

“Continuous Improvement and Experience Feedback in on-site construction is lacking” this is something we’ve heard mentioned more than once.

The root of the problem can be traced to several factors (and these are just a few): the current way of working with experience feedback, the disinterest and lack of time from staff and the project-based organization. At present most experiences are stored as individual knowledge instead of a shared collective knowledge within the company. Experiences and solutions are mainly communicated to others verbally which requires direct contact with the specific individual who experienced the problem. [\(Lundkvist & Meiling, 2010\)](#).

During every construction project problems inevitably occur, there are always external factors which are impossible to control but many problems occur repeatedly and these can be solved through continuous improvement from experience feedback. Most of these problems are solved ad-hoc instead of through standardized processes and methods. Every project might be unique but the processes in projects usually are not, by looking at these individual processes we can start to improve them across all projects.

We want to help contractors with the process of experience feedback and continuous improvement spanned over several projects at the same time by combining technological solutions with our services.

The first part of our idea is to create a database for knowledge storage, access and activation (further referred to as “Knowledgebase”). Problems during production are reported in to the Knowledgebase by the building contractor after which we help detain the root cause of the problem and present possible solutions and actions to start process-standardization. The report is then updated in the Knowledgebase and the customer is alerted. The database is structured according to the BSAB-system, which is widely used by clients, contractors and consultants in Sweden through the AMA-description tool and system. The advantages with the company-knowledgebase-system described above are:

- The contractor receives continuous statistics from construction sites and can start to prioritize improvements.
- Knowledge and experience feedback is centralized and available for the entire organization.
- Smart methods and solutions developed in the organization can be spread quickly.
- The information can be accessed during design to prevent design flaws, planning to choose method and construction to prepare work on-site using the Knowledgebase.

The second part concerns the services needed to ensure continuous experience feedback and the support processes for the contractors strategic choice of continuous improvement.

The lack of continued experience feedback (reports from site) during construction might be the killing factor for our entire idea, therefore it is vital to support the customer during this process with problem information gathering. During follow-up meetings between client and contractor, coordination meetings between contractor and subcontractors and during inspection/control we can support our customer by following up on current problems and issues as well as reporting it to the Knowledgebase. Furthermore we want to offer services for value-flow analysis of processes, analysis of inspection records and the remarks in these, Historic-economic comparison with competitors from the last few years, improve measurement systems and we can produce knowledge-packages for the customer.

The gain in the construction industry from continual improvements is potentially huge. Decrease product time, cost, work, stress on team staff and more. Clients can improve design to support better execution and better buildings and contractors can build faster with the same or increased quality.