

This topic is “practice ready.” Yes No

Framework for Research & Technology Implementation in the UK Rail Industry

Ross Welham¹, Taku Fujiyama², and Meena Dasigi³

Abstract

Implementation is a requirement for any technological innovation and in the UK rail industry, there has been an inherent issue transferring from research to industry. This study has identified three highly influential and interconnected factors that are integral to the implementation of research and technologies into the UK rail industry. Using multiple detailed case studies to develop an understanding of how the UK rail has implemented research and technologies in both the past and present has enabled a framework around these three factors of implementation to be developed. This framework consists of three main factors; Stakeholder Management, Technology Management and Human Behaviours, which have proven to have a deep influential relationship with one another. This framework is currently being tested against a UK rail research project which has brought together both academic research and industry in collaboration and mutual benefits. This study has found that these three factors interlink and play a vital role in the implementation of technology innovations in the UK rail industry and that following the results of the framework process could increase the may increase of successful implementation and a reduction of the inherent complexities of large multi-organisational industries and would thus increase the technology transfer of research to industry.

Keywords: Implementation—Framework—Research—Technology—UK Rail

¹ Ross Welham; University College London; Gower Street, London, United Kingdom, WC1E 6BT; phone 020 7679 2000; email: ross.welham.14@ucl.ac.uk

² Taku Fujiyama; University College London; Gower Street, London, United Kingdom, WC1E 6BT; phone 020 7679 2000; email: taku.fujiyama@ucl.ac.uk

³ Meena Dasigi; Network Rail; The Quadrant, Elder Gate, Milton Keynes, United Kingdom, MK9 1EN; phone 07917 577940; email: meena.dasigi@networkrail.co.uk