IS PROJECT EVALUATION METHODOLOGY - SCIENCE OR ART?

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IS PROJECT EVALUATION METHODOLOGY - SCIENCE OR ART?

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Abstract

Pre-investment evaluation of information system project proposals persists in being problematic and highly risky in practice. Numerous evaluation approaches and methodologies, offered in the literature, have not contributed to major improvements in practice. As the literature review shows, these methodologies have assumed an ideal of objective and scientific evaluation and taken the view of methodology as science. In this paper we aim to revisit the notion of IS evaluation methodology in practice and specifically explore the methodology as both the ‘science’ and the ‘art’. We achieve these aims by conducting an Actor Network Theory (ANT) study of IS evaluation in a large financial services company. The ANT study allowed us to investigate the methodology as it is enacted in IS project evaluations in practice without making any a priori decision of what methodology is or should do. By defining a series of processes, inscription aids and mandated checkpoints we found that the evaluation methodology engenders the evaluation process as ‘science’; and by allowing a degree of freedom in conducting the evaluation processes, the methodology is also enabling the evaluation processes to emerge as ‘art’ and by doing so stimulating creativity and innovation. Thus the ANT approach assisted in our discovery of the dual nature of methodology as simultaneously science and art.

Keywords: Pre-investment IS project evaluation process, IS project proposal evaluation methodology, Actor-network Theory, socio-technical approach
1 INTRODUCTION

The increasing costs of investments in information systems (IS) and persistently high failure rate of IS projects in practice indicate that IS project evaluation is of critical importance to organizations. The evaluation of IS projects before the decision is made to fund it – referred to as pre-investment evaluation – is potentially critical to increase both the success rate of IS projects and to achieve expected business value. Making the right IS investments is, and will continue to be, a critical component of organisational planning for the future (Lin & Pervan 2001b, Murphy & Simon 2002).

To improve the practice of pre-investment evaluation of IS project proposals, IS researchers have over the years proposed numerous evaluation methodologies with the aim to advance and assist ‘rigorous’ and ‘scientific’ assessments (Berghout 2001). The focus of scientific evaluation of IS projects has been on the tangible aspects of IS costs and benefits, thus privileging the technology and its measurable impact on performance. The assumption has been that the more evaluation methodology is scientific, that is objective, rigorous and based on precise measurements and calculations, the more accurate and certain the evaluation result will be. The failure of evaluation of IS is attributed to the lack of appropriate adoption of the scientific rigour of the methodology.

The IS evaluation literature has been largely dominated by an objectivist view of the IS evaluation process, technological determinism and the perception of IS evaluation methodology as a ‘science’. However, there are indications which suggest that organizations generally ignore these IS evaluation methodologies, because they are perceived to be too complex, difficult to understand and unreliable (Al-Yaseen & Eldabi 2004). While we have seen a growing number of ‘scientific’ methodologies in the literature (Nagm & Kautz 2007), we have also seen reports about the lack of methodology adoption in the practice of IS evaluation (Nagm & Kautz 2008). Is something wrong with practice or with evaluation methodologies?

We propose that IS evaluation in practice is not well understood by proposers and proponents of “scientific” evaluation methodologies of IS. In this paper we argue that IS evaluation in practice is not only a science but is also an art form which involves creativity, improvisation, imagination and community building. More precisely we aim to demonstrate that the IS evaluation methodology in practice has a dual nature: that it is simultaneously science and art. We achieve this by conducting an Actor Network Theory (ANT) (Latour 2005, Law 2002) study of IS evaluation in a large financial services company. The ANT study enables us to investigate the nature of methodology as it is enacted in IS project evaluations in practice without making any a priori assumptions about what a methodology is or should be.

Before we present our results we first discuss the IS evaluation literature and raise key problems and themes. We proceed by presenting the ANT approach to the case study. We then present an ANT account of an IS project evaluation methodology in an exemplary case company, based on which we reveal and discuss the dual nature of methodology as simultaneously science and art.

2 LITERATURE REVIEW

The IS evaluation literature is divided into two distinct areas, pre-investment evaluation and post-implementation evaluation. The focus of pre-investment evaluation is on the justification of IS investments before being initiated (Murphy & Simon 2001). It is also known as ‘predictive evaluation’, emphasizing the speculative nature of the estimation of an IS worth and impact on the organization in future that depends on the evaluator’s judgement (Remenyi & Sherwood-Smith 1999). This differs from post-implementation evaluation which aims to evaluate IS projects after the implementation has occurred. In this paper, we focus on pre-investment evaluation of IS projects.

