MGMT8520

Human Resources Data Analytics

ASSIGNMENT 1: Employment Capital Cost and Value HR Metrics

## **PARTICULARS**

* The question this assignment has you work to answer is how much does our workforce contribute to the profitability of our company? You will use some key employment metrics to help you measure that, which will help increase your knowledge of how HR contributes to a company’s financial position.
* You may do this assignment alone, or in teams of two (2) (1+1, 3-1, 4-2, 13-11, 427,036-427,034, etc.)
* There are four main assignment questions to answer with data in Excel (including some calculations you will have to perform to answer these questions. There is also a 3-slide PowerPoint Presentation where you synthesize your findings.

## **BACKGROUND**

Every Monday morning your company has a manager meeting to discuss ongoing issues and the upcoming week. You have been in the HR position at Headgames Inc. (a manufacturer of inserts for all kinds of helmets) for six months, and you are starting to feel comfortable about your role in the company. Benefits, compensation, job descriptions, all these core HR features are your comfort zone. But when the CEO, John Daily, asked you a couple of pointed questions around human resources, you were stumped. And everyone else in the boardroom knew it. Profits were down, and mangers were looking for ways to cut costs or to improve the revenue on products, and that’s when John Daily turned to you and asked: “What is the total cost of our workforce and how does it contribute to our revenues?”

There were many things you were investigating from an HR perspective, but this wasn’t one of them. You flipped through your notes, checked the company intranet on your laptop, and then said: “Sorry, John, I will have to get back to you with those numbers.”

John said: “If we don’t know what our workforce costs us, how do we know what to price our services at for better revenue?”

The redness you felt in your face was something you never wanted to experience again.

Back in your office you got to work on calculating the required metrics for next week’s meeting.

**HINT: Before using any numbers, use the Excel UNIQUE function to verify that the key columns have correct values – no unexpected values. This is part of data cleaning that you should do with all data *before* your analysis.**

## **CALCULATIONS**

1. Using the workbook EMPLOYEES, and the Employees worksheet, calculate the HCVA (Human Capital Value Added) and the HCROI (Human Capital Return on Investment) using the formulas supplied below.
   1. The formula for HCVA is: HCVA = Operating Profit + Employment Cost/FTE
      1. Operating Profit is in the tab labelled: Operating Profit.
      2. Employment Costs = Pay + Benefits
      3. FTE stands for average number of full-time employees (or full-time equivalents). In other words, if a company has 9 full-time employees and 2 part-time employees who work half days, then FTE would be equal to 9 + 0.5 + 0.5.
   2. The formula for HCROI is: (Revenue – (Costs – (Compensation + Benefits))/(Compensation + Benefits)
   3. The formula for the HCROI percentage is (Revenue – (Costs – (Compensation + Benefits))/(Compensation + Benefits).
   4. The employee base salary is labeled Annual Salary 2020.
   5. The annual bonus in the Job Codes worksheet is the percentage increase on the annual salary. Use a VLOOKUP to help calculate this amount.
   6. The benefits are determined using a VLOOKUP and matching with the benefits plan lookup table. This is a per month value, so you will have to convert it to a yearly cost by multiplying it by 12.
   7. To calculate the metric Revenue per Employee: revenue/no. of employees. Note that only FT & PT employees are counted.
   8. Use the VLOOKUP function to bring in the positions from the jobcode table.
   9. Compensation in the formula includes salaries, benefits, and bonuses.

## **NOTES**

1. The Excel file, Employees Database for HCVA – Assignment 1, contains all the data you will need to perform the calculations.
2. The figures on the Operating Profit tab have been given to you from the Finance department. The U.S. numbers have already been converted to Cdn$.
3. Contract Employees are an Operating Expense not compensation and will need to be added in appropriately.

## **ASSIGNMENT QUESTIONS**

There are four questions you need to answer so that you are prepared for next week’s meeting:

1. What is the Human Capital Value Add for our company? In your explanation explain what this number is, that is, what does it measure?
2. What is the Human Capital Return on Investment for our company? In your explanation explain what this number is, that is, what does it measure?
3. Calculate the Revenue per employee. Compare this number to the HCVA, and explain:
   1. The difference between what the two numbers represent. Do they both measure the same thing?
   2. Do you think one metric is more valuable than the other? Think about this before you answer.
4. Your CFO has provided you with their equivalent figures for a similar U.S. sister division (with similar revenue, expenses, and employee numbers). How does your company compare? What recommendations can you make to your CEO based on the comparisons of HCVA and HCROI between the two companies? Will the issue of reduced revenues be solved through employee layoffs?
5. Evaluate the metrics calculated. In other words, what would you explain to the CEO next meeting? Create a maximum of three (3) PowerPoint slides to highlight your answer to his question from last week’s meeting. Use the presentation notes on each slide to add the text to explain/support your slides where necessary.

## **SUBMISSION**

1. An Excel workbook with all calculations, charts, tables, explanations – all the things you feel you need to create answers the assignment questions.
2. A PowerPoint presentation of 3 slides maximum outlining the findings/recommendations you would stress to the CEO at next week’s meeting. Marks will be given based on your ability to synthesize your answer to three slides. Do not introduce yourself and the topic – the management team know who you are, focus on what you want to say.

## **MARKS (50) but worth 15% of the course mark.**

Q1 10 marks Q4 10 marks

Q2 10 marks Q5 10 marks

Q3 10 marks