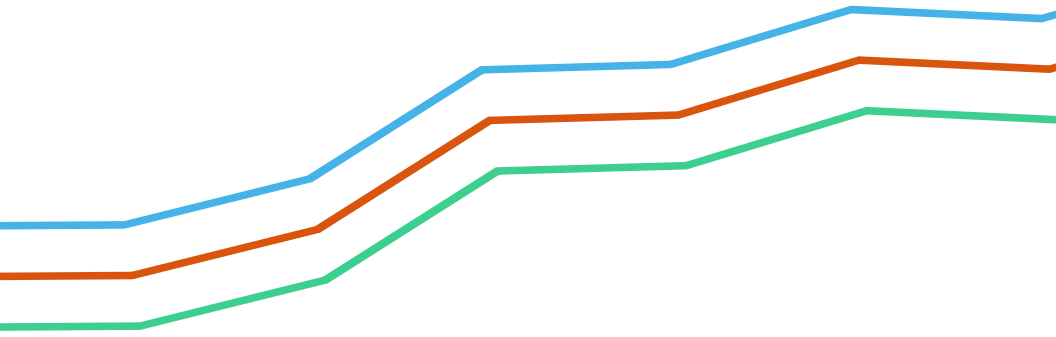




The book of  
really  
good  
metrics

by Keen



Interested in implementing customer-facing metrics?

Get in touch with us:

[team@keen.io](mailto:team@keen.io)

<https://keen.io>






# Show your customers the metrics they crave.

At Keen, our mission is to enable a data-rich user experience to every product on earth.

Data is everywhere these days. In fact, 90% of the world's data was created in the last two years. Your company's data potential is at an all-time high as well. Fortunately, at Keen, we love data. We're experts at helping our users collect, store, query and present customer-facing metrics.

Transforming your data into effective visualizations is crucial to ensuring your customers get a delightful data experience - all seamlessly embedded into your UI. With that in mind, we created this book to help you understand the best chart types to use for what data you are trying to communicate and to jump-start your journey to providing customer-facing metrics.

We hope you enjoy it!



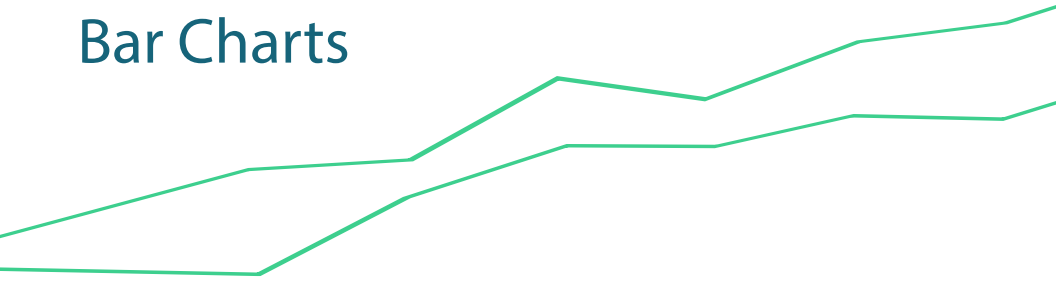


# Show me the data:

The best chart types for the information you're trying to communicate.



# Bar Charts



One of the most popular ways to visualize data, bar charts are great for comparing information and revealing how various categories of data compare against each other.

## Bar charts are best for:

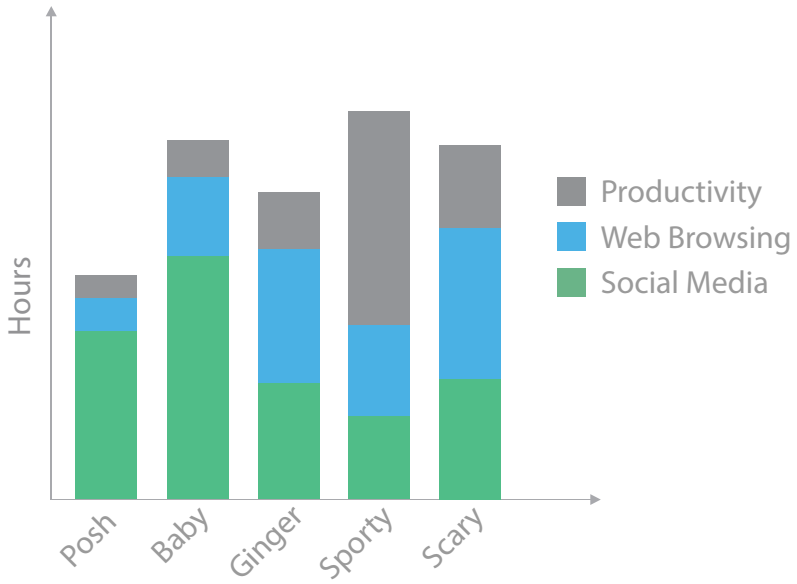
- Data that can be split nicely into distinct categories
- Comparing data across those categories

## Helpful tips:

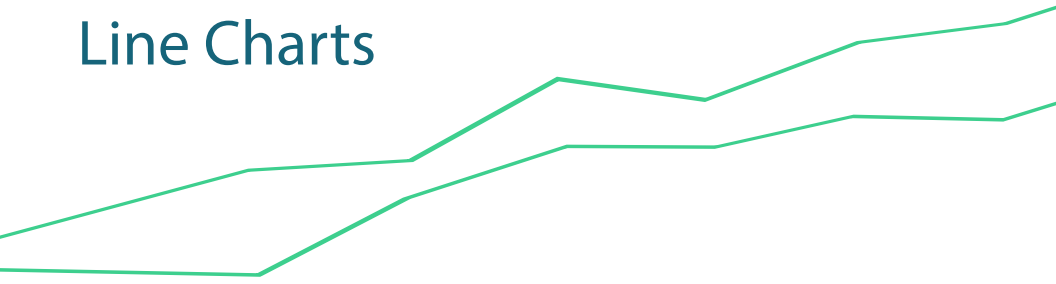
- Use color on the bars to provide additional insights, such as adding a red/green color-coding for positive and negative trends.
- Use stacked bars or side-by-side bars to display related data.



