

# The Role of Business Case Development in the Diffusion of Innovations Theory for Enterprise Information Systems

**Francisco Chia Cua**  
*Otago Polytechnic, New Zealand*

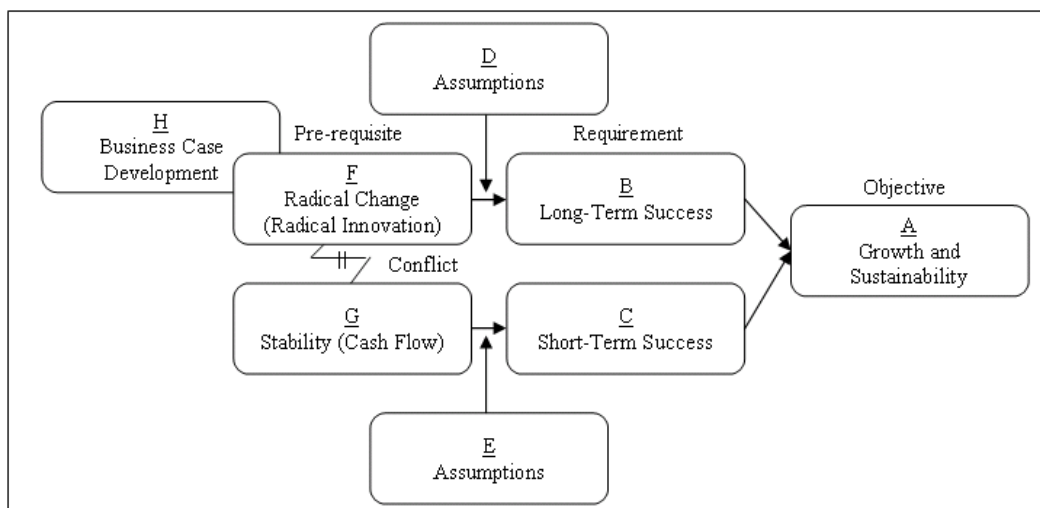
**Tony C. Garrett**  
*Korea University, Republic of Korea*

## INTRODUCTION

A successful organisation continually initiates and implements radical innovations. The innovation must not only be new. A radical innovation has a significant impact on how the organisation undertakes its business process. Impacting is different from affecting. The former has a more substantial effect on the organisation. This is precisely why new enterprise information systems represent a radical innovation. To be successful, the organisation undertakes an innovation-decision process to align itself, as much as possible, with the ever-changing external realities. The **innovation-decision process** dictates selling an idea (the business case) that the new enterprise information systems possess economic value to upper management.

This paper depicts a bird’s-eye view of how innovation, in this case, the new enterprise information systems, diffuses (episteme) via business case development (techne) in the innovation-decision process. As shown in Figure 1, the adoption and implementation of new enterprise information systems constitute a radical change (prerequisite F). New enterprise information systems represent radical innovation. An **innovation-decision process** starts with an **initiation phase** through which the individuals or decision-making units move from identifying and knowing the new enterprise information systems, to the forming of an attitude toward the different competing software packages, and subsequently to deciding whether to adopt or reject the implementation and use of the new idea. A **business case** is a formally written document that argues about the adoption to a certain course

Figure 1. Conflict between radical change and stability



Interpreted from Burrell & Morgan (2005), Dettmer (2003), Trompenaars & Prud'homme (2004)

of action. It contains a point-by-point analysis to making a decision for a set of alternative courses of action to accomplish a specific goal. A **business case process** walks through the **initiation phase** of the innovation-decision process and talks about the project plans that concern the **implementation phase**, which follows the initiation phase. The **business case document** justifies, in detail, the innovation-decision process: what has transpired in the initiation phase and what will transpire in the implementation phase. It takes into account the innovation-decision process. In short, a business case process develops a detailed business case document of the innovation-decision process. Thus, a business case is both a means and an end.

An innovation-decision process is required to foster long-term success (Figure 1; Burrell & Morgan, 2005; Dettmer, 2003; Trompenaars & Prud'homme, 2004). Stability is another factor, that enhances short-term success. The crucial component of stability is the cash flow, the lifeblood of the organisation. Profitability is vital in generating the cash flow. Profitability is a crucial issue to stability, while uncertainty, risk management, and governance are crucial issues to radical innovation. The organisation cannot exploit the radical innovation effectively unless it manages uncertainty, mitigates the risk related to the uncertainty, and governs the innovation-decision process appropriately. Because the innovation-decision process disrupts stability, radical innovation and stability are in **conflict** with each other.

