Notice of the Final Oral Examination
for the Degree of Doctor of Philosophy

of

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MN (University of Manitoba, 1999)
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“Business Intelligence: Assimilation and Outcome Measures for the Health Sector”

School of Health Information Science

Wednesday, December 6th, 2017
10:00 a.m.
Clearihue Building
Room B017

Supervisory Committee:
Dr. Abdul Roudsari, School of Health Information Science, University of Victoria (Supervisor)
Dr. Karen Courtney, School of Health Information Science, UVic (Member)
Dr. Kathryn Hannah, School of Nursing, UVic (Outside Member)

External Examiner:
Dr. Karen E. Furlong, Department of Nursing and Health Sciences, University of New Brunswick

Chair of Oral Examination:
Dr. Kristen Semmens, Department of History, UVic

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

Increased adoption of health information systems in clinical practice has set a foundation for use of this data for Business Intelligence (BI). BI is the use of specialized tools to collect, analyze, and present organizational data to operational leaders in user-friendly formats to support organizational objectives. This is a routine component of management practice in sectors such as finance and manufacturing but has not yet reached its full potential in the health sector where limited availability of BI systems and factors such as data quality, complexity, and access to data have been identified as barriers. Correspondingly, there are no established conceptual models for measuring successful adoption of BI in the health sector. This dissertation study proposes a Business Intelligence Benefits Model for Health derived from frameworks used in other sectors and establishes health sector measures for two foundational constructs, BI Assimilation and Health System Organizational Performance. Through an online Delphi consensus process involving 25 Canadian health leadership panelists from four provinces, the study establishes a total of 30 concept measures for these constructs. Only seven (23.3%) of the concepts identified by the panelists in the study are reflected in an established non-health sector framework, the Business Value of BI Model, validating the need for sector specific measures. The study also compares priorities between leadership groups: top management team versus operational managers; and, leaders with a nursing related portfolio versus those without. The comparisons demonstrate variations among these groups but consistency in requirements overall. Establishing these BI constructs for healthcare is a precursor to measuring BI success and informs priorities and approaches for BI implementation as well as further instrument development.