Notice of the Final Oral Examination for the Degree of Master of Science of

ROBERT HART

BSc. (University of Alberta, 1986)

“Extending Dimensional Modeling through the abstraction of data relationships and development of the Semantic Data Warehouse”

School of Health Information Science

October 16, 2017
1:00 P.M.
Human and Social Development Building
Room A202

Supervisory Committee:
Dr. Alex Kuo, School of Health Information Science, University of Victoria (Supervisor)
Dr. Andre Kushniruk, School of Health Information Science, UVic (Member)

External Examiner:
Dr. Alex Thomo, Department of Computer Science, UVic

Chair of Oral Examination:
Dr. Poman So, Department of Electrical and Computer Engineering, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies
Abstract

The Kimball methodology, often referred to as dimensional modelling, is well established in data warehousing and business intelligence as a highly successful means for turning data into information. Yet weaknesses exist in the Kimball approach that make it difficult to rapidly extend or interrelate dimensional models in complex business areas such as Health Care. This Thesis looks at the development of a methodology that will provide for the rapid extension and interrelation of Kimball dimensional models. This is achieved through the use of techniques similar to those employed in the semantic web. These techniques allow for rapid analysis and insight into highly variable data which previously was difficult to achieve.