Lab 7. Telling a Story with Tableau

In this lab, we will cover the following recipes:

- Creating a Tableau Story
- Setting the narrative of the Story
- Choosing the right charts
- Writing effective headlines
- Recommendation and executive summary
- Formatting the Story

Technical requirements

To follow the recipes in this lab, you will need to download the `Recycling_campaign_effects.csv` dataset from https://github.com/SlavenRB/Storytelling_with_Tableau/blob/master/Recycling_campaign_effects.csv and save it to your device.

Introduction

So far, you have learned how to create individual charts and dashboards. In this lab, you will go a step further and learn how to connect them in a meaningful Story. The Tableau Story functionality enables you to order visualizations in a logical and simple manner that helps your audience understand your insights better. Data that is presented within a Story is much easier to remember. Also, telling data stories gives you an opportunity to present your results in a broader context. Making stories in a Tableau is a lot like playing a game of "connect the dots". You just need to make the right links between your points and a picture will appear.

Creating a Tableau story

In this recipe, you will be given an explanation and overview of the technical basics of creating a Tableau story. In the following recipes, you will learn how to elaborate on the story, by picking adequate charts, putting them in the right order, writing insights, and formatting them in an appealing way. First, we will create a simple Story containing two worksheets, and we will build on it in the following recipes.

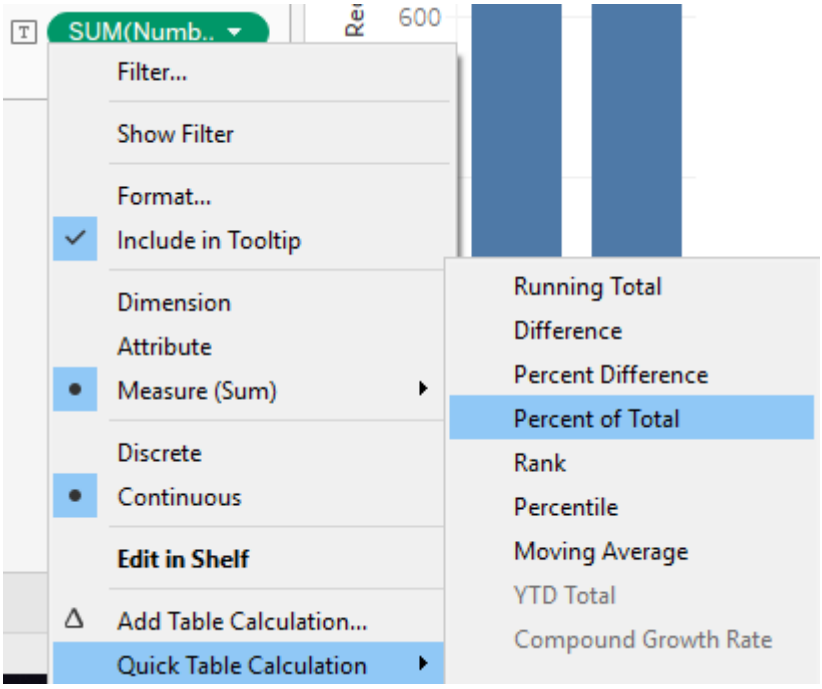
Getting ready

To create the Story, we will use the `Recycling_campaign_effects.csv` dataset. This dataset comes from a survey that is aimed at measuring the effectiveness of a campaign that is promoting recycling milk cartons. To promote recycling the carton packaging, a milk manufacturer placed specialized recycling bins around major cities and advertised the campaign on the labels of the milk packaging. Three months later, they wanted to know how many people knew about the recycling possibilities and how many people are actually recycling their milk cartons. They also conducted a survey asking milk buyers about their habits related to carton disposal. The variables that we are going to use are as follows:

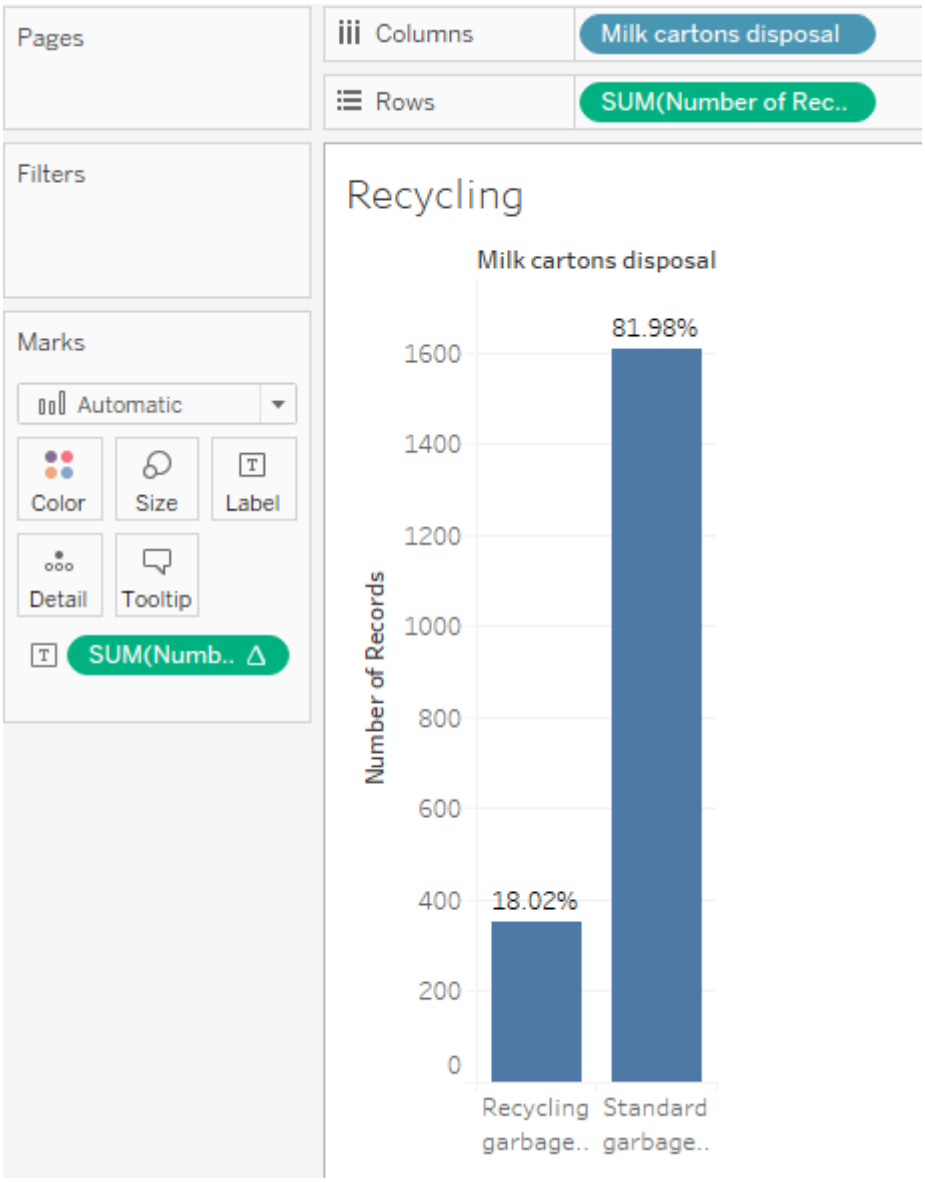
- [**Aware of recycling possibility**]: This variable describes whether a person knows that milk carton packaging can be recycled in Serbia. The values of the variable are yes and no.
- [**Milk carton disposal**]: This variable concerns a person's typical place of milk carton disposal. The values of the variable are recycling garbage can and standard garbage can.
- [**Read labels**]: This describes the respondent's habit of reading labels on products that they purchase. The variable values are yes and no. First, save `Recycling_campaign_effects.csv` on your computer, open Tableau, and connect it to your local copy of the data.

How to do it...

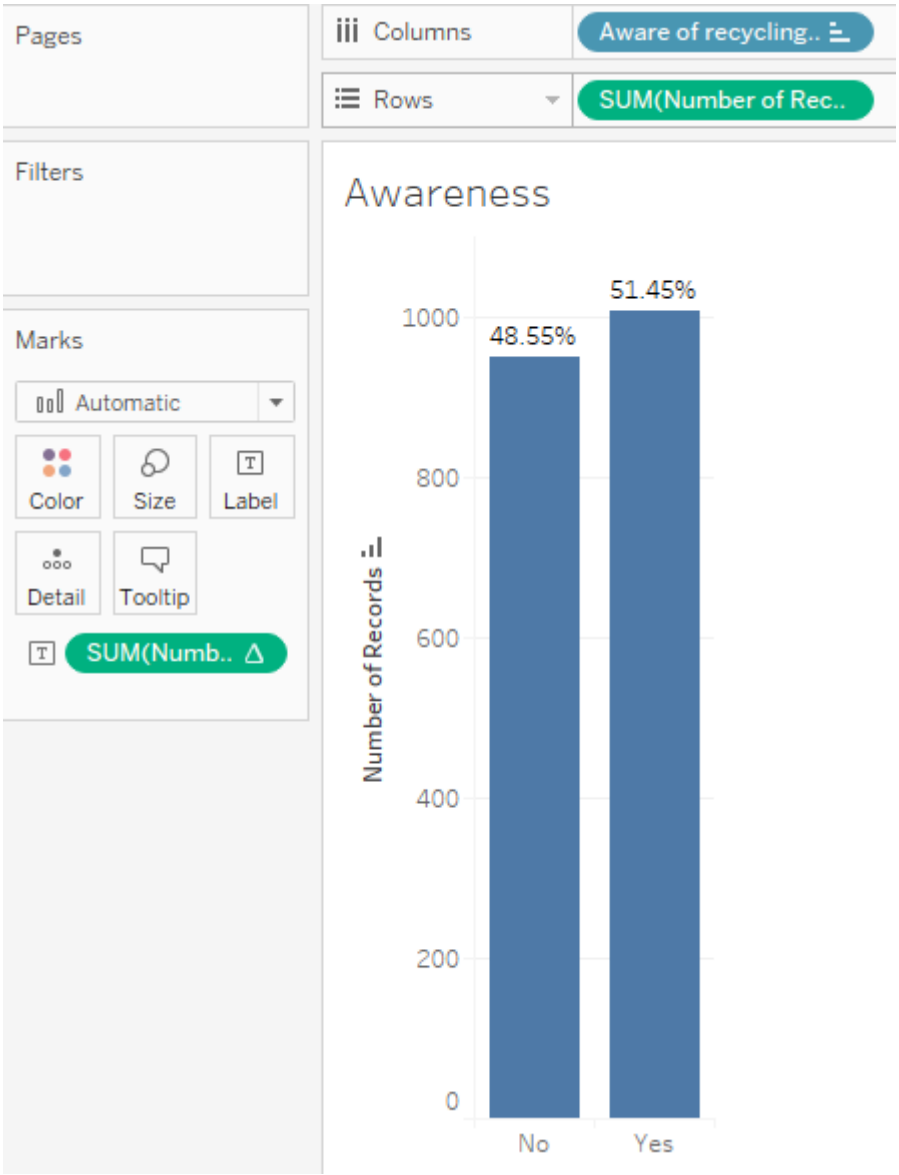
1. Open a blank worksheet and drag and drop **`Milk cartons disposal`** from **`Dimensions`** into the **`Columns`** shelf.
2. Drag and drop **`Number of Records`** from **`Measures`** to the **`Rows`** shelf.
3. Drag and drop **`Number of Records`** from **`Measures`** to **`Label`** in the **`Marks`** card.
4. Hover over the **`Milk carton disposal`** pill in the **`Marks`** card so that a small downward arrow appears and click on it.
5. Navigate to **`Quick Table Calculation`** | **`Percent of Total`** :



