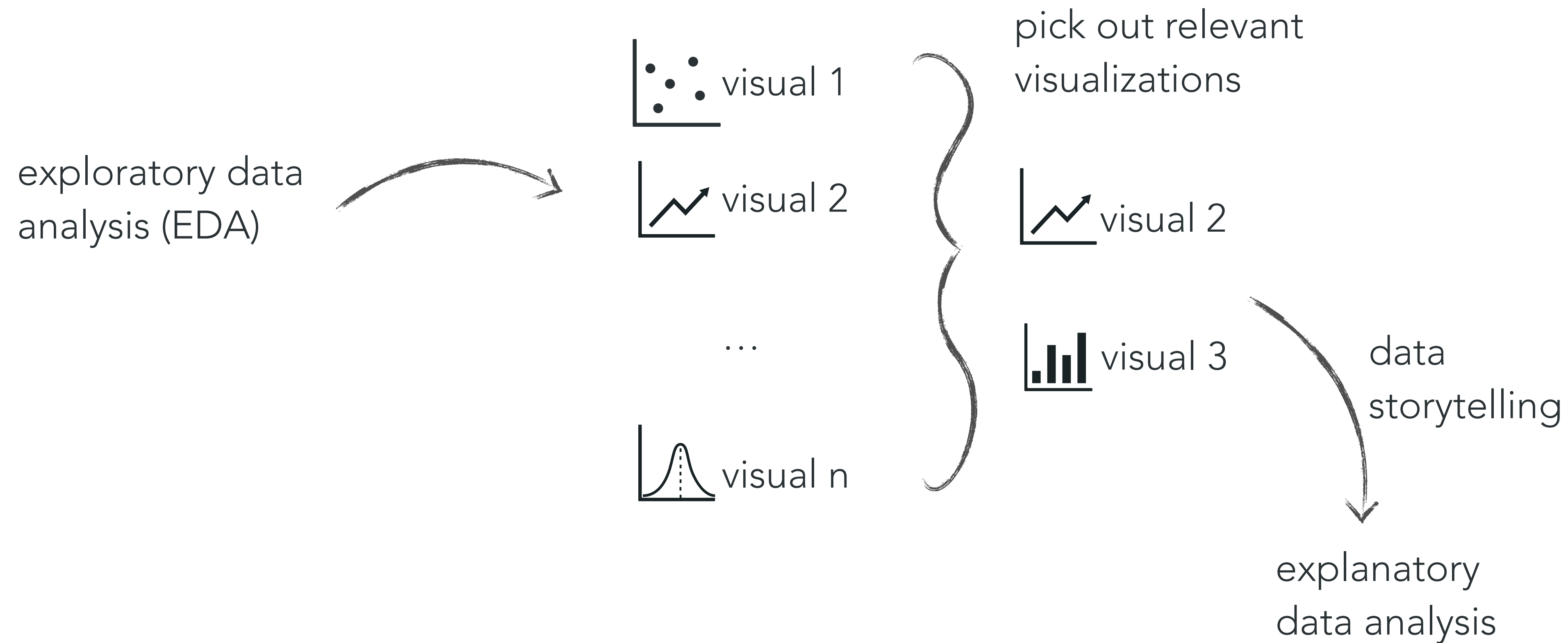
generated by gpt-4o

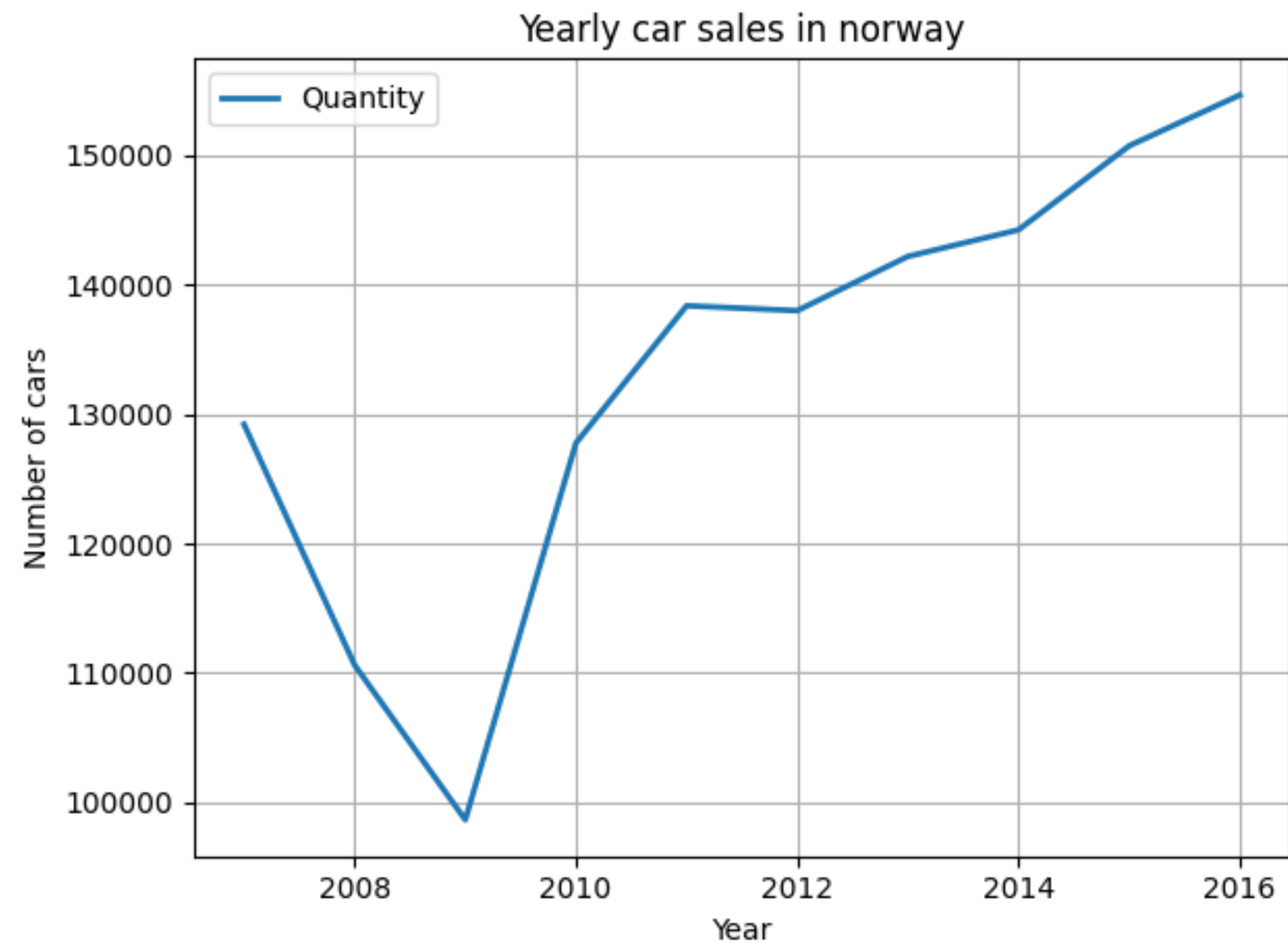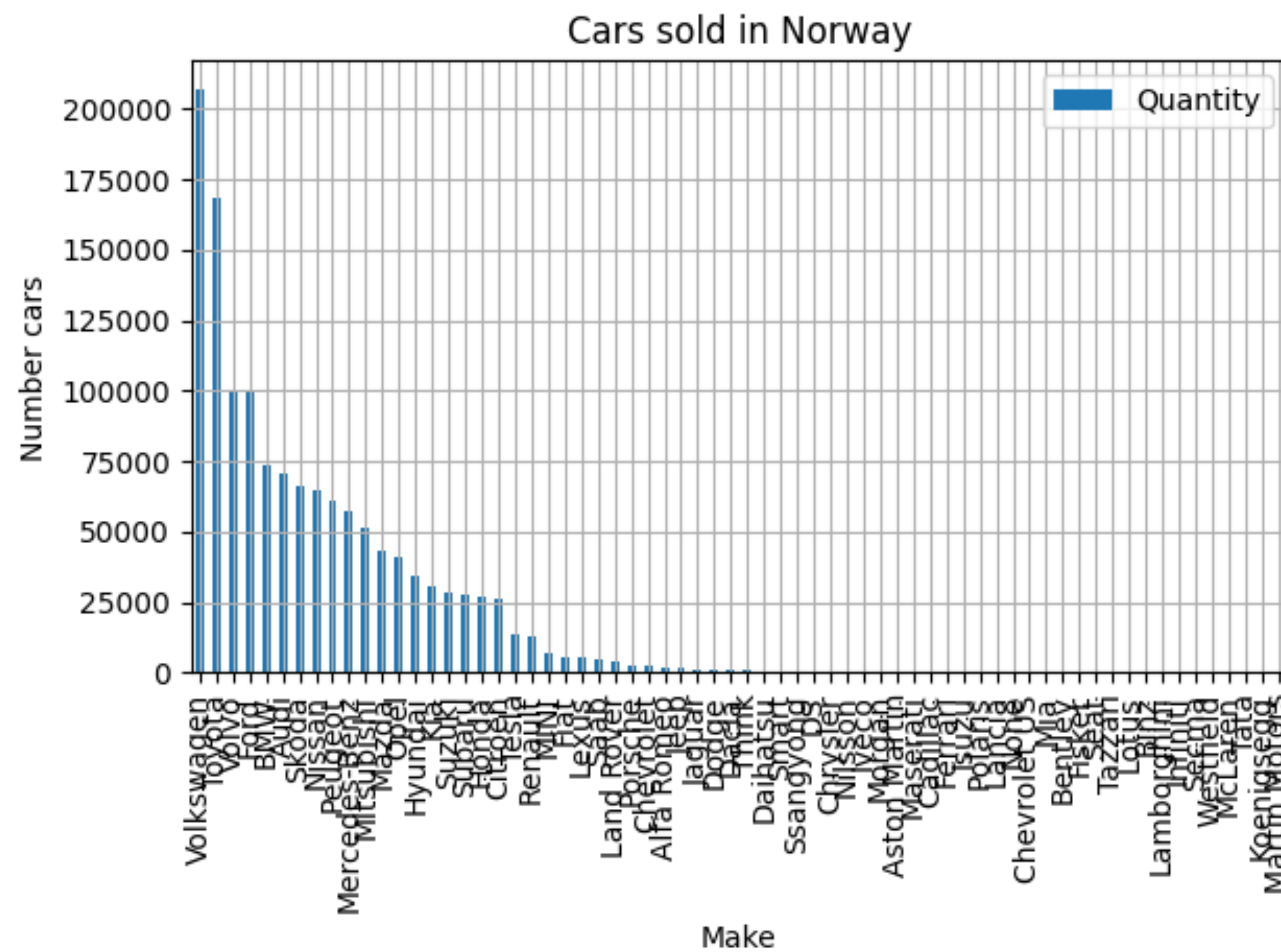# a simplified **data journey** in data analysis and visualization

parts of data journey **visible for business** for stakeholders

from exploratory data analysis to **explanatory data analysis**

exploratory data analysis (EDA)

