

## Background

In this technical assessment, we'd like to see what insights you can get using a sample of production data for translation work done at Welocalize; and *how* you do so; and how you talk about it.

Please **read this entire document**, including all the "Exercises" and how to create your "Submission," **before** beginning on any one exercise. If you have any questions/concerns about how to complete this assessment, please email [kevin.havice@welocalize.com](mailto:kevin.havice@welocalize.com) right away.

You will receive a dataset in an Excel file named "welocalize\_dataset.xlsx"...

- The "readme" worksheet of the file describes the data (column definitions).
- The "data" worksheet contains the raw data.

## Exercises

Welocalize is interested in understanding how frequently we deliver to our customers on time, vs. how frequently we are late. And what factors contribute to our on-time delivery (OTD) rates. And how we can do better at delivering on time. We'd also be interested to know what other insights you can derive from this data (not necessarily related to OTD rates).

**Instructions:** please complete the following five exercises.

Items **highlighted in this blue/teal color** describe data products/visualizations that you will build.

Items **highlighted in this yellow color** describe information to present to Welocalize. In a subsequent interview section, you will "role play" and present your answers to these things, as if you were an analyst working with your stakeholders. For each yellow item, be prepared to give a verbal response during the subsequent interview session.

There are no right or wrong answers! We are interested in testing your creativity, analytics fundamentals, technical knowledge, communication, and connecting data to people/processes/business outcomes.

1. **Describe the tools you used** to generate the following results. And, as much as possible, in all subsequent exercises, **be prepared to show any "code"** or anything else that demonstrates *how* you completed the exercise.
2. **Develop and show** at least 3 different data visualizations showing how Welocalize performed in terms of OTD rates (how frequently we deliver on time vs. late). Consider how these OTD rates are correlated with other attributes/variables from the dataset. **Be prepared to explain how you calculated OTD rates; what the visuals demonstrate; and what are the most important conclusions you drew from the data.**
3. **To discuss:** imagine you are contributing to an initiative to improve OTD performance at Welocalize. Brainstorm and tell us what you and the team might *do*, based on your insights from #2, above. What questions might you ask? Who might you involve? What are some potential actions that Welocalize might take, to improve OTD performance?
4. **To discuss:** did you encounter any data quality issues in the dataset? If so, what were they? And how did they impact your analyses in the other exercises? What would you do about issues like these, in the "real world?"

## Submission:

Send your completed exercises back to Kevin Havice (kevin.havice@welocalize.com). **The analytics/visualization tools you use, and the format of your response, are up to you.** For example...

- For data visualizations, you could use Power BI, Excel, Tableau, Qlik, Python, R, or anything similar.
- For your submission of the blue/teal items, you could...
  - Provide the responses within a Power BI or Excel file (though if possible, we'd like you to use some analytics/visualization tool other than Excel).
    - Please include the .pbix file, if you use Power BI. (We can open it using Power BI Desktop.)
  - Or, write narrative and paste screenshots into this Word document, under each question/exercise above.
  - Or, narrative/screenshots could be put into a slide deck (such as PowerPoint) for you to present.

But please do not include any other "file types" that require special software. (Because we might not have that software.)

**Again, if you have any questions/concerns about this assessment, you are encouraged to ask by emailing [kevin.havice@welocalize.com](mailto:kevin.havice@welocalize.com)**