

Handbook

For project and construction management

Statement of the gathering of experience data

After delivery of the construction project, it is an advantage to accumulate and catalogue the experiences learned from executing the project.

Experience collecting can happen at several different levels, e.g.:

- Economic experience/data through key figures/ratios
- Process experience from lean-construction meetings
- The Handover's defects and shortcomings

Economic experience through ratios

When the project's budget has been finalized, the ratios can be pulled out of the budget and compared with ratios from previous projects. The company's current ratios can either be corrected with regard to the new figures, or new figures can be created on the basis of work for which the company does not have historic data.

For this project, the calculation of the bid offers the following ratios:

Ratios	Unit	Quantity	Unit Price
Strip-foundation with reinforcement and excavation	m ³	85,73	1.884 kr.
Point-foundation with reinforcement and excavation	m ³	8,07	2.449 kr.
Terrain slab in hall and technical room	m ²	558,07	927 kr.
Terrain slab hall, locker-rooms, corridor, and staircase	m ²	289,04	1.101 kr.

During the tendering phase, the ratios drawn could be used to consider whether the calculation was realistic by comparing them with the company's existing ratios.

In this phase, where the work is finished and the budget has been settled, one can again draw out new ratios, which can be done in the following way using the following hypothetical example:

Area of terrain slab in m² (hall and technical room) that has ultimately been executed: 560M²

Total cost: **542.080 kr.**

Total unit price: **968 kr.**

The new unit price can then be compared with the existing ones and help give an idea about market trends, or a scrutiny of the financial management can be made where salaries, materials and equipment are specified, so that differences can be identified.

Process experience from lean-construction meetings

As previously described in the statement about lean management, the reasons for the failure in the flow must be spelled out. The causes of the errors could be identified by asking five times about why the problem had arisen in the first place. Five times because the first issue only points to the problem symptom. Therefore, one should pursue the trail of the problem and keep asking so that the cause of the problem can be identified and eliminated.

Here, I think there is a certain accumulation of experience, which in reality is ongoing during the realization of the project. However, I also believe that experience that is repeated can be written down and saved for the next project where it can already be used for the scrutiny of a new project proposal.