The predominate stream of research in the IS evaluation literature has been on the development of ‘scientific’ evaluation methods and their use in practice. There have been numerous attempts at counting and investigating these methods, Berghout (2001) for instance identified the existence of
over 65 evaluation methods, most centred around ‘scientific’ appraisal techniques like discounted cash flow analysis (DCF), net present value (NPV), internal rate of return (IRR), cost benefit analysis (CBA) and payback period. These methods often described as being formal, summative or functionalist. They offer some advantages for IS investments that are expected to produce cash flows or some other tangible financial benefit, but disadvantage IS investments which may add value to the organization in a less tangible way. They exemplify a scientific ideal to prescribe a rational, formal, quantitative and exact evaluation process. These represent as Stockdale, Standing & Love (2006) argue the hallmark of the scientific paradigm.

These ‘hard evaluation techniques’ (Ballantine, Galliers & Stray 1994) or ‘rigorous scientific methods’ (Smithson & Hirschheim 1998) have been often questioned and criticized:

- For their assumption that value and impact of IS can be reduced to numbers which can be calculated and counted (Williams & Williams 2004).
- They ignore intangible/qualitative aspects of IS investments (Hirschheim & Smithson 1999)
- They ignore the wider context within with the evaluation takes place (McBride & Fidler 2001)
- By ignoring organisational issues, they are difficult to apply (Ballantine & Stray 1998)
- They are susceptible and sensitive to manipulation (Hirschheim & Smithson 1999)
- They stifle innovative development by focussing on formal-rational approval processes (Howcroft & McDonald 2004)
- They obscure subjective aspects of IS evaluation (McBride & Fidler 2001)

More recently there has been a growing awareness among researchers that the scientific rational view of evaluation has to be expanded, perhaps being replaced by a perception of evaluation as a social and political phenomenon (Berghout, Nijland & Grant 2005). A number of alternative or complimentary methods have been proposed that include more ‘subjective’ aspects of evaluation (Klecun & Cornford 2005). The emergence of such methods has no doubt been inspired by a new way of thinking in the IS discipline. For instance May (1997) states:

“This new world of IT-enabled value creation contains none of the cold sterility of scientifically precise, formula-driven absolutes. Our central certainty of value has given way to a series of negotiated, mutually-agreed-on business objectives” (pg. 92)

However despite the criticism we still don’t have a clear understanding of IS evaluation methodology that is more than science. If IS evaluation is not a completely scientific enterprise, the question is: What is it? If an IS evaluation methodology is criticised for being overly "scientific", what is missing?

We sought to answer these questions by drawing on an empirical study of IS evaluation processes in practice. Without assuming any view or position from the literature we aimed to find out what is a nature of IS evaluation methodology in practice. We therefore examined the practices of IS evaluation in a company that has extensive experience in assessing, developing and deploying IS, and a track record of successful IS adoption and implementation. It also has well established processes for developing and evaluating IS proposals, including the use of a range of evaluation techniques. Throughout the empirical study, lasting 16 months we encountered many actors, such as business managers, IS managers, project managers; a plethora of documents including an IS evaluation methodology, IS project ideas, project proposals, IS business case, etc. We came to realise that all of them, human actors and various documents and technologies (that can be seen as non-human actors or ‘actants’) play a role and exert agency due to their mutual interactions and influences. This led us to adopt actor-network theory (ANT) to enable a more comprehensive understanding of IS project proposals and their evaluation methodologies and processes (Latour 2005, Callon 1986, Law 2004).
3 METHODOLOGY: AN ANT CASE STUDY

ANT is an approach to sociomaterial analysis developed in the sociology of science and technology (Callon 1986, Latour 1986, 2005, Law 1999, 2004) which found a fertile soil in IS research (Walsham 1997, McLean & Hassard 2004). ANT considers entities such as IS, organisations, methodologies, and users, as actors or actants that have agency by virtue of their relations with other actors/actants in heterogeneous networks (Law, 2004). ANT is grounded in an ontology of relationality and treats actors as enacted and relational effects. The world is seen as being comprised of enumerable heterogeneous actors engaged in a continuous process of mutual interconnecting to form or diminish actor-networks. Actor-networks thus emerge, grow, sometimes stabilize and black-box and sometimes destabilize and dissolve. The emergence of actor-networks result from enrolment of other actors (allies) and alignment of their interests with that of the network. Generally, ANT enables analysis of the conditions, constraints and modification of agency within actor-networks that intertwine the humans, culture, language, artefacts and technology (and many other things).

