PIECC
Planning and Implementation of Effective Collaboration within Construction

What is 'effective collaboration?'

Delivery from PIECC

It is the intention of the PIECC project to 'write' a protocol that is based around 6 key areas for effective collaboration (see below). This protocol will add value to a project by enabling managers to make more informed decisions when planning and implementing collaborative working. We are seeking the views of senior management to discuss the requirements of introducing such a protocol into project teams in their organisations.

Introduction

To enable an organisation (or organisational unit) to 'effectively collaborate' there must be a harmonisation of three key strategic areas: business, people, and technology. Usually collaboration enables participants to build up capacity to complete a set of tasks that one sole organisation would find difficult to achieve. The collaboration eliminates fragmentation, duplication and distrust. This is achieved by intelligently using available resources wisely, sharing the multiple project risk factors across multiple domains, and enhancing staff and organisational motivation. This can only be achieved 'effectively' by bringing together and aligning the three strategic areas of business, people and technology (see diagram).


Key areas for collaboration

There are many factors that are likely to influence the success or failure of working collaboratively, with no two collaborations will progressing in exactly the same way or within the same time frame. Each collaboration must find a way to proceed that is consistent with its unique circumstances and composition.

There are 6 key areas that are deemed critical for effective collaboration in construction:

- **Vision** – all members of the collaboration agree on the collaborations aims and objectives;
- (Stakeholder) **Engagement** – collaboration leaders need to ensure that all key participants are consulted as to the practices to be employed during the collaboration;
- **Trust** – time and resources are needed to enable all participants to build trusting relationships;
- **Communication** – a common means of communication is decided by all key participants in the collaboration;
- **Processes** – both business and project, that describe to all key participants how the collaboration is to work on a day-to-day basis;
- **Technologies** – an agreement on those to be used to ensure the collaboration is easily implemented and maintained.
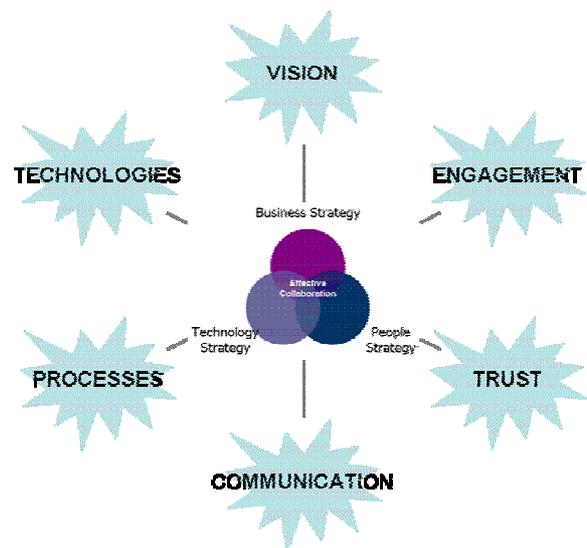
All 6 areas need to be addressed in the three strategic areas described above to have "*effective collaboration*" in the organisation / project context. However, the strategies may well need to be different dependent on the context of the proposed collaboration. Differences exist in effective collaboration at the project and organisational level. It is the intention of the PIECC project to determine these differences in future stages of the research and define a protocol to adapt to the project or organisational context.

Perhaps the most important overarching aspect of effective collaboration is that working collaboratively often means '*new ways of working*' for many / all of the participants involved in the collaboration. Effective collaboration is only achievable through the innovative design and development of a more balanced 'collaboration strategy', that does not rely solely on sophisticated information and communication technologies. As yet there is little evidence of such a 'strategy' existing that prescribes to managers effective ways of implementing and managing collaborative projects / environments. A projected result of the PIECC project is to define this protocol to take advantage of the benefits provided by a more targeted use of information and communication technologies, that is more aligned to the people and business strategies.

Initial findings from the PIECC project suggest that it is essential to allow stakeholders to take the necessary time from routine responsibilities to meet and interact with one another so that trust and respect on an individual level can be generated. Personal interactions across the collaborating stakeholder organisations who are attempting to nurture trusting relationships will encounter together the growing pains naturally associated with systemic change associated with the new ways of working. It is worthy of note, that change (i.e. change management principles) begins with individuals, not institutions.

Barriers to effective collaboration

From the comprehensive literature survey carried out in the PIECC project the barriers to effective collaboration may be summarised as:

- Collaborating organisations have different vision, mission, goals and priorities;
- Organisational 'culture' and methods of communication are often different;
- A lack of focus and consensus on the delegation of tasks;
- An imbalance of resources – time, money, human (frequent turnover of participants) etc;
- Confidentiality, Intellectual Property and legal considerations;
- Technological incompatibility;
- A lack of understanding of the expertise, knowledge and language of the other collaborating participants.

The PIECC projects' aim is to break down these barriers by developing a protocol with associated processes that enables organisations to plan and implement their collaborations in a more effective manner.

Research method

Researchers wish to interview, and/or hold workshops, with key personnel from the industrial partners. Senior managers / policy makers are sought in the first round. These will be followed by personnel managing and those working collaboratively on projects in their daily activities. Information gained in these interviews will be analysed and synthesised and used to check whether the users needs and requirements, determined from the literature survey, are what is required in a protocol for effective collaboration. It is the intention that the protocol be evaluated on an iterative cycle with the industrial partners to refine its usefulness.