

Performance improvement via use of performance indicator – 15 years of voluntary benchmarking in German water industry

Arab Water Week

Filip Bertzbach

Amman, Jordan, December 2010

aquabench comes from the industry

- aquabench was founded from leading Swiss and German companies of the drinkingwater and wastewater branch, which have had experiences in benchmarking since 1996.
- 15 economists and engineers are running 25 different benchmarking projects for the whole water cycle



Different Benchmarking projects for the whole water cycle with more than 1,200 clients



Corporate Benchmarking

Wastewater services

Number of participants > 500

Modular concept with three selectable survey levels.



Drinking water services

Number of participants: 150

Modular concept with three selectable survey levels.



Riverbody

Number of participants: 4

Investigations regarding the maintenance and retention services of riverbodies.

Process Benchmarking

Number of compared objects > 500 (up to 11 years in a time series)

Wastewater services

- Wastewater treatment plants (WWTP)
- Urban wastewater treatment plants
- Industrial wastewater treatment plants
- Sewer operation
- Pumping stations
- Sewer construction
- Chemical analysis
- Indirect discharger
- Estate drainage
- Material management

Drinking water services

- Water production
- Water distribution and storage
- Water quality control
- Water main construction
- Administration
- Special focus
- Customer meter reading and consumption billing
- Customer meter replacement
- Construction and renovation of service connections

Public services

- River maintenance and retention
- Reservoir management
- Civil engineering office
- Road condition control
- Excavations of third parties
- For all public services
- Personnel management
- IT services

Wastewater survey

Number of participants > 500

Nationwide surveys of the economic data of wastewater services and for the state of sewer system commissioned by the German Association for Water, Wastewater and Waste (DWA).

Why Benchmarking? – Quotes from the industry

Performance Assessment and Performance Improvement

“...we apply the instrument regularly to control our continuous improvement process at various levels. With this, we can follow exceptionally well the developments and changes of ourselves and also of the branches.” Helmut von Roden, Head of the Operations Division, S

“Happy and
quoted by

Network

“Despite I
Klaus We

“That, in a
bonus” He

Commun

“The relat
these, are
Heinrich V

Support

“Using the
its value a

Internal tr

“...neverth
collection
determine

“Participation has also been worthwhile for us because, through the answering of the questionnaire, from now on we have available plant-specific values and key figures via an expanded database.” Wolfgang Drobig, Central Wastewater Treatment Plant, Radolfzell

Motivation, transparency and insights for employees

“Qualified staff carry out benchmarking not just because of the cost aspects but because they also have fun doing it.” - Bernd Wille, Wupperverband

- „Performance assesment
- „Performance improvement“
- „Networking and Exchange of experiences“
 - „Communication“
 - „Internal transparency“
 - „Support of decision maker“
- “Motivation, transparency and insights for employees”