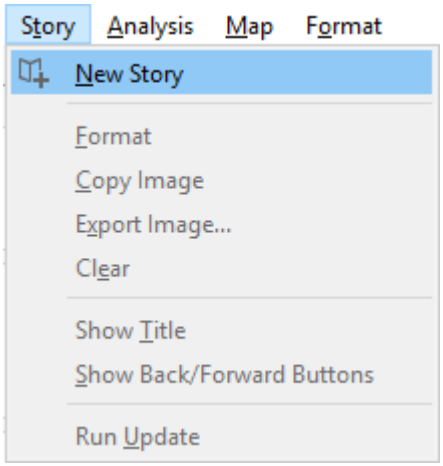
6. Change the label of the sheet from **`Sheet 1`** to `Recycling` :[** **] []



7. Open a blank worksheet and drag and drop **`Aware of recycling possibility`** from **`Dimensions`** into the **`Columns`** shelf.
8. Drag and drop **`Number of Records`** from **`Measures`** to the **`Rows`** shelf.
9. Drag and drop **`Number of Records`** from **`Measures`** to **`Label`** in the **`Marks`** card.
10. Hover over the **`Number of Records`** pill in **`Marks`** card so that a small downward arrow appears and click on it.
11. Navigate to **`Quick Table Calculation`** | **`Percent of Total`**.
12. Change the label of the sheet from **`Sheet 2`** to `Awareness`:

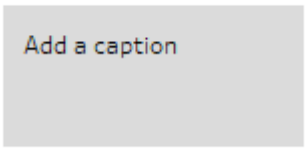


13. In the main menu, go to **`Story`** and click on **`New Story`**:



14. Alternatively, click on the icon at the bottom (circled in the following screenshot) of the screen to create a new story:

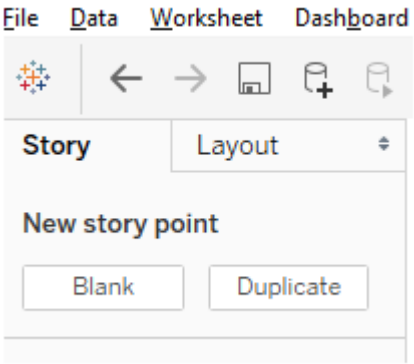
15. Drag and drop **`Recycling`** from the **`Story`** sidebar at the left-hand side to the **`Drag a sheet here`** placeholder in the canvas.
16. Double-click on the gray box at the top of the canvas to make the text editable and then type `Recycling`:



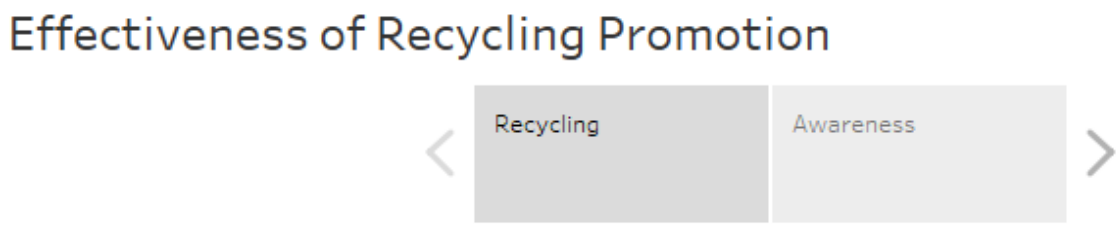
Note

The caption in the box has to be more descriptive, but for the sake of simplicity at this point, we will just put the title. In the following recipes, we will learn how to write effective captions.

17. In the **`Story`** tab on the left-hand side, under the **`New Story`** section, click on the **`Blank`** button:



18. Drag and drop **`Awareness`** from the **`Story`** sidebar to the **`Drag a sheet here`** placeholder in the canvas.
19. In the gray box at the top of the canvas, type `Awareness`.
20. Double-click on **`Story 1`** and in the **`Edit title`** box, type `Effectiveness of Recycling Promotion`:



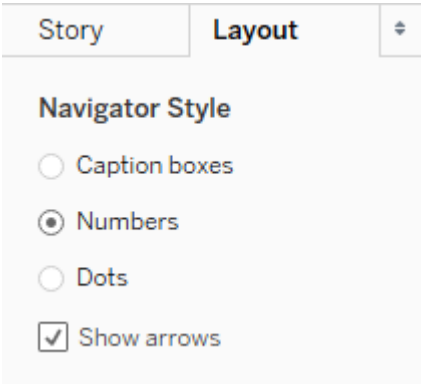
How it works...

Basically, the Tableau Story is a collection of multiple worksheets or dashboards that are organized in a planned order. It helps us walk the audience through our data in the right way. Using Tableau Story enables us to suggest the path, to guide our viewer through the data in a way that will help them see a meaningful Story behind it.

There's more...

Tableau also offers two additional formatting styles, numbers and dots.

1. Open the **`Layout`** tab in the **`Story`** pane.
2. Under **`Navigator Style`**, choose **`Numbers`**:



In your **`Story`**, it will look as follows:

3. In the same menu, you can also select only dots to be displayed:

```
If you want to get rid of left/right arrows, just deselect
```

the `Show arrows` checkbox.

Note

When you are dealing with busy charts or dashboards, both of these options can save you some space. As we said before, strive to keep it simple and remember that less is more!

See also

You can learn more about creating stories by using the following resources:

- https://onlinehelp.tableau.com/current/pro/desktop/en-us/Story_create.html{.ulink}
- https://www.encorebusiness.com/blog/tableau-tips-tricks-tableau-Story-telling/{.ulink}
- https://www.coursera.org/learn/dataviz-dashboards

Setting the narrative of the Story

To present an effective Story, you need to discover it in your data first. This sounds demanding, but actually it's not. If you have data to analyze, you also have a Story to tell. We don't have to be talented novelists to write a good Story. However, we can borrow some tips from them. First, let's take a look at what every Story contains. In every Story, we can find the following elements:

- [**Introduction**]: In the introduction, we need to describe the setup of the situation and introduce the main characters. For example, in business, the situation often denotes the market context, while characters are brands that we are interested in.
- [**Conflict**]: The conflict phase is where we present the main problem. In this phase, we are usually faced with dilemmas where we need to choose the direction of the following steps in the analysis. The conflict phase is resolved when we decide on the specific route to take while investigating our data.
- [**Development**]:[** **]The development phase is usually devoted to a description of different approaches to the problem and our process of searching for the solution. The main purpose of this phase is to inform our audience about what we have done with our data and which hypotheses are already tested.
- [**Climax**]: The climax is the moment when all the pieces of the puzzle come together. At that point, the key insight of our analysis should have been clarified.
- [**Resolution**]:[** **]In the resolution phase, we are presenting the final result. In this phase, we are suggesting a solution to the problem, along with the arguments that support it.

Getting ready

Let's get back to recycling data. Follow the previous recipe, [*Creating a Tableau Story], and make the ** `Recycling and Awareness` sheet. So far, we have found that more than 50% of the milk buyers know that carton packaging can be recycled in Serbia, but only 18% dispose of their packaging in specialized recycling bins. In terms of storytelling, this phase can be considered an introduction or setup phase. The following phase is Conflict.

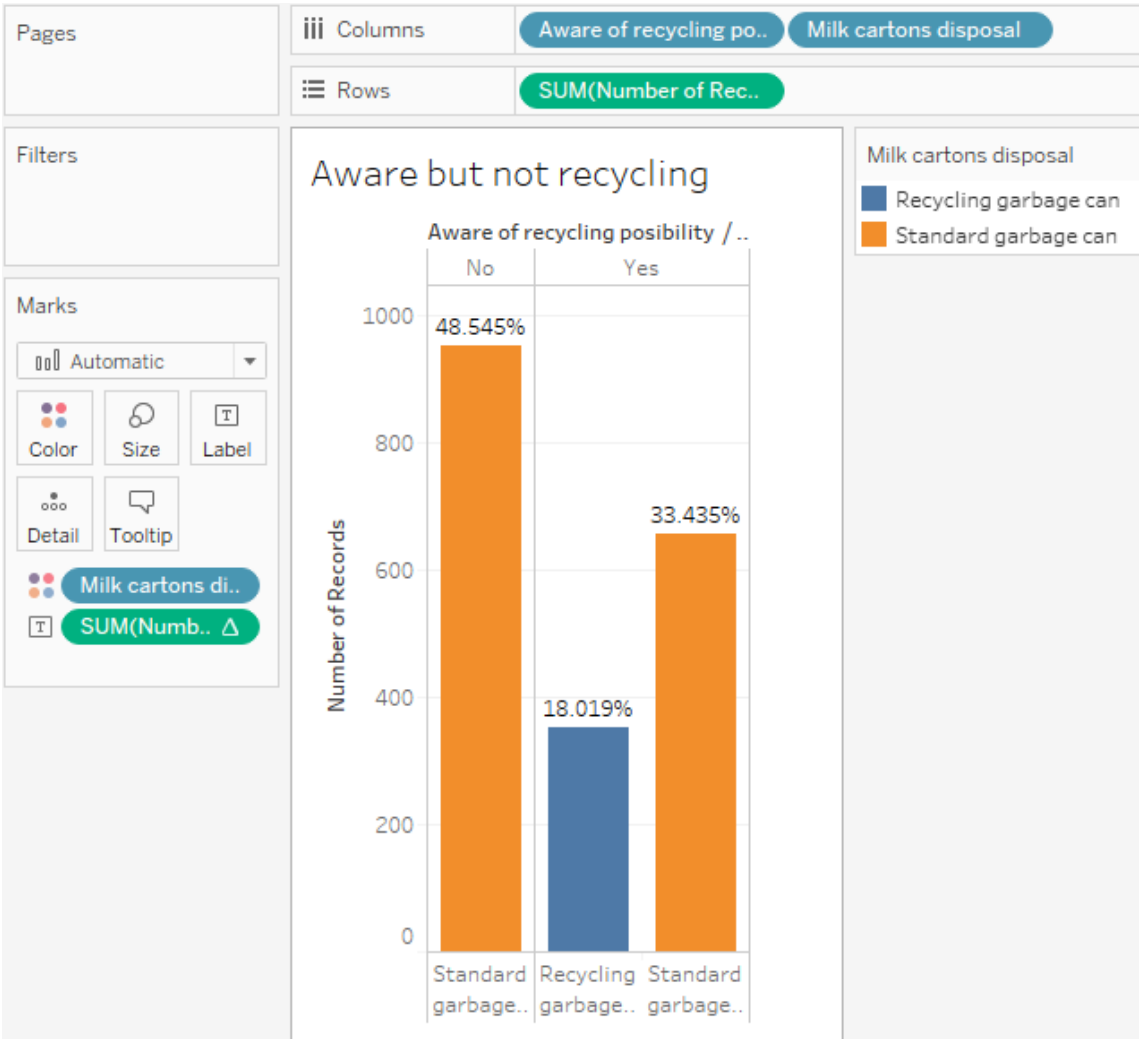
Conflict

In the Conflict phase, we should identify possible approaches in dealing with our data and select the most relevant. We have just arrived at the crime scene, and we are observing the pieces of evidence. Our investigation is about to start.

