

WORKSHOPS/PANELS

Leveraging failure - practical lessons from the University of Very Hard Knocks

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IT failures are pervasive and pernicious. Worse, despite extensive effort by practitioners and researchers, they remain persistent. This suggests that whether or not we properly understand what causes failures, the remedies we prescribe do not work or are unworkable. The challenge of this panel is to help us make better use of bad experiences by presenting lessons that will make a difference in managing diffusion and implementation risk.

Each of the panelists has studied recent, high profile projects which have been criticised for having failed in various ways. These include the London Stock Exchange's Taurus system, the London Ambulance Service's command and control system, and SNCF's SOCRATE reservation system. The panelists briefly describe the key practical lessons they have learnt from these projects, and why these lessons will make more difference than previous lessons drawn from failure.

While at least thirty minutes will be reserved for general discussion, the audience will be invited to comment at any stage on the practicality of the panelists' lessons and to build on them where appropriate. In the general discussion, there will be scope to explore audience members' experience for further practical lessons. The take-home will be some robustly practical approaches to managing diffusion and implementation risk.

Creating virtual organisations through advanced telecommunications and groupware

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GEMISIS 2000 is a collaborative research and development project involving the University of Salford, NYNEX CableComms, the City of Salford, Manchester TEC/Chamber of Commerce, ICL and Newbridge Networks. The overall aim of the project is to demonstrate the impact of high-bandwidth ATM networks (the so-called "Information Superhighway") on the economic and social regeneration of a region. Central to the project at the current time is the implementation of a "Virtual Chamber of Commerce" which will link some 450 SMEs in the Greater Manchester area through a mixture of PSTN dial-up connections, ISDN lines, and fibre optic cable.

Aonix Limited is a recently formed venture which aims to facilitate the emergence of "virtual" organisations through a mixture of communications technology, process improvement, Lotus Notes based applications, and new forms of organisational structure which utilise such things as joint ventures and outsourcing. Aonix has been established based on the same set of principles that they seek to apply to their clients in consultancy contracts.

This workshop will seek to share these ideas with others who are involved in, or are simply interested in, how new forms of organisational structure might actually be brought into being. The aim will be to explore both the theory and the practice of how "organisations" will do business through advanced communications technology.

Technology transfer: does the context of the creation of IS technology inhibit its transfer ? An international perspective.

D. Bunker, University of Wollongong, Australia.

T. Larsen, Norwegian School of Management, Norway.

P. Vlissidis, National Computing Centre, UK.

It is the intent of this panel to discuss and highlight the process of IS technology development and the how the context of this development, may inhibit the creation of a general taxonomy of models of ITT.

The IFIP TG8 Working Conference on Diffusion, Transfer and Implementation of Information Technology held in Pittsburgh in October 1993 was the starting point for a body of work on this topic. In the latter stages of this conference attendees were broken into working sessions which attempted to focus on some of the areas of importance. Working Session 2 concentrated on the Role of Models and Theories in Information Technology Transfer (ITT). This group identified critical areas of work to be done in this area and made the following recommendations:

- Develop a list of competing models from the literature and from practice
- Evaluate each model for its strengths and weaknesses
- Examine the ethical dimensions and social consequences of ITT
- Develop a taxonomy of models for ITT (given that there is no unified model)

While the first three objectives are a natural consequence of the working conferences and meetings of IFIP TG8.6, is it realistic to assume that the logical conclusion of this work will produce a coherent and cohesive taxonomy of models of ITT ?

It is acknowledged that IS technologies and their associated tools and techniques, are not all defined and created in exactly the same way. Tool definition and creation starts from a multitude of contexts. It is this idea of context, as it relates to the development and transfer of IS technology tools and techniques, which may inhibit a common understanding of the transfer process.

“The client as the receiver of the technology, must create the context (technology, transfer, context, talent, modification, management, resource and contribution) and verify its capacity to receive and apply the technology and information in the new environment ” (Lien, 1994). Can there be a true transfer of the technology from one environment to another or must the acceptance of the technology necessitate change to the recipient’s context and environment in order to be successful ? If this is true can we develop a taxonomy of models of ITT, or must each example of technology transfer be dealt with on a case by case basis?

Technology transfer: European initiatives.

John K. Christiansen, Copenhagen Business School, Denmark.

Patrick CORSI, European Commission, Brussels, Belgium.

Michael Cavanagh, Balmoral Consulting, UK.

