

SEEM2460 – Assignment 1

Distributed: Jan 19 (Fri.) 2023

Due: 11:59 PM, Feb 9 (Fri.) 2023. Please submit via Blackboard.

Question 1 (30 points)

Data science is helping transform traditional industries and contributing to the rise of a digital economy. For example, Uber runs the largest taxi business but they do not own any taxi cars. Airbnb runs the largest hotel business but they do not own any hotel properties. Data is a key enabler of their business.

- (a) Please choose ONE of the two options (between Uber and Airbnb) and describe in what ways can data enable the transform the traditional business into a digitalized business. Provide references and citations. In your answer, please describe the nature of the data used, the properties of the data (e.g. the 5 Vs) and how one may derive value from the data. (5 points). Also describe how things work in the transformed business (5 points). Please furnish with references and citations where appropriate (5 points).
- (b) Please find another industry in which such digital transformation is taking place / has taken place. Explain how the transformation works and data science has enabled the digitalized business. The expected answer should cover similar points as in part (a) above. (15 points).

For your report, we do not set a word limit. Up to two pages will be sufficient for a clear description and explanation with cited references.

Question 2 (20 points)

Recall that in lecture, we show a case study of using data visualization to convey major cancer trends. Please select another dataset (e.g. from Kaggle or other sources) and use Tableau (or any other tools) to generate a data visualization based on your selected dataset. (10 points) Please explain what are the key observations that you wish to convey through the visualization (10 points).

Note: If you did not work on your own data visualization / plot, but rather obtain it from elsewhere, or if you did not submit your visualization / plot, you will lose 7 points in your score.

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