akespeare,

findings” -

han a

used through

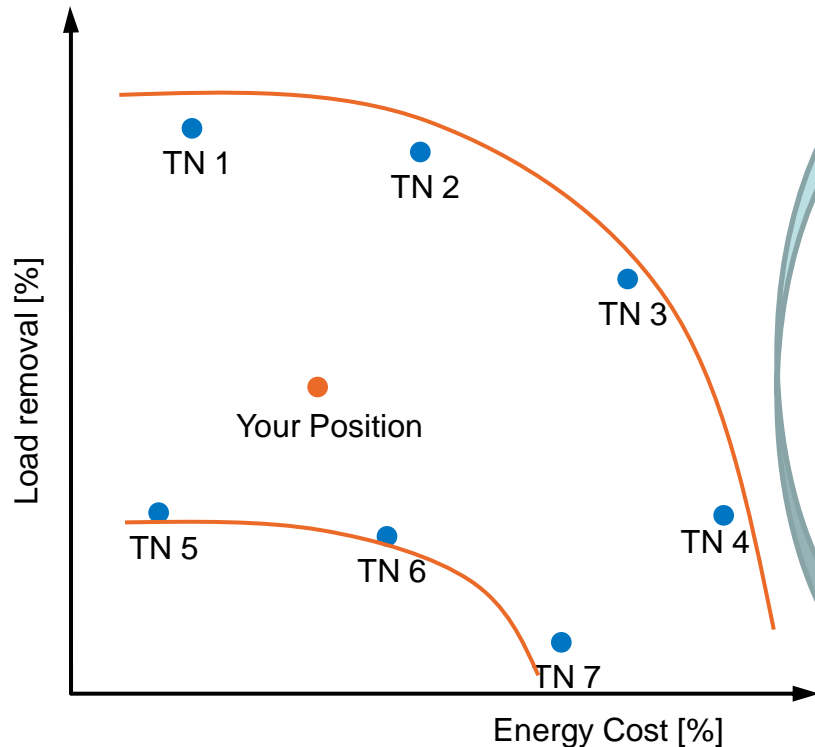
has proved

e data
eady

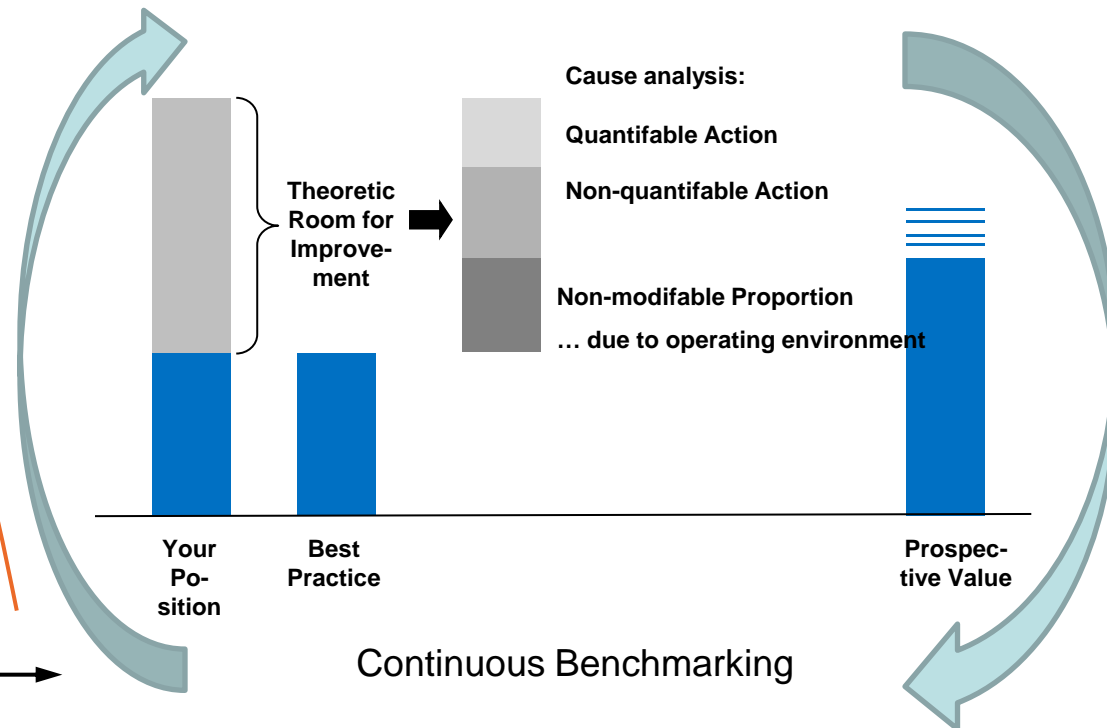
Performance assessment and performance improvement

“Benchmarking is the systematic and continuous process for the identification of, becoming acquainted with and adoption of successful instruments, methods and processes from benchmarking partners identified as being better.”

Performance assessment



Performance improvement



How to achieve performance assessment and performance improvement?

Performance Assessment

- Clear Structure and definitions of benchmarking systems (especially IWA-Performance Indicator)
- Methods from the industry for the industry
- Multidimensional performance assessment framework
- Inclusion of Context information
- Performance assessment tools, especially aquabench online Software

Performance Improvement

- Clear commitment of the leadership to benchmarking results
- Workshops and networking
- Action plans and proposals
- Continuous benchmarking
- Process benchmarking

Benchmarking at Corporate Level identifies areas of improvement – Benchmarking at Process Level leads to action proposals

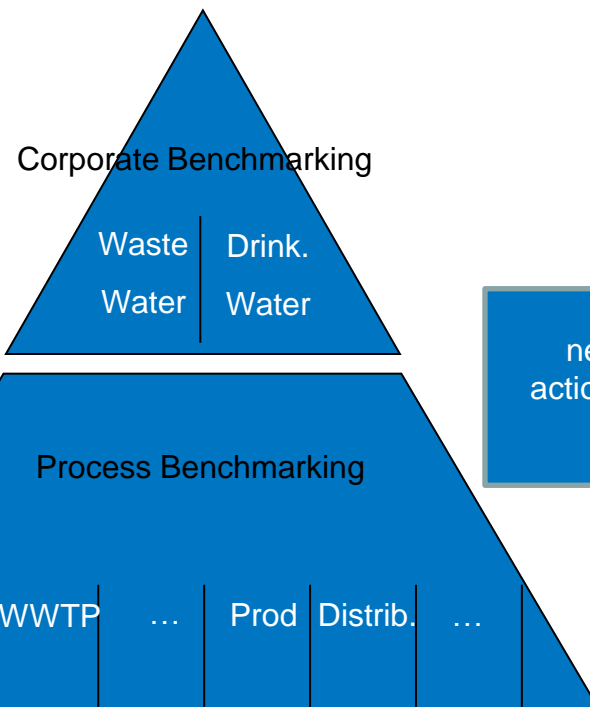
Examples of action proposals in one utility:

Process „Operating Sewer System“

- Changing the frequency of inspection and cleaning of pumping station
- Changing frequency of cleaning sewer system
- Integrating manhole-inspection in other activities
- ...