In particular two concepts drawn from ANT assist in analysing IS evaluation practices. These concepts are , ‘translation’ and ‘inscription’. Translation is the process by which an actor creates a body of allies by enlisting other actors to align with their actor network (Walsham 1997, Latour 2005, pg. 218). Inscription describes the process by which designers inscribe their interests into technical artefacts such as information technologies or into other actants such as policy documents and methodologies. Inscription can be said to define the roles and use of these artifacts and has been described as “frozen organizational discourse” (Walsham 1997 pg. 469).

Furthermore, ANT presents challenges for researchers aiming to investigate emergence of heterogeneous actor-networks. How to adopt ANT to conduct empirical studies remains open to researchers’ imagination and is not prescribed by ANT’s proponents and followers. For instance in their particular kinds of ethnographic studies – Latour’s investigation of a “laboratory life” (1979) and later on a failed technology project called Aramis (1986), Law’s aircraft stories (2002) and Mol’s treatment of atherosclerosis in a hospital (2002) – they followed their objects and subjects, recorded events and collected other material evidence in many different ways. The major feature in their work is a detailed description of a story as a basis for examining and theorizing novel and often complex concepts and questions. Latour himself describes ANT as a “very crude method to learn from actors without imposing on them an a priori definition of their world building capacity” (1999, pg. 20). We learn from him and other ANTs to ‘follow the actors’, let them tell their own stories, use their own vocabularies and unfold their own meanings.

Our study started without any pre-conceptions about a theoretical foundation or the nature of evaluation processes. It was motivated and initially driven solely by the research questions. It focused initially on the human actors and what they do, how they go about proposing ideas for new projects and how the ideas grow into official IS Project Proposals. In the process we were particularly interested in the evaluation processes and how methodology acts as a non-human actor. It turned, almost intuitively, into a ‘journey’ of following the actors, not only humans but also objects, documents and other devices employed during projects’ evaluations.

We conducted our study in a large multi-national financial services company referred to as ALFA Group. The Australasian operation – which we shall call ALFA Bank – has an impressive history spanning approximately 150 years and with an investment portfolio in excess of $1 trillion dollars. One of its divisions, ALFA Invest, was the prime focus of the study. This organisation was selected because the company is known to have a well established practice of IS project proposal evaluations; secondly it has a track record of successful IS deployment and implementation; thirdly, it has recently overhauled its evaluation methodology worldwide and finally because it was quite receptive to our request to study these practices in depth; hence this presented a unique opportunity to study the adoption of the methodology in depth.

A financial crisis in 2004 forced ALFA Group to reassess the way in which it evaluated IS project proposals. In order to manage the $2 billion commitment which ALFA Group made to rebuild ALFA
Bank, ALFA Group decided that it needed more discipline around the way proposals for the $2 billion spend would be evaluated. To facilitate this, a new Evaluation Methodology was introduced with two core principles at its heart – doing the ‘right projects’ and doing the ‘projects right’. From 2005 to 2007, over $3 billion worth of projects have gone through the new methodology which has helped ALFA achieve a way to produce consistent and comparable IS Project Proposals.

Data collection includes a) interviews with 36 senior executives and managers of ALFA Invest division as well as some from ALFA Bank (the parent company) over a 16 month period from July 2006 to October 2007 (listed in Table 1), and b) company documents related to IS project evaluation methodology including examples of recently approved IS project proposals.

