**Mnguni Zulu**

**11 September 2023**

**Exercise 1.1**

**Analysis of Riley Newman Interview:**

Riley Newman is Head of Data at Airbnb. He was attracted to Econometrics by the need to understand how real-world events and realities impact on economic theories, modeling and business performance. Econometrics is an application of statistical methods to economic data in order to give empirical content to economic relationships [1]. When referring to his post-graduate work in econometrics: ‘- it was my first experience using data to understand the world around me’. He has worked with many departments in the organization and says that there is a demand for data analysis and visualization in all aspects and departments. He does however make it clear that businesses should not be data-driven but data-informed, pointing out that only data which has been logged can be analyzed - and that of course not all data has, or can, be logged.

It becomes clear that Mr. Newman believes strongly in cross-disciplinary cooperation, as a means for fostering the acquisition of new skills as well as ideas. This is seen as a source for new ways of collecting, transforming and presenting data. Although he is not against sourcing new data collection methods, it becomes apparent that he believes that existing internal data, when used correctly is the simplest, most accessible and affordable way to drive organic growth of a business. This means relying on data generated by users of the application and website. Looking deeper at existing data, transforming this data and even finding new ways to map or view this data can lead to the identification of new opportunities and strategies for growth. Mr. Newman continually encourages the acquisition of new skills into his teams and across the organization.

**Personal Reflections on 10 Industries Redefined by Big Data Analytics**

My interests in the possible applications of data analysis are diverse, but the industries which grab my attention immediately are retail, transport (including automotive design) and software and applications. I am specifically interested in how data could help us design, develop and implement better products and services in the abovementioned fields. These are industries which generate significant environmental waste or conversely have the opportunity to eliminate it. Using data can help us improve decision making, reduce waste and increase overall customer satisfaction.

Whenever products or services leave a customer wanting, or are not available to a customer at the right time, place or format, waste is generated. This negatively affects both business profits as well as the environment. A good example of this is the waste generated by ‘fast fashion’, where millions of garments end up in landfills. I believe that this represents the opportunity to use Big Data as a tool for improvement.

**References**

[1] M. Hashem Pesaran (1987). ‘*Econometrics*’, The New Palgrave: A Dictionary of Economics, v. 2, p. 8 [pp. 8-22]

[2] Dave (2013) ‘Off the Charts: An Interview with Riley Newman, Head of Analytics at Airbnb’ , Chartio, accessed 11 September 2023, <https://chartio.com/blog/riley-newman-interview/>

[3] OECD/ITF. 2015 ‘*Big Data and Transport: Understanding and assessing options*’