# Essentials of HR Analytics

**Course Project**

**Instructions:**

In this project, you will be assuming the role of an HR analyst who has been asked to investigate whether (and if so, how) employee turnover relates to customer satisfaction. You will work on the course project in phases, ultimately creating a five-page slide presentation that summarizes your analysis, findings, and recommendations.

Some portions of the project will provide instruction as well as assigned tasks, so certain parts of your project will be noticeably longer than others. You will also need to use the data file provided in the course for this project. Focus on the specific part (data tab) for each section as you navigate through the course and project.

*Once you have completed all three parts of the project, submit this project document and any supporting documents to your instructor for grading. A* ***Submit*** *button can be found on the Part Three assignment page. Information about the grading rubric is available on any of the course project assignment pages online.* *Do not hesitate to contact your instructor if you have any questions about the project.*

#### **Course Project**

#### **Part One: Review and Analyze HR Data**

**Instructions:**

In Part One, your goal is to become familiar with the data, conduct basic analysis, and complete a series of grids that you will refer back to as you work on subsequent phases of the project.

You should become familiar with the data, then follow the steps and answer the questions in the following charts. Start by reviewing the Excel file provided in the course. Consider the Part One instructions and data in the spreadsheet. Be sure to review the background, issue, and data surrounding the scenario in this case.

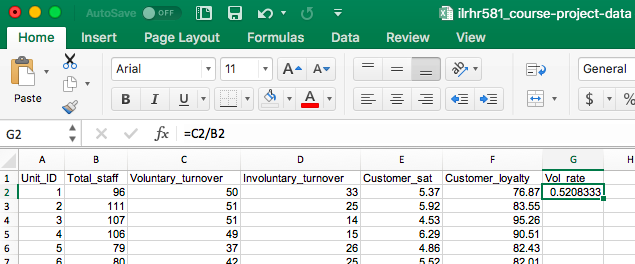
Once you have reviewed this case and the data, complete these steps in your basic analysis:

1. Because each store has a different number of total employees, you will need to create two new columns for turnover *rates* (one for voluntary turnover rate and one for involuntary turnover rate). Highlight cell G2 and enter the following formula:

=C2/B2

This will give you the voluntary turnover rate for Unit 1, which is .520833 (or 52.1%).

Copy and paste this formula down the rest of the column by double-clicking the small square in the lower right corner of cell G2.



Repeat these steps in column H to compute the involuntary turnover rates.

1. Run basic descriptive statistics to calculate the **average** and **median** scores for voluntary turnover rates, involuntary turnover rates, customer satisfaction, customer loyalty, and total staff. Complete the chart below:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Average** | **Median** |
| Voluntary Turnover Rate |  |  |
| Involuntary Turnover Rate |  |  |
| Customer Satisfaction |  |  |
| Customer Loyalty |  |  |
| Total Staff |  |  |

1. Examine the range of scores on the turnover and customer variables. You can use the formula =MIN and =MAX to quickly calculate the minimum and maximum scores. For example, find an empty cell and type =MIN(F2:F216) to find the lowest score on the customer loyalty variable. You will see that the lowest score was 37.27. Find the minimum and maximum scores for the variables listed below:

|  |  |  |
| --- | --- | --- |
| **Variable** | **Minimum** | **Maximum** |
| Voluntary Turnover Rate |  |  |
| Involuntary Turnover Rate |  |  |
| Customer Satisfaction |  |  |
| Customer Loyalty | 37.27 |  |
| Total Staff |  |  |

1. Calculate the following correlations:

|  |  |
| --- | --- |
| **Variables** | **Correlation** |
| Voluntary turnover rates and customer satisfaction |  |
| Involuntary turnover rates and customer satisfaction |  |  |
| Voluntary turnover rates and customer loyalty |  |
| Involuntary turnover rates and customer loyalty |  |

Save your worksheet results. **Stop here.** Return to the course before completing Part Two of the course project. You will refer back to your data and analysis as you complete the remaining phases of the course project.

**Part Two: Conclusions, Insights, and Recommendations**

**Instructions:**

Review the results that you generated while working on Part One of the project. As you do, think about the key insights that emerge from the analysis. Some of these can be descriptive—simply summarizing the key facts about important areas of the workforce or business. Other insights are more about patterns and relationships—how different factors relate to one another. Once you have reviewed the findings, identify three to five key insights that you think are most worth bringing to the attention of key stakeholders.

Use the grid below to summarize your insights. Highlight data/findings as necessary to support your position:

|  |  |
| --- | --- |
| **Top Insights** | **Supporting Data/Information** |
| **Generic Example:**  Scores are improving in the Midwest division | * Although the Midwest division was scoring 3.06 out of 5.00 in Q1, which was lower than all other divisions, by Q4, we see that scores have improved to 3.55, which places them second from the top. |
| **Key Insight #1:** |  |
| **Key Insight #2:** |  |
| **Key Insight #3:** |  |
| **Key Insight #4:** |  |
| **Key Insight #5:** |  |

Next, think through possible recommendations that could help the organization improve going forward. These could be specific recommendations about practices or programs, or could be more general and call for additional data collection and analysis to get at root cause or understand an issue more fully. Summarize your top three recommendations:

|  |  |
| --- | --- |
| **Recommendations** | **Action Steps for HR and/or Business** |
| **Generic Example:**  Conduct a root cause analysis to determine the factor(s) influencing this change in scores. | * Select team to conduct root cause analysis * Determine specific measures and parameters for analysis * Create an action plan to submit to senior leadership |
| **Recommendation #1:** |  |
| **Recommendation #2:** |  |
| **Recommendation #3:** |  |

Save your work. You will refer back to it as you complete the remaining parts of the course project.

**Part Three: Telling the Story**

**Instructions:**

Review the results that you generated while working on Part Two of your project. As you do, generate the key talking points that you want to communicate. Identify and build visualizations around the insights you outlined in Part Two. Then create a PowerPoint presentation to bring together all of the course elements.

1. As you prepare your presentation for key decision makers, limit it to five slides. Be sure to use more than one data visualization to support your recommendations.
2. When you submit your presentation to your instructor, please also upload this file and your Excel file.