How to do it...

1. Open a blank worksheet and drag and drop `Aware of recycling possibility` from `Dimensions` into the `Column` shelf.
2. Drag and drop `Number of Records` from `Measures` into the `Rows` shelf.

3. Drag and drop **`Milk carton disposal`** from **`Dimensions`** into the **`Column`** shelf to the right-hand side of the **`Aware of recycling``possibility`** story.
4. Drag and drop **`Milk carton disposal`** from **`Measures`** to **`Color`** in the **`Marks`** card.
5. Drag and drop **`Number of Records`** from **`Measures`** to **`Label`** in the **`Marks`** card.
6. Hover over the **`Number of Records`** green pill in the **`Marks`** card so that a small downward arrow appears and click on it.
7. Navigate to **`Quick Table Calculation`** | **`Percent of Total`**.
8. Click on the **`Sheet 3`** tab at the bottom of the page and type `Aware but not recycling`:



How it works...

In the [*Creating a Tableau Story*] recipe, we discovered that a third of milk carton buyers know about the possibility of recycling, but still dispose of the packaging in the standard garbage bins. Also, we know that almost half of the milk buyers don't even know about the possibility of recycling the milk cartons. At this point, we are in the conflict phase as we should decide on where to focus our efforts. Should we investigate those who do not know about the recycling potential or those who are aware but are not willing to support it?

When we are making decisions such as this, it is always important to keep our audience in mind. Telling a Story always requires taking the perspective of your listener. In this case, our listener is a [**public relations**] ([**PR**]) manager of a milk manufacturing company. We need to step into their shoes and put their glasses on. Let's try to figure out

what our PR manager can do about the fact that every third person that knows about recycling is possibly not motivated to practice it. As a PR manager, we can try to think of ways to motivate those people. For example, we could organize a lottery game or give a discount to those who dispose of their garbage in specialized garbage bins. However, it is much more likely that we would focus on people who don't know about the recycling possibility yet.

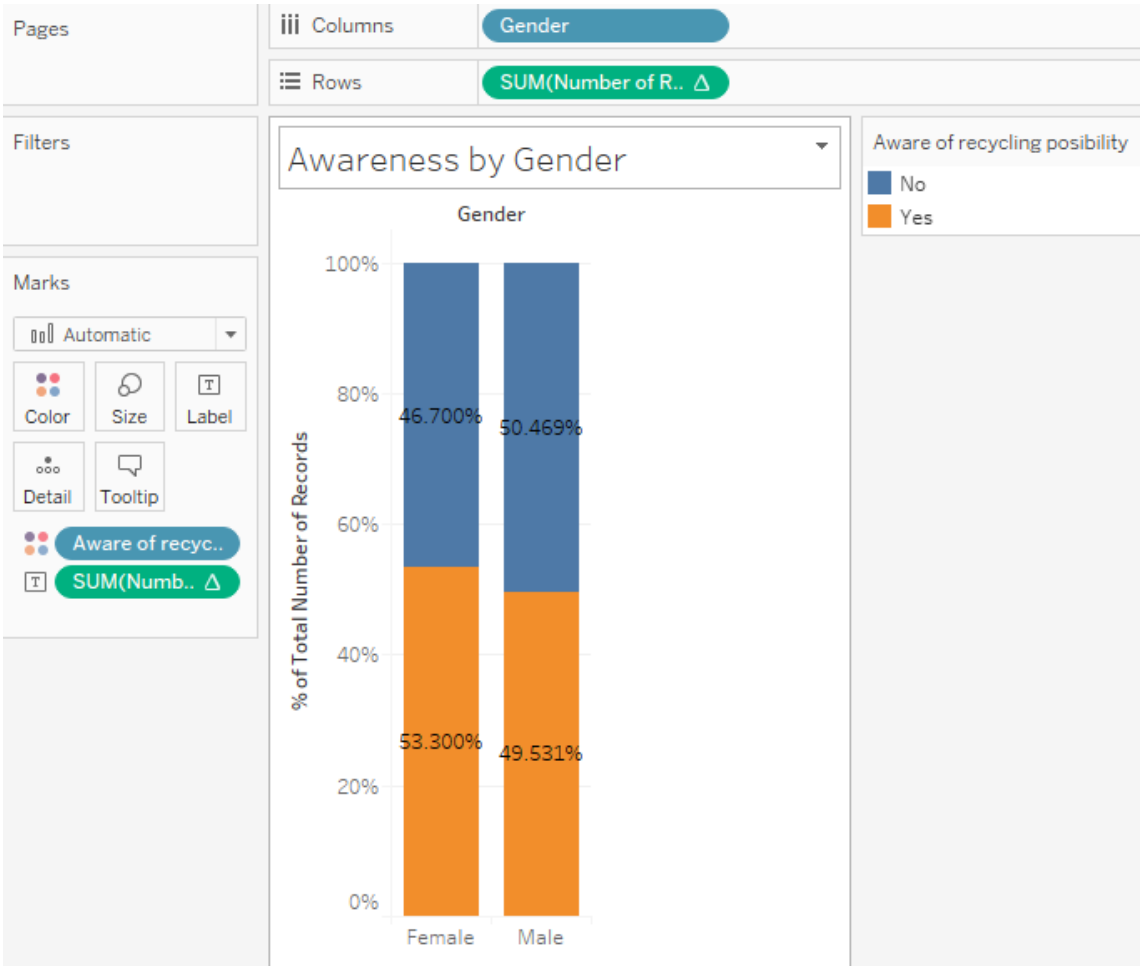
Considering the tools that we have at our disposal, raising awareness seems to be a more achievable goal than a direct change of behavior. Furthermore, as a PR manager, we would want to know the reasons for the relative failure of our current campaign. Maybe we still can fix something and turn it into a success, or at least avoid the trap in the future. It is important to remember that another stakeholder in the same situation would probably have a different perspective, plan a different strategy, and take different steps in solving the problem. Let's go back to our PR manager and see what we can do about our data to help them out.

Development

In the Development phase, we are going to test our hypothesis. It's time to work around our business problem.

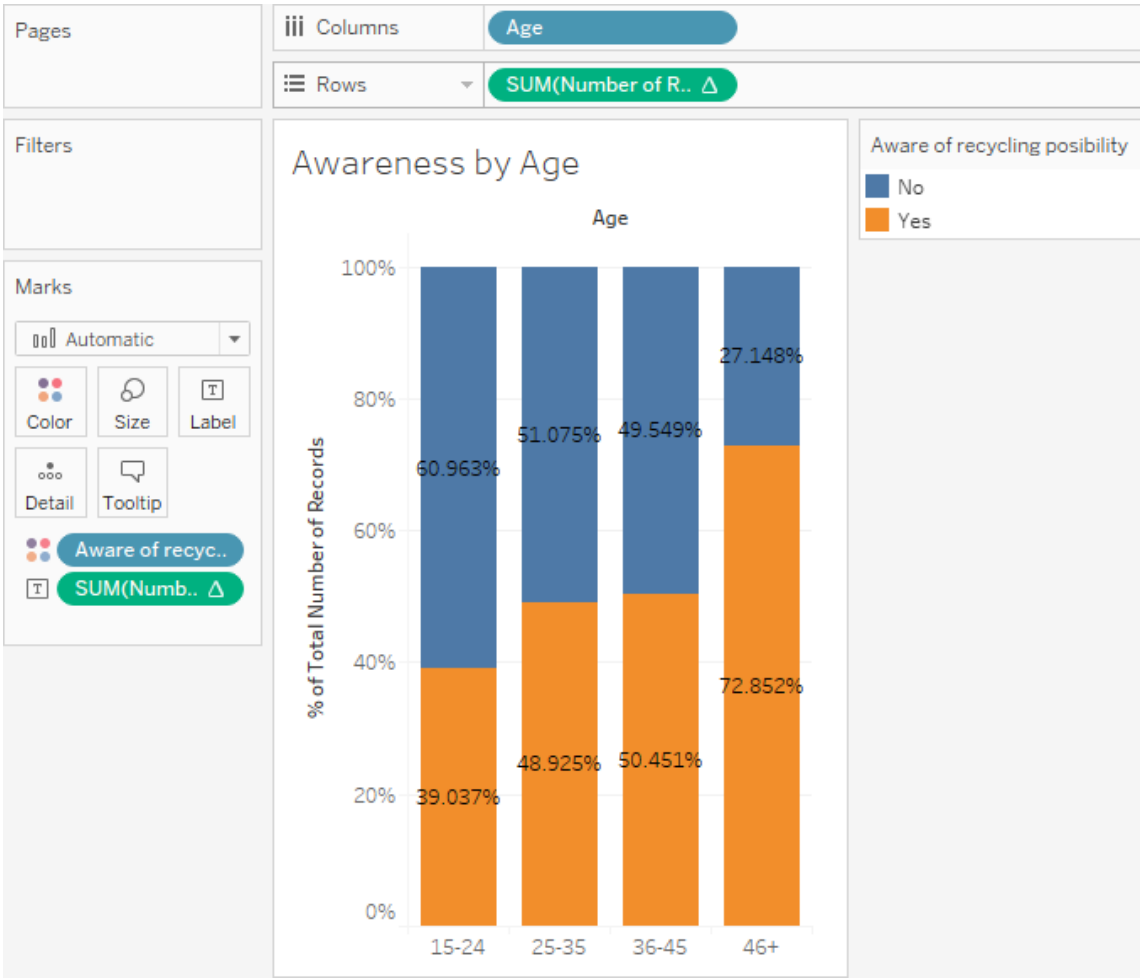
How to do it...