Table 1  Interviews conducted in ALFA Invest and ALFA Bank

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<tr>
<th>Roles</th>
<th>Human actors</th>
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<tr>
<td>IS Management (13 people)</td>
<td>Head of IS Group</td>
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<td></td>
<td>Head of Business Demand (two people)</td>
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<tr>
<td></td>
<td>Head of IS Architecture</td>
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<td>Head of IS Business Support</td>
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<td>IS/Business Relationship Partners (six people)</td>
<td></td>
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<tr>
<td>Business Management (8 people)</td>
<td>CEO and Chairman of ALFA Group</td>
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<td></td>
<td>CEO of ALFA Bank</td>
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<td>Head of Strategy</td>
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<td>Chief Operating Officer</td>
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<td>General Manager – Business Unit</td>
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<td></td>
<td>Head of Financial Planning</td>
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<td></td>
<td>Head of Central Business Operations</td>
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<td></td>
<td>Head of Business Development</td>
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<tr>
<td>Projects &amp; Project Management (15 people)</td>
<td>Senior Project Analyst (five people)</td>
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<tr>
<td></td>
<td>Senior Project Manager (four people)</td>
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<td></td>
<td>Project Director (two people)</td>
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<td>Head of Project Methodologies</td>
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<td>Head of Projects</td>
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<td>Head of Portfolio Management</td>
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<td>Head of Regional Projects Board</td>
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Our investigation started with an interview with a Senior Project Analyst who explained how projects are viewed by people in the company, as well as how they are evaluated within the broader business context. From that point the inquiry detoured into several directions following the Senior Project Analyst’s suggestions including Head of Regional Projects Board, and other Senior Business and IS Analysts. We started with semi-structured interviews guided by an interview schedule but soon departed from it and adopted unstructured interviews that proved more suitable to addressing emerging issues. The length of each interview on average was approximately one hour, but in some cases interviews spanned two hours over two separate sessions. Through these interviews we encountered non-human actors, IS project documents, evaluation methodology and strategy. The analysis of empirical data started early on as we encountered new actors (humans and non-humans) and cannot be clearly separated from data collection. Namely, following the actors and their relations with objects and other actors prompted the chain of interviews and collection of documents. The analysis of the interviews and documents in turn led to seeking explanation of activities, events and outcomes by interviewing new actors and seeking new documents. These interviews revealed how different business realities and interests are negotiated and inscribed in the production of IS project proposals. After data collection the analysis became more refined focusing on stages in the production of IS project proposals, evaluation methodology, the roles of specific actors or actants and the ways they enrolled and acted upon the production and evaluation of the proposals while creating actor-networks. Snapshots of networks were presented in a graphical form as ANT maps. Our ANT inquiry included coding the interviews and documents using Nvivo. The coded texts were then extracted in a
4 IS PROJECT EVALUATION METHODOLOGY: DEFINING THE ‘SCIENCE’ AND ENABLING THE ‘ART’

At the pre-investment phase of a project, each IS project proposal has to go through five stages of the evaluation methodology, the Idea Stage, Concept Development Stage, Business Case Stage, Proposal Submission Stage, and Proposal Assessment Stage. In the process an IS project proposal is developed and continually evaluated. Initially, an idea for an IS grows and increasingly becomes more defined and concrete to the people involved as it moves through the stages defined by the methodology. From the first Idea stage, which involves informal discussions and the fermentation of ideas, the IS idea converges into a concept through the Concept Development stage before forming a coherent IS Business Case drafted during the Business Case stage. This business case is then transformed into an IS Investment Submission document before being further refined and shaped in a consolidated form that will be put forward to the Regional Investment Committee for deliberation during the final proposal assessment stage.

For example the business case stage as described by Figure 1 involves a number of human actors (like the Business Sponsor, Finance Partner, Critical Business Stakeholders and more) who Business Case Document. As these actors directly determine the content of the Business Case Document, we presented them in the core of the actor-network. The core describes the actors and relations at the centre of an activity. Other actors such as Business Plan, ALFA Group Management and the Methodology are presented in the periphery which indicates that they are acting from a distance.

Figure 1 - IS project evaluation methodology acting from the periphery of the actor-network
The methodology in this case acts in two major ways: first, the methodology can be seen to act as a scientific method by prescribing a set of systematic processes, inscription forms, norms, rules and checkpoints that need to be passed. The evaluation methodology as science is systematic, formal, prescriptive and rigorous. It ensures standardization and comparisons across projects, equitable treatment of all projects, and involvement of relevant stakeholders in each project evaluation. However, it is at the same time enabling and encouraging the “art” of evaluation to emerge. The art in this context refers to the “expression or application of creative skill and imagination” (OED 1989), innovation, improvisation and informal relations. In the section below, we explore these two ways in which the methodology acts – as science and as art – and in doing so, reconceptualise the notion of an evaluation methodology.

