IDEA GROUP PUBLISHING

701 E. Chocolate Avenue, Suite 200, Hershey PA 17033, USA
Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.idea-group.com

ITP4757

Project Communication Management in Australia, Germany and India – A Cross Cultural Study

Bardo Fraunholz
Institute for IS Research - University of Koblenz
Rheinau 1 - 56075 Koblenz - Germany
Tel. +49 261-287 2536
Fax +49 261-287 100 2536
bardo.fraunholz@uni-koblenz.de

Chandana R Unnithan and Jeff Chamberlain
School of Information Systems - Deakin University
221 Burwood Highway - Burwood - Victoria 3125 - Australia
Tel. +61 3-9244 6930, Tel. +61 3-9244 6525
Fax +61 3-9244 6928, Fax +61 3-9244 6928
chandana@deakin.edu.au, jeffc@deakin.edu.au

ABSTRACT

The dynamic forces of globalisation, innovation, and information revolution have changed the nature and complexity of communication in information systems projects. Our research in Germany, India and Australia suggests that many diverse and yet crucial variables are pertinent to success in IS projects and reveals that numerous benefits could be derived in the project management discipline by constructing a framework through further research.

INTRODUCTION

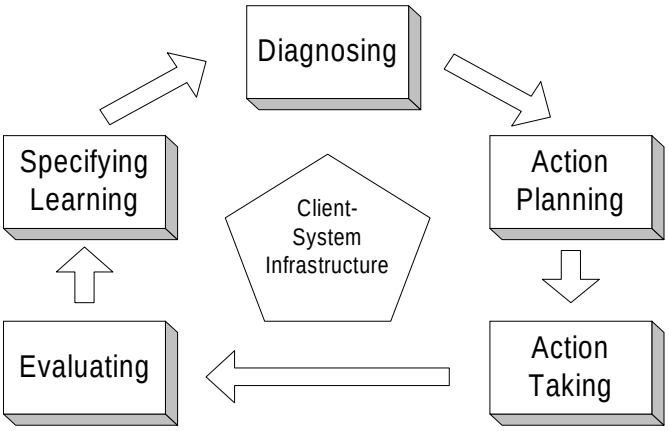
Project management is becoming increasingly popular in dynamic Information Systems projects. Nicholas (2001) argues that modern project management has evolved from its original, limited use within private or military sectors, in response to the need of a managerial approach that could deal with interdependent, complex and rapidly changing societies. There is an accelerated replacement of traditional, hierarchical management styles into a consensus based approach, often known as systems engineering (Burke, 1999). Different sectors or industries have diverse cultures or environments, as do organisations from different regions of a given economy or geographical area, or different divisions of organisations (Meredith and Mantel Jr, 2000). The impact of these variables often influences the 'project communication' methods. In this paper, we have explored this impact from the experiences gained from information systems projects, across three economies, through the lens of an action research framework.

THE ACTION RESEARCH FRAMEWORK

This research takes on the post-positivist philosophy, anchored in an action research method (Baskerville 1999), where the key assumption is that social settings cannot be reduced for study and creation of theory, but synthesized action process brings in better understanding. The iterative process (see Figure 1) of action research requires researchers and practitioners to work together in diagnosing a problem, to intervene and learn by reflecting on the past cycle (Susman and Evered 1983). The "hermeneutic circle" allows the researcher to play an active part in the change process and influence it, by being included in the evaluation process (Avison et al. 1999).

By engaging actively with the businesses it is easier to understand specifics involving project communication. In addition, close collaboration with business owners facilitates the possibility of evaluating results and implementing change. The biases, which are developed by this method, are made explicit and well documented – thus an asset to the researcher, rather than a potential liability. The long-term research project involved the investigation of three projects across three economies – Australia, Germany and India, with a view to analyse experiences and understanding the imperatives that drove them. The iterative nature makes action research an ideal method to transfer theoretical knowledge and to make IS research practice relevant. However the challenge is to always reflect on the aims of the project and not to lose the drive for scientific reflection (Watson and Wood-Harper 1996). Casuistic research is not sufficient (Frank 1998); it is important to make findings comparable, while being original and conceptual at the same time.

Figure 1: The Cyclical Process of Action Research (Susman 1983).



The action researchers involved in this case have been actively involved and have been through the iterative cycle of reflection, and thereafter achieved relative success in transferring the knowledge to support the project communication practices, in their relevant situations. However, the findings reported in the paper are preliminary and concise due to restricted space and confidentiality issues. We are currently developing a more descriptive framework.

The German Experience

The German perspective on project communication described in this paper is derived from an action research study carried out in three independent information systems related projects over a period of 5 years. These projects were carried out in the private sector with the involvement of public sector organisations, therefore relating to a wide range of institutions to provide for a pertinent insight into the management of information systems projects in the German context.