visual 1

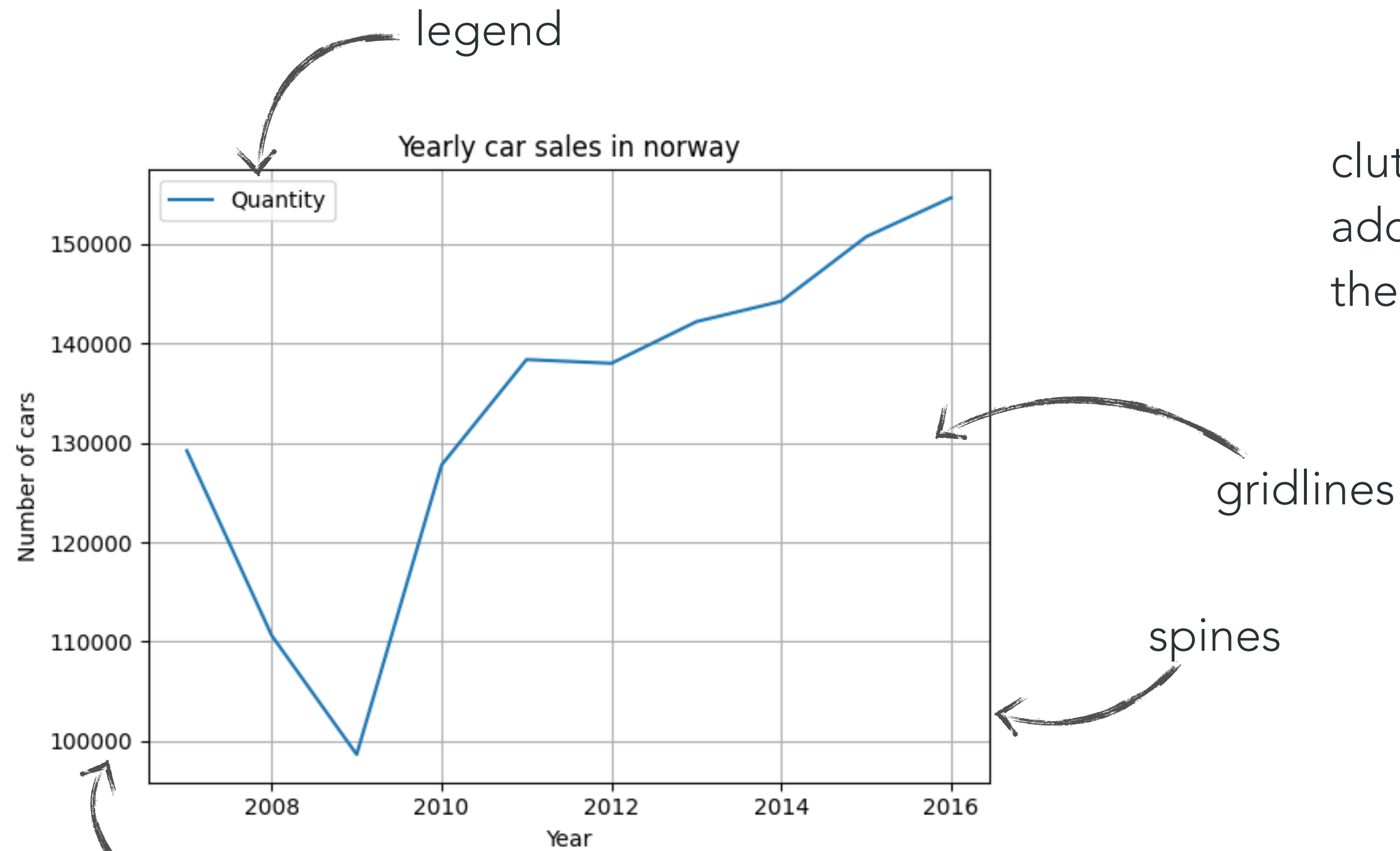visual 2

…

visual n

pick out relevant visualizations

visual 2

visual 3

data storytelling

explanatory data analysis

**exploratory data analysis** are good for finding insights, bad for presenting to business stakeholders

removing **clutter** to simplify visualizations and improve readability

legend

Yearly car sales in norway

Quantity

Number of cars