1. Open a blank worksheet and drag and drop **`Gender`** from **`Dimensions`** into the **`Columns`** shelf.
2. Drag and drop **`Number of Records`** from **`Measures`** to the **`Rows`** shelf.
3. Drag and drop **`Aware of recycling possibility`** from **`Dimensions`** to **`Color`** in the **`Marks`** card.
4. Hover over the **`Number of Records`** pill in the **`Rows`** shelf so that a small downward arrow appears and click on it.
5. Navigate to **`Quick Table Calculation`** | **`Percent of Total`**. Choose the **`Edit Table Calculation...`** option and select **`Table (down)`**.
6. Press [*Ctrl] and drag and drop* ***`Number of Records`*** *from* ***`Rows`*** *to* ***`Label`*** *in the ** `Marks` card.
7. Click on the **`Sheet 4`** tab at the bottom of the page and enter `Awareness by Gender`:



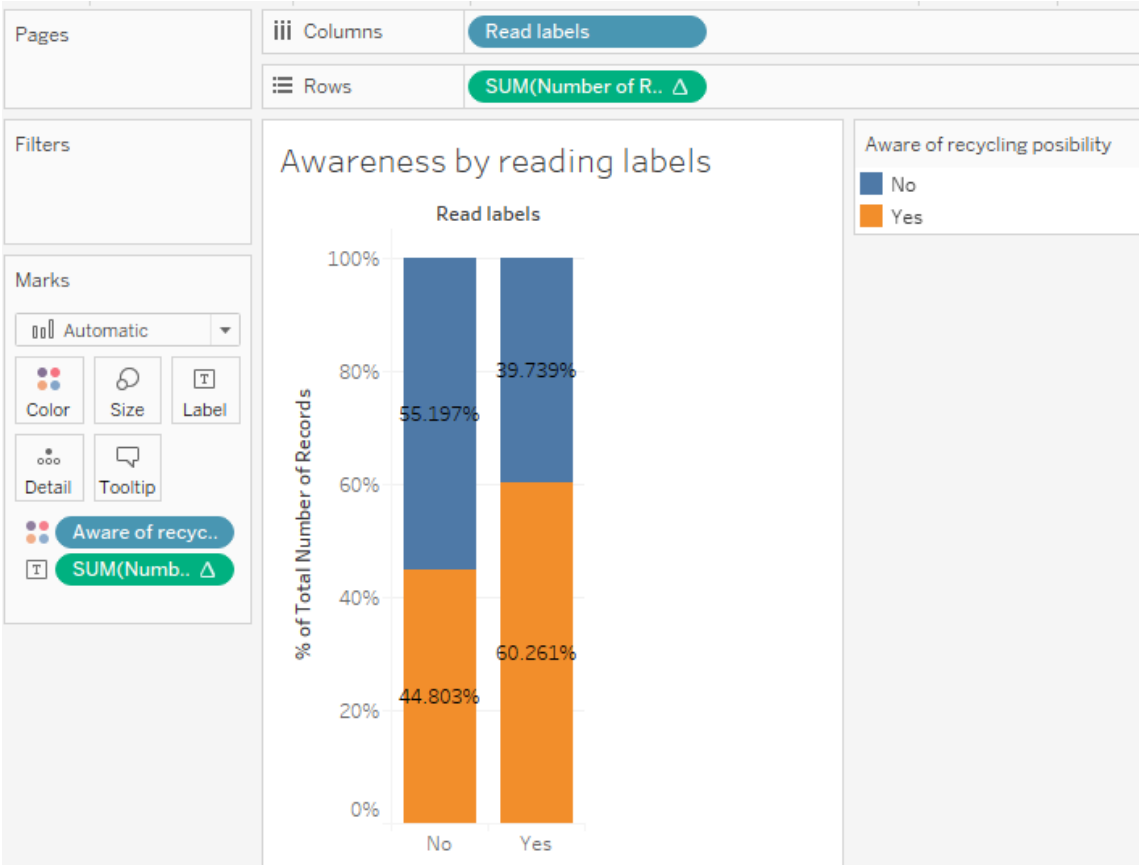
As we can see in the preceding screenshot, among females there are more buyers who are aware of recycling possibilities. The difference is not so striking, but it provides us with some insight. However, we should continue digging.

8. Open a blank worksheet, drag and drop **`Age`** from **`Dimensions`** into the **`Column`** shelf.
9. Drag and drop **`Number of Records`** from **`Measures`** into the **`Rows`** shelf.
10. Drag and drop **`Aware of recycling possibility`** from **`Dimensions`** to **`Color`** in the **`Marks`** card.
11. Hover over the **`Number of Records`** pill in the **`Rows`** shelf so that a small downward arrow appears and click on it.
12. Navigate to **`Quick Table Calculation`** | **`Percent of Total`**. Choose E **`dit Table Calculation...`** and then select **`Table (down)`**.
13. Press *[Ctrl] and drag and drop* ***`Number of Records`*** *from* ***`Rows`*** *to* ***`Label`*** *in the* ** `Marks` card.
14. Click on the **`Sheet 5`** tab at the bottom of the page and enter `Awareness by Age`:



Analyzing the results by age groups reveals some interesting differences in the level of awareness. Almost 75% of people aged 45 or older know that milk cartons can be recycled in Serbia. On the other hand, more than 60% buyers in the 15-24 age group do not know about this possibility. Based on that, we can conclude that the 15-24 group is the least informed and that we need to make a concerted effort to raise their awareness. That is our first clue. Let's investigate some more.

15. Open a blank worksheet, drag and drop **`Read labels`** from **`Dimensions`** into the **`Column`** shelf.
16. Drag and drop **`Number of Records`** from M **`easures`** into the **`Rows`** shelf.
17. Drag and drop the **`Aware of recycling possibility`** from **`Dimensions`** to **`Color`** in the **`Marks`** card.
18. Hover over the **`Number of Records`** pill in the **`Rows`** shelf so that a small downward arrow appears and click on it.
19. Navigate to **`Quick Table Calculation`** | **`Percent of Total`** . Choose E **`dit Table Calculation...`** and select **`Table (down)`** .
20. Drag and drop **`Number of Records`** from **`Measures`** to **`Label`** in the **`Marks`** card.
21. Hover over the **`Number of Records`** pill in the **`Marks`** card so that a small downward arrow appears and click on it.
22. Go to the **`Quick Table Calculation`** option and choose **`Percent of Total`** . Then, pick **`Edit Table Calculation...`** and select **`Table (down)`** .
23. Click on the **`Sheet 6`** tab at the bottom of the page and enter `Awareness by Reading labels` : [** **]



How it works...

We have discovered that the level of awareness of recycling possibilities is much higher among those who regularly read labels on food packaging.

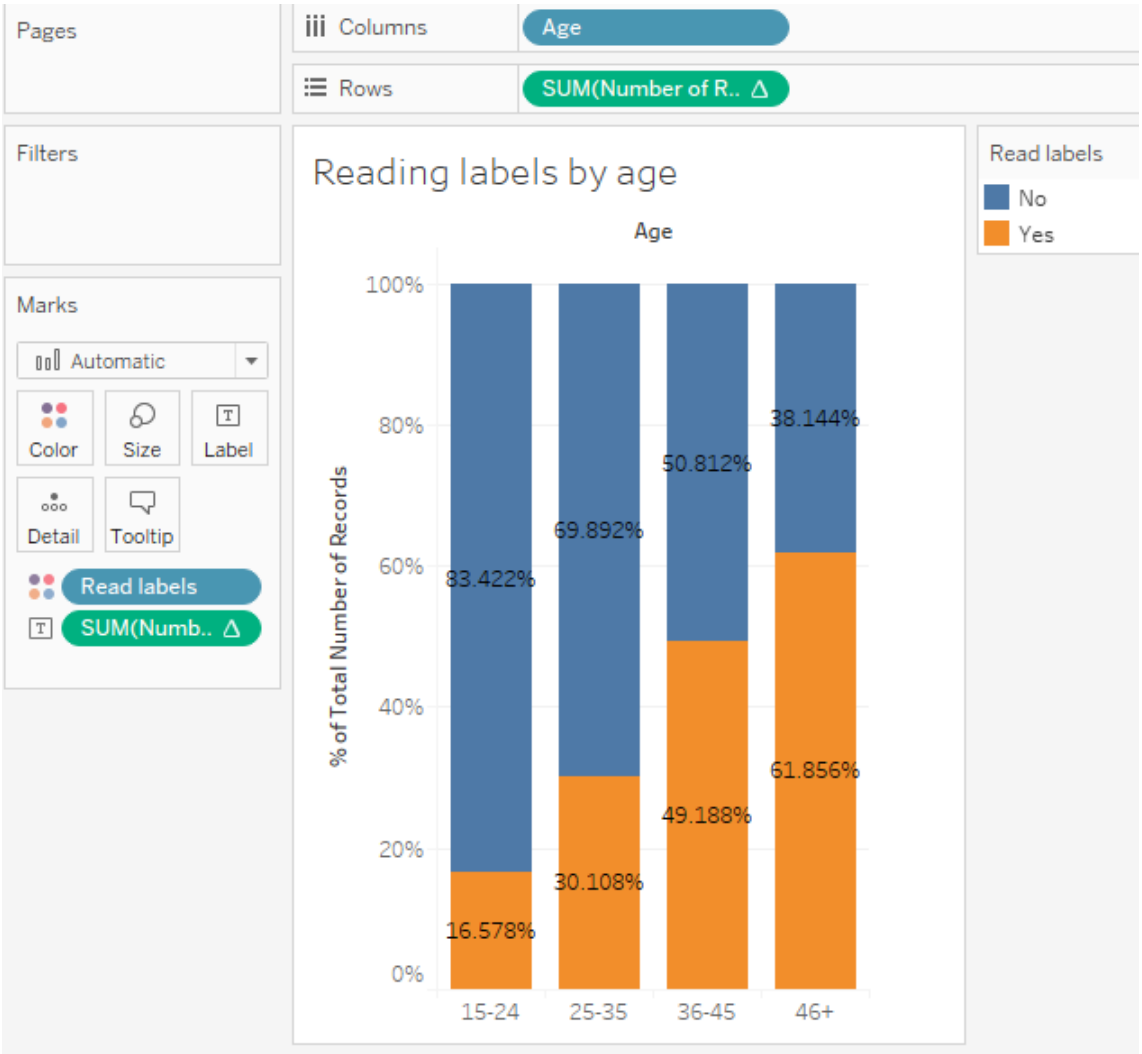
Let's consolidate what we have found up to this point. We learned that men and women do not differ in their awareness about recycling significantly. We know that among the 15-24 age group of milk buyers, we have the highest percentage of those who are not aware that the milk carton can be recycled in Serbia. We also know that the level of awareness is lower among those who do not regularly read labels on packaging.

Climax

The Climax phase is the turning point where we arrived at the answer to our key question.

How to do it...

1. Open a blank worksheet and drag and drop **`Age`** from **`Dimensions`** into the **`Column`** shelf.
2. Drag and drop **`Number of Records`** from **`Measures`** into the **`Rows`** shelf.
3. Drag and drop **`Read labels`** from **`Dimensions`** into **`Color`** in the **`Marks`** card.
4. Hover over the **`Number of Records`** pill in the **`Rows`** shelf so that a small downward arrow appears and click on it.
5. Navigate to **`Quick Table Calculation`** | **`Percent of Total`**. Choose E**`dit Table Calculation`** and then click on **`Table (down)`**.
6. Press *[Ctrl] and drag and drop the* ***`Number of Records`*** *pill from Rows to* ***`Label`*** *in the* ** `Marks` card.
7. Click on the **`Sheet 6`** tab at the bottom of the page and enter `Reading labels by Age`:



How it works...

