Value Adding Space Management in Higher Education

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CIB Facilities Management Conference May 23rd 2014

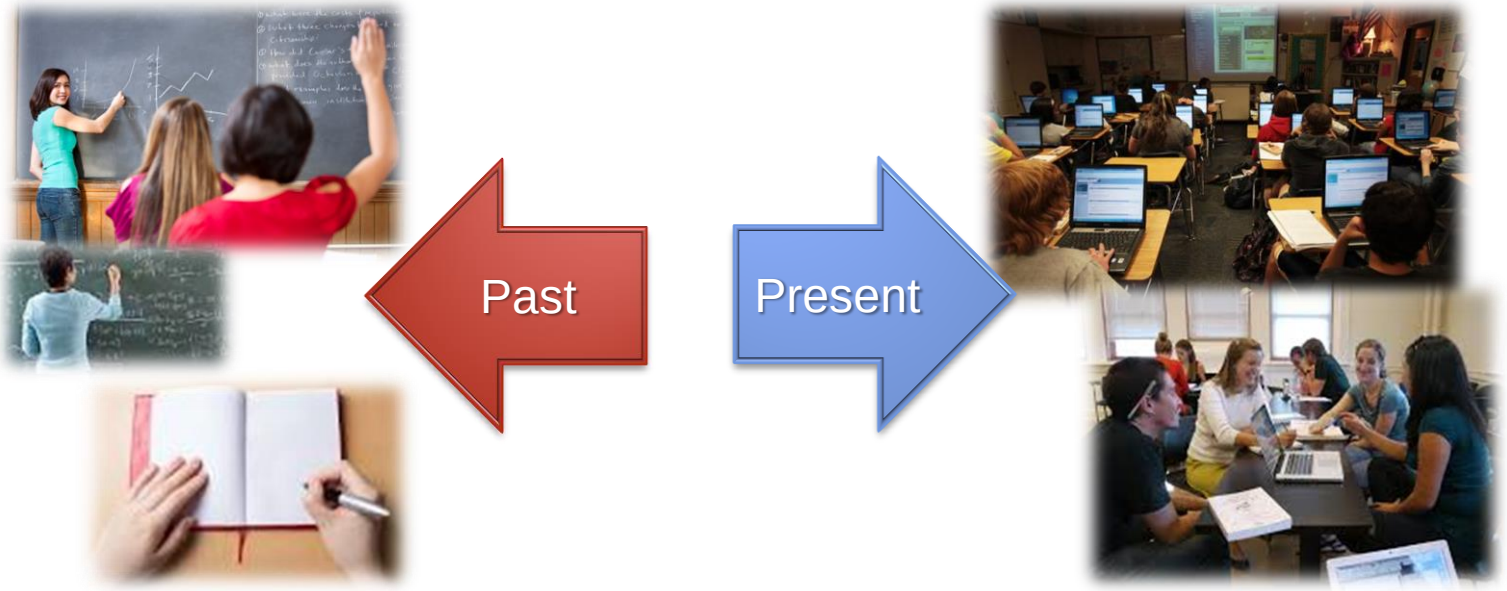
Agenda

1. Purpose, background & relevancy
2. Space Optimisation
3. Methodology
4. The Case Studies
5. Findings and results
6. Conclusion

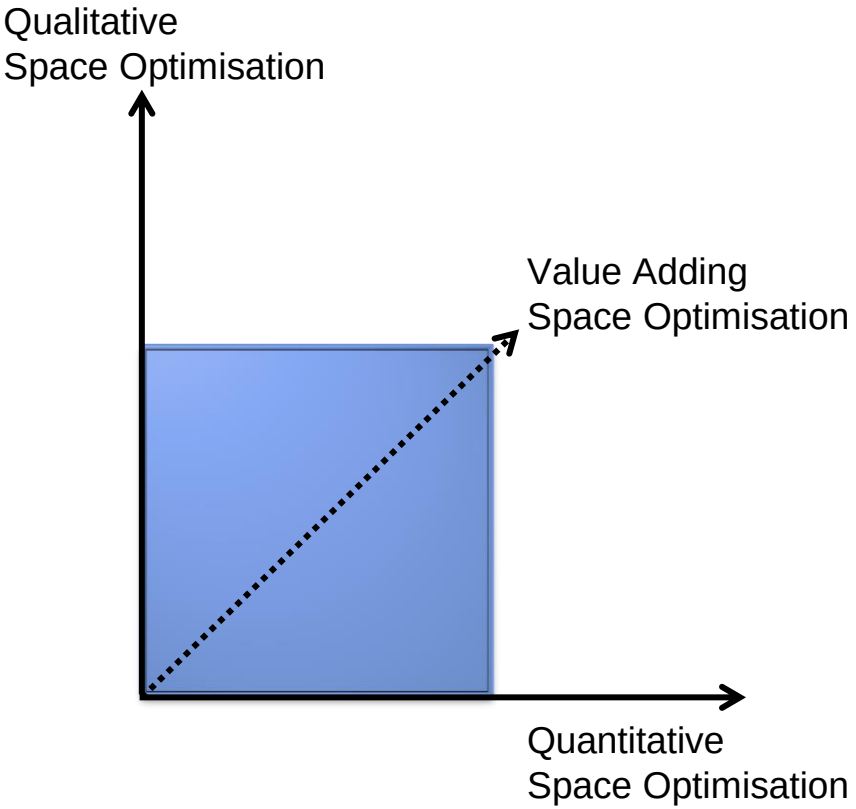
1. Purpose, background and relevancy

Purpose: Develop a methodology for Value Adding Space Optimisation in educational facilities – particularly Danish gymnasiums