150000

140000

130000

120000

110000

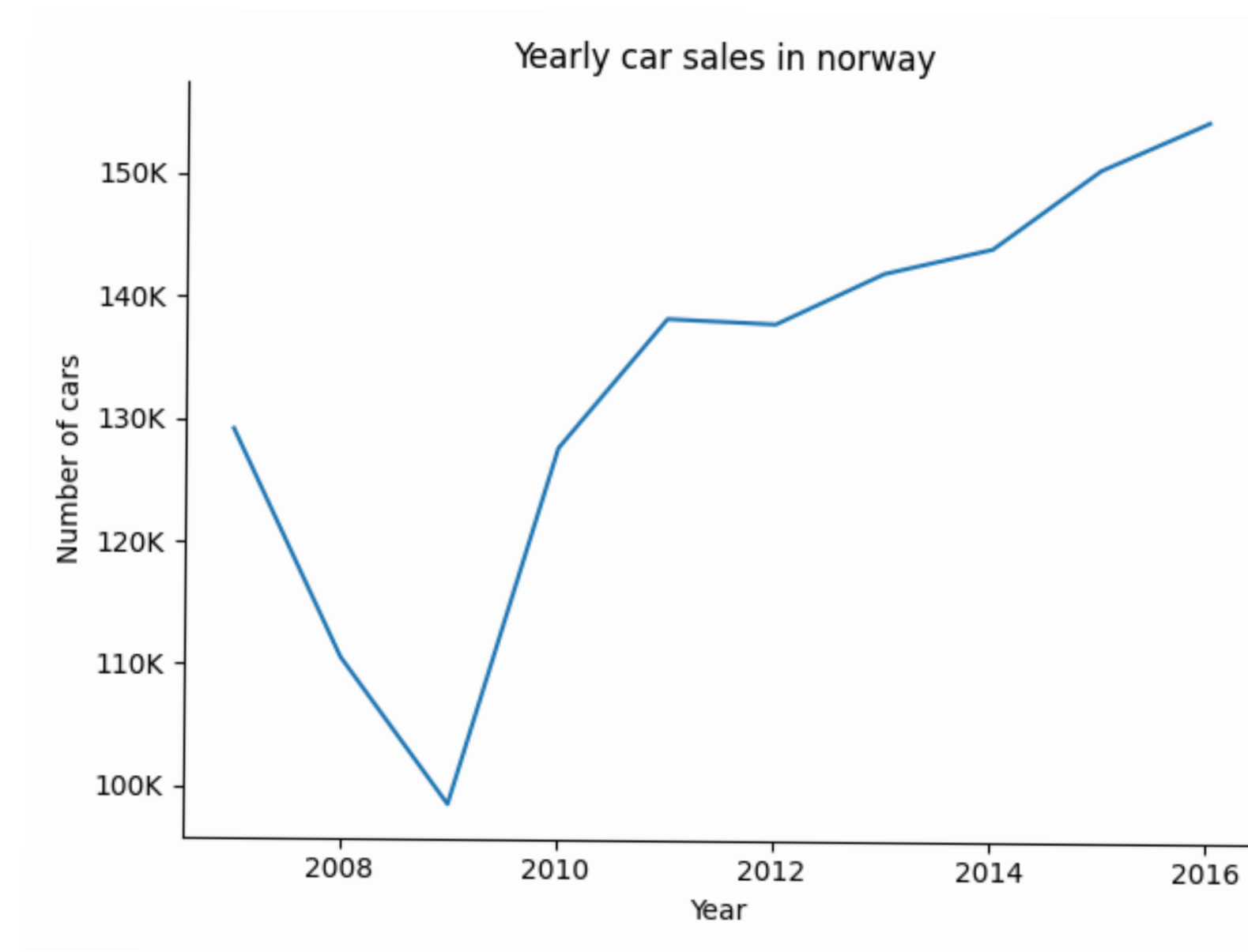100000

2008   2010   2012   2014   2016

Year

clutter are elements that don't add information and complicates the visual

gridlines

spines

three zeros could be replaced by prefix k
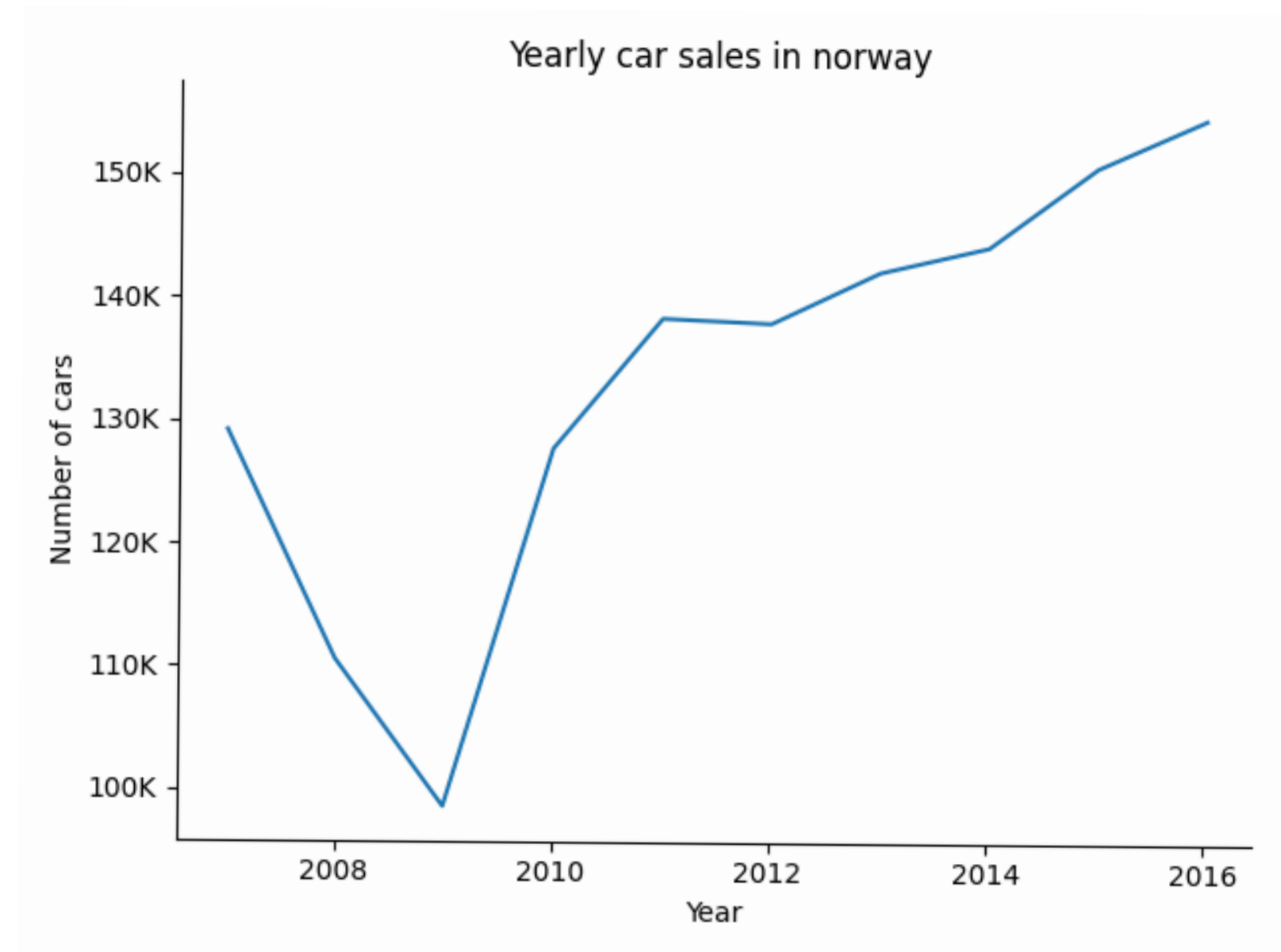
removed **visual clutter** in this line graph
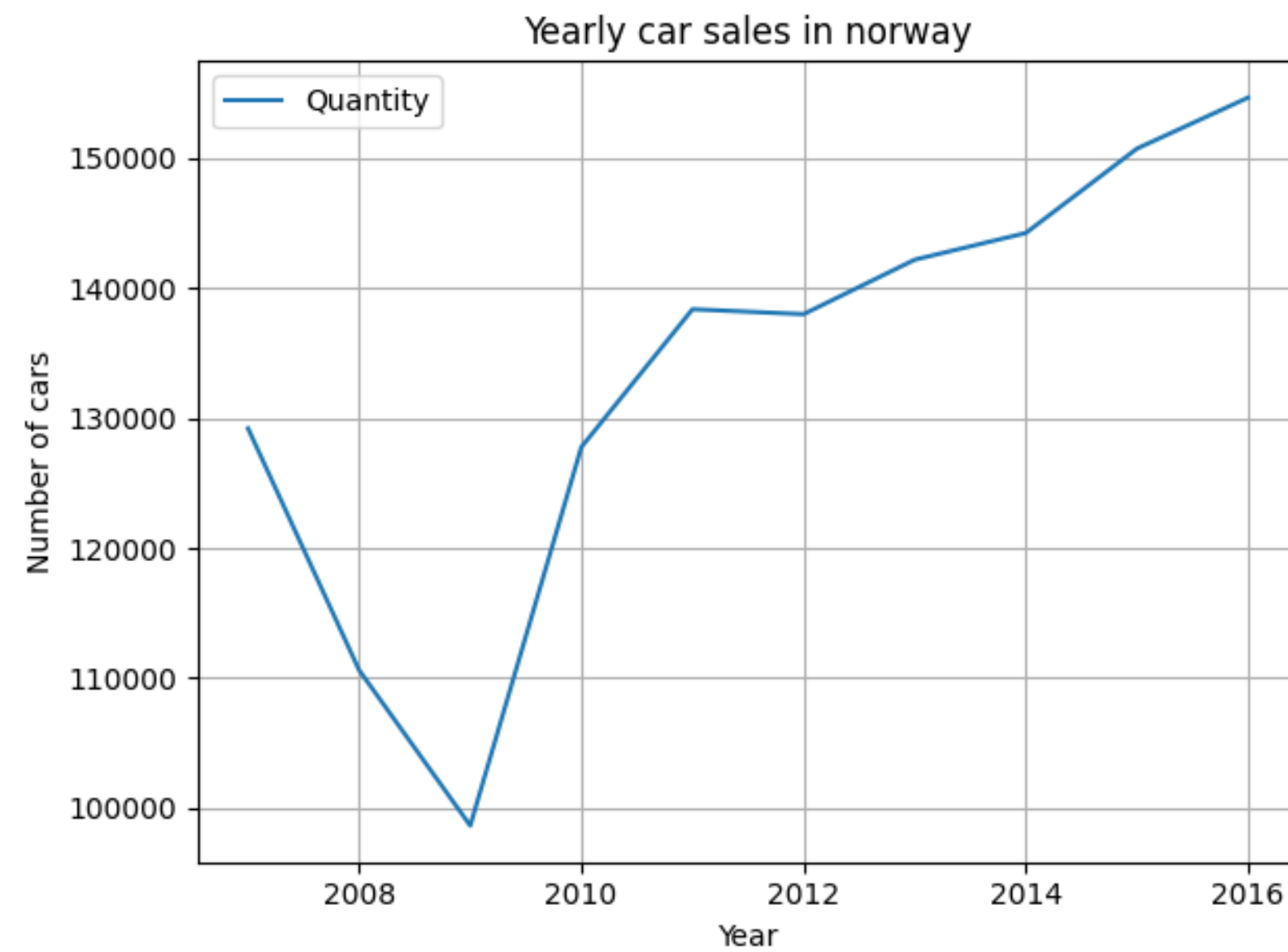
grid   legend

