



Chapter VI

The Institutional Dimensions of Information Systems Evaluation

Vassilis Serafeimidis

KPMG Consulting¹, London, UK and University of Surrey, UK

INTRODUCTION

Information systems evaluation is embedded in many social and organisational processes, and thus is a particularly complex decision process. Evaluation happens in many ways (e.g. formally, informally), uses diverse criteria (e.g. financial, technical, social), follows rigorous methodologies or gut feelings and often becomes a political instrument which influences the balance of organisational power.

The existing literature (Ballantine et al., 1995; Farbey et al. 1992; Willcocks and Lester 1994; Ward et al. 1996) identifies noticeable gaps between academic theories, commercially available methodologies, and actual evaluation practice within organisations. Such gaps between theory and practice are not unusual and they have been reported in other research areas. Hsia (1993 p.14) for example argues: "The truth is that most companies have two sets of practices; one real, the other recommended." In other words there are the formal evaluation practices promoted by organisational rules and structures, the informal practices implemented by stakeholders involved, and finally the academic recommendations which in many cases recognise the delicate nature of evaluation and suggest more interpretive considerations.

The better theories tend to emphasise the complexity and richness of the evaluation problem situation or context while the available methodologies tend to oversimplify the process through cookbooks that focus on the more measurable aspects of the outcome of IT/IS investment. Meanwhile, the actual use of such methodologies in practice is often largely determined by the subjective views of individual stakeholders facing a combination of business, organisational and technological pressures.

The reasons for the apparent gaps, I believe, are related to the institutional dimensions of IT/IS evaluation as an organisational process and their limited understanding. The limited consideration of the organisational/institutional context where evaluation is integrated (e.g. the system's development life cycle, the IS management practices) and furthermore, the limited study/understanding of the stakeholders' behaviour (the socialisation) lead to differences (or mismatches) between theory and practice. The lack of appropriate cultural and structural foundations (e.g. organisational learning and maturity, training) could also explain the crisis of utilisation (Legge 1984) of the evaluation approaches.

The above aspects will be the focus of discussion in this chapter. Furthermore, this chapter discusses a series of concepts to be considered in order to build an alternative way of the IT evaluation. The proposed approach focuses on the role of individuals and the roles they play in their organisational context in relation to evaluation. The following section provides a short review of the available approaches in IS evaluation and attempts to justify the rationale for the institutional suggestions. It is followed by my recommendations regarding the various components that need to be considered within the organisational framework of IS evaluation.

WAYS OF APPROACHING IT EVALUATION

Like much IS research, the study of IS evaluation used to be dominated by a positivistic and scientific paradigm (see, for example, Lee et al., 1997; Walsham, 1995a). The traditional (formal-rational or functionalist) conception sees evaluation as an external judgement of an information system that is treated as if it existed in isolation from its human and organisational components and effects. It also places excessive emphasis on the technological and accounting aspects at the expense of the organisational and social aspects. In so doing it neglects the organisational context and process of IS development and its content, elements that are critical to the successful application of IT in support of the business. In general, more attention has been focused over the years on prescribing how to carry out evaluations (with project-driven and cost-focused accounting frameworks) rather than analysing and understanding their role, interactions, effects and organisational impacts (Hirschheim and Smithson, 1988; Smithson and Hirschheim, 1998).

Formal/rational approaches have been challenged for their internal validity and their external ability to generalise in other areas of social research (Legge, 1984). They contribute to one piece of the picture but are not rich enough to describe the complex impacts within organisations. Thus they cannot encompass the uncertainties, risks and context dependencies concerning the value of IS investments to a business that is undergoing often considerable organisational change. Evaluation is a socially embedded process in which formal procedures entwine with the informal assessments by which actors make sense of their situation.

Many authors (e.g., Hirschheim and Smithson, 1988; Iivari, 1988; Walsham, 1993; Smithson and Hirschheim, 1998) argue that IS evaluation would be improved by using an interpretive epistemology. This stance offers a framework for analysis that assists in the understanding and assessment of the meanings assigned by individuals to evaluation phenomena. Interpretive evaluation aims to involve a wide variety of stakeholder groups and to focus on a discourse for learning and understanding. Such designs are driven mainly by the determination of the content according to the organisational context and they are organised around the concerns, issues and actions of the stakeholders. The suitability of interpretive epistemology to the study of IS evaluation is supported further by Symons (1993 p.74) who argues that:

“Interpretive methodologies of evaluation actively analyse the experience of organisational reality, focusing on stakeholder interests and perspectives. ... They increase the effectiveness of organisational activity by ensuring a match between elements of organisational change and the dynamics of organisational culture and politics.”

However, research (e.g., Ballantine et al., 1995; Farbey et al., 1992; Willcocks and Lester 1994; Ward et al., 1996) suggests that most of the interpretive approaches find limited use in practice and they remain among the academic community. The main reasons for that limited success (Serafeimidis, 1997) are around the integration of the interpretive ap-

10 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/institutional-dimensions-information-systems-evaluation/23670

Related Content

ICT Investments and Recovery of Troubled Economies

Ioannis Papadopoulos and Apostolos Syropoulos (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 2337-2344).

www.irma-international.org/chapter/ict-investments-and-recovery-of-troubled-economies/183946

An Optimal Policy with Three-Parameter Weibull Distribution Deterioration, Quadratic Demand, and Salvage Value Under Partial Backlogging

Trailokyanath Singh, Hadibandhu Pattanayak, Ameet Kumar Nayak and Nirakar Niranjana Sethy (2018). *International Journal of Rough Sets and Data Analysis* (pp. 79-98).

www.irma-international.org/article/an-optimal-policy-with-three-parameter-weibull-distribution-deterioration-quadratic-demand-and-salvage-value-under-partial-backlogging/190892

A Case of Academic Social Networking Sites Usage in Malaysia: Drivers, Benefits, and Barriers

Maryam Salahshour, Halima Mohamed Dahlan and Noorminshah A. Iahad (2016). *International Journal of Information Technologies and Systems Approach* (pp. 88-99).

www.irma-international.org/article/a-case-of-academic-social-networking-sites-usage-in-malaysia/152887

Computer Simulation of Particle Packing In Bituminous Concrete

Kasthurirangan Gopalakrishnan and Naga Shashidhar (2009). *Utilizing Information Technology Systems Across Disciplines: Advancements in the Application of Computer Science* (pp. 243-260).

www.irma-international.org/chapter/computer-simulation-particle-packing-bituminous/30729

Testable Theory Development for Small-N Studies: Critical Realism and Middle-Range Theory

Matthew L. Smith (2010). *International Journal of Information Technologies and Systems Approach* (pp. 41-56).

www.irma-international.org/article/testable-theory-development-small-studies/38999