4.1 Evaluation methodology acts by defining the ‘science’

By defining a number of elements, the methodology acts to inscribe the process interests as well as control (checkpoints), standardisation (inscription norms), consistency (inscription forms), and policing (inscription rules) interests of ALFA Group management.

The methodology specifies a number of processes that should be carried out in each stage; it also defines key ‘obligatory’ human actors that need to be engaged for certain processes. For example, the methodology stipulates that the Business Sponsor needs to approve and sign off all major documents (for instance the IS idea document) before they can be submitted to the Local Investment Committee for deliberation as Figure 2 below illustrates.

![Figure 2 - More prescriptive element of the IS project evaluation methodology](image-url)

While there are some processes that must be performed as defined by the methodology, others are less prescriptive. For example in producing the IS Concept document the methodology defines a linear sequence from developing the concept, to developing the high-level architecture to finalising and reviewing the concept document; however, in practice it is possible for all three processes to be carried out simultaneously as Figure 3 demonstrates.
The methodology does prescribe some actors and processes but leaves others flexible. In such a way the methodology is an actor that shapes the IS Project Proposal emergence sufficiently strictly to meet management needs, but with the flexibility to ensure enrolment of actors and the growth of the actor-network. The power of the methodology is in part the ‘science’ it imposes (in varying degrees) and in part the ‘art’ it enables in creating relations and building networks.

The methodology does not only define a series of processes to follow, but also defines a set of inscription devices to complete (see Figure 1), in order to create an audit trail and evidence of actions in all stages. The Head of Project Methodologies in ALFA Bank states: ‘the methodology we have built, is saying what you have to do, [and] also provides the tools and templates to help project managers actually do it and to deliver [projects]’.

While the methodology does not define how these inscription devices can or should be put together, it does define a series of inscription forms, norms, and rules that help create inscriptions that strategies and business plans are enacted. It also ensures that different IS project proposals can be compared to one another. These inscription aids also act to ensure that people are serious when they develop IS Project Proposals. There is a audit trail that is left behind. To enforce some control especially around estimations and value articulation, ALFA Group have embedded inscription rules into key inscription devices (financial analysis spreadsheet for example) that cannot be manipulated and must be reviewed by GM Finance.

The methodology also acts by clearly defining a number of checkpoints that each IS Project Proposal must pass through from the Idea Stage right through to the Proposal Assessment Stage. The Head of Project Methodologies in ALFA Bank states:

‘At the end of these stages you have what is called a ‘stage gate’ where you have to pass the gate to get into the next stage. So there is a check mark by certain people at the end of each of those stages to see if the project should then progress to the next stage’

These checkpoints, called ‘stage gates’ in ALFA, not only act out management’s control interests but they promote a practice of continuous evaluations which are both formal and informal. Importantly for each checkpoint, a ‘gatekeeper’ has been made obligatory by management through the methodology ensuring that progress of an IS Project Proposal from one stage to the next is regulated and policed by someone who does not stand to benefit or suffer from the progression of an IS Project Proposal. By defining a number of checkpoints, the methodology acts by helping to identify and eliminate ‘bad’ proposals; those that do not provide justifiable benefits, are not feasible, are not supported by key actors or are misaligned with the strategic priorities of the business. The current methodology has been instrumental in helping to ‘stop wasting a lot of the organization’s money on projects that never go anywhere’ (who said this?). In fact, statistics in ALFA suggest that the methodology has helped stop 30% of all projects before they were approved. These projects would have been allowed to go through
with the previous methodology, and this demonstrates how the methodology acts to increase instances of project success by helping to detect and eliminate bad projects (those with a weak financial case, unsupported by key people or unaligned to agreed strategic priorities). It also acts by amplifying beneficial, valuable or strategically aligned IS Project Proposals.

