Culminating Assignment

Overview

For your culminating assignment, you will assume the role of a data analyst tasked with analyzing employee attrition for a fictional business. The company's CEO is concerned that too many employees are leaving and wants you to help her understand more about why attrition is occurring. She would also like your recommendations for possible solutions to the issues you identify.

Your final dashboard should consist of no less than four objects (i.e., graphs, charts, maps, and/or tables) that are interactive and adhere to design best practices. Titles and labels should be clear and descriptive. Include concise instructions if specific abilities (e.g., filtering, highlighting, drill-down) are available through the object.

You will use your completed dashboard to record a 10-minute presentation for the CEO. In this presentation, you will screen share your dashboard and use it to walk the CEO through the key findings of your analysis. You will also make data-driven recommendations for strategies the company might implement to reduce attrition.

You have a great deal of flexibility in where you go with this assignment. There are many variables to explore, and there is no one "right" solution. Give yourself time to understand and explore the data and work through any technical challenges you might encounter. This assignment is as much about the journey as the destination. Only once you have a sense of the story you want to tell should you begin to develop and/or fine-tune your final dashboard for submission.

Assessment

Your grade on this assignment will be determined as follows:

- Meeting the assignment's minimum requirements (25 pts.)
- Appropriateness and design of the graphs, charts, and/or tables depicted in the dashboard (100)
- Formatting and labeling of the dashboard and objects (20 pts.)
- Effective and appropriate use of colors and shading (10 pts.)
- Coordination of objects in the dashboard using filters/dashboard objects as filters, and/or highlighting (20 pts.);
- Quality of analysis (25 pts.)
- Quality of recommendations made (25 pts.)
- Quality of presentation (25 pts.)

Getting Started/Minimum Requirements

- Download the **Employee Attrition** CSV file from D2L, then open Tableau to connect to the CSV file. Save your file as a packaged workbook named: **LastName_Assignment.twbx**
- Create a minimum of two calculated fields of your choosing to use in your analysis.
- Set the appropriate default properties for the measures you use in your analysis. You are not required to set the default properties for every measure in the dataset, but you must set them for

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all measures you use in your analysis. **This is critical to your ability to interpret the data correctly**. Setting the appropriate properties refers to both applying number formatting and selecting the proper default aggregate statistic for a given measure. The following table provides a list of the measures contained in the dataset, their descriptions, and an explanation of values where necessary:

Field Name	Description
EmployeeNumber	Unique ID for each employee
Age	Age of employee at the time of data collection
Attrition	Documents whether or not an employee left the company: • Yes – Employee left the company • No – Employee is still with the company
BusinessTravel	Indicates the extent to which an employee is required to travel for work
Department	Department in which the employee works
DistanceFromHome	Distance the office is from an employee's home (expressed in miles)
Education	Describes the employee's level of education • 1 – Below College • 2 – Some College • 3 – Bachelor • 4 – Master • 5 – Doctor
EducationField	Employee's educational field (i.e., their major)
EnvironmentSatisfaction	Indicates the extent to which an employee is satisfied with their work environment • 1 – Low • 2 – Medium • 3 – High • 4 – Very High
Gender	Employee's gender
JobInvolvement	Indicates the extent to which an employee feels that their job is central to their identity • 1 – Low • 2 – Medium • 3 – High • 4 – Very High
JobLevel	Indicates the responsibility level and expectations of roles at the employing organization • 1 – Entry Level • 2 – Mid-Level Junior • 3 – Mid-Level Senior • 4 – Middle Management • 5 – Senior Management
JobRole	Employee's job title/role

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JobSatisfaction	Indicates the extent to which employees feel satisfied in their current role • 1 – Low • 2 – Medium • 3 – High • 4 – Very High
MartialStatus	Indicates whether an employee is married, divorced, or single
MonthlyIncome	Employee's monthly income
NumCompaniesWorked	Number of companies for which the employee has worked
OverTime	Documents whether an employee is eligible for overtime or not
PercentSalaryHike	The percentage by which the employee's salary has increased since joining the company
PerformanceRating	Employee's performance as rated by their manager • 1 – Low • 2 – Good • 3 – Excellent • 4 – Outstanding
RelationshipSatisfaction	Indicates the extent to which employees are satisfied with their relationship with their manager • 1 – Low • 2 – Medium • 3 – High • 4 – Very High
StockOptionLevel	Indicates a level that corresponds to the number of stock options offered to the employee • 1 – None • 2 – Some • 3 – More • 4 - Most
TotalWorkingYears	Number of years worked over the employee's working life (not exclusive to the company)
TrainingTime	Number of hours of job training received
WorkLifeBalance	Indicates the extent to which employees feel as though they have work/life balance • 1 – Bad • 2 – Good • 3 – Better • 4 – Best
YearsAtCompany	Number of years employee has worked at the company
YearsInCurrentRole	Number of years an employee has been in their current role
YearsSinceLastPromotion	Number of years since an employee was last promoted
YearsWithCurrManager	Number of years the employee has reported to their current manager

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Publishing Your Presentation to YouTube

You may choose any platform you wish to record your presentation. Both you and your dashboard should be on the screen for the entirety of the presentation. One suggestion for doing this is to use your Zoom account to record a meeting where you are the host (and the only attendee). The recording of the session will be an MP4 file that you can upload to YouTube as an unlisted video. Please refer to the "How to Upload an Unlisted Video to YouTube" document posted in D2L for instructions.

Wrap-Up

When you have completed your assignment, upload your packaged workbook to the appropriate dropbox on D2L. Post the link to your YouTube video in the comments of your assignment submission.