Benchmarking of operating costs: Experiences in the housing sector in Germany

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Outline

• Problem
• Approach / Participants
• Implementation
• Results
Types of costs and shares in the total operating costs in Berlin in 2004

- Real property tax: 10%
- Gardening: 3%
- Caretaker: 12%
- Street cleaning + snow removal: 1%
- House electricity + light: 2%
- Refuse disposal service: 6%
- Residual operating costs: 8%
- Street cleaning + snow removal: 1%
- Refuse disposal service: 6%
- Water + waste water: 23%
- Heating + hot water: 35%

sum = 2.01 euros/m²*month
Cost reduction and "general" increase in costs

**General cost development and optimized operating costs**

Due to successful cost management, the Benchmarking users were able to counter the general trend by slowing down cost increases or even reducing costs effectively.
Development of energy prices and operating costs for heating/hot water of BBU member companies in Berlin

![Graph showing the development of energy prices and operating costs from 1995 to 2005. The x-axis represents the years from 1995 to 2005, and the y-axis represents the index starting from 50 to 250, with 1995 as the base year (index = 100). The graph includes four different indices:

- Index fuel oil
- Index natural gas
- Index long-distance heating
- Index operating costs (heating + hot water)]
Index of water prices and operating costs for water / waste water / precipitation of BBU member companies in Berlin

Basis 1995 = 100
Initiative Berlin-Brandenburg and summary of costs

1. **II. Calculation regulation**

2. **BBU / WohnCom working group (1998)**

3. **Regional working groups of the associations to establish comparisons of operating costs**

4. **Working group GdW head Prof. Bach**

Benchmarking - Concept (type classification and mean values)
Course of optimization

- Establishing transparency
  - Structure
  - Data collection
  - Plausibility

- Benchmarking
  - Internal and external comparisons

- Variance analysis
  - Causal research
  - History

- Initiating measures
  - Best practice
  - Documentation

- Reviewing success
  - Target achievement / Target agreement
Participation and course of Benchmarking Analysis

Cost data
- Export
- Client

Structural data
- Registration or compilation on the spot
- Client / WohnCom

Plausibilisation
- WohnCom

Benchmarking
- Internet retrieval
- Client
Benchmarking - Concept (evaluation example)

Analysis via internet

Ordered by: Actual value labelling: View: Year: Cost type:

(Schnitt (All values in EUR/m²/month))

-0.084 -0.063 -0.042 -0.021 0.021 0.042 0.063 0.084

Property 2993 ( 50 HU*, 3.000 m²)
Property 3897 (200 HU, 10.000 m²)
Property 2834 (144 HU, 5.800 m²)
Property 2348 (90 HU, 4.000 m²)
Property 2356 (100 HU, 5.500 m²)
Property 2481 (240 HU, 13.000 m²).
...

Regional average of cost type caretaker, without further conditions

Deviation of the property in the cost type caretaker in EUR
red: prop. above average
green: prop. below average

1 property of the company in comparison to 1101 properties in the region in the cost type caretaker

*HU = housing unit
Benchmarking - Concept (evaluation examples)

Analysis via internet – Energy consumption and CO₂

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<th>Objekt</th>
<th>Wohnfläche in qm</th>
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Evaluations examples from www.energy-bench.com
Benchmarking - Concept – Extention through “Set of Measures“

Analysis of cost types

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Compiling property lists

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Planning of measure & documentation of implementation

Initiating measure

Client: xyz
Cost year: 2000
Cost type: Hot water

Selection criteria: Region Berlin, hot water, all (applicable) properties of the client, year 2000

New measure: Installation of priority circuit
Date: 03.04.2004
Comment:
Selected measure: Save!
Average total operating costs of the housing stock

(Basis: 190 Housing enterprises, 610,000 flats; Annual statistics of the BBU and mean values of operating costs of housing companies - without lifts)
Average warm operating costs of the housing stock

(Basis: 190 Housing enterprises, 610,000 flats; Annual statistics of the BBU and mean values of operating costs of housing companies - without lifts)
The “knowledge“ gained from the measures or their results will be automatically integrated in the measures pool and makes simple measures in rated form to best-practice proposals.

Know how in two areas:

Firstly optimization approaches = which measures ? (Professional competence) but secondly = how to implement in organisations ? (Method competence)
Benchmarking – Success of the competence pool

List of properties / costs
- 1010
- 1012
- 1020
- 1021
- 1022

Set of measures
- Property data
- Planning
- History

Competence pool
- Measures
- Solutions
- Procedures

Selection of properties with cost deviation (Benchmarking)

Management tool to plan and document measures

Concrete proposals to reduce costs of successful participants, service providers and industry
Benchmarking - Concept

- Internet-based evaluation
- Anonymous data processing
- Integration in process courses
- Regional specifications
- Moderated working groups of users
- Work in associations