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Information Systems Evaluation: Mini-track Introduction

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Introduction

The ubiquitous nature of Information Systems (IS) and its ever-changing underlying technology is demanding organisations keep abreast of technological innovations. Yet, companies are becoming more aware that a competitive advantage can not be achieved, or even maintained by utilizing the latest technology. Indeed, it is becoming more apparent that a strategic competitive advantage will *not* be achieved through embraced technology alone but, in the way companies approach the evaluation, management and exploitation of their human, organizational and technology based assets and infrastructure.

In support of this, Sohal et al. (2001) reported the results of a large-scale survey that demonstrated the limited Information Technology (IT) enabled business benefits resulting in service and manufacturing sectors.

The survey highlighted that many of the benefits achieved through adopting IT/IS were limited to improvements in productivity and cost alone. Clearly, such results are surprising given the emphasis the normative literature has placed on the strategic benefits achievable from IT/IS. As a result of the far reaching conclusions reported by Sohal et al. (2001), many organisational have begun to question the scope and depth of those IT-enabled business benefits that are *not* achieved by those companies proactively adopting IT/IS.

Information Systems Evaluation

The adoption of new technology remains a prime driver for organizations seeking to improve their short, medium and long-term performance. Yet, the adoption of all-embracing information systems that can be 'rolled-out' through the organization and adequately integrate functionally isolated activities often remains a management panacea.

Much resistance towards the adoption of new technology can be attributed towards the legacy of *failed* intra-organisational information systems (Irani and Love, 2001), and inter-organisational information systems (Sumner, 1999). Indeed, such failure is often evident through the inability of information systems to deliver the business benefits that were used to justify their adoption.

Organizations are also beginning to recognize the plague of indirect costs associated with the adoption of information systems (Irani et al., 1997; 1998; Ryan and Harrison 2000). Indeed, decision-makers and project managers once ignored such costs, often

for political reasons that centered on the need to secure management support. Consequently, these costs were absorbed and dissolved by the company as a whole and amortized into overheads. However, increased accountability and robust project management techniques have together placed cost *identification*, *management* and *control* on the agenda of managers.

It would therefore appear that the efficient and effective management of technology-related costs and benefits are seen as enablers for *strategic*, *tactical and operational* business 'success'. However, many companies continue to overlook the importance of evaluating their techno-centric investments and instead, favor a more *ad-hoc* risky investment strategy that is often nothing more than an 'act of faith' (Kaplan, 1985).

Barriers to Carrying Out an Evaluation

Although there remains a wide variety of reasons to justify investments in information systems, empirical evidence is offered by Irani and Love (2001), Khalifa et al., (2000) and Serafeimidis and Smithson (2000) to support the lack of widespread evaluation processes, financial or otherwise. Table 1 summarizes the barriers that tend to complicate the investment evaluation process.

Table 1. Barriers to Evaluation

Barriers to Evaluation	References
Assessing IT value impact, performance indicators and measures.	Chircu and Kauffman (2000);
	Sircar et al., (2000)
	Irani et al., (2001)
Organisational risk, technical infrastructure management uncertainty.	Alshawi et al., (2000);
	Broadbent et al., (1999)
Learning, communication, and business processes design and reengineering.	Love et al., (2000);
	Laurillard (1999).
Governance, project; size, management and structure, market needs, learning ability	Wilcocks and Lester (1994);
and complexity.	Marosszekey et al. (2000)
	Raymond et al., (1995)
Techno-ware: devices and tools, orga-ware: technology institutions, info-ware:	DIST (1998)
know-how and technical / technological knowledge, and human-ware: human skills,	Vandenbosch and Ginzberg (1997)
expertise.	
IT culture gap, strategic IT challenge and alignment, traditional IT delivery,	Garfield and Watson (1997);
emphasis on output rather than outcome.	
Motivation breakdowns, ability breakdowns, execution breakdowns.	Remenyi et al. (2000);
	Love et al., (2000)
Management's motivation towards the short-term, limitations and generic nature of	Lefley (1994);
traditional appraisal techniques, changing portfolio of benefits and costs.	Irani et al. (1999; 2001)

The increased complexity of information systems combined with the uncertainty and unpredictability associated with information systems benefits and costs clearly point to the need for evaluation procedures. Farbey et al., (1993) suggest that the search for a single 'best' approach is fruitless due to the wide variety of complex interacting variables. Yet, evaluation methods are constantly being propagated by researchers in a hope to find the panacea for the 'evaluation paradox', which organizations clearly face.

Information systems evaluation has *not* been an explicit topic of any recent AMCIS mini-track [other than the mini track organized by Irani et al., (2000)] although isolated papers on information systems evaluation have appeared in several AMCIS proceedings. These papers have been presented while spanning across different mini-tracks, thereby not allowing the information systems evaluation community and interested researchers to readily follow developments in this dynamic and emerging field.

We [mini-track chairs] believe that this specific mini-track on 'Information Systems Evaluation' will be highly beneficial to both AMCIS and the information systems evaluation community. In doing so, it will enable new and different insights of information systems evaluation to be viewed in a more holistic and integrated manner. The idea for organizing a mini-track on information systems evaluation originated from a lack of forum to debate the issues associated with information systems evaluation outside Europe.

Much of the research community feels frustration with having to look through many conference programmes [including those of AMCIS] to find papers that relate to the information systems evaluation area, as a result, this mini-track proposed to go some way in addressing this critical issue.

This mini-track deals with evaluating and measuring effectiveness of information systems. There are four closely interrelated issues that the accepted papers span:

- Benefit, cost and risk management within the value domain.
- Customer expectation and satisfaction.
- Evaluating instruments in information systems/technology; and,
- Managing the effectiveness and scope of technologies.

In addressing these issues, these themes deal with the evaluation and measurement of the effectiveness of emerging technologies, and its implication of the evaluation process. As a result, the purpose of this mini-track is to generate a stream of research oriented toward the study of measuring effectiveness and impacts of information systems. Specifically, in areas were theoretical models may need to be borrowed from referent disciplines, or were models and associated operationalizations have been proposed, or not yet tested [conceptual].

Information Systems Evaluation: Purpose

The information systems evaluation mini-track will help researchers and practitioners understand the processes involved in the decision making of adopting technology in contemporary organizations. Articles that address the justification process necessary to evaluate IT/IS deployments by identifying the constructs associated with investment decision-making are presented. Emphasis has been placed on investment decision-making in the context of business process change and effective capital budgeting. Strategic frameworks, conceptual and analytical models, and case studies of information systems evaluation were encouraged and form the genesis of the mini-track.

It is hoped that this mini-track will encourage the latest thinking and research in information systems evaluation to be presented to a forum of leading information systems professionals and business executives. The mini-track will provide a potpourri of ideas, models, and case studies, which will be stimulating and useful.

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