Chapter XIV Diffusion of Innovations Theory: Inconsistency Between Theory and Practice

Francisco Chia Cua University of Otago, New Zealand

Tony C. Garrett *Korea University, Republic of Korea*

ABSTRACT

The literature review on case study design does not explain how the complex relationships (the issues) in a case study are identified. A top down approach, borrowing from argumentation theory, is a distinct contribution of this chapter which introduces the diffusion of innovations (DOI) as a research problem theory applied to the examination of a business case involving the replacement of enterprise systems by a large risk-averse public sector university in Australasia. The business case document is intended to diffuse the innovation to upper management for funding. But, there is a lack of diffusion study about the business case stage (the process) and the business case document (the outcome) as the construct that affects the innovation and its diffusion. A crucial component of the said diffusion research is designing the case study and mitigating the risks of theory-practice inconsistencies. Critical to mitigating that threat are the complex relationships (issues) that should be thoroughly identified. The context of the research provides experiential practical knowledge and analytical lenses to understand the essential components of a case study and the controversies affecting the rigour in the research design. This makes the top down approach of identifying the issues a good methodological base of designing a single-case study in a particular context. It can be useful to post-graduate and PhD students.

INTRODUCTION

FoxMeyer in United States and Fonterra in New Zealand experienced the unexpected undesirable consequences with regards to replacing enterprise systems. FoxMeyer did not succeed in its Project Delta III which bundled with the SAP R/3 and the Pinnacle warehouse-automation. In Chapter 11 (of the Bankruptcy Code), its gatekeepers claimed that their implementation of the enterprise systems drove them to bankruptcy (Caldwell, 6 July 1998; O'Leary, 2000; Stein, 31 Aug 1998; SAP and Deloitte Sued by FoxMeyer, 27 Aug 1998). They sued SAP and Andersen Consulting for a total of US\$1 billion dollars. The dairy giant Fonterra put on hold its global SAP ERP project called Project Jedi (Foreman, 2007). Project Jedi is supposed to standardise its disparate manufacturing systems in line with its new business model of "One Team, One Way of Working" (Jackson, 2006; Ministry of Economic Development, Feb 2004). Fonterra justified the suspension of the project: first to reduce further capital spending and second to provide its farmer-shareholders a slightly higher dividends (Jackson, 2006). It did not escalate Project Jedi despite of the huge sunk costs of about NZ\$ 260 million from 2004 to 2006.

These consequences highlight a concern in the business case. In large organisations, upper management generally makes accept-reject decision on the basis of a business case. Corporate governance requires a business case for capital expenditure. The innovation could be strategic to a vision or reactive to a crisis. Their executive sponsor explores all options that best fit his strategic or reactive intention and subsequently develops a business case for approval and funding by the upper management. The business case "sells" the innovation. It attempts to diffuse an innovation to the upper management to make favourable accept-reject decision (aka, adoption decision or strategic investment decision). Good business cases sell while the spectacular ones make the upper management over-commit.

An interesting phenomenon. A successful diffusion, that is a good business case, is not necessarily good.

How should the application of the Diffusion of Innovations (DOI) theory be practiced in the context of the business case of replacing enterprise systems? This problem statement has an implication on practice.

Primary problem. What is the most likely application of the Diffusion of Innovations (DOI) theory when practiced in the context of the business case of replacing enterprise systems?

Practitioners gave simpler answers. They asked for practical solutions. On the other hand, academics began with certain premises. Replacing enterprise systems is likely about balancing long-term and short-term achievements, ultimately sustaining growth in the end (Burrell & Morgan, 2005; Dettmer, 2003; Hammer, 1996; Trompenaars & Prud'homme, 2004). It is likely a problem-solving intervention (Thull, 2005) that fosters seamless alignment and comes with a VALUE orientation. The assumptions go on but the practitioners may see them as uninteresting. The practitioners are likely to find a simple framework of a business case that they can use. Here exists the concept of dualism, polarity, or differentiation of practice and theory. Embedded in this concept is a threat of theory-practice inconsistency. Also embedded is a teleology of a theory.

According to Clegg, Kornberger, and Rhodes (March 2004), a theory should facilitate the creation of disturbance to the practice so that the organisation will be able to transform itself. This means that a theory should not be simply a tool to understand a practice. It should help the practice create noises and disturbances so that the organisation can transform. A theory should not only be a thinking hat to understand a worm. Rather, it should somehow help that worm to transform itself

33 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/diffusion-innovations-theory/35834

Related Content

Computer-Assisted Parallel Program Generation

Shigeo Kawata (2018). Encyclopedia of Information Science and Technology, Fourth Edition (pp. 4583-4593).

www.irma-international.org/chapter/computer-assisted-parallel-program-generation/184166

Authentication Practices from Passwords to Biometrics

Zippy Erlichand Moshe Zviran (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 4248-4257).

www.irma-international.org/chapter/authentication-practices-from-passwords-to-biometrics/112867

Sustainable Competitive Advantage With the Balanced Scorecard Approach

Jorge Gomesand Mário José Batista Romão (2018). *Encyclopedia of Information Science and Technology, Fourth Edition (pp. 5714-5725).*

www.irma-international.org/chapter/sustainable-competitive-advantage-with-the-balanced-scorecard-approach/184271

A Conceptual Descriptive-Comparative Study of Models and Standards of Processes in SE, SwE, and IT Disciplines Using the Theory of Systems

Manuel Mora, Ovsei Gelman, Rory O'Conner, Francisco Alvarezand Jorge Macías-Lúevano (2008). *International Journal of Information Technologies and Systems Approach (pp. 57-85).*www.irma-international.org/article/conceptual-descriptive-comparative-study-models/2539

Modeling Knowledge Society

Lech W. Zacher (2015). Encyclopedia of Information Science and Technology, Third Edition (pp. 7192-7201).

www.irma-international.org/chapter/modeling-knowledge-society/112417