Zukunft Bau

SUMMARY REPORT

Title

State of implementation of life cycle cost analysis in housing and real estate practice and possible avenues for improvement

Occasion / starting position

The integrated analysis of construction costs and ancillary costs and consequently life cycle costs is an important instrument for identifying the cost reduction potential for the creation and management of real estate. Although this view is widely shared by scientists and experts, the concrete application of life cycle cost analysis measures lags behind in practice.

Object of the research project

The research project addresses the question to which extent life cycle cost analysis and optimization has become established in practice in the German real estate and housing industries and in what ways the application diffusion might be improved.

Basically, the project is divided into three areas of responsibility, which were dealt with using a mix of methods from quantitative and qualitative surveys:

a. Assessment of the application status for life cycle cost analysis in practice
b. Analysis of drivers and barriers for life cycle cost analysis / calculation
c. Development of solutions and derivation of recommendations for action

To systematically examine the application status and the corresponding influencing factors on the application, an online survey was directed at over 2000 players from the construction and real estate industries. The results of the empirical survey involving almost 200 test subjects (e.g. building owners, planners, building managers) were expanded and validated with the help of qualitative expert discussions.

For this purpose, 15 experts were consulted in the context of guideline-based interviews on the application status and the possible causes for the application or non-application of life cycle cost approaches. The experts are recognized authorities in the field of life cycle costs and/or representatives of the target groups as mentioned above.

From the knowledge gained on central problem areas, recommendations for action were made for different groups of actors in the construction and real estate industry, but also for politics, chambers, associations and also e.g. derived for the software industry. Another result is a set of guidelines for the housing and real estate industry, which is aimed at demonstrating methods how life cycle costs can be optimally taken into account and which organizational and content-related sources of error can be avoided.

Conclusion

The results of the research project provide information about the practical application of instruments for life cycle cost analysis and clarify in which areas deficits and opportunities for improvement exist. Central problems, barriers and drivers for life cycle cost applications were identified using an extensive and reliable data-

base. The derived recommendations for action offer approaches and starting points to create better conditions for the application of life cycle cost analysis and thus to improve the quality and diffusion of this approach in practice.

Key data

Short title:	Application state of LCC-Analysis
Researcher:	Prof. Dr.-Ing. Guido Spars
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