13.11 Cross-organisational Learning

Sharing insights from managing major construction projects

By Mike Cushman and Alberto Franco

This contribution reports the main lessons drawn from the experience of developing and applying a strategic choice-based methodology for promoting inter-organisational learning in the construction industry. While the different elements of the resulting methodology reflect those of the traditional SCA, the focus on project review and learning meant that major changes were needed to the original SCA so that participants could engage in reflection and learning rather than on current decision-making.

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BACKGROUND

During the mid-1990s, the UK construction industry initiated a move from single-tendered contracts, where the future behaviour of other parties is seen as a marginal consideration, to partnering arrangements, where actions have to be weighed against their effect on future interactions. Partnering was seen as playing a key role in the generation of feedback learning processes, which in turn had been identified as a critical missing process in conventional construction arrangements (Bennett and Jayes, 1998). One way of generating learning in projects is through post-mortems, and indeed construction firms often undertake in-house project reviews. On the other hand, however, there is little tradition of exchanging perceptions with other firms – a lack that has impeded...
learning throughout the industry (Barlow and Jashapara, 1998).

It was against this background that the authors participated in an action research programme, known as the B-Hive project, and aimed at increasing the value of construction projects. Although both authors were familiar with the SCA before the project, they had relatively little experience regarding its application in multi-organisational settings. Yet the partnership environment in which the research was developing seemed at the time an appropriate and ‘safe’ setting for the application of the SCA. That is, there was a setting of multiple stakeholders within a context of broad agreement which needs to be made operational. Towards the end of the project, strategic choice had become part of a wider framework for cross-organisational learning. The framework, labelled the cross-organisational learning approach or COLA (see Figure 13.4) is aimed at eliciting, reflecting and distributing formal and tacit knowledge within and across partner firms.

THE COLA APPROACH

A key aspect of COLA is a project review workshop which draws significantly on the SCA (Franco, Cushman and Rosenhead, 2004). One of the main constraints encountered during the research was the lack of time available to conduct one-off project reviews. These had to be carried out in less than one working day and thus one major innovation and input to the workshop was information collected through a questionnaire. These allowed the facilitators to
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prepare a list of candidate discussion areas to save time in the workshop. The questionnaire asks participants to rank various aspects of the project and the performance of other firms. These rankings are supplemented by free text comments which usually proved more revealing than the rankings. The questionnaires typically took about 1 hour to complete.

A COLA workshop iterates through four stages: focus, options, plans and commitment, which are derived from strategic choice’s shaping, designing, comparing and choosing modes. COLA may make use of some of the distinctive tools of strategic choice, for example decision graphs, or comparative advantage charts. However it is in the emphases of the stages and in the flow of the process between them, rather than in the technology employed within the stages, that the strategic choice influence is most apparent.

During the focus stage, participants identify key opportunities for improvement. However, and this is another departure from traditional strategic choice, they discuss first the project’s victories and successes. The discussion is informed by the results of the pre-workshop questionnaire, and the output of this stage is a focus consisting of a set of urgent, important and interconnected opportunities for improvement that is small enough to be manageable during the workshop.

In the options stage, participants are helped to generate options for improvement within the chosen focus in the previous stage. A consideration of the implications of the distinction between single- and double-loop learning (Argyris, 1999) led to another significant change in this stage of the process for later workshops. Options can appear to be self-evidently beneficial, but more deep-seated problems may exist which prevent apparently obvious innovations either being implemented or, if implemented, achieving the intended improvement. A discussion of possible blockages to action was introduced into this stage, in which discussion was focused on development of initiatives to remove these blockages.

A further constraint at this stage was included in later workshops; actions for debate were limited to those that could preferably be initiated by workshop members or, at minimum, be initiated by their line managers or others that individual workshop members could directly influence. This prevented aspirations masquerading as actions.

The plans and commitment stages closely reflect strategic choice’s comparing and choosing modes. The former involves participants in identifying the value criteria needed for the comparison of options for improvement and in evaluating the options against these criteria – though in the process they commonly also uncover uncertainties which stand in the way of identifying a straight-forward preferred solution. The latter enables the group to make progress towards agreement in some areas and set up explorations and/or consultations in others (see Agreed Actions and Explorations in Figure 13.4).

