

DSCI 6840 Homework 1

Due: 12:30pm Saturday Feb 10th, 2024. Submit on WebCampus.

Submission format: Any format that can present your results well to the audience, such as Word, Excel, PowerPoint, and etc.

1. File to use: [6840HW_Data.xlsx](#)

Use item description (Column H “*Item description*”) and item value (“*Net in EUR*” in Column U) to do a portfolio analysis for the top 50% items in the category of “IT / Telecommunication” and the top 50% items in the category of “Facility & Office”. Categories are defined in Column K “*First level Category*”. (50%)

Tasks:

- 1) Create one single Kraljic’s matrix for your two portfolio analyses by placing the top 50% items from the two categories accordingly onto the same matrix.
- 2) Briefly discuss the rationale for your portfolio analysis.
- 3) Provide feasible sourcing strategies for each category.

2. **Use ChatGPT** to do the following tasks: (40%).

[Copy pastes your prompts and ChatGPT answers in below.](#)

Task 1

- 1) Find the top 50% items in the category of “IT / Telecommunication” and the top 50% items in the category of “Facility & Office” based on “Net in EUR”.
- 2) Did you see any differences of the Top 50 items created by ChatGPT and your own work from Question 1?

Task 2

- 1) Create a Pareto chart for items in the “IT / Telecommunication” category using value of “*Net in EUR*”. Show your prompt, ChatGPT answers, and the chart created by ChatGPT in below.
- 2) Now manually create the same Pareto chart using Excel for items in the category of “IT / Telecommunication” based on “*Net in EUR*”. Show you work in Excel and copy paste your chart in below.
- 3) Did see you any significant differences between the two Pareto charts?

3. Without doing any portfolio analysis, have a quick look at the top 20 items measured by value for the following three categories:

- 3rd-Party Non-Billable Services
- Billable
- Marketing

What is your initial thought for these three categories? What are the potential problems that jump to your mind? **(10%)**.