Research Assessment Exercise 2020 Impact Overview Statement

University: The Chinese University of Hong Kong Unit of Assessment (UoA): 22 Total number of eligible staff of the university in the UoA: 44

(1) Context – context for the individual case study(ies)

The main non-academic user groups, beneficiaries, and audiences of the Business UoA are business enterprises, government, and the general public who can enjoy improved goods and services resulting from our business research. The resulting benefits may range from substantial financial gains or expanded business opportunities of a small number of companies to governmental projects that bring large scale important social services and benefits to the public.

The "Online Advertising Market" project starts with a general search engine optimization algorithm, which brings in more efficient and effective analysis of search data to satisfy the individual needs of customers. On top of marketing information that is tailor-made for each search customer, this project brings in tens of millions of financial income to the most important search engine provider in the PRC including Baidu (the Google equivalent in China) and Beijing Percent Info Tech Co.

The "Internet of Things (IoT)" and Airfield Service System (AS2) project use sensors to capture unstructured data in the Hong Kong International Airport (the sole public international airport in HK) so that aircraft take-off and landing so that safety and efficiency can be improved. The same research outputs are used in Hong Kong Air Cargo Terminals Limited to use mobile sensors for identifying the clients' whereabouts and big data analytics to improve scheduling of cargo collections.

The "Career Counseling and Guidance Service" project stimulated large-scale free-of-charge career choice inventories, personality assessment inventories and emotional intelligence training kids provided by the Hong Kong Labor Department to help young school graduate in their career search. Since its commencement in 2008, the career counseling project has benefited more than 700,000 users in their job search process.

(2) Approach to impact – the unit's approach to impact during the assessment period for impact

For projects that focus on individual companies and organizations, the PI would get into direct contact with the participating companies and provide consulting services to them in the actual implementation of the research outputs. For the "Online Advertising Market" and the "Internet of Things (IoT)" project, Prof. Zhang and Prof. Cheung are the sole consultant responsible for the technical design and research outcomes supporting the whole project. For the "Career Counseling and Guidance Service" project, Prof. Wong is the person who develop the whole set of testing instruments as well as its validation and implementation. Our PIs also monitor news media constantly to check the actual impact of their project. They arrange meetings with potential interest parties to seek their attention and possible adoption of the research outputs. The UoA also organize meetings and conferences and invite business leaders to participate so that they can have an experiential and in-depth understanding of the practical impact of our research outputs.

(3) Strategy and plans – strategy and plans for supporting impact

Our UoA promotes the impact of our research actively through various strategies. First, we have a special unit called CBK, which core activity is to employ a proactive approach in disseminating and publicizing our research work to the business sector, media, and community through our online platforms and organizing public forums regularly.

Second, we created a new Associate Dean in Impact & Innovation position in 2018 and leverage on Faculty resources to support cross-disciplinary research centers and projects. This Associate Dean's sole responsibility is to foster a general impact-sensitive culture within the UoA, to ensure that research outputs of the UoA would create actual impacts, and to provide direct and on-hand advice and assistance to PIs of impact cases.

Third, we provide substantial internal funding and seek money for PIs to promote the impact of their projects. The PIs used the granted money to hire research assistants to search for impact data. PIs also hire assistants to buy time and provide teaching and research relief so that they can devote more to improve impacts of their research. Recently, we launched funding to support post-doc students to participate in projects with high impact. The PI of the "Online Advertising Market" project has applied for this post-doc scholarship in his project.

Fourth, we have at least one research center within each department under our UoA. The core job of these research centers is to conduct high-quality academic research with strong business practical implications. The UoA has another group called APIB, which serves as the umbrella structure to house research units as well as the executive education/consultation arm of the UoA. The APIB, therefore, works as a middleman to bridge PIs of our research and business executives in the market.

Finally, research impact creation is a group effort instead of individual jobs of the PIs. We involve everyone in the UoA in the planning, selection, and revision of the impact research. Each department under the UoA is required to nominate potential projects with high impacts. The department chairs are responsible for the coordinating job and cultivate an impact-creation culture within their unit. We also organized regular meetings for all the PIs and department chairs to discuss progress and rooms for improvement of each selected impact project.

(4) Relationship to case studies – the relationship between the unit's approach to impact and the submitted case studies

In the "Online Advertising Market" project, Prof. Zhang serves as a consultant to design and implement the internet search algorithm. As shown in the letter of support by Percent Ltd. And Baidu, Prof. Zhang plays a key leader role in the technical design of the whole project. In the "Internet of Things" projects, Prof. Cheung serves as a consultant in the whole process of design and implementation of the setting of sensors for information gathering in the Hong Kong International Airport and Hong Kong Cargo Terminal Ltd. The whole AS2 project is commissioned by the Hong Kong international Airport to Prof. Cheung and CUHK is the sole developer of the whole AS2 project. In the "Career Counseling and Guidance Service" project, Prof. Wong is the leading person who provides advice to the Labor Department in the design of the whole career counseling kit and program. Prof. Wong was invited by the Labor department of Hong Kong to start the project and is, again, the sole developer of the whole project as well as the chief agent responsible for execution of the project.