

FROM DATA TO INSIGHTS TO VALUE IN GLOBAL ASIA: DEVELOPING A TRANSLATIONAL APPROACH BASED ON THE SOCIAL INFORMATICS PERSPECTIVE

STATEMENT OF RESEARCH PROJECT

This PhD project addresses the research question of “How to turn data into insights and translate insights into value?” This research question will be addressed by developing a translational approach for the global Asia context, accounting for multiple Asian cultures as well as influences of global connections. The translational approach will specify the translation process, activities, stakeholder roles, and a scaffolding toolkit useful for a multicultural context. The approach is to be developed based on the social informatics perspective and theories of robust action and systems thinking. Following the action-design-research method, the approach will be evaluated and refined through actual applications in knowledge-intensive endeavours such as robotic process automation, product innovation, service enhancement, and disaster rescue. Quantitative and qualitative data from multiple sources will be collected for the evaluation.

Despite myriad advancements in data management technologies and data analytical techniques, there has been a lack of studies on the process and tools for translating data into insights and value. The translational approach developed in this study will help to connect the missing link, thereby contributing to both research and practice of data analytics. Its focus on the multicultural, global Asia context also addresses a harder problem of the translation, as multicultural communication and knowledge integration is typically more arduous. Singapore epitomises multiculturalism and is therefore an ideal location for the study. Developing the translational approach is, by nature, interdisciplinary, because it requires knowledge of data analytics, information science, and knowledge of the application domain. The project poses a great opportunity for developing a PhD candidate into an interdisciplinary researcher that is capable of conducting rigorous research with practical impact.

SCOPE OF WORK FOR SELECTED PHD STUDENT

Under the guidance of the supervisors, the PhD student will develop the data-insight-value translational approach based on the social informatics perspective and robust action theories, and propose scaffolding tools for the approach using systems thinking theories. The student will also work with practitioners in knowledge-intensive organizations to implement the proposed approach and collect feedback for refining the approach. The student will have the opportunity to lead and organize a small team of part-time research assistants in data collection and analysis, as well as developing an automated online tool for the translational approach. Throughout the project, the student will learn how to effectively record and report research findings for dissemination in academic publications.