

1.3.3

Timing Success

Another valuable piece of data is the length of fundraising campaigns. Is the length of a campaign correlated with its success? To help Louise plan her campaign timeline, let's take a closer look at how campaign length might be tied to its outcome. In order to do this, we'll need to convert the Unix timestamps to a more readable format.

Now we've looked at the different categories and compared countries of origin, which has provided a lot of insight into Kickstarter campaigns. Now let's consider time, or more specifically, whether the length of a campaign makes a difference in determining its success. For example, is a shorter or longer campaign more effective? Is there a certain time of year when campaigns tend to be more successful? We have the data, so let's find the answers.

Convert Unix Timestamps to Readable Format

Look at the Deadline and Launched_at columns in your worksheet. The data in these columns is not exactly easy to read. They contain Unix timestamps, which measure time as the number of seconds since midnight of January 1, 1970. While interesting, these timestamps are not exactly something we can use easily.

Thankfully, Excel helps us convert these timestamps into a day-month-year format that we can interpret. For this conversion, we'll need to use another formula.

In a new column (S), add the heading "Date Created Conversion." Then, enter the following formula, making sure that J2 is replaced with the first data cell of the Launched_at column:

```
=(((J2/60)/60)/24)+DATE(1970,1,1)
```

Let's break this down.

- `=` tells Excel that we're using a formula.
- `((J2/60)/60)/24` iterates the following: cell J2 (the first cell in the Launched_at column) divided by 60 (seconds), then divide that by 60 (minutes), then divide that by 24 (hours).
- `+DATE` tells Excel that we're using the DATE formula as well.
- `(1970,1,1)` is the date that the Unix timestamps began counting from, also known as the **epoch**.

After applying the formula to the column, change the format of the column from General to Date. Human-readable dates should fill the column cells.

Essentially, we're using the formula to figure out how many days, minutes, and seconds the timestamp translates to, and then we're adding it to the January 1, 1970 date. It's a little confusing, but it adds up to the actual time of the campaign launch.

[SHOW HINT](#)

Follow these same steps to create a Date Ended Conversion column (T).

Input the same formula, but change J2 to the first cell of the Deadline column (I2). Test the formula on the first cell to ensure the conversion goes smoothly, and then apply it to the rest of the column.

Create a New Pivot Chart

Now that we have a date range for each project, let's create another pivot chart. This time, instead of a stacked bar graph, we'll use a line chart to view the data. Filtering by parent category and years, we will want the Columns value to be "outcome," Rows value to be "Date Created Conversion," and Values to be "outcome." Note that when "outcome" is placed in the Values box, it will be renamed "Count of outcome."

[SHOW HINT](#)

NOTE

In some versions of Excel, Outcome should be dragged to "Legend (Series)" and Date Created should be dragged to "Axis (Categories)."

The steps for setting up a pivot line chart are similar to those followed to create stacked bar charts:

1. In the Kickstarter sheet, create a new PivotChart.
2. Rename the new sheet "Outcomes Based on Launch Date."
3. Right-click the chart image and hover over "Change Chart Type."

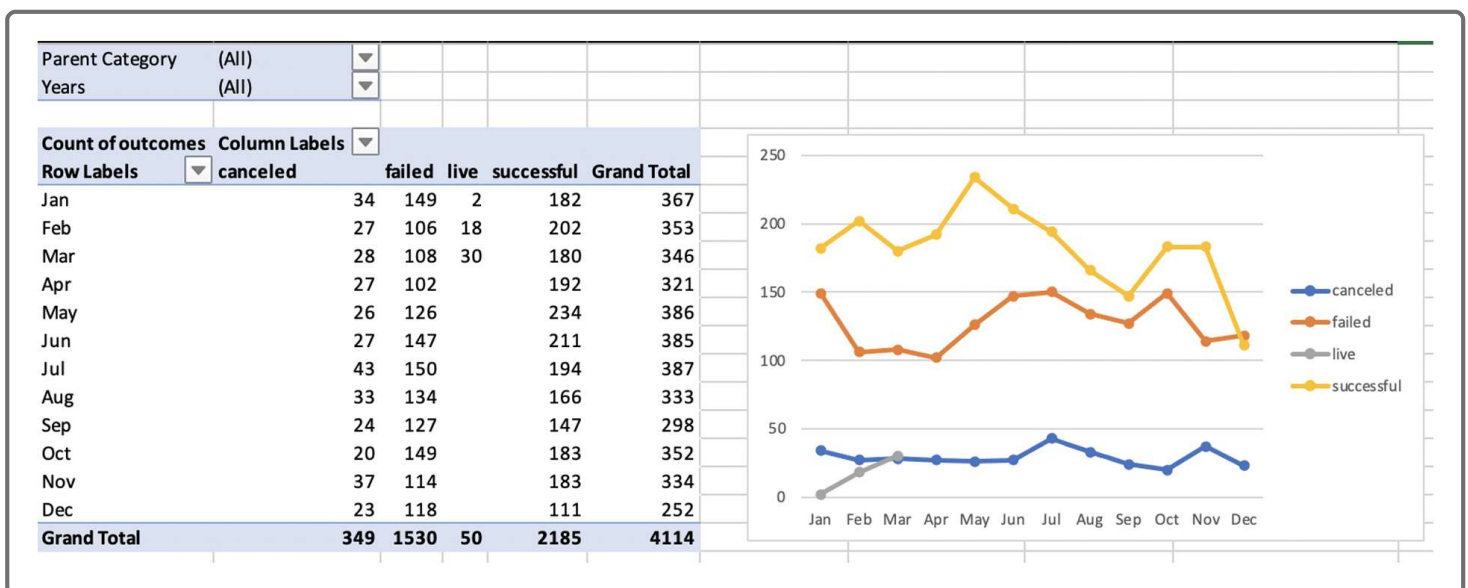
4. Select "Line" from the pop-up menu.

5. Select the "Line with Markers" chart type from the next pop-up menu.

NOTE

Some versions of Excel automatically parse the dates when pivot tables are created. This means that additional columns may be created without additional input from the user.

Line charts are helpful when trying to determine trends. We can see by looking at our new chart that the months of May and June both have a greater success rate.



A bar chart wouldn't be able to convey this information in the same manner, so it's important to keep in mind the type of data story we want to tell.

Save this image in your project folder so we can add it to our report later.

FINDING

The month that launched the most successful Kickstarter campaigns was May. However, January, June, July and October all had roughly the same number of failed campaigns launched. This can be determined by examining the points along the trend lines of the chart. As you hover over each point with your mouse pointer, a tooltip appears with the corresponding information.

© 2023 edX Boot Camps LLC