right spine

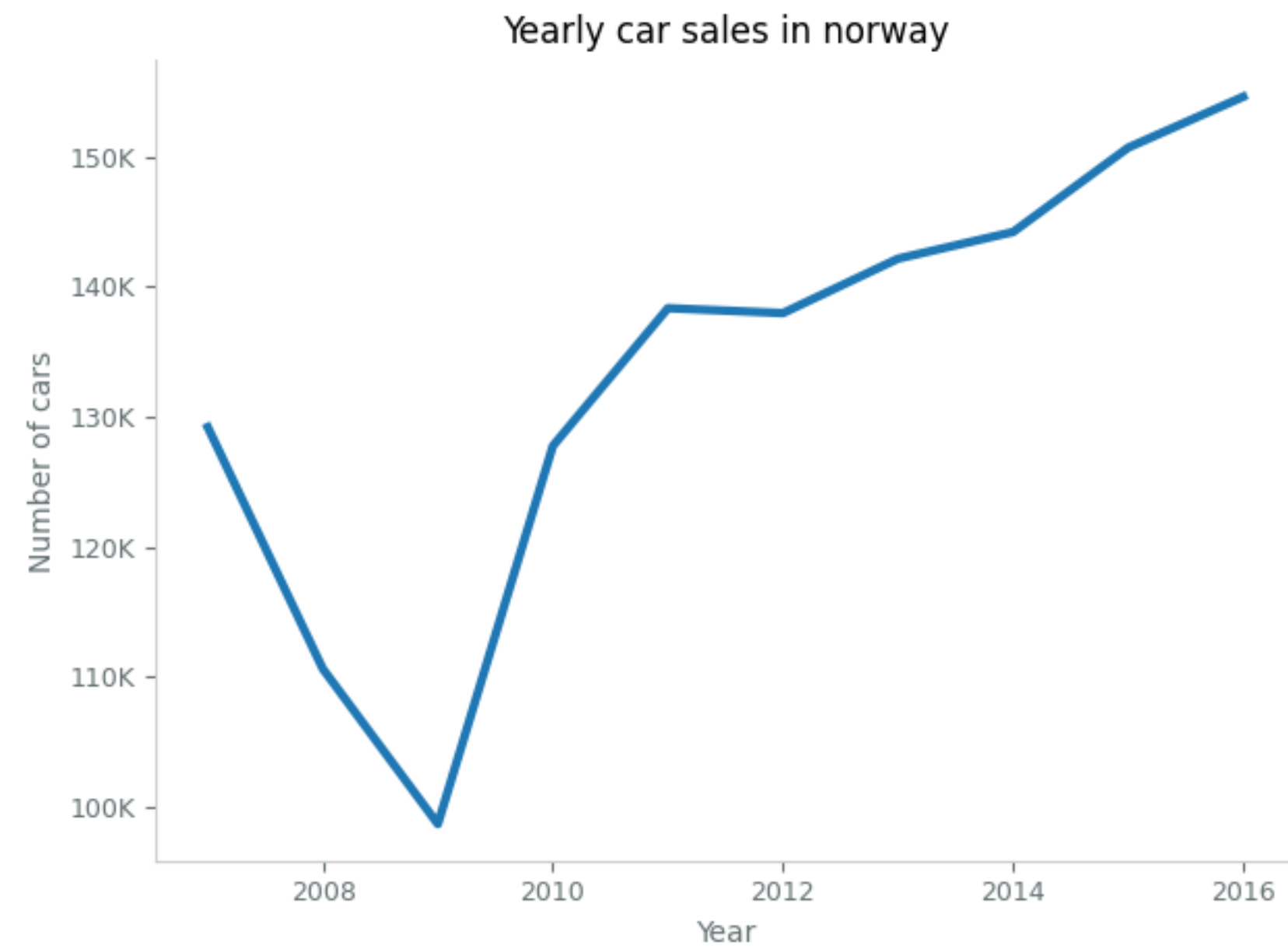top spine

K for thousands

use **colors** and **contrast** to focus the audience **attention**

thicker line

lower contrast
on spines, axis,
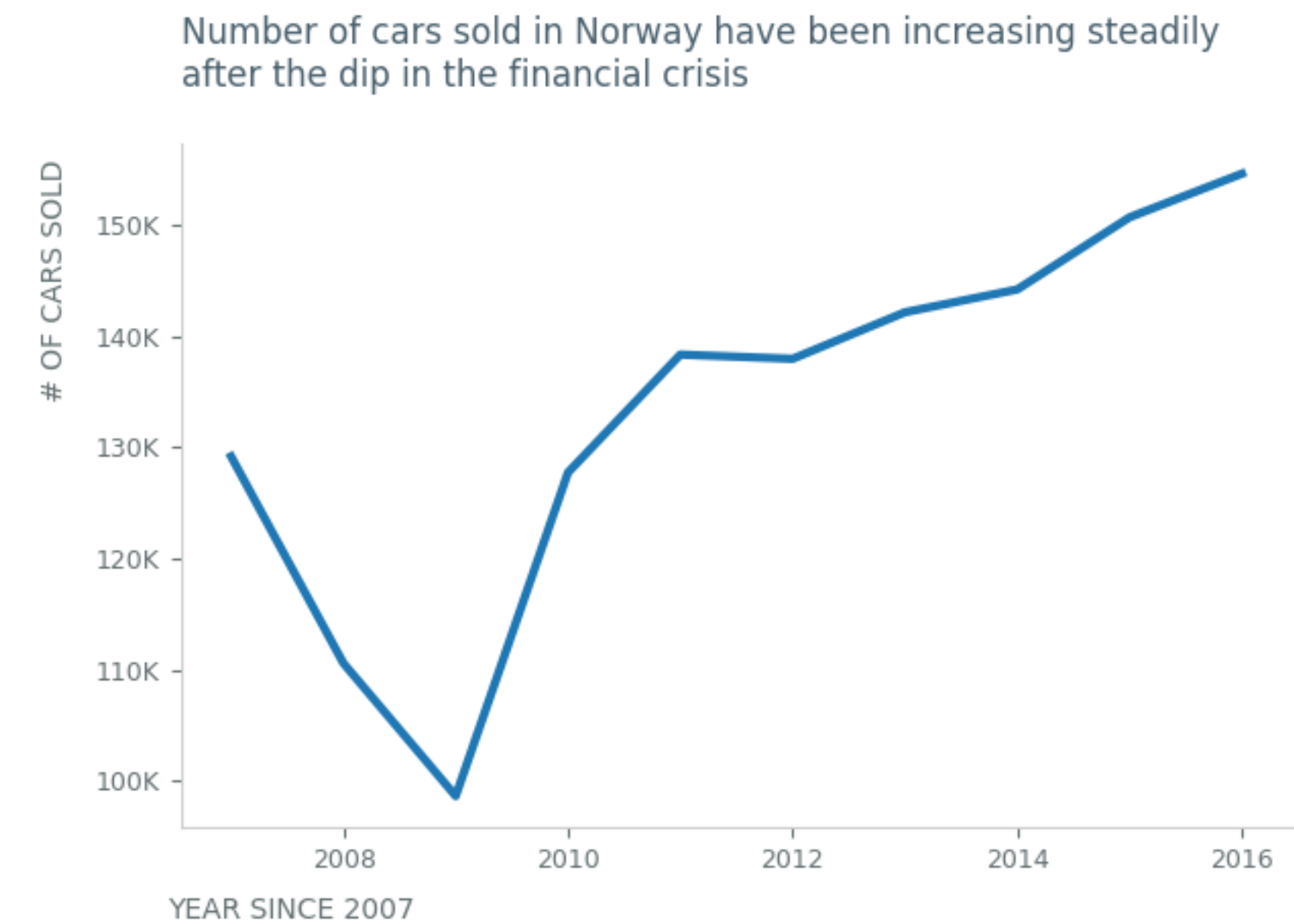ticks, labels