LESSONS DRAWN

During the period of the research Whitbread Hotel Company were in the early stages of a partnering arrangement with their service providers for a series of refurbishments of their hotels to meet the standards of their recently acquired Marriott franchise and the construction of new Marriott hotels. Three of the projects completed during the research were the subject of a post-completion review using the COLA workshop. The main lessons drawn from these workshops and others held with Thames Water and Taylor Woodrow are briefly described below.

The use of a pre-workshop questionnaire allowed the intended time saving and compression of the workshop. However, it introduced the risk of a facilitator-imposed agenda and thus it was necessary to explicitly negotiate the draft agenda and candidate decision areas with the workshop participants. Members may raise issues in a questionnaire that they would not raise in the workshop and vice
versa. Thus the use of the questionnaire, supplemented with additional issues identified at the workshop, allows the maximum number of potential issues to be included in the debate.

This pre-description of decision areas is also possible in a conventional SCA workshop, where it is dealing with issues that have already been discussed in a number of fora and the facilitator has access to the records of the previous activities. This allows a fast entry into activities which leads participants to experience progress and build confidence in the benefits of the approach (Cushman and Rosenhead, 2004).

The early consideration of victories and successes helped to building confidence and avoid a blame environment and a retreat to defensive routines. This is particularly relevant to a project review environment where there is a tradition of adversarial relations and lack of trust, but is of wider application. An SCA workshop will often be held when other approaches have failed and the members bring a history of failure and frustration to the workshop. Therefore, in order for the workshop to make progress, it is helpful for the facilitator to draw early attention to group successes. While involving representatives of competing interests in the workshop, in the case of COLA different members of a supply chain, may lead to difficulty, it also inhibits loading blame onto others as criticisms must be raised directly rather than easily passed onto an absent stakeholder.

A focus of concern on blockages to action is an innovation of wider application. In any strategic choice exercise participants may suggest options that may be desired but are not easily attained. A review of possible blockages may cause decision areas to be redrawn to focus attention on necessary actions to achieve a desired state, or options to be discarded as desirable but not attainable in the current exercise. Discussion of blockages may also disclose uncertainties of related areas or uncertainties about values.

Similarly the constraint of focusing on actions achievable by the workshop participants, or at least achievable by people or bodies who may be influenced directly by members of the study group means that that items appearing in the progress package will lead to action rather than failure.

There is one final point of novelty in the application reported here. It can be said that some success has been achieved in applying a strategic choice-based methodology in a process-detached mode of operation (Friend, 1999). This means the use of strategic choice to develop first an idealised state of affairs for the project partners (e.g. a 'zero defects' project) before moving towards the development of alternative options for action. Strategic choice provided a useful framework for reflection and learning as well as action. Strategic choice can thus form the basis of a methodology to support reflective learning, and the four modes of SCA facilitate learning-based workshops as well as workshops designed to plan future action.

**POSTSCRIPT**

Two years after B-Hive, COLA is still used within Whitbread Hotel Company as part of their project review procedures within the partnership. The COLA processes and tools are now part of the process manual which every project manager should follow, and workshop facilitation is usually undertaken by Whitbread. Whitbread have extended the use of COLA from the Marriott Hotel projects where it was piloted in B-Hive to the much larger programme of Travel Inn Reservations.
CONCLUDING REFLECTIONS

In conclusion, three main lessons regarding this experience can be summarised as follows:

• Collecting information before a workshop (when possible) leads to a more exhaustive workshop agenda, which can save time and, subject to ratification and amendment by the workshop participants, increase participants’ ownership of agenda. This also allows the early identification of potential conflict for which appropriate ‘confidence-building’ tasks need to be designed and included early in the workshop.

• The explicit elicitation of blockages to action, and identification of activities to overcome them, increases the feasibility of implementation as well as enables the uncovering of uncertainties.

• The use of strategic choice in process-detached (rather than process-engaged) mode is possible and useful.

REFERENCES

CUSHMAN M and ROSENHEAD J (2004) Planning in the Face of Politics: Reshaping Children’s Health Services in Inner London in Handbook of or/Ms Applications in Health Care, (F. Sainfort, M. Brandeau and W. Pierskalla eds) Kluwer, Boston, MA, USA