Two of the projects examined are similar in structure with the third being quite distinctive. For convenience, the projects will be referred to as A, B and C respectively. Details must be withheld for confidentiality. Project A's team members were located together in a branch office. Project B's team members were dispersed in five locations within one state while Project C's team members were dispersed across two states with inevitably different expectations.

With two of the projects being structurally similar and the third being distinctly different they were all comparable in terms of transience and communicative maxim. Also Germany as a dynamic business environment with a traditional but, innovative and highly skilled workforce has a good record of managing traditional projects efficiently; we have found that this also applies to information systems projects with individuals capable of applying an adaptive approach to planning, decision making, problem solving and crisis management.

Common to all projects was the clarity of the proposed objectives. Team members' perceptions especially in project C typically conflicted with intended realities. The motivation for participation was non-uniform and therefore interpretation on objectives migrated. A mix of written, verbal and graphical communication proved useful to convey the project member's understanding and perceptions. The project manager's disposition to listen and acknowledge individual's perceptions and personality proved indispensable. The electronic information system in form of Lotus Notes proved valuable as a method for keeping records but did not contribute to the project culture or the overall success. In some cases the system migrated to a defence tool with information and agreements put up as a means of justification or documentary proof. The idea to store project knowledge could not be obliged and the projects proved to be reliant on organizational culture and tacit knowledge. Interestingly except for project A, verbal communication only played a minor role and was utilized only when immediate responses were required or in the form of meetings. The communication was dominated by electronic interchange and reports. In project A the single lieu without necessary external communication facilitated informal meetings and proved to be the preferred method for information exchange. Formal agenda meetings had to be held but usually all relevant decisions had been made prior to the convened congregation and were only formally "signed off" for the minutes.

Within projects B and C it was evident that the dispersed loci made written and electronic information exchange inevitable. The telephone was mainly used to retrieve information or make quick reference to a problem. The majority of the communication was made via the distributed information system where all documentation was held. However communication within the individual locations remained informal and mainly unshared on the system – thus not being available to the project team as a whole. Only information that was crucial for the other locations was placed on the system and sometimes only after it had been requested.

The unique set-up of project C with project teams of conflicting interests and long term goals it became evident that communication was not intended and only inevitable documentation was placed on the information retrieval system. Meetings were avoided where possible and any additional communication took place only at an individual level below the management level. Both groups wanted the project to succeed, but the results were intended to be utilized in different ways, which had the effect of forcing continuous compromise between the groups.

As the projects progressed and the individuals got to know each other, telephone communication increased but not significantly. Also such communication hardly proved to be project relevant but at the same time necessary and valuable for the project culture by providing a personal bond between team members thus enforcing the common goal – project success.

With project management evolving from military and construction projects, the structure of communication has changed to provide for information systems projects. It is apparent, that the structure and communication lines remain to be very traditional, with the project workers reporting to their managers, and those in turn reporting to the project manager. This does not mean that there is a large hierarchal structure in managing projects but that the reporting structure reflects the responsibilities. Information systems tend to be used as a method for document exchange and vindication without making full use of groupware potentials. This is predominantly true for project C where there was no culture of trust between the individual project groups and many decisions were taken for political reasons rather then for the conveyance of the project.

THE INDIAN EXPERIENCE

The project communication perspectives from India, reported in this paper are based on the experiences of an action researcher, involved in three (Project A, B, C for convenience) information systems projects over a period of five years. With the IT revolution sweeping through the 1990s, innovative approaches to project management were demanded. The three projects in this context were pioneers in experimenting proactive project management methods. In tune with the thinking that a young team of professionals would facilitate fast turnover and smooth project transition, a team of professionals willing to learn/unlearn/relearn were selected. The project managers were expected to be well versed in interpersonal skills, verbal communication and preferably multilingual. Although coming from similar socio-economic and educational background, any project team in an Indian context tends to be multi-ethnic and multi-lingual. There were distinctly different attitudes and perceptions that needed to be addressed within every team. The project manager needed to take on different roles, in case of contingencies – such as a resource lag.

The three projects involving global stakeholders and multi-ethnic/multilingual project teams were initiated at the same time, in the national office. The timelines set for the projects were such that they were initiated simultaneously, but the completion deadline was six months after one another (i.e Project A, B, C began at the same time, but B was expected to finish six months after A).

The office environment was open such that informal meetings were encourages and most of the project communication was either face-to-face or via email between the members. There were no formal meetings except the initial stages of negotiation and finalization with the stakeholders – through email, telephone, facsimile and simple documentation. The flat structure enabled team building, improvisation of processes, collaborative approach to planning resources, making instantaneous decisions. An intranet was in place were members exchanged information freely. There seem to be a sense of camaraderie between all team members within and across the three teams. Resources were also shared as and when necessary, across the three teams, without any hidden agendas.

