Chapter 1.18
Are Information Systems' Success and Failure Factors Related?
An Exploratory Study

Jeremy J. Fowler
La Trobe University, Australia

Pat Horan
La Trobe University, Australia

ABSTRACT

Although the discipline of information systems (IS) development is well established, systems' failure, abandonment, and dissatisfaction with functioning systems remain widespread. This has generated a considerable amount of literature investigating the factors seen to contribute to IS success and failure. However, little attention has been given to the possible relationships among the factors most influential in IS success and failure. Therefore, we examine the development of a successful system and compare the factors associated with the system's success against the factors most reported in the literature as being associated with systems' failure. Project management practices may be affected by knowing whether success and failure are two sides of one coin or different in nature. The results of our exploratory study showed that four of the six factors identified by the participants in our chosen system as being the most influential in the success of the system were directly related to the factors identified from the literature as being most associated with IS failure. Although more research needs to take place, these results would suggest a considerable relationship might exist between IS success and failure factors.

Copyright © 2008, IGI Global, distributing in print or electronic forms without written permission of IGI Global is prohibited.

INTRODUCTION

The information systems (IS) profession has long been plagued by the failure and abandonment of a large number of IS projects despite the vast monetary and human resources they are regularly afforded. A report by the Standish Group (2001) found that only 28% of IS development projects are considered a success while budget and schedule overruns continue to occur at an unsatisfactory rate. These failures regularly cause businesses of all sizes financial loss and damage to staff and customer morale. Attention to the perceived causes of these failures has produced a slow improvement in the overall success rates of more recent IS development projects (Standish Group, 1999); however, the improvement has been incremental at best.

As well as the extensively documented examination of IS failure (e.g., Beynon-Davies, 1995; Ketchell, 2003; Law & Perez, 2005; Montealegre & Keil, 2000), work has also been done on factors associated with the success of systems, notably the DeLone and McLean model (2003) which has been applied to many cases over the decade since its first publication (DeLone & McLean, 1992).

Despite the widespread research investigating IS success and failure, little research has investigated the possible relationships that may or may not exist among the factors most influential in IS success and failure. This leads us to ask what factors are associated with a successful IS and how do these factors relate to the factors identified in the literature as associated with systems failure? Is success and failure two sides of one coin or are they different in nature?

This article reports on an exploratory study of one organizational case of stakeholders' experiences of a successful IS, and compares factors identified as being associated with the success of the system against a set of factors identified in the research literature as being associated with systems' failure.

This research is important because little previous research has looked at the relationships that may, or may not, exist between IS development success and failure factors. It is also important given the limited research investigating IS development within a regional Australian context. This research could provide important insight for both practitioners and educators on the relative importance of significant development factors both in the success and failure of IS. For example, negative levels of top-management commitment might be a very important factor in the failure of IS, while positive levels of top-management commitment might only be moderately important in the success of IS.

LITERATURE REVIEW

Perceptions of Systems Success and Failure

There is a fundamental difficulty in defining exactly what constitutes IS success and failure. Over the years researchers have identified several perspectives on the term "failure" within the IS context. Sauer (1993) defined a system to have failed if "development of operation ceases, leaving supporters dissatisfied with the extent to which the system has served their interests" (Sauer, 1993, p. 4). He described this definition as being more forgiving than most, given that many authors consider factors such as user-resistance or missed targets and so forth, to be sufficient grounds for describing an IS as a failure. The Standish Group (1994) defines failure as either a project that has been cancelled, or a project that does not meet its budget, delivery, and business objectives. Wilson and Howcroft (2002) showed that given the multitude of descriptions developed by researchers relating to IS failure, almost any project could potentially be considered a failure of some description.

14 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/information-systems-success-failure-factors/18182

Related Content

User Behaving Badly: Phenomena and Paradoxes from an Investigation into Information System Misfit

Panagiotis Kanellisand Ray J. Paul (2008). *End-User Computing: Concepts, Methodologies, Tools, and Applications (pp. 637-657).*

www.irma-international.org/chapter/user-behaving-badly/18213

Information Systems Success and Failure—Two Sides of One Coin, or Different in Nature? An Exploratory Study

Jeremy Fowler (2009). *Evolutionary Concepts in End User Productivity and Performance: Applications for Organizational Progress (pp. 1-18).*

www.irma-international.org/chapter/information-systems-success-failure-two/18641

The Impact of Software Testing Governance Choices

Xihui Zhang, Colin G. Onitaand Jasbir S. Dhaliwal (2014). *Journal of Organizational and End User Computing (pp. 66-85).*

www.irma-international.org/article/the-impact-of-software-testing-governance-choices/108830

TAM or Just Plain Habit: A Look at Experienced Online Shoppers

David Gefen (2004). *Advanced Topics in End User Computing, Volume 3 (pp. 1-15).*

www.irma-international.org/chapter/tam-just-plain-habit/4454

An End-User's Journey of System Use: A Change In Attitudes And Behavior Over a Period

Zahid Hussainand Khalid Hafeez (2011). *Organizational and End-User Interactions: New Explorations (pp. 124-148).*

www.irma-international.org/chapter/end-user-journey-system-use/53088