The European Initiatives Panel will present views on the outcomes and processes produced by European Initiatives and the various programmes in that context, e.g. the ESPRIT programmes. In particular the panel will present reflections on the quality and form of processes that constitute success in the European Initiatives programmes and projects, and how we define success in this context.

John K. Christiansen

Partnerships in Competitive Contexts: Measurement of benefits from international IT-projects.

Various types of programmes , projects and other forms of set-ups for technology transfer and diffusion have been used and suggested in order to facilitate such processes, but how are the outcomes of these initiatives determined, and how do we measure effectiveness in inter-organizational R&D projects? Is it even possible to identify factors that facilitate success in these projects?

A framework for the measurement of effectiveness in inter-organizational projects based upon an organizational perspective on projects is presented, and this framework is applied (tested) on a number of Danish companies that participated in ESPRIT projects. Some preliminary conclusions on the effectiveness of the projects is presented, and some critical factors for the successful diffusion and transfer of knowledge is identified and discussed.

Patrick Corsi

Cutting through Barriers in the Technology Adoption Cycle

This presentation introduces the technology transfer software engineering activities of ESPRIT, including ESSI Software Best Practice, with a particular perspective on diffusion, adoption of novel technologies and related processes, with a view to:

- accelerating the innovation process in software engineering and applications using advanced techniques coming from research.
- linking R&D with product definition and market preparation activities.

Examples of such successful projects will be drawn from the ESPRIT portfolio of projects.

An ESPRIT evaluation report says, "The mechanisms are there; the challenge now is to encourage new types of projects which respond to the modern business environment in an innovative, pro-active way."

Michael Cavanagh

A review of the ESSI 'PIE' mid-term workshops held in Autumn 1996.

Over 100 ESSI-sponsored Process Improvement Experiments were begun in 1996. The mid-term results from these were presented by the participants' project managers in a series of workshops facilitated by Michael Cavanagh at the end of the year. This presentation looks at the lessons learned, both technically, and in terms of the effectiveness of the technology transfer mechanism. It also considers options for further improvement.

Inter-Organisational Networks for Innovation in Logistics.

Jacky Swan & Sue Newell, Warwick Business School, UK.

Maxine Robertson, Coventry Business School, UK.

Caroline Bilborough, Coopers and Lybrand, UK.

Richard Turner, Institute of Operations Management, UK.

Research on technological innovation has emphasised the importance of a variety of inter-organisational networks in the innovation process. Inter-organisational networks include not only links among firms in industry (e.g. in the form of contracts or mergers), but also formal and informal links with technology vendors, professional associations, consultants, academics, and so on. Through these networks organisations can exchange equipment and resources as well as knowledge and expertise needed to inform their decision about the design and implementation of innovative solutions. Individuals who engage in such networks are referred to as 'boundary spanners' and play an active role in the innovation process.

Our research has looked in particular at the diffusion of technologies for logistics and their implementation by European manufacturing firms. This has found particular networks to be influential in the diffusion process. For example, professional associations play a useful role in the diffusion of new ideas about best practice, and this role differs across national boundaries. However, their role might be limited by industry representation or by narrow focus within the logistics chain or by the lack of opportunity of members to influence decisions about technology design within their own firms. Technology suppliers (including consultants and software vendors) are also influential in diffusing ideas about new 'best practice' technologies. Whilst some suppliers do emphasise the complex nature of the technologies, others present a relatively unproblematic technical 'fix'. The degree of organisational change needed with technologies that integrate different aspects of the logistics chain may thus be underestimated, with manufacturing firms then finding it difficult to implement bought technologies. Research suggests then that notions of 'best practice' are limited. Inter-organisational networks can encourage innovation by diffusing new ideas but also tend to promote fashions that may or may not be efficient choices for particular firms.

This panel brings together participants from key occupational groups involved in the creation, diffusion and implementation of logistics technologies who will

discuss their role in the innovation process. The panel uses the example of Logistics but the issues raised will be relevant for innovation across a broad range of technologies. Each panel member will deliver a short presentation followed by time for questions on their role in the innovation process. These will address such issues (where relevant) as: (i) the routes through which organisations learn about new ideas in the logistics/ operations management area; (ii) collaborative inter and intra-organisational networks that are useful; (iii) the ways in which knowledge about technologies is disseminated; (iv) the major problems that firms experience in developing and implementing technologies and ways forward in addressing these problems and; (vi) major changes that firms face in terms of information technologies for managing the logistics process in the future.