use a descriptive title to tell a **story**

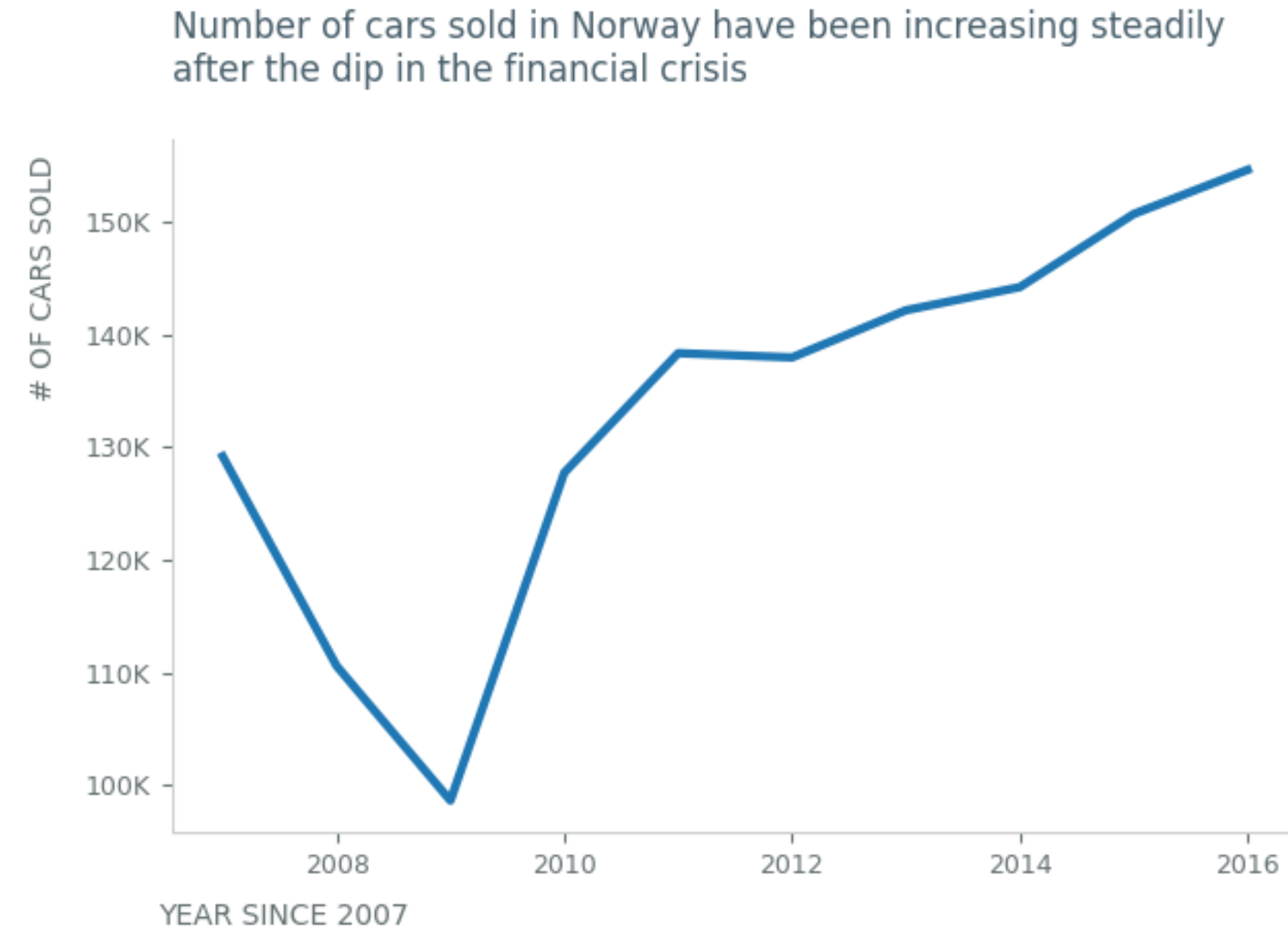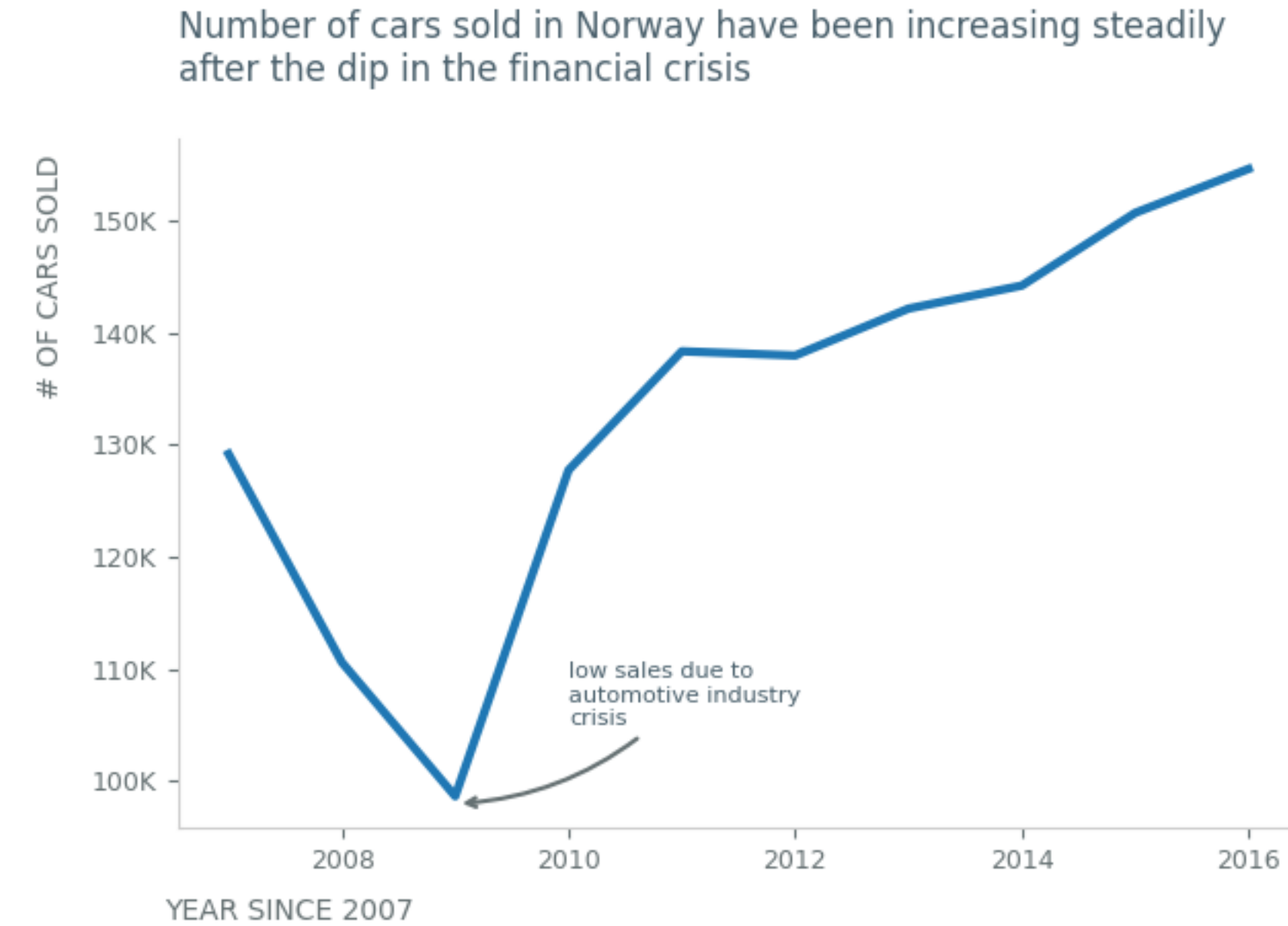### Yearly car sales in norway

descriptive title

positioned title
and labels