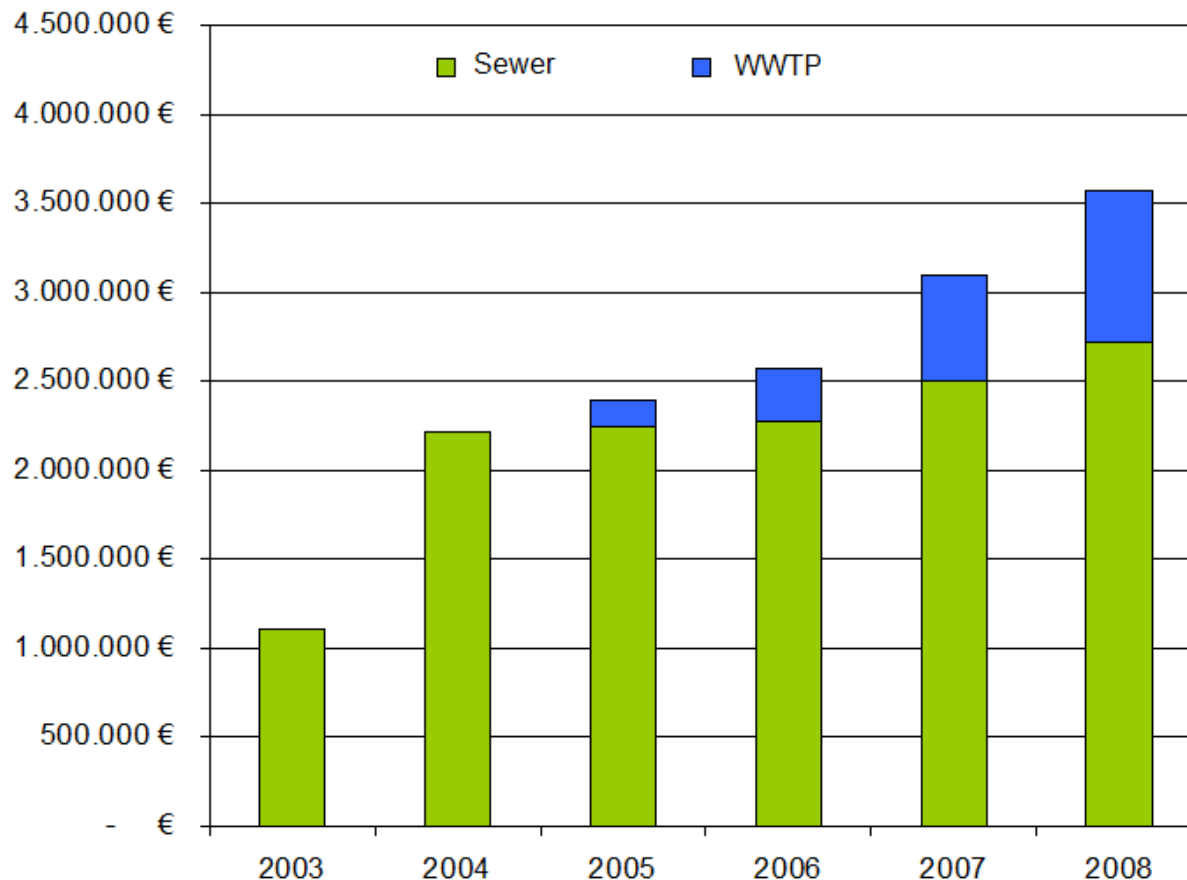
Process „Investment in Sewer System“

- No change of overall sustainable strategy of high investment level
- Change in standards of new manholes
- ...



networking, workshops,
action proposals, continuous
benchmarking

Example: Annual savings are achieved, which add up to 2,7% of operating costs



The way forward - Using the tools worldwide

Methods are available

- aquabench online database – developed to be used by the industry in every language
- The IWA PI-System and IWA Manuals are supporting the development of new benchmarking systems
- International benchmarking is starting and open for everyone
 - European utilities are using aquabench benchmarking method for improvement
 - European Benchmarking Cooperation (EBC) is cooperating with aquabench corporate benchmarking