Although the experimentation with the informal modes of communication, facilitated by the flat structure was encouraging, the project lagged behind the expected timeline. This became a concern with the stakeholders, who then demanded project team members to be posted at client sites overseas. The challenge was then to effectively translate the sense of informal project communication and the developed camaraderie, on to the remote environment. With shared resources across teams, in different locations made it even a bigger challenge for the project manager, who then had to communicate dynamic specifications, in time, to various members.

The remote project communication required experimenting with new technologies that can translate informal, but effective communication online. Video-conferencing and powerful macromedia based simulations on the Intranet were deployed to support the project communication between members as well as stakeholders. For example, it became a norm to place a simulation on the Intranet, to explain a prototype or the changes required within a prototype, to other project members at remote locations or often to stakeholders. A knowledge management system was custom built were each of the project members added their experiences. The project managers then added their own experiences to enrich the knowledge based learning process that evolved from this exercise.

The success of the project communication methods was reflected on the second project, which met its dateline, and the third project, which was completed much earlier than expected. It is evident that the

first iterative (rather overlapping) cycle translated into learning for the subsequent projects. Perhaps, the underlying Indian work culture of being united in diversity, translated into the collaborative working environment and the experimentation with informal project communication was successful in the context.

THE AUSTRALIAN EXPERIENCE

The Australian perspectives reported in this paper are based on the experiences of one of the action researchers, involved in three information technology projects, over a period of 5 years, in a key Australian industry sector. Three distinctly different projects, hereinafter named Project A, B, C were examined. Project A's team members were located together in a branch office. Project B's team members were dispersed interstate and were based in two branch offices. Project C's team members were dispersed across two interstate branch offices and the project included resource contributions from six countries.

Though each of the projects was distinctly different in form they are juxtaposed in terms of transience and comparable communicative axioms. Perhaps most significantly, each demanded that its leadership and staff were firmly cognisant of managerial cybernetics. In this sense it was crucial that individuals were capable of assuming an adaptive and heuristic approach to decision-making, planning and problem solving in what were accelerated and dynamic business environments. To reinforce this approach it was also crucial that the project team members adopt the principle of 'Kai Zen' or continuous improvement and in doing so, quickly build models based upon communicative interactions and then invoke these when needed to simulate complexities and thus derive solutions. Dividends such as risk reduction, quality enhancement, scope control; improved resource levelling; greater earned value and cost reduction are some of the by-products of this adoption.

Exigent to all of the projects was clarity pertaining to goals and objectives. Team member perceptions at project inchoation typically conflicted with intended realities. Combinations of written, verbal and graphical communications proved useful in converging project member's cognition. Key to success in this regard was the manager's acknowledgement of team member's personalities, skills, knowledge, experience and abilities to actively listen. Project charters, developed at embryonic stages, also proved useful in communicating expected behaviours, protocols, and methodologies. An electronic information retrieval system, facilitating collaboration and storage of project documentation was also crucial to each project.

Communication within each project was manifestly variegated. Project A was principally reliant upon branch and organisation culture and tacit knowledge held by team members. Verbal communication, directly or via telephone, dominated operational communicative exchange although kinetic interaction played a similarly significant role, particularly at the senior project operative levels. Skills in non-verbal cues, at the leadership level, were thus crucial to the ongoing success of the project. The project's locus enabled informal meetings, which were convenient although properly planned and managed meetings which included formal agendas were preferred as they ensured relevance, minimal posturing and time preservation. Complex decision making invariably comprised the use of tools and techniques such as group brainstorming, mind mapping and scenario planning. Project A was also characterised by high levels of trust, a likely contributing factor being that most of the project team's members knew each other preceding the project's inception.

Project B's team members spanned two Australian states and were based at two branch offices, each possessing discretely subtle cultures. Such distance and segregation was countered essentially virtually by means of email and telephone communication. This was supported with an Intranet repository for project document collaboration and exchange. Voice point and tele-conferencing technologies were typically used for team meetings. A proclivity by team members to assume, albeit fallaciously, that the team manager's home branch was the base of operations, emerged. This was countered by regular, expensive and time consuming visits by project officers from one branch to the other, to engage in physical team meetings together. This served to propagate trust and harness synergies amongst otherwise distant team members and enhanced future virtual communications, although costs in time were considerate and directly impacted the project's time lines and completion forecasts.