Number of cars sold in Norway have been increasing steadily after the dip in the financial crisis

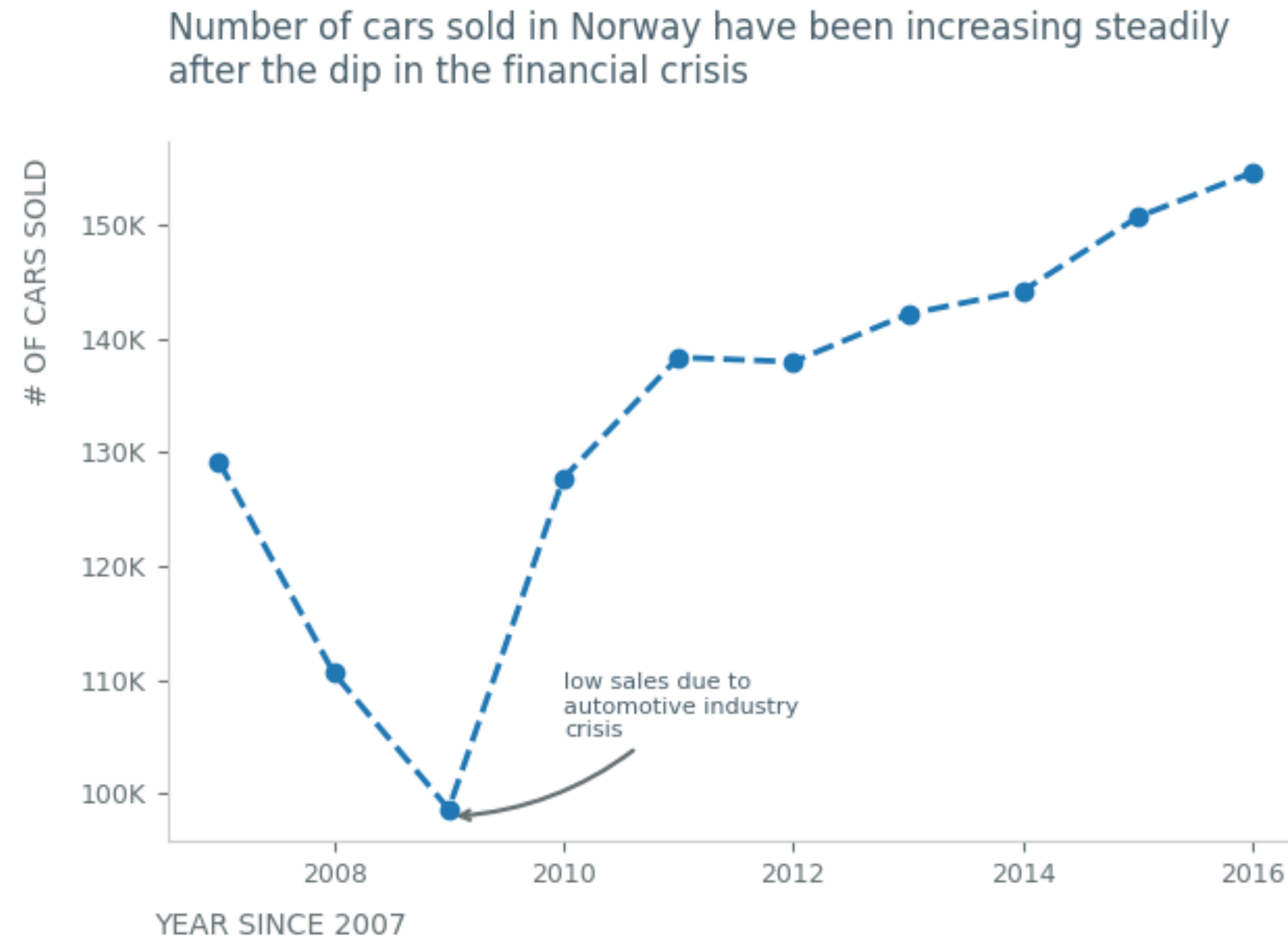# **annotate** to clarify or lift up different parts of the visual