## Screen Time



# Line Charts



Another popular chart-type, line charts are great for visualizing a sequence of values through connecting individual numeric data points. These are great for displaying trends over a period of time.

## Line charts are best for:

- Highlighting trends in data over a period of time
- When you have a sequence of distinct values that need to be shown in a specified order

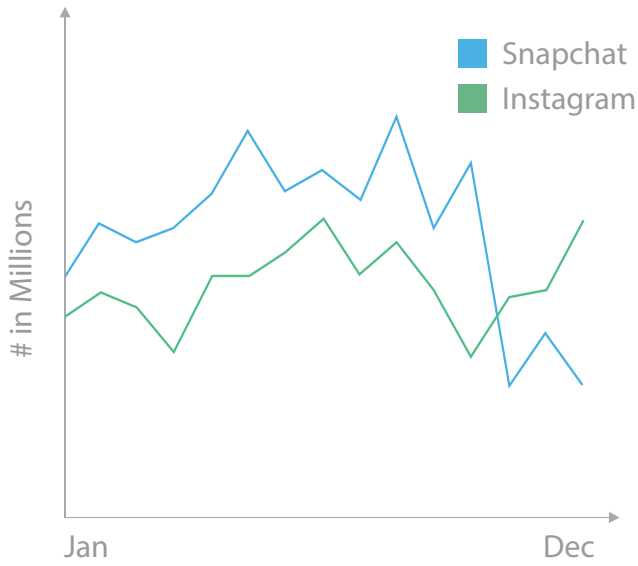
## Helpful tips:

- Make it an area chart by shading the area under lines to show a customer the relative contribution.
- Combine line and bar charts to highlight complementary information.





## Social Media Followers



# Pie Charts

A decorative green line graphic that starts at the bottom left, rises to a peak, dips slightly, and then rises again towards the top right, ending at the top edge of the page.

These delicious-sounding charts are a common favorite due to their visually-appealing nature. However, they should primarily be used to show relative percentages of information.

## Pie charts are best for:

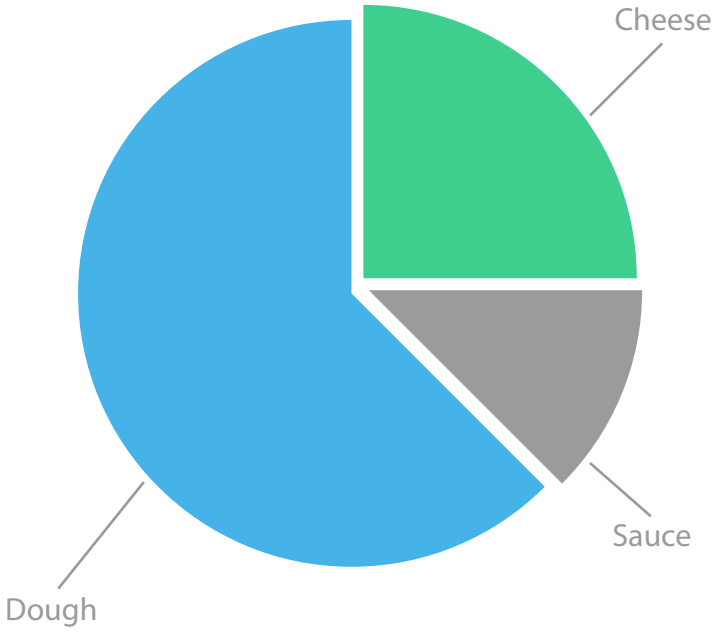
- Showing the relative proportion of different categories to a total

## Helpful tips:

- Limit the categories to 6-8. Think of this like a pizza, any more and the slices become too small to be meaningful.
- If you have more categories, consider switching to a bar chart.



## Pizza Ingredients



# Maps

A decorative graphic consisting of two green lines that trend upwards from left to right across the top of the page. The lines are slightly jagged, suggesting a data series or a stylized path.

As the name might suggest, maps are best when you want to visualize location data to show trends by a specific geographic definition. These can be defined in a variety of ways, such as by state, postal code, country, or even custom territories.

## Maps are best for:

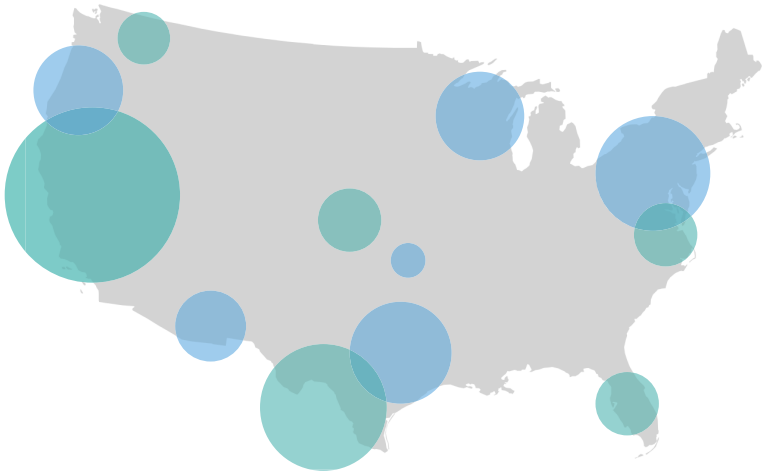
- Showing geographically-based data

## Helpful tips:

- Use maps as a starting point to let your customers drill into additional visualizations by location.
- In partnership with bubble charts, maps can help represent the concentration of data.



