

## Chapter 67

# Investments in E-Government: A Benefit Management Case Study

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### ABSTRACT

*The expenses in Information Systems and Information Technology (IS/IT) represent a substantial share in organizations' budgets. However, IS/IT investment projects seem to continue to show reduced success rates. The Benefits Management (BM) has gained relevance as a way, not only, to understand these failures, but also as a tool available to organizations to improve the success of IS/IT investments. The objective of this article is to understand how BM can be applied in IS/IT investments in the Public Administration (PA) and help to leverage the benefits of these investments. A case study was conducted using an e-Government project in the Portuguese PA. The study showed how a BM approach can be applied in this environment and also identified some difficulties that must be considered. Several benefits, that were not foreseen, were identified and evaluated, or proposed some criteria for their evaluation, highlighting, this way, the true contribution of IS/IT investments in delivering services to citizens and increasing public organizations performance.*

### INTRODUCTION

Investments in IS/IT continue to have significant and growing importance in organizations' budgets, with the average organization spending around 3.4% of its revenues (Gartner, 2015). These investments have provided significant transformations in business and productivity gains, but continue to fall short of expectations (Lin & Pervan, 2003). Almost 30 years later, the claim of the Nobel laureate in economics, Solow (1987), over the business value of IS/IT investments, what became known as the Productivity

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Paradox, seems to remain valid. Academics and practitioners argue that projects are a structured way to implement business change. It is thus vital that organizations ensure the success of their projects and, in this way, the success of the implementation of their strategy (Serra, 2015). Most researchers and organizations involved in project management continue to use the iron triangle criterion to evaluate project success (Atkinson, 1999). These are execution and delivery criteria, but the post-delivery phase should also be considered and two additional success criteria must be added, such as the quality of the delivered product, and the benefits to key stakeholders (Atkinson, 1999). DeLone & McLean (2003) redefined their initial framework to evaluate the success of an IS/IT project (DeLone & McLean, 1992) to include the net benefits as one of the six dimensions to consider in evaluating success. According to Ward & Daniel (2012), IS/IT projects have a poor reputation in many organizations, because often these investments fail to deliver the expected benefits. About 70 to 85% of IS/IT investments fail to realize the promised benefits (Ward & Daniel, 2013). The idea that technology alone would bring competitive advantages to organizations has led many of them to spend more on IS/IT (Carr, 2003) than would be desirable, or, at least, to do so in a non-selective way (Serrano & Caldeira, 2002). Managers have felt increasing difficulty in approving their investments in IS/IT (Lin & Pervan, 2003) and also a pressure to justify and measure the contribution of these investments to the organization's performance (Lin et al., 2005). The main objective of this research is to analyse how Benefit Management (BM) applied to IS/IT investments, in particular on e-Government projects, can help to leverage the benefits of these initiatives and thus contribute to the value creation for organizations, citizens and companies. This study is intended to answer to the following questions: (1) How can a BM approach be applied to e-Government projects? (2) What are the main difficulties and constraints? (3) What are the main advantages or benefits? For this purpose, a case study was developed involving an e-Government initiative.

## **BENEFITS MANAGEMENT**

BM was initially developed in the 1980s and 1990s (Breese, 2012) by several authors (e.g. Ward et al., 1996; Remenyi & Smith, 1998; Atkinson, 1999; Farbey et al., 1999) with the focus to justify the significant investments in IS/IT, to which the application of valuation methodologies based on purely financial criteria did not seem to be satisfactory (Ward et al., 1996). Although it is an area of study that has received increasing interest from academics and professionals, it is still a young discipline with a limited number of models and tools that need to be tested (Doherty, 2014).

Organizations aim to create value for their stakeholders. The creation of value is based on the delivery of benefits, whether these are translated into financial return or the provision of public services (ISACA, 2012). The strategic planning of IS/IT aims to align IS/IT investments with the business strategy, with the focus on obtaining competitive advantages and thus maximize the benefits that will be obtained through these investments (Ward et al., 1996). It is also recognized that technology alone does not bring value to the business. Without business and organizational changes, that implement them, there are no benefits and, therefore, change management is also a relevant area that must be considered (Ward & Daniel, 2013). Our study adopted the Cranfield School Approach, developed by Ward, Taylor and Bond (1996), that deals with investments in IS/IT as business projects in which both business and IS/IT stakeholders plan and manage the availability of technology, business and organizational changes that will enable the benefits achievement (Ward & Elvin, 1999).

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