In the climax phase, we are connecting the dots:

- The youngest purchasers are the least aware of the recycling possibility
- Those who do not regularly read labels on packaging are also not informed about the recycling possibility
- The youngest purchasers (the 15-24 group) do not regularly read labels (at least most of them) By linking these findings, we can arrive at a conclusion. The youngest purchasers are the least aware of the recycling possibility, mainly because they do not regularly read the labels on packaging.

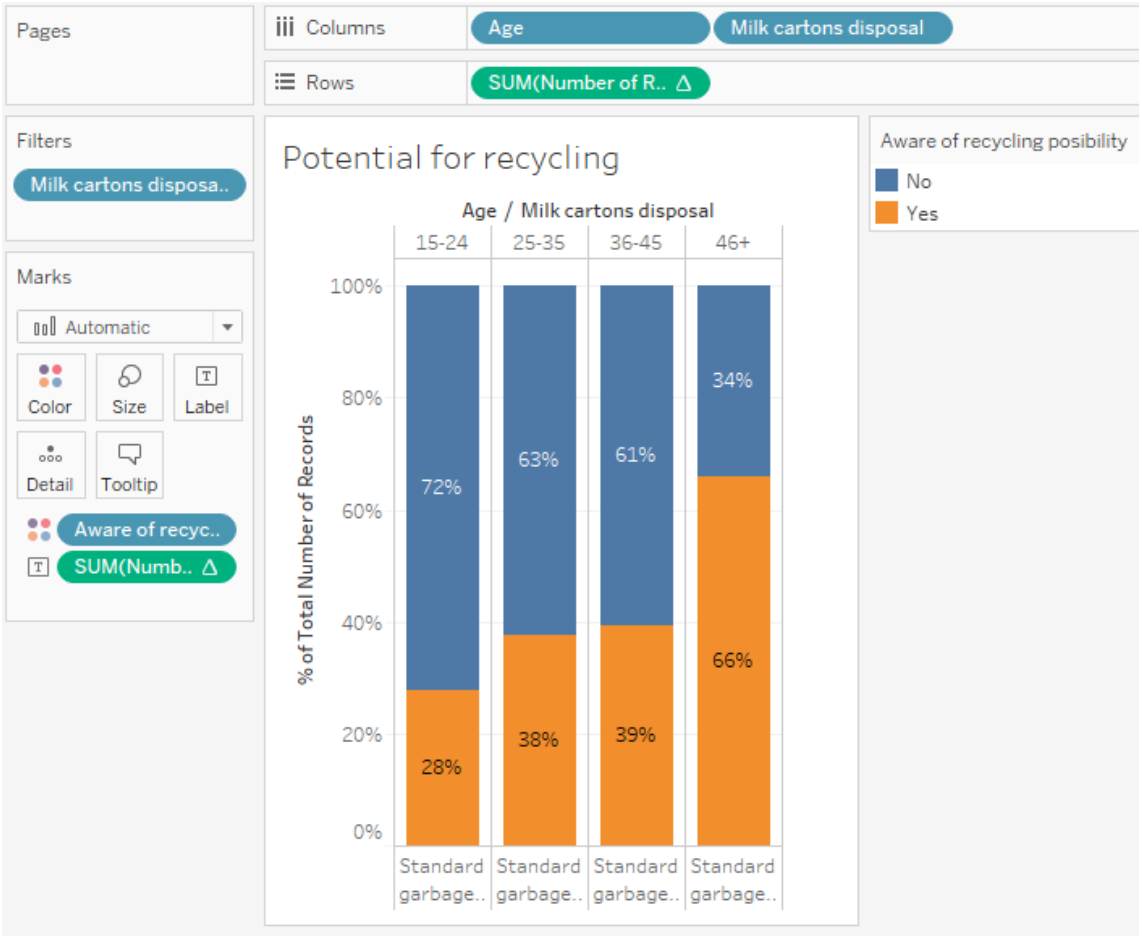
Here, we can point out the main difference between findings and insights. In a nutshell, a finding just informs us about the facts, while an insight provides an explanation of those facts. Findings give us the answer to the [*what], while insights answer the [why*]. The crucial difference is that insights enable us to speculate about the underlying mechanism of a phenomenon, and put us in a position to make an impact on the situation and to change the facts.

Resolution

In the Resolution phase, we should properly articulate and communicate results to the relevant audience.

How to do it...

1. Open a blank worksheet and drag and drop **`Age`** from **`Dimensions`** into the **`Column`** shelf.
2. Drag and drop **`Milk cartons disposal`** from **`Dimensions`** into the **`Column`** shelf, to the right of the **`Age`** pill.
3. Drag and drop **`Number of Records`** from **`Measures`** into the **`Rows`** shelf.
4. Drag and drop **`Aware of recycling possibility`** from **`Dimensions`** to **`Color`** in the **`Marks`** card.
5. Hover over the **`Number of Records`** pill in the **`Marks`** card so that a small downward arrow appears and click on it.
6. Navigate to **`Quick table calculation`** | **`Percent of Total`**. Then, choose **`Edit Table Calculations`** and click on **`Table (down)`**.
7. Press *[Ctrl] and drag and drop* ***`Milk cartons disposal`*** *from* ***`Column`*** *into the* ** `Filters` shelf.
8. Deselect the box in front of the **`Recycling garbage can`** and click OK.
9. Press *[Ctrl] and drag and drop* ***`Number of records`*** *from* ***`Rows`*** *into the* ***`Label`*** *in the* ** `Marks` card.
10. Click on the **`Sheet 7`** tab at the bottom of the page and enter `Potential for recycling`:



How it works...

In this recipe, we compared the age groups and then focused only on those who currently do not recycle. We can see that among 15-24 year olds, we have the smallest percentage (28%) of those who know about the possibility of recycling but do not use it. Based on that, we can conclude that within the 15-24 age group, we have the smallest percentage of buyers who are resistant to our promotional efforts. Accordingly, we can assume that we have a good

potential for recycling within this group! Now, we have all the elements. In the following sections, we will learn how to connect them in a story.

There's more...

The names of the phases in storytelling we use throughout this lab are just one of the many ways to conceive the storytelling process. In other sources, you might encounter phases that are a bit different or have different names for similar phases. However, the basic structure of a story is universal, and there is always an introduction, a problem, attempts to solve the problem, the moment of arriving at a solution, and a conclusion.

See also

- [**The Anatomy of a Story**]: [*22 Steps to Becoming a Master Storyteller*], by John Truby
- [**Resonate**]: [*Present Visual Stories that Transform Audiences*], by Nancy Duarte
- [**Long story short**]: [*The Only Storytelling Guide You'll Ever Need*], by Margot Leitman

Choosing the right charts

Once we make the basic narrative, we need to pick up the crucial moments to present in a Story. When we were speaking about the development phase of storytelling, we said that we should inform our listener about the hypothesis that we tested. However, this does not mean that we need to describe every step that we made in detail and every dead end that we encountered. Like a movie director who cuts the frames of scenes when editing a movie, we also need to crop only those elements that are important for our Story. All the other things should be mentioned, but in a way that they do not draw attention away from the main plot of the Story.

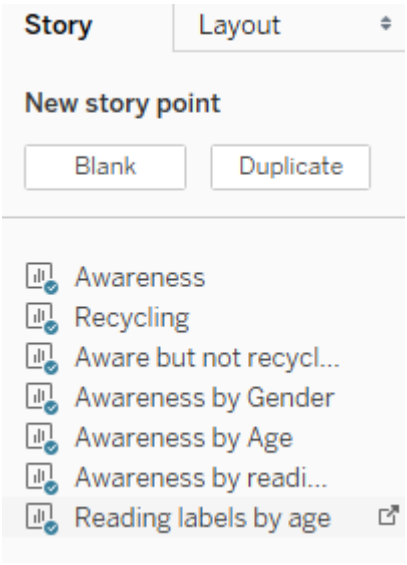
Getting ready

For this recipe, we will need all the sheets that we have made so far:

- `Awareness`
- `Recycling`
- `Aware but not recycling`
- `Awareness by Age`
- `Awareness by reading labels`
- `Reading labels by age`

How to do it...

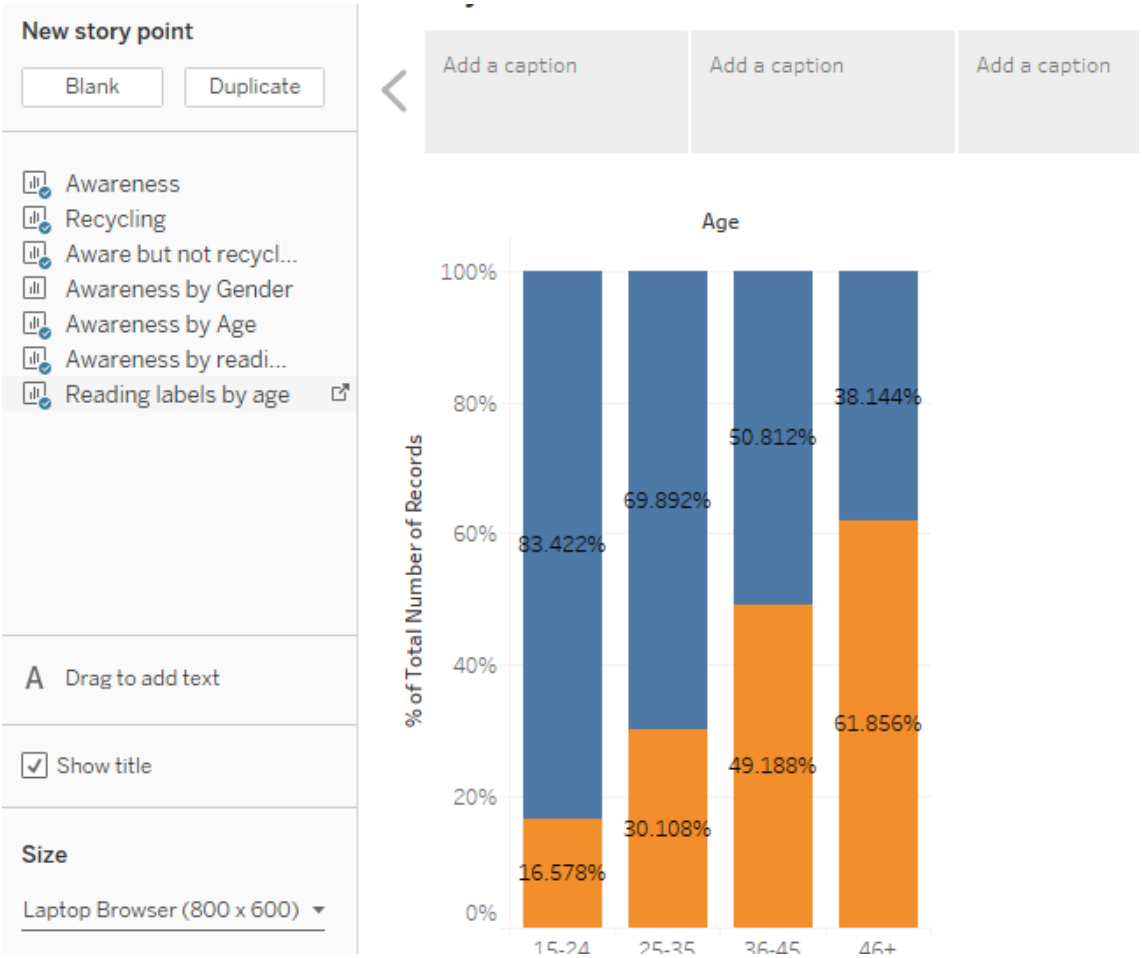
1. Go to the main menu at the top of the screen and navigate to **`Story`** | **`New Story`**.
2. Drag and drop **`Recycling`** from the left sidebar to the **`Drag a sheet here`** placeholder in the canvas:



3. In the **`Story`** tab on the left-hand side, click on the **`Blank`** button.
4. Drag and drop **`Awareness`** into the canvas.
5. Repeat the same procedure for the following sheets in the proposed order:
    - `Aware but not recycling`
    - `Awareness by Age`
    - `Awareness by reading labels`
    - `Reading labels by age`
6. Double-click on the **`Story 1`** tab and rename it `Promotion of milk carton recycling among buyers in Serbia`

How it works

As you've probably noticed, we have skipped `Awareness by Gender`. In the following analysis, we are focusing on the differences between age groups, not on gender differences. Information about gender differences is not a crucial part of understanding the main plot of the Story:



There's more...