## Taco Consumption



- Flour
- Corn



# Bubble Charts


A decorative graphic consisting of two green lines that trend upwards from left to right, with some minor fluctuations in slope.

Technically not a chart type, bubbles are a visualization that can be added onto other charts to help accentuate data. The different-sized bubbles help provide meaning around the relative weight of the data.

## Bubble charts are best for:

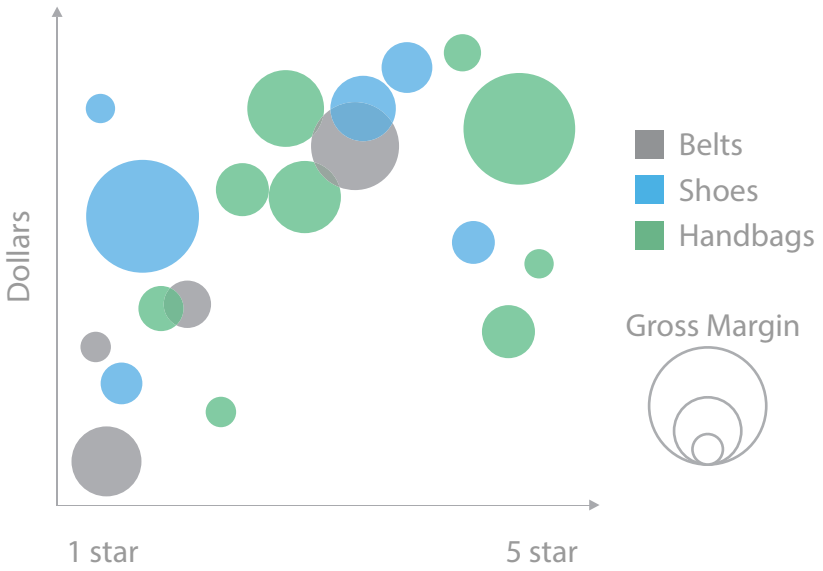
- Showing the concentration of data
- Using along with maps or scatter plots to accentuate data

## Helpful tips:

- Consider using different colors to further accentuate data.
  - Bubble charts are best used with maps and scatter plots.
- 
- A decorative graphic at the bottom of the page showing a series of vertical bars of varying heights in shades of blue, resembling a bar chart.



### Sales by Rating



# Heat Maps

A decorative graphic consisting of two parallel green lines that trend upwards from left to right, with some minor fluctuations in slope.

Heat maps are a great way to compare data across different categories using color to show where the relationship between the two categories are strongest versus weakest.

## Heat maps are best for:

- Showing the relationship between two factors

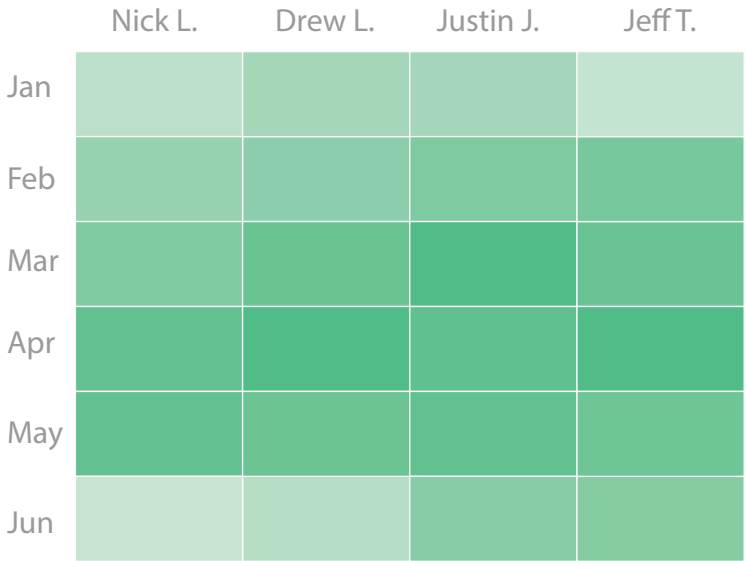
## Helpful tips:

- You can also vary the size of squares to add a third element.





## Sales Team Performance



# Tree Maps

A decorative graphic consisting of two parallel green lines that start at the left edge of the page and trend upwards towards the right edge, with some minor fluctuations in slope.

These color-blocked charts are great for highlighting how different pieces of data relate to the whole. Typically, tree maps are a series of rectangles, proportionally sized to show hierarchical data to the whole.

## Tree maps are best for:

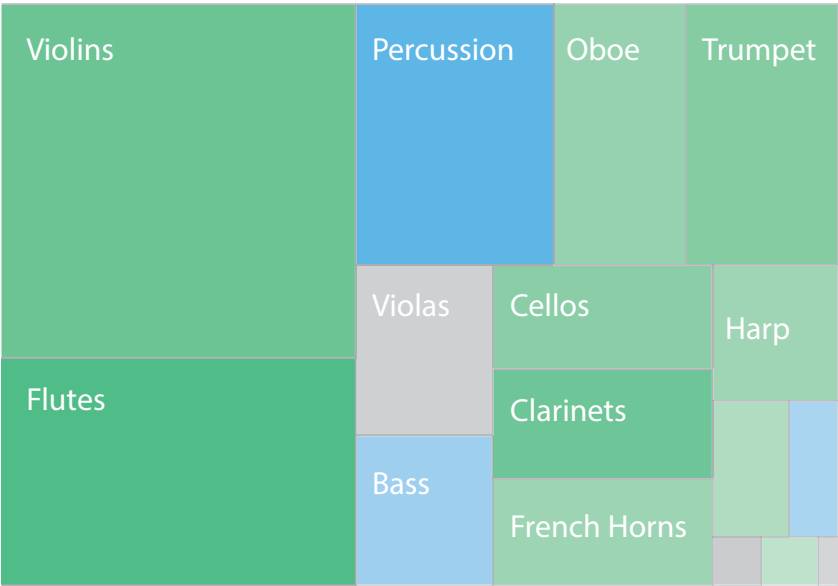
- Showing hierarchical data as a proportion to the whole

## Helpful tips:

- Color the rectangles differently to add an additional element.