Project C was a very complex Internet based development driven and controlled by Australians. The project team was dispersed across two branch offices located in two states of Australia and project resources were drawn from six countries. Liaison officers were based in each country and continuous communication was required between those officers and the Australian project team members. Communications were conducted in four languages although English was the commonly used language. Interpreters were used when needed. Apart from the difficulties associated with linguistic interpretations, cultural issues required navigation and often several email exchanges were necessary before some issues were basically understood. Fortunately and inexorably, the project was inaugurated with a four-day focus group, which was held in Australia and attended by delegates from each of the respective countries involved. It was important that goal congruence be established amongst the attendees to the focus group. This was attempted using written, verbal and graphical communications supported by informal communications over meals and leisure activities. Issues pertaining to power and authority had to be clearly articulated, examined and resolved at the focus group.

As Project C progressed, communications were essentially virtual and use of technologies including tele-conference and video-conference, email, telephone and fax were fundamental. A project web site was also created and included project documentation such as initiation briefs, budgets, business cases, and specifications documents. It also included photographs and descriptions of attendees at the focus group which assisted all stakeholders with recall and served to assist ongoing relationships. This, in turn, enhanced trust, which was the most pertinent of issues and crucial to continuing successful communications, and ultimately, project accomplishment. Verbal communications via electronic conferencing facilities required extremely honed active listening, semantics and oratory skills to achieve understanding. Such communication was generally supported by project documents, business graphics and online slide shows. Interestingly, whilst a heuristic project paradigm was apposite, representatives from one of the stakeholder countries embraced an algorithmic approach to project outcomes. This hindered progress and upon a later visit to that country it was discovered that the objectives of the project had been totally misunderstood.

CONCLUSIONS

The experiences from three perspectives are summarised in Table 1. We reviewed three IT related projects, for five years in the three economies. All the projects had highly skilled, flexible and innovative workforce, which characterises IS projects.

Key considerations drawn from each of the described projects examined within this paper may form a foundation or a framework for future communicative best practices in information systems projects across the world. Our most predominant findings include the careful management and acknowledgement of perceptions, personalities, cul-

Table 1: Comparative Analysis

Comparative Criteria	Germany	India	Australia
Project Management Method	Unstructured	Unstructured	Structured
Communication	Preferably verbal	Verbal/Electronic	Verbal/Electronic
Degree of Trust	Moderate	High	Moderate
Attitude to listening	High	High	Medium
Team Paradigm	Group based	Collaborative teams	Group Based
IT use for communication	Moderate	High	High
Effectiveness of communication	Medium	Medium-high	Medium

ture, linguistics, kinetics, semantics, cybernetics, heuristics, listening, authority, power, politics and collaborative electronic and written communications. Harnessing the power of informal interpersonal communications, suitable hierarchical structures, alternative decision making processes, monitoring personal relationships and associated trust, within project teams have emerged as vital considerations in the quest for success in information systems projects. Without this framework and associated considerations, successful project navigation, negotiations and ultimate culmination will continue to be at risk of peril. Clearly, further research in information systems project management communications will derive benefits. Predominant gains will be the identification of a framework for world best practices pertaining to project management in dispersed, multi-cultural, multi-lingual and even virtual environments.

REFERENCES

Avison D, Lau F, Myers M, Nielsen PA (1999) *Action Research*, Communication of the ACM, Volume 42, Issue 1, pp 94-97.

Baskerville, R (1999) *Investigating Information Systems with Action Research*, Communications of the Association for Information Systems, Volume 2, Article 19, October.

Baskerville R and Wood-Harper AT (1996) *A critical perspective on action research as a method for information systems research*, Journal of Information Technology, Volume 11, pp 235-246.

Burke, Rory (1999) *Project Management, Planning and Control Techniques*, Third ed, John Wiley, UK.

Frank U., Klein S., Krcmar H., Teubner A. (1998) *Aktionsforschung in der Wirtschaftsinformatik: Einsatzpotentiale und Einsatzprobleme* in Schütte R., Siedentopf J., Zelewski S. (Eds.) Wirtschaftsinformatik und Wissenschaftstheorie. Grundpositionen und Theoriekerne Arbeitsberichte des Instituts für Produktion und Industrielles Informationsmanagement, No. 4. University Essen, pp 71-90.

Meredith JR, Mantel Jr SJ (2000) *Project Management – a Managerial Approach*, John Wiley and Sons, NY.

Nicholas, J M (2001) *Project Management for Business and Technology*, Prentice Hall, New Jersey.

Susman G (1983) *Action Research: A socio-technical systems perspective*, Beyond Method: Strategies for Social Research, Morgan, G (ed) Sage, Newbury Park, pp 95-113.

Watson H and Wood-Harper AT (1996) *Deconstruction contexts in Interpreting Methodology*, Journal of Information Technology, Volume 11, pp 59-70.