

**Exploring a Paradigm Shift: An Australian Case Study
of the Adoption of Multimedia Occupational Health,
Safety and Environment Inductions**

By

Rodger Wright, MSc

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I declare that this thesis is my own account of my research:

Rodger Wright:

ABSTRACT

Despite research suggesting the superiority of face-to-face communication in the transmission of vital information and contrary to the lack of productivity/profitability evidence for IT in general and multimedia in particular, classroom style Occupational Health, Safety and Environment (OHSE) inductions in Australia are increasingly being replaced by interactive multimedia. The research described in this thesis investigates this trend. On the practitioner side, it contributes to the knowledge base of OHSE and multimedia professionals and practitioners by describing the paradigm shift to the use of multimedia in OHSE inductions. The research describes current practice including the delivery media and content of the inductions. On the theoretical front, this research uses the data collected in achieving the practice-oriented objective to test theoretical aspects of the paradigm shift to the use of multimedia in OHSE inductions. Case study data was collected from 21 adopting organisations that were paired across industry sectors. The data included personal interviews with the OHSE managers and analysis of their multimedia OHSE inductions. A number of theoretical platforms were tested including Technology Push/Market Pull, Unique Selling Propositions (USP), Product Positioning, the Technology Acceptance Model (TAM2), Media Richness Theory (MRT), the Productivity-Profitability Paradox (PPP) and the role of Disruptive and Revolutionary technologies in paradigm shifts. Adoption by others (the ‘herd’), Demonstratability, Job Relevance, Image and Output Quality were identified as important change factors. The PPP was both contradicted and supported – multimedia was found to be very cost effective, but on the other hand ‘profits’ were traded away before they hit the bottom line. Major factors in influencing enterprises to ‘take the leap’ were transaction efficiency (more inductions, employing less infrastructure, delivered in less time) and the superior consistency of multimedia delivery.

Keywords: Occupational Health, Safety, Environment, Paradigm Shift, Multimedia, Technology-Push, Market-Pull, USP, Product Positioning, Technology Acceptance Model, TAM, Media Richness Theory, MRT, Duty of Care, DOC, Productivity Paradox, Profitability Paradox, Information Productivity, Transaction Efficiency

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