# Members of the Orchestra



# Histograms

A decorative green line graphic that starts at the bottom left, rises to a peak, dips slightly, and then rises again towards the top right.

Histograms look very similar to bar charts, but the key difference is that each column represents a quantitative variable rather than a categorical variable. The columns can represent a single value or a range of values.

## Histograms are best for:

- Showcasing the distribution of data

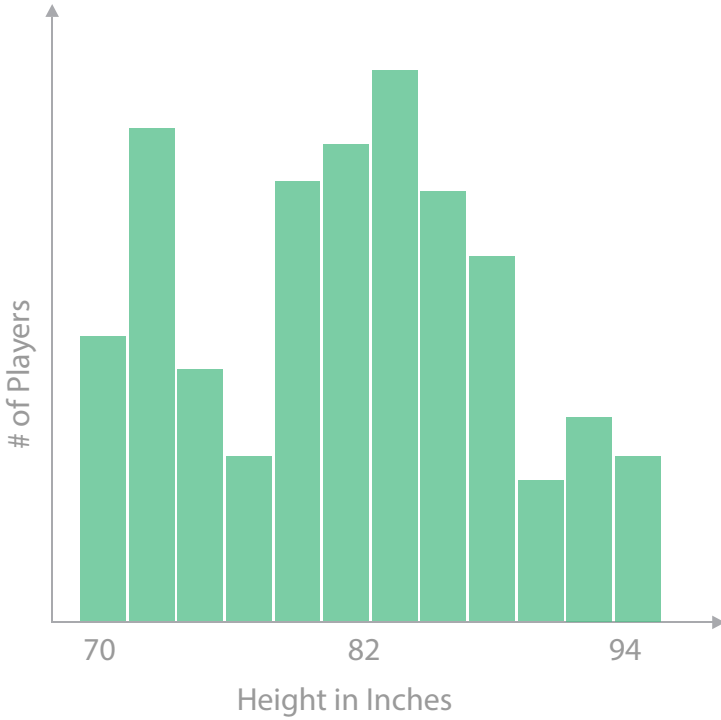
## Helpful tips:

- Consider whether to put a space between the bars to break up the series.
- Make sure to experiment with the groupings for the “bins” so that the data is telling the right story.





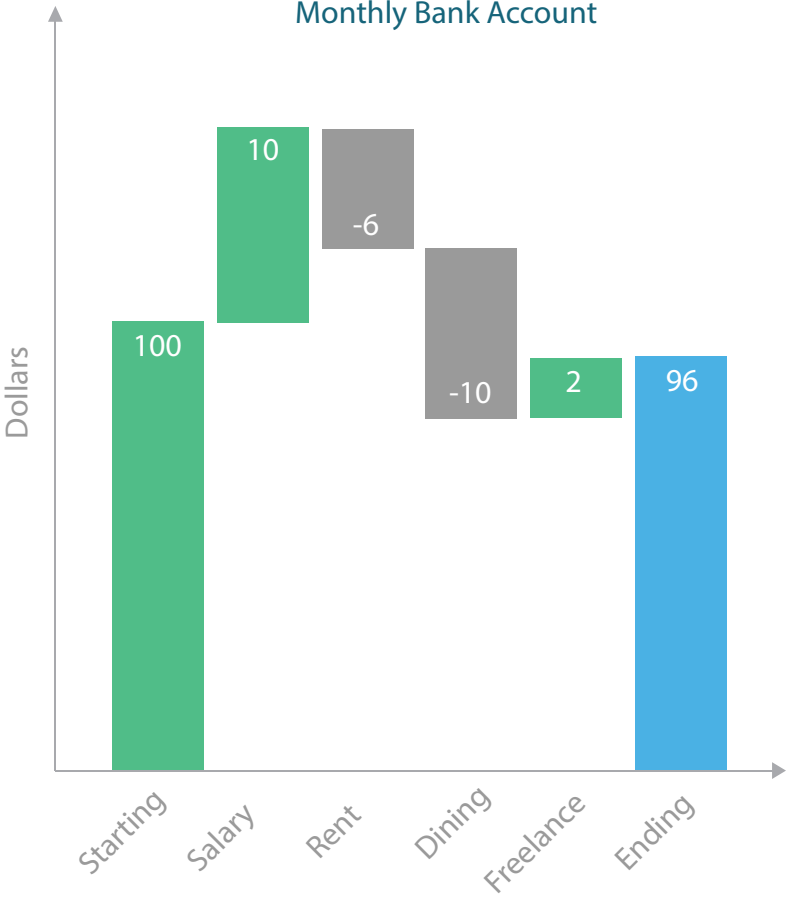
## Basketball Players Heights







### Monthly Bank Account



# Box and Whisker Plots

A decorative green line graphic that starts at the bottom left, rises to a peak, dips slightly, and then rises again towards the top right, ending at the top edge of the page.