Background and relevancy: In 2007 Danish gymnasiums went from being state owned to self-governing **=** greater focus on cost related to maintaining and operating their buildings



2. Space Optimisation



2. Space Optimisation

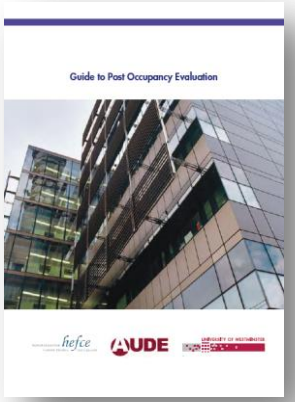
NOT QUESTIONABLE	QUESTIONABLE
Quantitative Space Optimisation • **Fact based** Amount of square meters Space utilisation Costs ……	*Qualitative Space Optimisation* • **Based on perceptions** Depends on stakeholders

3. Methodology - POE

Developed in the 1960's in USA and is today the most well-known method used to evaluate buildings

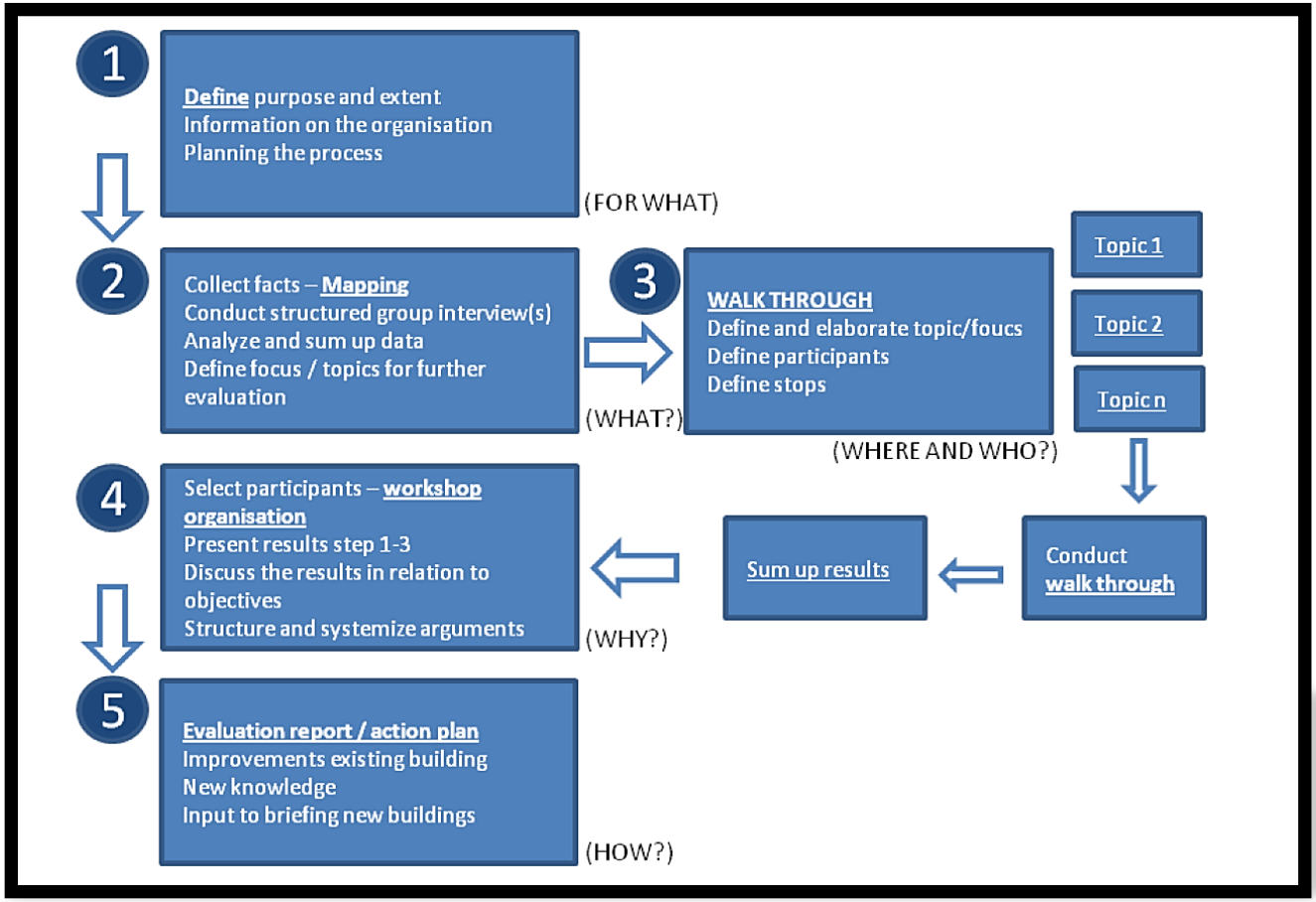
According to Preiser et al. (1988, Blakstad et al., 2010) POE is: *"[…] the process of evaluating buildings in a systematic and rigorous manner after they have been built and occupied for some time"*

