Abstract

Data science has been defined as the ability to gather, manage, translate, and communicate data in an effective way (Berkeley School of Information, 2020). Or simply, data science is the study of extracting value from data. With the great advances in computing power, storage and networking, numerous facets of social, business and industrial activities are moving on-line. This has ignited, and provided rich ground for data science related research, often interdisciplinary in nature, bringing together data scientists and domain experts to collaborate. The purpose of setting up a Data Science Research Centre for Social Policies and Services is to promote and support data science related social sciences research in our Institute.

While a lot of the successes with data science research are in the e-commerce and social media areas (e.g. recommendation systems), considering the strengths of our Institute as the largest provider of social work degree and sub-degree programmes and in accessing the extensive services of our partners and sponsoring body, which is one of the largest NGOs in Hong Kong, we propose to focus (at least initially) on supporting research in the areas of social services and policies. This focus can be considered part of the "Smart City" that governments worldwide are driving for. City services, whether carried out by government, NGOs or commercial entities, are increasingly supported by digital platforms that can systematically collect data, which can be used to enhance these services and relevant policies. The term "Smart X" is often used to describe a service (X) that smartly applies data science in its operation. Our goal is to do research to help make many of the social services "smart".

To achieve these objectives, the Data Science Research Centre for Social Policies and Services aims to provide the following resources: (a) Centralised computing resources that can be used for research projects, and storage of data that can be made available with controlled access, (b) Data Engineers who will help manage the data, clean the data for sharing, and offer some data science programming training on need basis, and (c) Organize seminars and workshops, to inspire data science based research, and enable our researchers to share their experiences. More importantly perhaps, the Research Centre will help get research projects started by liaising between researchers and data providers and providing the often-necessary consulting and data engineering support. The Research Centre also aims to provide some suitable topics and data for undergraduate student Capstone projects, involving outside social service workers as appropriate. This can greatly help students get prepared for the workforce after they graduate, and the higher calibre students can even be hired by the Research Centre as interns when the needs arise, and funding is available.

The success of Data Science Research Centre for Social Policies and Services in connecting the interesting practical research problems with the data needed for addressing these problems will attract research collaboration with academics in other tertiary institutions locally or beyond. Such collaboration will be very helpful for improving the research capacity of self-financing institutions by generating a larger collective critical mass of research.