Box and whisker plots are a great way to show distributions of data. The “box” part of the chart typically contains the median of the data along with the 1st and 3rd quartiles. The “whiskers” will typically represent the rest of the data set to specific parameters or to the minimum and maximum points within the data.

**Box and whisker plots are best for:**

- Showing the distribution of a set of data

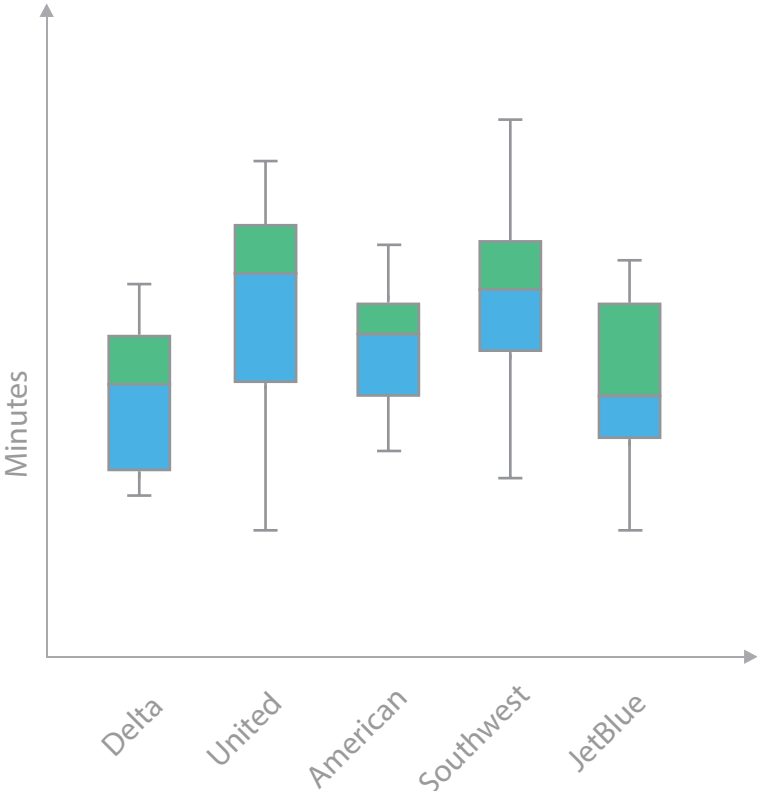
**Helpful tips:**

- Hide the points within the box to clean up the report.





# Airline Delays



# Scatter Plots

A decorative green line graphic that starts at the bottom left, rises to a peak, dips slightly, and then continues to rise towards the top right corner of the page.

Scatter plots are great for plotting the relationship between two sets of data. They can help shed some light on how different pieces of data relate to each other.

## Scatter plots are best for:

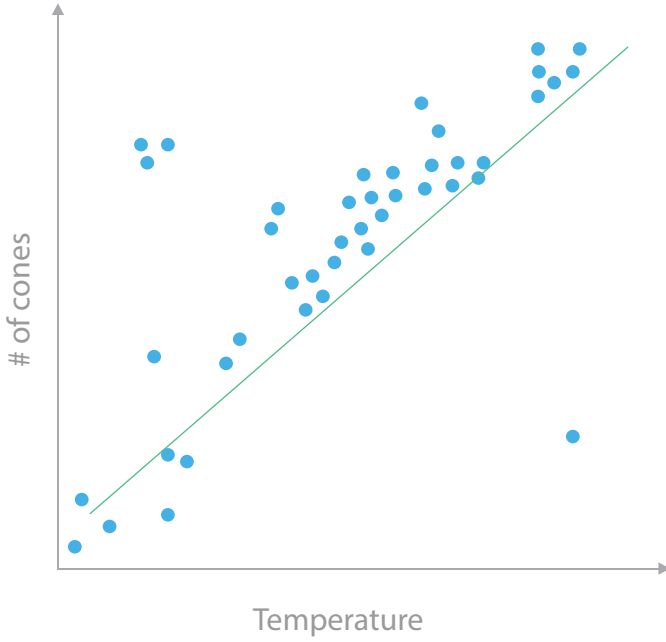
- Looking into the relationship between different variables
- Discovering trends, concentrations, and outliers

## Helpful tips:

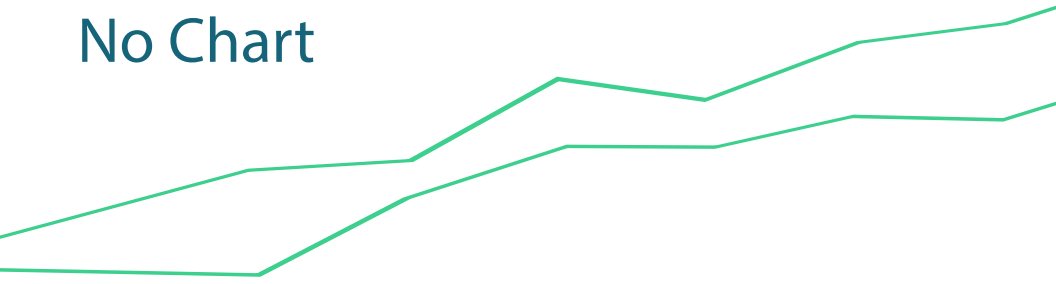
- Add a trend line to help see the correlation.
- Use different shapes for the dots to identify different types of items.



## Ice Cream Sales by Temperature



# No Chart



It may be tempting to default to displaying data in a chart. After all, charts are appealing and offer an impressive visual quality to your application. However, when thinking about effectively communicating data to your users, sometimes the best way to tell the story is with no chart at all. A simple data point may be all that you need

## No chart is best for:

- When you have a single data point that you want to communicate

## Helpful tips:

- Consider integrating your data seamlessly into your text if it's somewhere your customers are already looking at.
- Highlight multiple important data points in succession if they are related.