Sometimes, it isn't easy to decide which finding is important for the Story and which is not. In such cases, you can rely on a simple rule of thumb: if a finding is not going to be mentioned again, it is probably not crucial.

See also

- Interested readers can find more information about how to communicate effectively with data in the following book: [**Storytelling with data:**] [*a data visualization guide for business professionals*], by Cole Nussbaumer Knaflic

Writing effective headlines

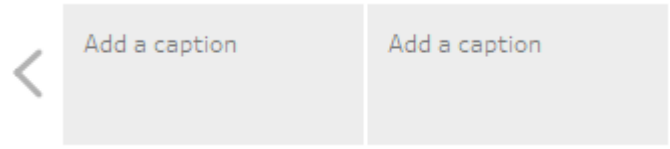
As mentioned earlier, our presentation should always be adjusted for the audience we are presenting it to. In business, stakeholders to whom we are presenting our findings often have limited resources in terms of the time and attention that they can devote to our presentation. With that in mind, we should do our best to make our captions short and precise.

Getting ready

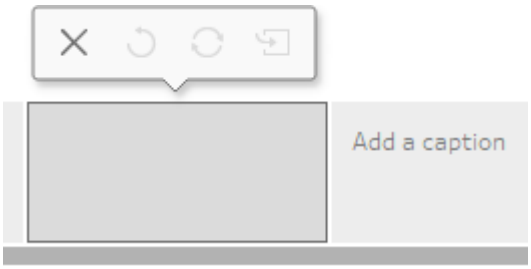
Follow the previous recipes, [*Creating a Tableau Story], [Setting the narrative of the Story], and [Choosing the right charts*] recipes to create the sheets we will be using in this recipe.

How to do it...

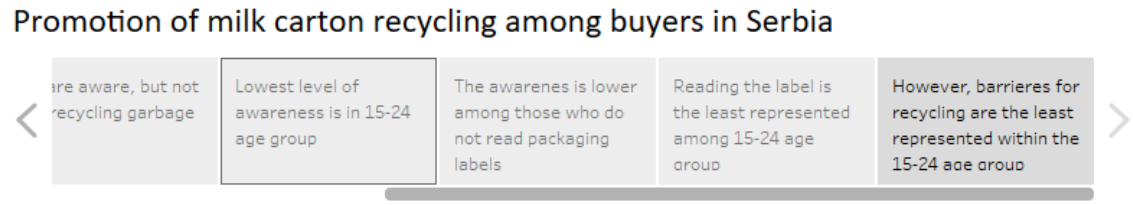
1. Open the **`Promotion of milk carton recycling among buyers in Serbia`** Story that we made in the previous recipe, [*Choosing the right charts*].
2. Click on the left arrow in the navigation and go to the first textbox in the row. It should be the **`Milk cartons disposal`** sheet:



3. Double-click on the **`Add a caption`** placeholder, and then type `We come to know that 8 in 10 buyers do not use recycling garbage bins`:



4. Go to the first textbox on the right-hand side (it should be the **`Awareness`** sheet), double-click on it, and type `Almost 1/2 do not even know about the recycling possibility`.
5. Double-click on the **`Aware but not recycling`** text-box sheet and type `1/3 are aware, but not use recycling garbage bins`.
6. In the **`Awareness by Age`** textbox, type `Buyers in the 15-24 age group are the ones least aware of recycling possibility .`
7. In the **`Awareness by reading labels`** text-box sheet, type `Those who do not read labels on packaging's are less aware of the recycling possibility`.
8. In the **`Reading labels by age`** text-box sheet, type `Buyers in the 15-24 age group least likely to read labels`:



How it works...

Writing effective headlines is a skill that requires some practice. Luckily, there are some tips that we can use to make them better.

When writing headlines, we must make sure that they meet the following requirements:

- They clearly communicate the most important finding
- They are not data chart titles

- They do not repeat the figures from the charts
- They should use a verb
- They should use transitional words (such as [*but], [moreover], and [in addition to*])
- They are no longer than five lines

Recommendation and executive summary

Writing the executive summary is probably the most intimidating phase of the whole analytical process. When we need to give concrete advice for an action, we are always on a slippery slope, because it involves a prediction of future events. However, our task is to be as objective as possible and to provide the most useful business advice, based on the data that we have[.]

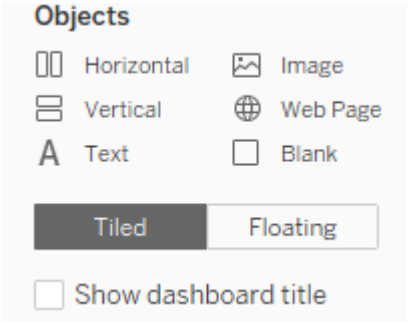
Getting ready

It's time to wrap up our Story, so we will need all the sheets that we have made in this lab so far:

- `Awareness`
- `Recycling`
- `Aware but not recycling`
- `Awareness by Age`
- `Awareness by reading labels`
- `Reading labels by age`

How to do it...

1. Open a new dashboard.
2. Drag and drop **`Potential for recycling`** from the list of sheets that are on the left-hand side of the **`Drag a sheet here`** placeholder in the canvas.
3. Drag and drop **`Awareness by Age`** from the list of sheets to the canvas that is to the right side of **`Potential for recycling`**.
4. Drag and drop **`Reading labels by age`** from the list to the canvas under **`Potential for recycling`**.
5. Drag and drop **`Text`** from the **`Objects`** card at the left-hand side to the bottom of the canvas:

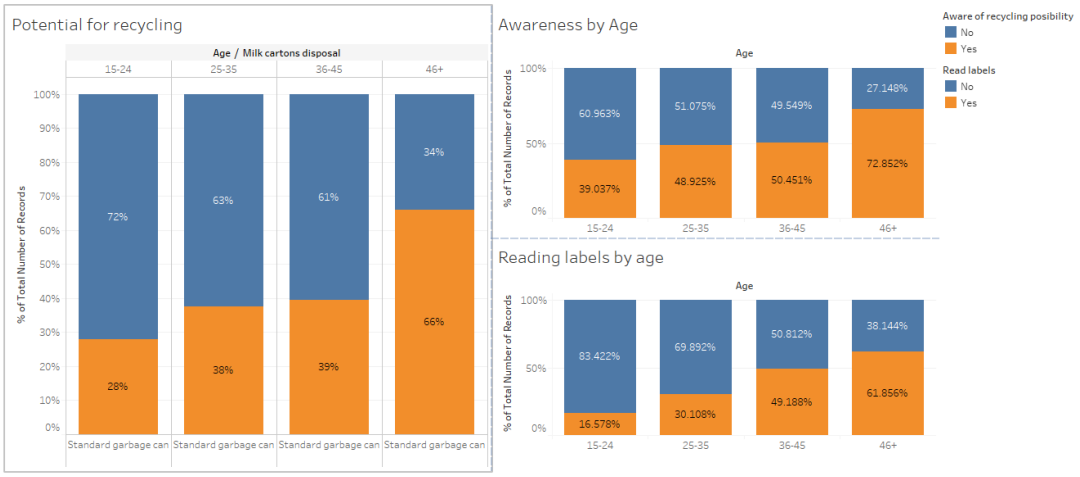


Then type the following paragraph:

```
Based on the results of our study, we can expect that promotional activities focused
on the 15-24 age group can have a significant effect on their recycling habits.
Because of that, our recommendation is to launch a promotional campaign that would be
specifically designed in accordance with the media consumption habits of younger
buyers. In this age group, we found that those who know about the possibility of
```

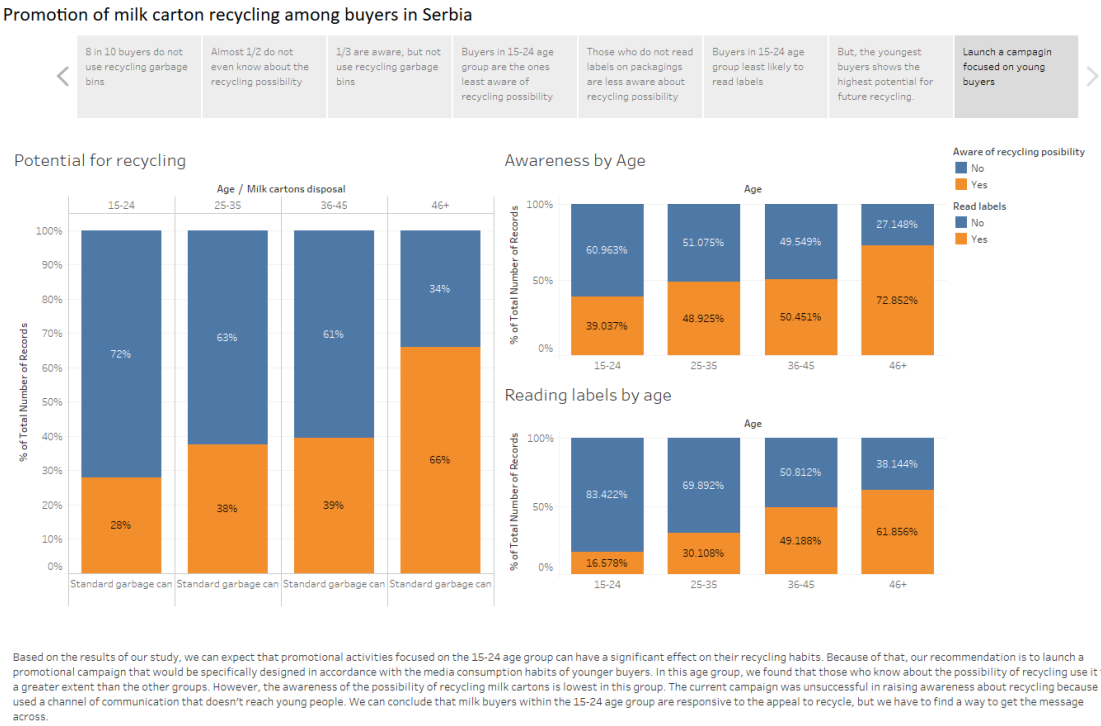
recycling use it to a greater extent than the other groups. However, the awareness of the possibility of recycling milk cartons is lowest in this group. The current campaign was unsuccessful in raising awareness about recycling because it used a channel of communication that doesn’t reach young people. We can conclude that milk buyers within the 15-24 age group are responsive to the appeal to recycle, but we have to find a way to get the message across.