dashed lines with dots to indicate there is no data in between

Number of cars sold in Norway have been increasing steadily after the dip in the financial crisis

OF CARS SOLD

150K
140K
130K
120K
110K
100K

low sales due to automotive industry crisis

2008   2010   2012   2014   2016

YEAR SINCE 2007

we've applied **data storytelling** to turn exploratory data analysis
into explanatory data analysis

Number of cars sold in Norway have been increasing steadily
after the dip in the financial crisis

OF CARS SOLD

150K

140K

130K

120K

110K

100K

low sales due to
automotive industry
crisis

2008 2010 2012 2014 2016

YEAR SINCE 2007
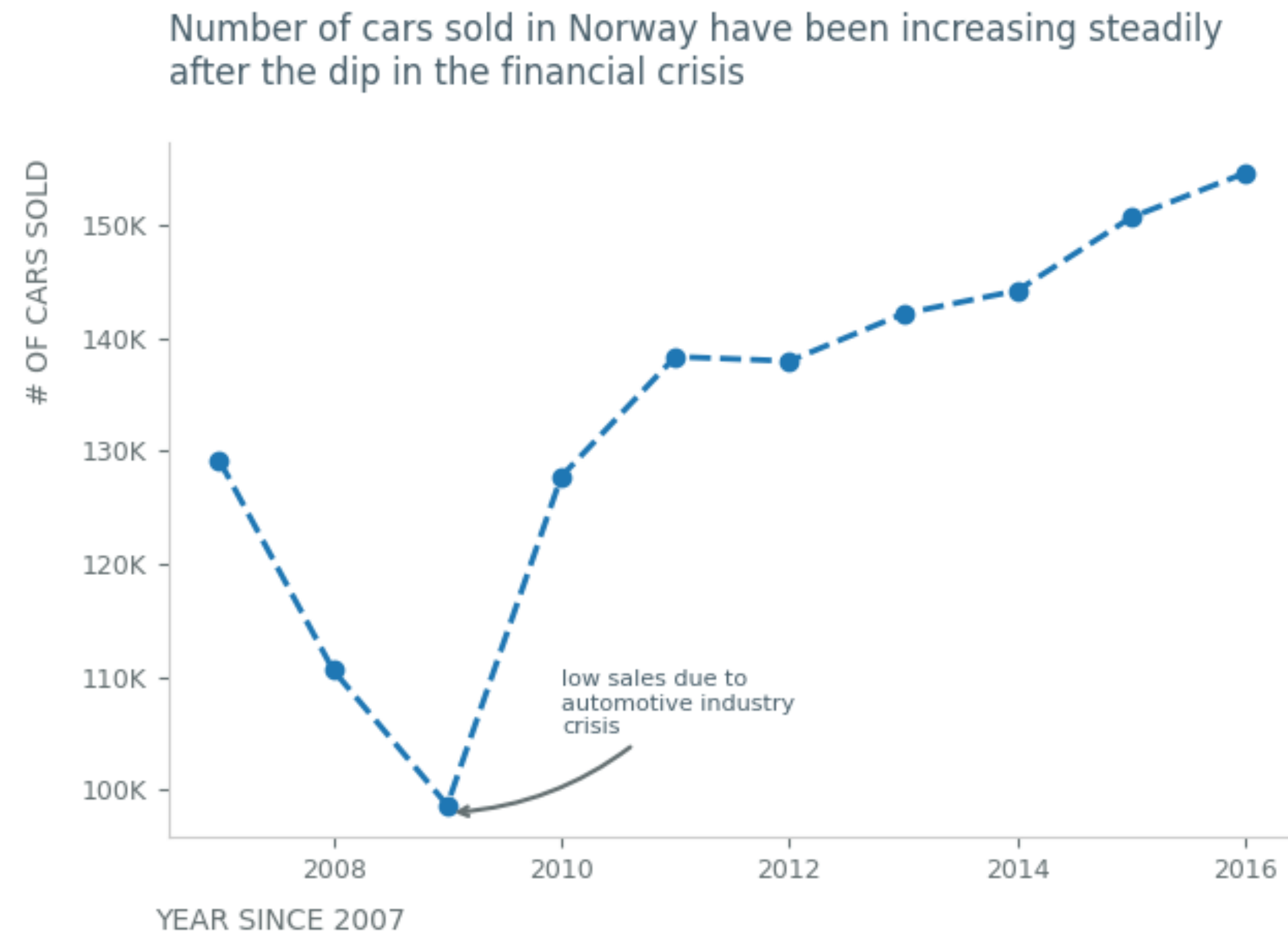
removed clutter

color sparingly

leverage contrast

focused attention

descriptive labels