## Monthly Sales Summary

350

New Customers

\$45,000

Sales Revenue

15%

MoM Sales Growth





# Put it in practice:

User story and mock-up templates



# User Stories

A decorative green line graphic consisting of two parallel lines that generally trend upwards from left to right, with some minor fluctuations in slope.

User stories are short, simple descriptions of a feature told from the perspective of the person the new feature would be built for, usually a customer or user of the product.

## General Format:

As a [role or persona] I want to [perform some task] so I can [goal].

## Helpful tips:

- Supply explicit roles. Never say “as a user.”
- Remove technical details/assumptions
- Really think about your user’s goals and needs, not just what you want to build/sell.







## Examples:

Scenario A: Landing page software company

Feature: Tracking landing page engagement

User Story: As a **marketing analyst**, I want to **track up-to-date metrics** so I can **see how my landing pages are performing**.

Scenario B: CRM developing new email campaign service


Feature: Tracking sales team's email responses rates

User Story: As a **sales manager**, I want to **have visibility into my team's email outreach** so I can **see how my employees are performing and identify coaching opportunities**.

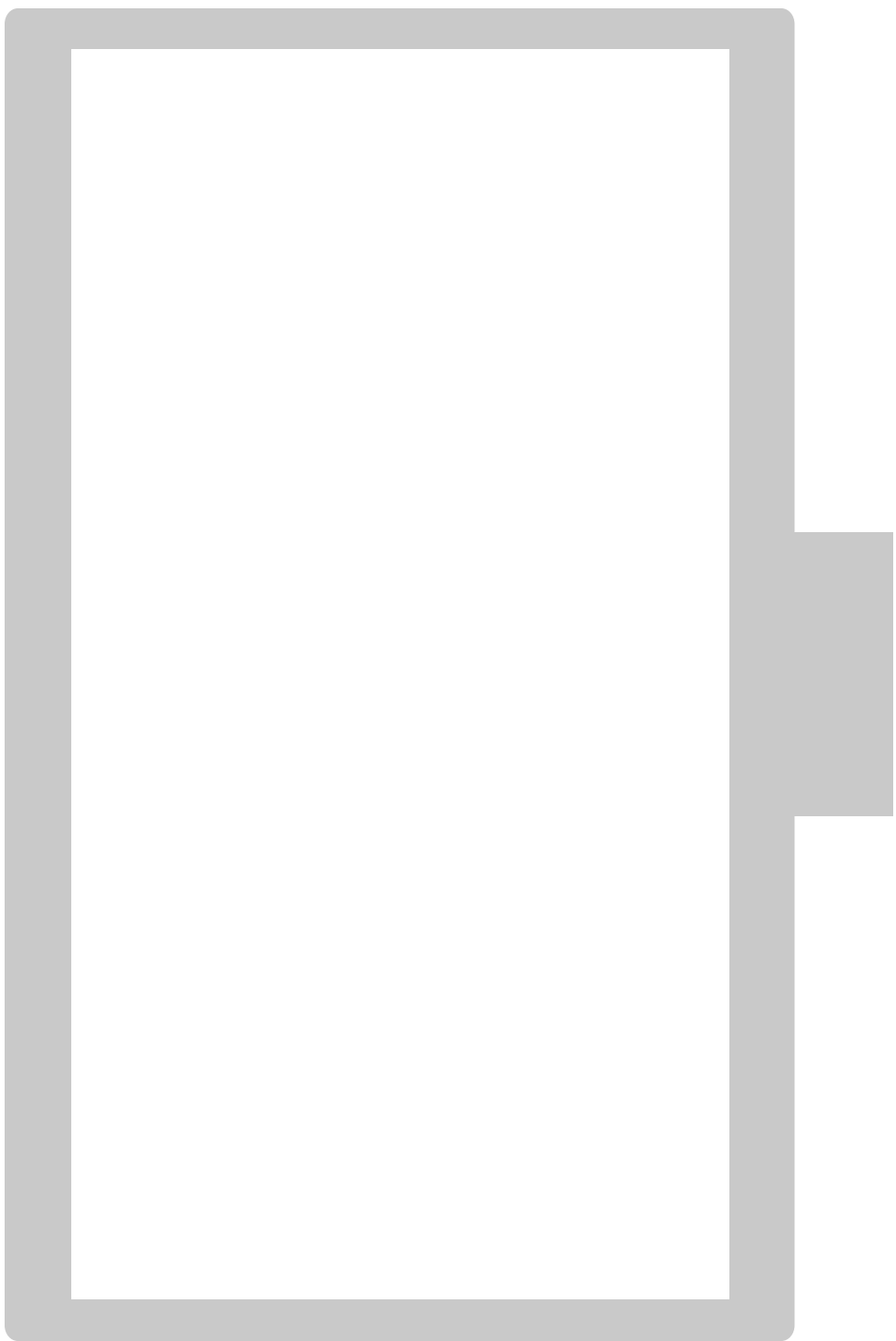
Scenario C: Help-desk software startup

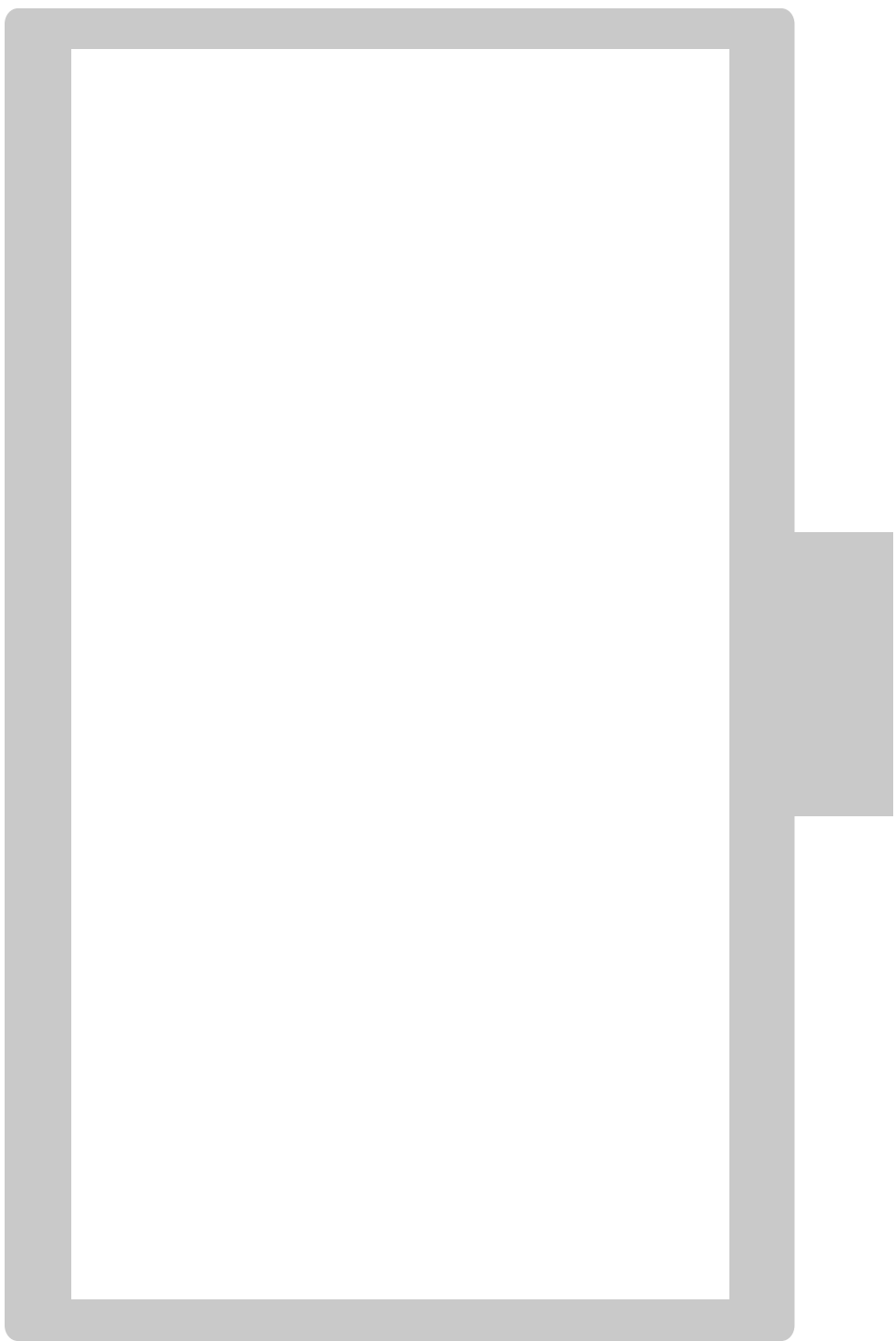
Feature: Tracking customer support satisfaction

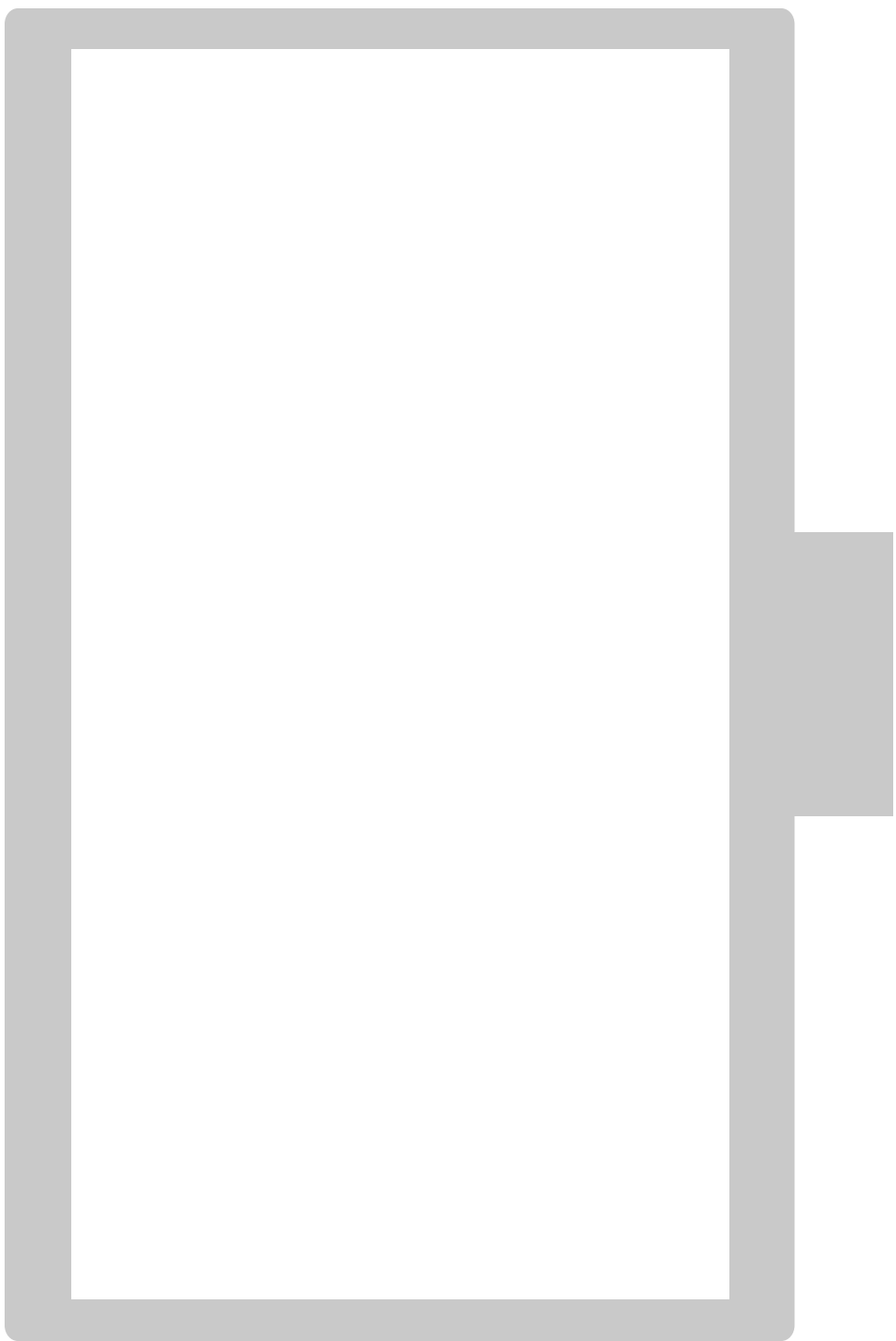
User Story: As a **customer success manager**, I want to **view ticket resolution satisfaction** so I can **make sure our customers are receiving stellar support**.