6. Double-click on the **Dashboard 1** tab at the bottom of the screen and rename it `Executive summary :`



Based on the results of our study, we can expect that promotional activities focused on the 15-24 age group can have a significant effect on their recycling habits. Because of that, our recommendation is to launch a promotional campaign that would be specifically designed in accordance with the media consumption habits of younger buyers. In this age group, we found that those who know about the possibility of recycling use it to a greater extent than the other groups. However, the awareness of the possibility of recycling milk cartons is lowest in this group. The current campaign was unsuccessful in raising awareness about recycling because it used a channel of communication that doesn't reach young people. We can conclude that milk buyers within the 15-24 age group are responsive to the appeal to recycle, but we have to find a way to get the message across.

7. Open the **Promotion of milk carton recycling among buyers in Serbia** Story.
8. In the **Story** tab on the left-hand side, click on the **Blank** button.
9. Drag and drop **Executive summary** from the list on the left-hand side to the **Drag a sheet here** placeholder in the canvas.
10. Double-click on the **Add a caption** placeholder in the gray box that appeared at the top.
11. Type `Launch a campaign focused on young buyers` :



Based on the results of our study, we can expect that promotional activities focused on the 15-24 age group can have a significant effect on their recycling habits. Because of that, our recommendation is to launch a promotional campaign that would be specifically designed in accordance with the media consumption habits of younger buyers. In this age group, we found that those who know about the possibility of recycling use it to a greater extent than the other groups. However, the awareness of the possibility of recycling milk cartons is lowest in this group. The current campaign was unsuccessful in raising awareness about recycling because it used a channel of communication that doesn't reach young people. We can conclude that milk buyers within the 15-24 age group are responsive to the appeal to recycle, but we have to find a way to get the message across.

How it works...

Our Story has, so far, been built by connecting individual conclusions. But when we are writing an executive summary, we need a reverse, [**top-down**] approach. When we are giving advice for the concrete course of action, we need to be concise and get to the point. First, we give the recommendation about what should be done, and then elaborate on it with arguments---why it should be done. Your listeners will appreciate your effort to save their time and you will sound much more confident.

There's more...

This way of communicating recommendations, which advocates a top-down approach, is known as the [**Pyramid Principle**]. The Pyramid Principle, designed by Barbara Minto, is one of the best-known concepts in modern executive communication. The main rationale behind this principle is that, when making decisions, people find it easier to focus on a specific course of action or recommendation first, and then consider all the pros and cons of it.

See also

- Check out Barbara Minto's website for more details about the Pyramid principle at http://www.barbaraminto.com/.

Formatting the Story

Although the content of the Story is essential, the importance of visual aspects of the Story's presentation should never be underestimated. If the visual layout of the presentation is sloppy, it can leave a bad impression on the audience and take away the credibility of the content of the Story. We certainly wouldn't want our hard work to be ignored due to bad formatting. So, let's pick up some tricks that can improve the visual identity of our presentation.

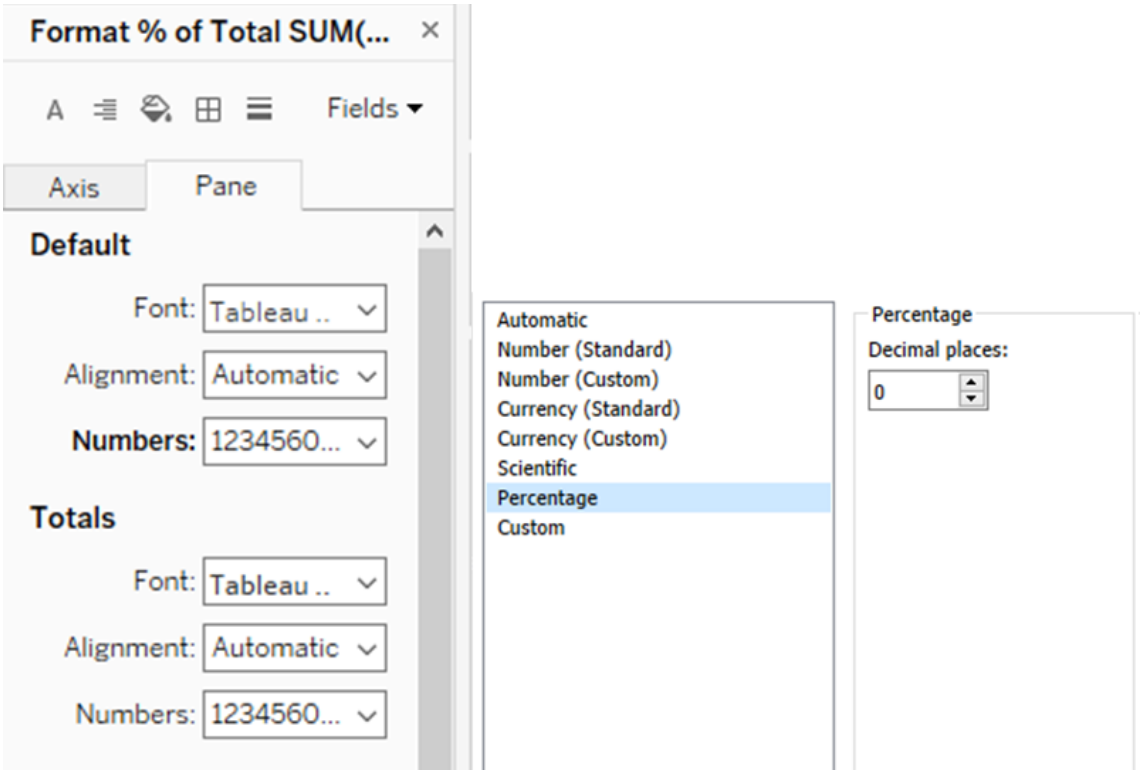
Getting ready

In this recipe, we are going to format the charts we've made so far. Follow the previous recipes from this lab: [*Creating a Tableau Story, Setting the narrative of the Story, Choosing the right charts, Writing effective headlines,*

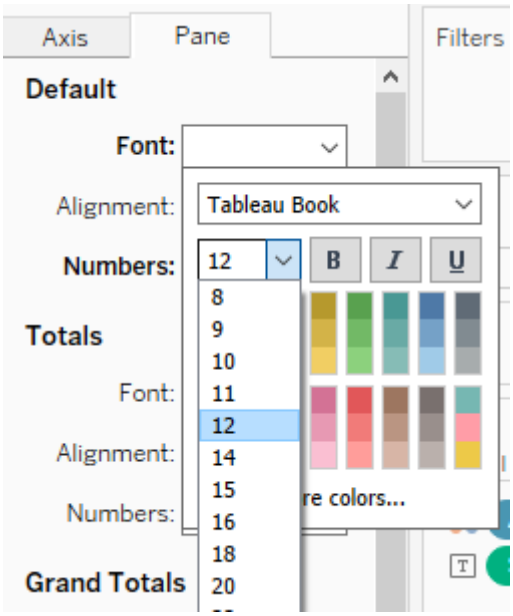
Recommendation] and [*executive summary *]to create the Story that we are going to be working on.

How to do it...

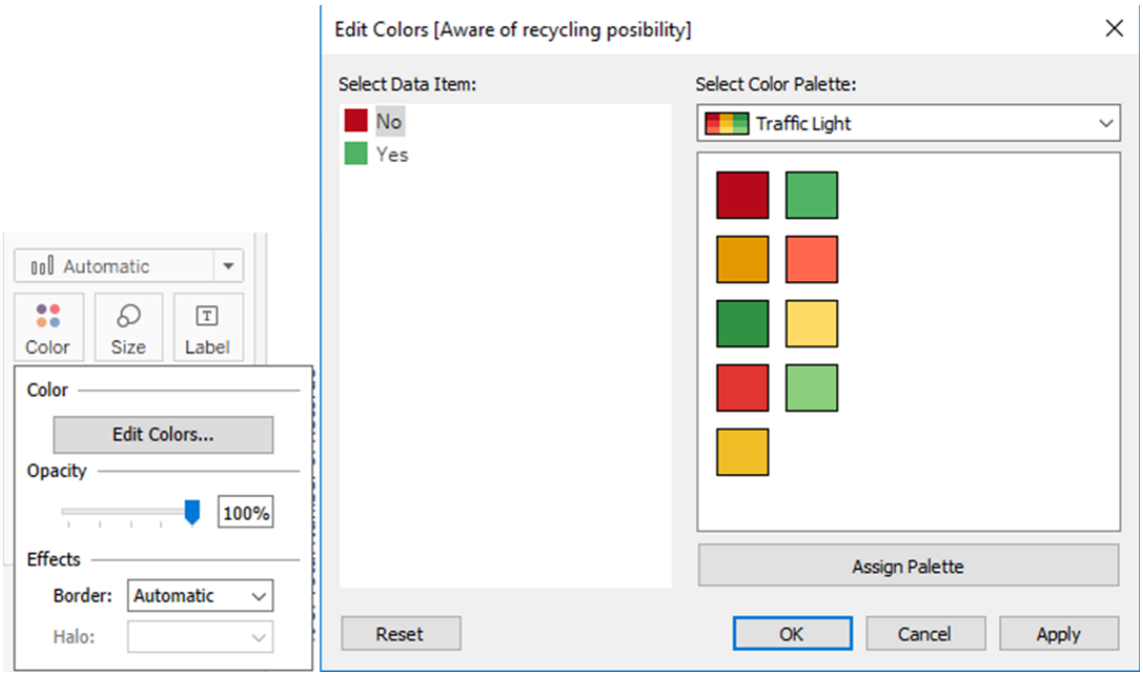
1. Open the `Awareness by Age` chart.
2. Hover over the `Number of records` green pill in the `Marks` card, and when the small white downward arrow appears, click on it.
3. In the menu, choose `Format...`
4. In the `Pane` tab, under the section `Default`, go to the `Numbers` drop-down menu.
5. Choose `Percentage` and set the number of `Decimal places` to `0`:



