

MBA1 – MT5125

Data Analytics - Individual Assignment

Context

You are Senior Data Strategist at Táirgí Déiríochta International, a company producing dairy products from Ireland and selling them all around the world. To perform its activities, Táirgí Déiríochta International is employing a total of 5679 sales representatives spread on 6 continents. The activity was booming, and the company has seen an average of 11% growth over the last 5 years. However, the results from the sales for 2020 have just been published and the Performance of sales representatives, in number of contracts negotiated, decreased by 20% compared to 2019. In parallel, the Turnover of sales representatives increased by 6.5% compared to 2020. The CEO is extremely worried about this situation and asked you to investigate the problem.

After interviewing 6 sales representatives, they all mentioned the absence of Organisational Support as a major cause of dissatisfaction. In order to investigate the influence of Perceived Organisational Support and Turnover Intentions on sales representatives' Performance, you have created a survey, to which 748 of them answered. Perceived Organisational Support, or POS, was measured by a scale of 8 Likert items from "Strongly Disagree" (coded as 0) to Strongly Agree" (coded as 6) by Eisenberger, Huntington, Hutchison, and Sowa (1986). Turnover Intentions, also called TI, was measured by a scale of 5 Likert items from "Strongly Disagree" (coded as 1) to Strongly Agree" (coded as 7) by Wayne, Shore, and Liden (1997). The list of item used in both scales are presented in the Appendix.

Task

Provide to the CEO **a report with the format of an academic research paper** presenting your analysis, results and suggestions to the CEO. Also include a description of your methods to transform, visualise and model the data in order to convincingly communicate your results.

Your academic research paper should investigate **between 3 and 4 hypotheses**.

Write an academic research paper, no more than **6 pages long**, including:

- A short **abstract**,
- A short **literature review** with no more than 5 references which ends with your hypotheses,
- A **method section** presenting your data. Your method section should present how the hypotheses are tested with the corresponding model representation and equation,
- A **result section** including descriptive statistics and inferential statistics,
- A **discussion and conclusion** section which examines the hypotheses and their results,
- A **reference section** listing the academic papers used in your document.

The format of your academic research paper should **follow the style from one of three templates** proposed (see "template_1.pdf", "template_2.pdf", and "template_3.pdf" attached).

Assessment Criteria

Obtaining statistically significant results (i.e., $p < 0.05$), rather than not significant results, **will not lead to a higher mark**. The only assessment criteria are the following:

- Accuracy of variables, hypotheses, model, and equation description,
- Conformity of statistical analyses and results' interpretations,
- Relevance of Tables and/or Figures,
- Overall presentation style.

Report Submission

1. On the MT5125 Loop page, section Assignment
2. In a .pdf file
3. By June 21st, 2021

Note, any page after the 6th page will not be assessed (whatever it is in the appendix or in the main document). Each data attributed to students are unique and will prevent copy-paste of results from another dataset attributed to another student.

References

- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Wayne, S.J., Shore, L.M., & Liden, R.C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82-111.

Appendix

Perceived Organisational Support

1. The organization values my contribution to its well-being.
2. The organization fails to appreciate any extra effort from me. (R)
3. The organization would ignore any complaint from me. (R)
4. The organization really cares about my well-being.
5. Even if I did the best job possible, the organization would fail to notice. (R)
6. The organization cares about my general satisfaction at work.
7. The organization shows very little concern for me. (R)
8. The organization takes pride in my accomplishments at work.

Turnover Intentions

1. I am actively looking for a job outside of my company.
2. As soon as I can find a better job, I'll leave my company.
3. I am seriously thinking about quitting my job.
4. I often think about quitting my job.
5. I think I will be working at another company five years from now (R)