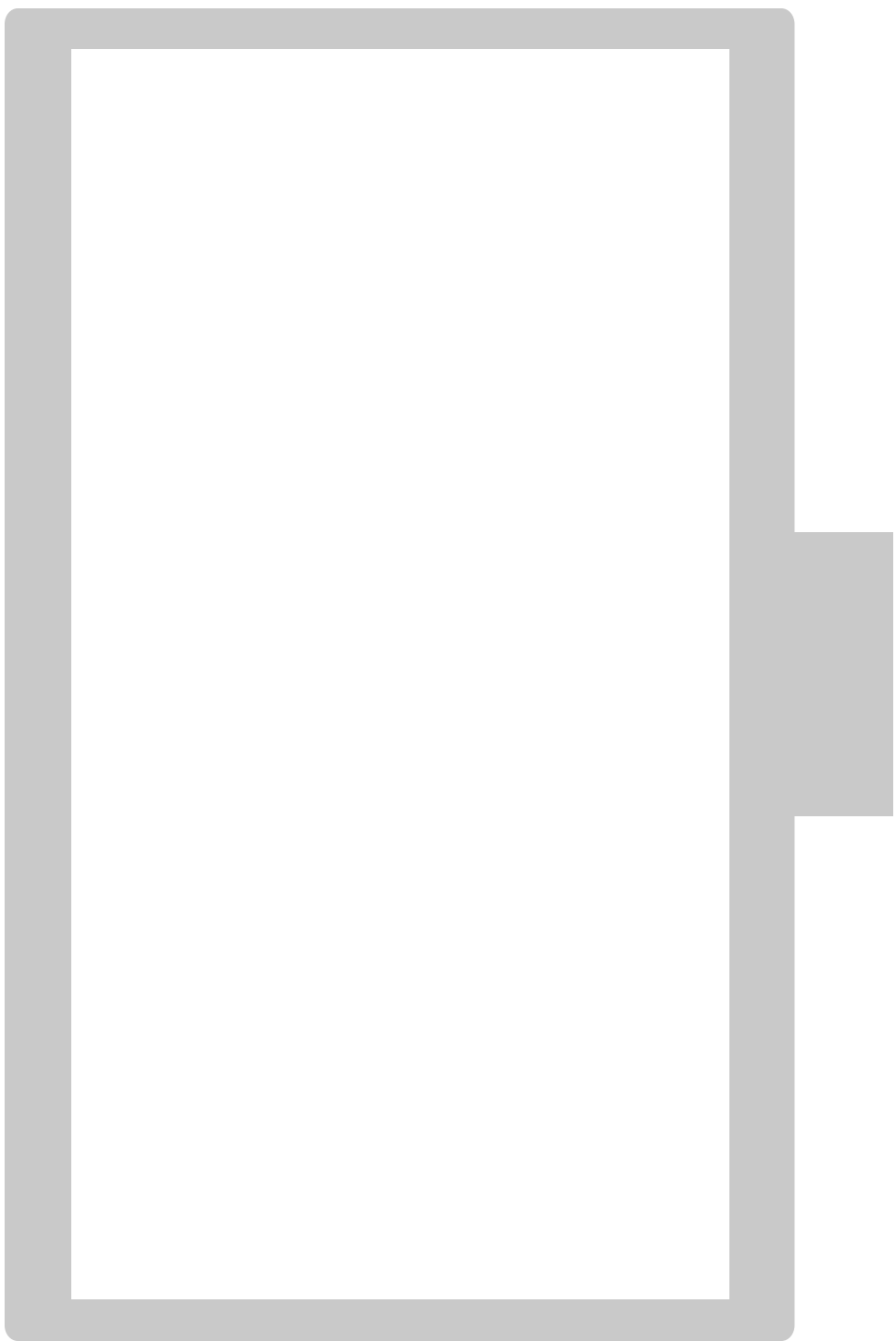


	As a <role/>[persona]	I want to <task>	so that I can <goal>

















Get in touch with us:  
team@keen.io  
<https://keen.io>