Chapter I

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

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ABSTRACT

Although the discipline of information systems (IS) development is well established, IS failure and abandonment remains widespread. As a result, a considerable amount of IS research literature has investigated, among other things, the factors associated with IS success and failure. However, little attention has been given to any possible relationships that exist among the uncovered factors. In an attempt to address this, we examine the development of a successful IS, and compare the factors associated with its success against the factors most reported in our review of the literature as being associated with IS failure. This may be an important area of study given, for example, 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 associated with the success of the investigated IS were related to the factors identified from our review of the literature as being associated with IS failure.
INTRODUCTION

The information systems (IS) profession has long been plagued by the failure and abandonment of a large number of IS projects. Recent research figures suggest somewhere in the range of 70 to 80 percent of IS projects are delivered late and over budget, often with missing functionality, while approximately 20 to 30 percent are considered outright failures (Stamati, Kanellis, Stamati, & Martakos, 2005; Standish Group, 2001). In an attempt to improve this situation a large body of research has, among other things, looked at the factors most influential in the success and failure of IS developments (e.g., Beynon-Davies, 1995; DeLone & McLean, 1992; DeLone & McLean, 2003; Ketchell, 2003; Law & Perez, 2005; Montetalegre & Keil, 2000). However, little attention has been given to any possible relationships that exist among the uncovered factors. This leads us to ask, what factors are associated with a successful IS, and how do they relate to the factors identified in the literature as being associated with IS failure? Are IS success and failure two sides of one coin, or are they different in nature? This chapter, therefore, 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 IS against a set of factors identified in the research literature as being associated with IS failure.

It is hoped this research may provide important insight into the relative importance of IS development factors in the success and failure of IS. For example, negative levels of factor ‘x’ might be a very important factor in the failure of IS, while positive levels of factor ‘x’ might only be moderately important in the success of IS.

LITERATURE REVIEW

In the first section of this literature review a brief account of the problems surrounding IS development and evaluation is presented. This includes a brief discussion of the difficulties faced when defining IS success and failure, the high failure rate of IS developments, and the question of when and how IS development outcomes should be measured. The second section then presents a brief overview of the six factors found to be the most regularly associated with IS failure during our review of the literature.

IS Success and Failure: Definitions and Evaluation

Currently, no universally accepted definition of IS failure exists. Over the years researchers have developed a multitude of positions in regards to the term “failure” within the IS context. Sauer (1993), for example, defined an IS 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). Sauer described this definition as being more forgiving than most, given that many authors consider factors such as user-resistance or missed targets etc. to be sufficient grounds for describing an IS as a failure. Alternatively, the Standish Group (1994) defines an IS to have failed if it is cancelled or 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.

Conversely, IS success can also be viewed in a number of ways. Taylor (2000) defined an IS to be successful if it delivered to the sponsor “everything specified to the quality agreed on or within the time and costs laid out at the start” (p. 24), whilst the Standish Group (1994) view an IS to be a success if it meets its budget, delivery and business objectives.
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