Several POE methods have been developed - in this study a version published by the Higher Education Funding Council for England has been used



POE is general divided into: Process, Functional Performance and Technical Performance – this study has focused solely on the Functional Performance

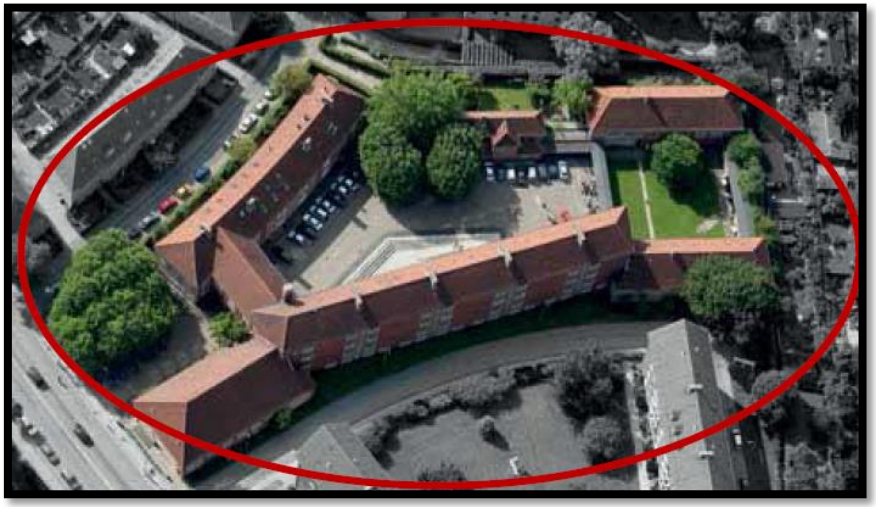
3. Methodology - USEtool



Phases in USEtool (Hansen et al., 2011)

4. The Case Studies

Herlev Gymnasium
Built 1975 – Concrete block
800 students & 110 staff



Falkonergården
Built 1955 – Several connected buildings
1.000 students & 100 staff

4. The Case Studies

The process

1. Interview with the head of school and the facilities manager
2. Walkthrough with the head of school and facilities manager at Herlev Gymnasium and the facilities manager at Falkonergården
3. Observation of space usage at the two gymnasiums
4. Interviews with selected teachers and the chairman of the student council at Herlev Gymnasium
5. Questionnaire given to selected classes at the two gymnasiums

Limitations: Missing workshops and focus groups

5. Findings and results – Case Studies

Lack of integration between space utilisation and the institutions overall strategic goals

Important to pay attention to the specific conditions applicable to the organisation in question as well as the less concrete facts such as culture and habits of the users

The research resulted in 11 proposals for space optimisation at Herlev Gymnasium and 7 at Falkonergården

Several similarities were identified despite that the purpose of the space optimisation at the two institutions and the layout of the buildings are very different

- ***A lack of physical development from when the buildings were build until now despite a radical change in the teaching methods***
- ***Limited and insufficient areas for the teachers to prepare***
- ***The possibilities to implement quantitative space optimisation are limited***

Limitations: Results are based solely on two gymnasiums, however the mentioned conditions is assumed to apply to other older gymnasiums in Denmark

5. Findings and results – New Methodology

Phase	Objectives	Activities
1	Clarification of purpose and success criteria Identifying stakeholders Preparing project plan and clarify resources Collection of data about the organisation, the buildings and space challenges	Interview with the head of school and the facilities manager Walk-through with the head of school and the facilities manager
2	Collection of data about use of space	Observations and interviews Analyse space utilisation
3	Discussion about the existing use of space	Focus groups with the primary stakeholders
4	Clarify which space solutions work well and not well – generally and related to specific aspects of the analysis	Walk-through with the primary stakeholders
5	Involvement of a large group of stakeholders	Questionnaire survey
6	Preparation of proposals for space optimisation and implementation plan	Workshop with the primary stakeholders, the head of school and the facilities manager
7	Implementation of space optimisation initiatives	Chums, rebuilding etc.

6. Conclusion

Space optimisation is complex – no standard procedure nor one right solution

The organisation subject to the space optimisation needs to be involved and the organisations specific conditions needs to be clarified and aligned with the space optimisation procedure

Consider the long term impact – cost reduction vs. reduction in user efficiency

POE and USEtool comprise a valuable combination for the development of a new value adding space optimisation methodology

Our results can be projected to other older gymnasiums in Denmark

Questions?