Employee Survey Analysis

# Background

Leadership is concerned with a recent rise in employee attrition across the Enterprise. They are looking for your assistance in understanding if there are any insights that you can provide in order to assist them in future decision-making. To this end, you extract the latest employee survey data found in the file *Employee\_Survey\_Raw\_Data.csv*, looking for answers.

# Data Description

The data holds 177 anonymous employee responses under 11 different variables. All variables that are of the format “Integer” are ratings (1 thru 5; 1 being the lowest score) to questions posed by the survey. The questions themselves can be found in the “Description” in the table below. There is a total of 8 different questions posed in the survey.

|  |  |  |
| --- | --- | --- |
| Field | Format | Description |
| Executive | Character | The executive vice president that employee reports up to |
| Company | Character | The business that the employee works for |
| Group\_Layer | Character | The layer within the organization structure that the employee resides (Ex. CEO = layer 1; VP = layer 2…) |
| Culture | Integer | My workgroup has a culture in which employees appreciate the differences that people bring to the workplace. |
| Career | Integer | I have good career opportunities at this company. |
| Communication | Integer | This company does a good job of communicating with employees. |
| Growth | Integer | I have good opportunities to learn and grow at this company. |
| Manager | Integer | I would recommend my manager/supervisor to others. |
| Respect | Integer | I am treated with respect and dignity. |
| Team | Integer | I am satisfied with my work team. |
| Satisfaction | Integer | How happy are you working here? |

# Deliverable

You are expected to deliver a short 10-15 minute presentation on your findings and recommendations to leadership, with a brief question and answer period to follow. The presentation itself should be either in PowerPoint or a pdf document which will be displayed to both a technical and non-technical audience.

Of particular interest to leadership is any of the following…

* What group of employees is the company at most risk of losing?
* What are the company’s strengths according to our employees?
* What are the company’s weaknesses according to our employees?
* Are there useful correlations to be drawn?
* Are there significant differences in responses between groups of employees?

Review the survey data using any tool of your choice. Details of your analysis and accompanying visualizations are encouraged to be included in the presentation.

# Additional Information

* Do **NOT** attempt to answer every question. Remember that this is to be a short presentation. The bulleted items are merely suggestions to inspire your creativity. They are not a check list to all be completed
* A successful presentation is one that is able to tell a sensible story, supported by evidence, that concludes with a responsible recommendation for action.
* An unsuccessful presentation is one in which the analyst delivers a flood of unrelated facts and figures that lead to an incoherent story that leaves the audience confused.
* Consequently, bring forth a narrative by focusing on one or two storylines of your choosing. There is no right answer.
* We are most interested in your methods toward a solution, rather than the solution itself. Furthermore, we are interested in seeing how you present yourself and communicate to both a technical and non-technical audience.
* As an aspiring analyst/data scientist, it is our hope that this exercise is a fun way to exercise your analytical muscles and showcase your talent. Allow the data to take you on a journey of exploration, then simply tell us where it led and how you got there. You may surprise us on what you find!

# Technical Information

* One can provide a .pptx or .pdf file of the presentation by way of email to Chris Martin [cmartin@textron.com](mailto:cmartin@textron.com) for the presentation.