6. In the `Pane` tab, under the `Default` section, go to `Font`.
7. Increase the size of the font from `9` to `12`:



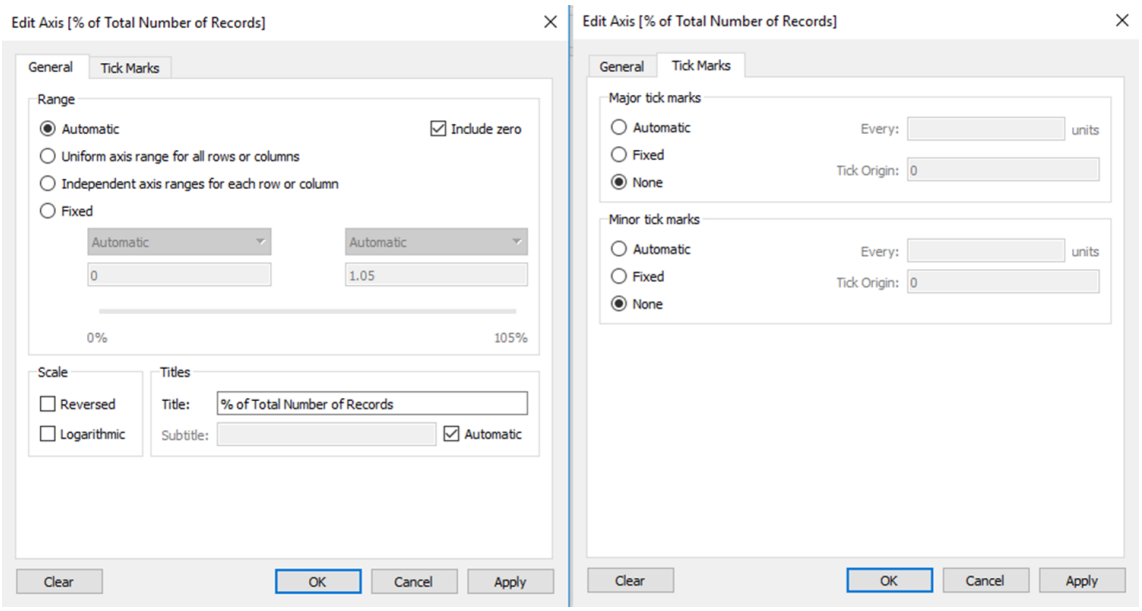
8. Choose the white color.
9. In the `Marks` card, click on `Color` and select the `Edit Colors` button.
10. In the `Select Color Palette` drop-down menu, choose `Traffic Light`.
11. Under `Select Data Item`, click on `No` and pick `Red` from the top of the `Select Color Palette` drop-down menu.
12. In the `Select Data Item` drop-down menu, click on `Yes`, pick `Green` from the top of the `Select Color Palette` drop-down menu, and click on `OK:`



13. Hover over the vertical axis of the `% of Total Number of Records` chart and right-click on it.

14. Choose **`Edit Axis`** and in the **`General`** tab, delete **`% of Total Number of Records`** from the **`Titles`** option.

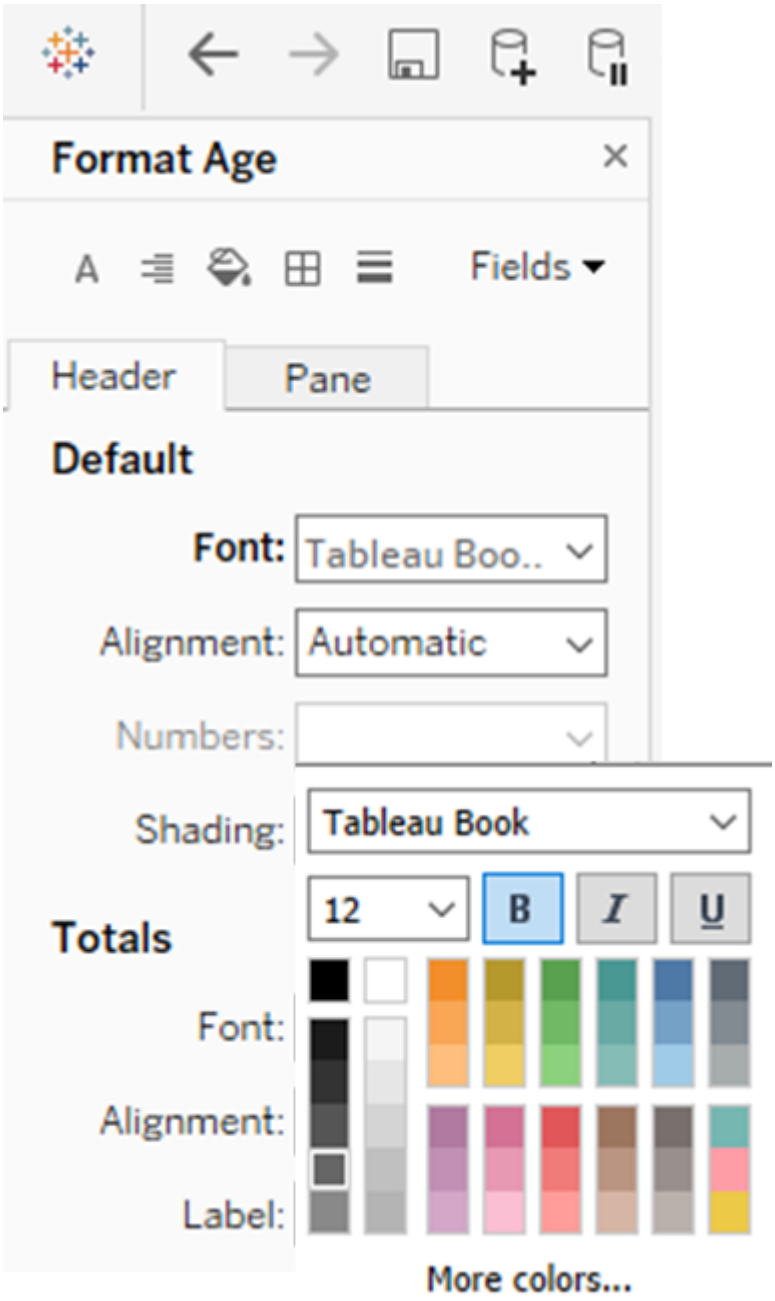
15. In the **`Tick Marks`** tab of the same window, choose **`None`** in both **`Major tick marks`** and **`Minor tick marks`**, and click on **`OK`**:



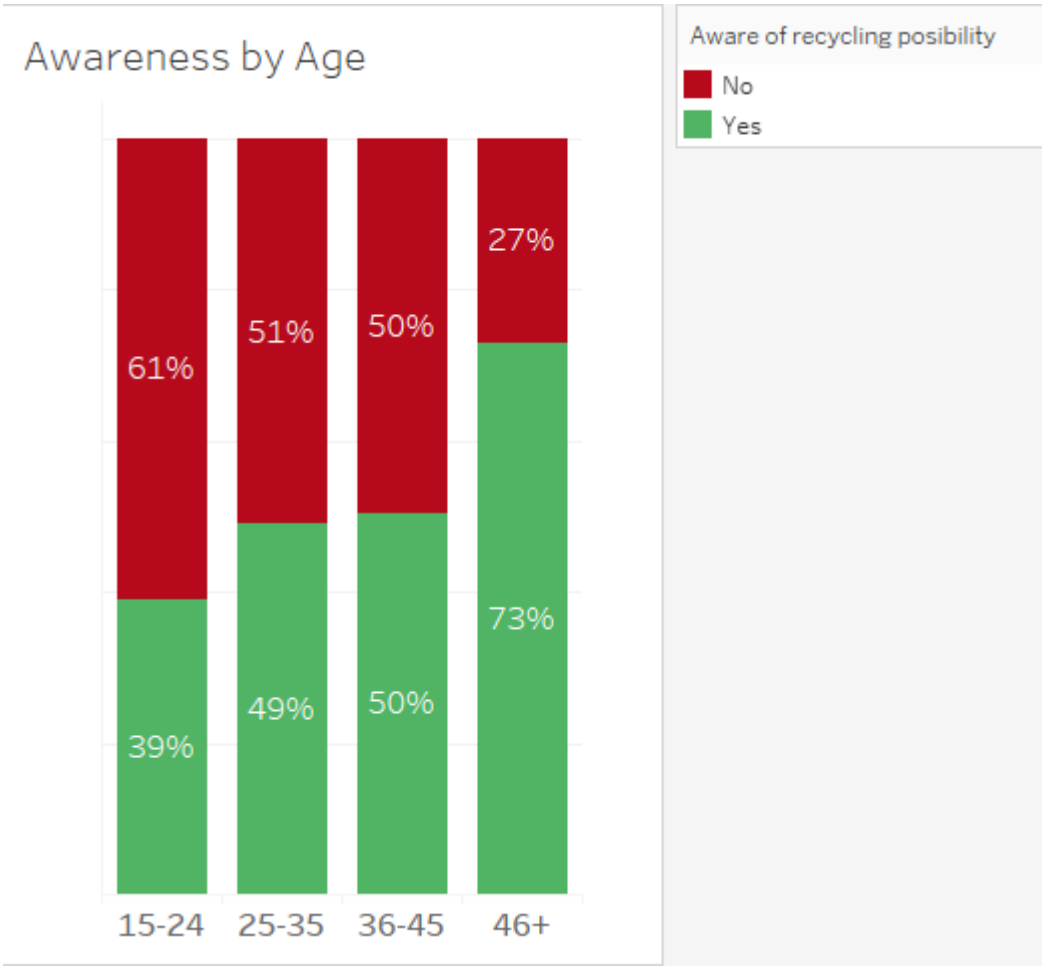
16. Hover over the horizontal axis of the chart (the **`15-24, 25-35, 36-45, 46+`** age categories), right-click on it, and choose **`Format`**.

17. In the **`Header`** tab on the left-hand side, under the **`Default`** section, click on the **`Font`** drop-down menu.

18. Increase the font size from **`9`** to **`12`**:



19. Right-click on `Age` at the top of the chart.
20. Choose `Hide Field Labels` for `Columns`:



How it works...

First, we decreased the number of decimal places (in the [*Formatting the Story*] recipe, steps 1-5). Although in some cases the decimal places are necessary, in most cases, whole numbers are enough.

We then increased the font size. It is recommended to adjust the layout of the screen on which the results will be presented. However, we can't always know where they will be displayed, so to stay on the safe side, we need to use a larger font size.

After that, we adjusted the colors. Some colors have specific meanings, and it is always handy to go along with them when possible. In our case, relying on a traffic light analogy, we use red for "not aware" and green for "aware."

In the formatting phase, our goal is to eliminate all unnecessary elements from the sheet. In our case, we have labels with percentages on bars, tick marks, and also the title in the vertical axis is sufficient.Due to the fact that the "Awareness by Age" title says enough, the label of the "Age" columns is redundant.

Note

When you are not sure whether an element is needed, ask yourself, "Does it carry unique information, or can we come to the same conclusion via another item?"

There's more...

A general rule to follow when we are making our visualization is to be consistent! Nothing makes our presentation sloppier than randomly using different formatting styles. Choose one formatting principle and stick to it throughout the Story.

In this recipe, we adjusted the format of only one of the sheets that makes our Story. Follow the given instructions to adjust the other sheets. When you open the Story again, you will find that it has been updated with the changes you made.

See also

- For more tips on how to make your presentation look stylish, check out https://www.tableau.com/about/blog/2017/10/7-tips-and-tricks-dashboard-experts-76821.