4.2 Evaluation methodology acts by enabling the ‘art’

By not being overly prescriptive, the methodology also acts by providing the creative freedom for actors to explore the ‘art’ in IS project evaluation – the art of translation. The art of engaging with others, the art of finding the right stakeholder or forum to present ideas, the art of persuading and influencing and enrolling others, the art of shaping, synthesising, sizing and crafting the IS proposals, the art of rallying support in meeting rooms and corridors, the art of story telling, the art of adapting (undefined, and un-prescribed) paths to develop an IS Project Proposal -- what the people in ALFA call a journey. The ‘journey’ refers to how people enact the processes, inscription aids and control points to enrol actors, to build allies and ultimately to make a compelling case for the selection of the proposed IS over others which are all competing for funds from the same limited pool. The methodology acts by not explicitly defining the paths people take to travel between processes and by not strictly defining how they carry out the processes. This enables people to approach each project different and attend to unique nuances that arise. By acting to allow both the ‘science’ and the ‘art’ in IS project evaluation the methodology is both a powerful and essential non-human actor in the heterogeneous actor-networks that help steer the emergence of the IS Project Proposal.

Allowing individual people to adopt their own approach to developing an IS Project Proposal, ensures that the culture of each local business unit can influence ‘how’ IS Project Proposals are initiated and assessed. It also ensures that people are free to find their own path to develop the IS Project Proposal recognizing not all projects are the same and that prescribing a strictly pre-defined path would not work in practice. Thus, because the IS Project Proposal involves many different people (business and IS actors) each bring to the journey their own understanding of process, and their own preferences for the path to take. This means potentially multiple different paths exist which can be taken by different people simultaneously. Many people in ALFA have described it as a ‘journey’ because the path is emergent, unknown and always different. For example, during the IS concept development process in the methodology, everyone has a different view of how the concept should be developed, what approach should be taken, which processes and tools should be involved. The methodology does not define how this should be done, or even how to clarify differences. That is why the people selected as IS project champions and IS/business relationship partners must have gone through development and assessment of many other IS project proposals. Their experiences, relationships and trust thus created enable identification and enrolment of the right people to the project the actor-network. Through organizing forms (meetings and forums) actors come together, raise issue, question, and debate the approach to take to develop the concept. They do this not in a predetermined manner, but they will do in the words of the Head of Central Business Operations ‘whatever works’.

Finding their own way to travel through the process defined in the methodology does not mean that anything goes or that projects are necessarily chaotic. As long as they do not break the inscription rules - rules that bring some order to the creative process, and which are defined in the methodology, actors can pursue different ways to debate ideas, clarify ambiguity, minimise conflict, and resolve misunderstanding. Similarly, they use different ways to inscribe their interests and visions in inscription devices. In this way, the methodology acts by being tolerant of multiple, messy and non-coherent realities that gradually cohere through the journey – helping to deal with both conflict and ambiguity.

Even though processes can be defined and standardised in a methodology, what matters is not the perfection of these defined processes or the prescribed elements but rather what the methodology does not prescribe – how people take others on the journey of translation. The journey adapts to the individual and specific needs of the project and is not determined by a ‘one size fits all’ methodology. This is like ‘stepping into the unknown’ as the Head of Central Business Operations explains, there is not necessarily ‘a clear way of getting to anywhere’. This is because the ‘best path needs to be found’.
‘Sometimes -- he continues -- you have to take the long way and sometimes you have to take the short
way’. Similar views are shared around ALFA. As one IS/Business Relationship Partner says; ‘every
initiative that goes through that process [IS Project Proposal development and assessment] has to find
its own way to get there’. In finding the path as the Head of Central Business Operations states, ‘you
evolve and adapt and think “what do I need to do to get through”’ and concludes by saying ‘not all
roads are going to lead us to there but eventually with the right convergence you’re going to get there’.
This makes the practice of IS project evaluation less of a ‘science’ and more of an ‘art’. As a Senior
Project Manager comments, ‘there is some art within each of those steps of the process’.