Inasmuch as a business case document must justify the radical innovation and its innovation-decision process, the business case must resolve the many issues and assumptions that affect the radical innovation, stability, and the conflict between them. There are two questions about radical innovation at the broadest level (Borge, 2001; Nadler & Tushman, 2004, pp 554-555; Trompenaars & Prud'homme, 2004). What innovation should the organisation prioritise? How should the organisation carry out the innovation-decision process? The first overriding question concerns the radical innovation (the object of innovation) and the change vision (the expected consequence). The second question assumes that the short-listed options in the business case provide the solution to achieve the change vision. The change vision represents an expected consequence, preceding the innovation-decision process. Another antecedent is the expected bad outcomes to avoid. The proximate trigger and the perceived attributes of the innovation likewise influence the executive sponsor to be in favour or against a certain package (brand) of the enterprise information systems.

The **diffusion of innovations (DOI)** (Rogers, 2003) is the theory of focus. DOI has three constructs: the antecedents, the innovation-decision process, and the consequences, especially the unexpected consequences.

- DOI underscores the antecedents of the innovation-decision process. The change vision, the proximate

trigger, the expected “bad outcome” to avoid, and the perceived attributes of the innovation are important antecedents. There are other antecedents, such as organisational innovativeness, and the external and internal environments.

- DOI draws attention to the innovation-decision process (Baskerville & Pries-Heje, 2001; Bradford & Florin, 2003; Dechow & Mouritsen, 2004, 2005; Dillard, 2000; Dillard, Ruchala, & Yuthas, 2005; Van de Ven & Poole, 1990; Zaltman, Duncan, & Holbek, 1973). DOI consists of the initiation phase and the implementation phase (Rogers, 2003). There are stages in each phase. The initiation phase incorporates the agenda-setting stage, matching stage, and adoption decision stage. The implementation phase of new enterprise information systems includes the preproduction, production, postproduction, and confirmation stages.
- DOI highlights undesirable consequences. The executive sponsor, who is the champion of the initiative to implement the new enterprise systems, acknowledges their success when the information systems go live. Yet research suggests that organisations fail to achieve outstanding bottom-line improvements even after 3 to 5 years of going live (Baskerville & Pries-Heje, 2001). This is **successful failure**, the undesirable consequence of implementing new enterprise information systems. Three illustrations of undesirable consequences are given in Section 2.

This section has stated the prerequisites and requirements to achieve growth and sustainability (Figure 1). It introduces DOI theory, and highlights its three main constructs: the antecedents, the innovation-decision process, and the consequences. Section 2 makes clear and illustrates the undesirable consequences of innovation. The terminologies of DOI differ, but not their essence. The business case is a part of the matching stage in the initiation phase. Understanding the framework of the innovation-decision process simplifies the complexity of business case development. It is particularly useful toward developing a structured approach to writing a business case. Section 2, section 3, and section 4 clarify the concepts and framework of DOI and the innovation-decision process. Section 5 ends with the implications of the business case development (that is, the *episteme* and *techne* of DOI and the business case development).

## UNDESIRABLE CONSEQUENCES

The studies of the villagers of Los Molinas in Peru illustrate an unexpected consequence. The villagers in Los Molinas stubbornly drank water from a canal floating with dead monkeys instead of a nearby tap with clean drinking water. To combat the infections caused by the contaminated water,

8 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/role-business-case-development-diffusion/14066](http://www.igi-global.com/chapter/role-business-case-development-diffusion/14066)

## Related Content

---

### S

(2007). *Dictionary of Information Science and Technology* (pp. 591-667).

[www.irma-international.org/chapter//119580](http://www.irma-international.org/chapter//119580)

### The Use of IT in Small Business: Efficiency and Effectiveness in South Africa

Sam Lubbe (2008). *Information Communication Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 3007-3020).

[www.irma-international.org/chapter/use-small-business/22860](http://www.irma-international.org/chapter/use-small-business/22860)

### Do Information Security Policies Reduce the Incidence of Security Breaches: An Exploratory Analysis

Neil F. Doherty and Heather Fulford (2005). *Information Resources Management Journal* (pp. 21-39).

[www.irma-international.org/article/information-security-policies-reduce-incidence/1279](http://www.irma-international.org/article/information-security-policies-reduce-incidence/1279)

### Information Architecture and Business Modeling in Modern Organizations of Information Technology: Professional Career Plan in Organizations IT

Edilaine Rodrigues Soares and Fernando Hadad Zaidan (2016). *Handbook of Research on Information Architecture and Management in Modern Organizations* (pp. 439-457).

[www.irma-international.org/chapter/information-architecture-and-business-modeling-in-modern-organizations-of-information-technology/135780](http://www.irma-international.org/chapter/information-architecture-and-business-modeling-in-modern-organizations-of-information-technology/135780)

### An Explorative Study of Age Discrimination in IT Wages

Jing Quan, Ronald Dattero and Stuart D. Galup (2008). *Information Resources Management Journal* (pp. 24-38).

[www.irma-international.org/article/explorative-study-age-discrimination-wages/1343](http://www.irma-international.org/article/explorative-study-age-discrimination-wages/1343)