IS Project Proposal evaluation being part ‘art’ does not mean that the journey is always smooth.
Conflict does arise in many ways and forms as is evident in the ALFA case. Conflict between human
actors (actor-network versus actor-network) for example who are competing for limited funds to
demonstrate they have contributed to the organization through projects (that add strategic value) and
wish to improve their bonuses for the year. Conflict also comes about within the actor-network as
personalities and viewpoints clash, or with people who have hidden agendas or intend to cause
disruption to a proposed IS. Ambiguity also surfaces around the initial idea, around how it should be
conceptualised, around the estimations of costs and benefits. Ambiguity exists around the new
business reality enacted by the proposed IS and how this reality is aligned to strategic priorities and
the existing portfolio of projects. However, a prescribed rulebook on how to deal with conflict and
ambiguity does not exist in this case, perhaps because conflict and ambiguity cannot be dealt with
‘scientifically’. Actors do find ways to deal with both elements (conflict and ambiguity) through the
‘journey’ itself. In dealing with both conflict on the one hand and ambiguity on the other through the
journey, the actor-network stabilises resulting in IS Project Proposal that sufficiently inscribes the
interests of the actors involved.

The evaluation methodology presented in the ALFA case, thus acts in these ways; first it defines the
‘science’ through a set of processes to follow, and people that need to be involved, and by defining a
series of inscription aids (inscription forms, inscription norms and inscription rules), as well as
defining a series of mandated checkpoints. Second, it enables IS Project Proposals to be described by
comparable and unambiguous sets of measures. Third, it enables the ‘art’ of translation to surface, and
thus encourage innovation and creativity in every IS project journey, allowing enrolment of relevant
actors and inscription of their interests.

5 CONCLUSION

The paper makes two contributions. First the paper demonstrates that the IS Evaluation Methodology
in practice has a dual nature, that it is simultaneously a science and an art. It redefined the nature of IS
project evaluation methodology by revealing how the science and the art of methodology are
intertwined and mutually dependent. Second, the paper contributes to better understanding how IS
evaluation methodology encourages IS project proposals that are likely to be successful and identifies
and discourages those that are likely to fail.

The dual nature of IS evaluation methodology has important implications for practice. The
methodology-as-science acts through a series of processes, inscription devices, enrolment of key
people, and mandatory checkpoints. It thereby ensures that systematic steps are taken and responsible
actors engaged in the process. It also ensures that different IS project proposals by various departments
are presented in a comparable form, using similar measures. However, this is just one side of the story.
The methodology-as-art acts by intentionally introducing flexibility in the processes and procedures,
leaving freedom for participants to adjust the processes and find the appropriate paths to develop and
evaluate proposals. The art of the methodology is necessary to deal with realities that are in flux, not
well defined and often non-coherent. This dual nature of the methodology as a science and as an art
describes what actors in practice call the “journey”.

The notion of the dual nature of the IS evaluation methodology addresses many criticisms of the
dominant view of methodology in the literature: that qualitative and organisational aspects are ignored
(Hirschhem and Smithson 1999), that it stifles innovation (Howcroft & McDonald 2004), obscures
subjective aspects of evaluation (McBride and Fidler 2001), and that the wider context within which evaluation place is ignored (McBride and Fidler 2001).

Understanding the IS evaluation methodology as a science and an art is important because it reveals the production of successful and unsuccessful projects. As an art the methodology leaves space for the actors to negotiate and enact their meanings, and translate interests and objectives in the IS project proposals. These include negotiation and checking that the projects are aligned with the company strategic priorities. The trails of these negotiation processes are recorded in various documents (an IS idea, IS concept or a business case document) as inscription devices prescribed by the methodology as science. In such a way the discursively produced IS ideas, concepts and business cases are materially inscribed in the respective documents. This is a basis for “detecting” weak or bad IS project proposals, and for their elimination before reaching the final stage of project selection. The implications for a company are significant: it identifies and eliminates bad project early on and thus saves time, money and effort in the organisation. The methodology also acts by “amplifying” beneficial or valuable IS project proposals from the point of view of different participants.

Our findings also show that the practice of IS project evaluation – for which various evaluation methods propose a range of rigorous and well structured processes, models and calculation techniques – is rarely rigorous, is often messy, and seemingly unsystematic. Are these signs of poor evaluation methodology? – as is assumed in most IS evaluation literature. Should (could) the practice be improved by the adoption of, and stringent adherence to, a more rigorous, formal and exact methodology as most of the literature argues? Our case company ALFA Invest learned hard way the answers to these questions – through their own mistakes. Lessons from this company indicate that this is a limited view of practice and evaluation methodology that neglects the embedded art forms of project proposal development and evaluation. It is now the researchers’ turn to find more evidence from practice and develop further the theoretical and practical understanding of IS project proposal evaluation methodology.

References


