

MOBILISING PERFORMANCE IMPROVEMENT THROUGH THE MUNICIPAL BENCHMARKING INITIATIVE

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Abstract

The South African Local Government Association (SALGA) and Water Research Commission (WRC) re-established water services benchmarking in South Africa through the launch of the Municipal Benchmarking Initiative (MBI) for Water Services in April 2011. For municipalities, the key benefits of benchmarking are access to a support network of peers where they can share common experiences, achievements and challenges in a manner that enables improved performance. The MBI offers a bottom-up focus on the performance measurement capabilities of municipalities, with the provision of appropriate support to strengthen performance reporting systems and affirm their importance for effective service delivery. This paper presents progress to-date and associated lessons learnt. It is expected that effective benchmarking will lead to substantial improvements in service delivery efficiencies and associated economic benefits.

INTRODUCTION

Local Government Water Services Authorities (WSAs) in South Africa have contributed significantly towards increased access to a wide range of basic and improved water services, including substantial progress in addressing water services backlogs. Notwithstanding the progress made, this is set against the backdrop of an on-going need to continue accelerating service delivery in order to meet *inter alia* the 2014 service delivery targets, and within an environment of growing development-driven water demand, as housing development and service upgrading accelerates. In order to seek sustainable provision of adequate, effective, efficient and safe water services, improved performance measurement and management will be crucial. To assist, the South African Local Government Association (SALGA) and Water Research Commission (WRC) re-established water services benchmarking in South Africa through the national Municipal Benchmarking Initiative (MBI) for Water Services in April 2011.

Benchmarking is a structured, continuous process to both (i) assess and improve one's own organisational performance, and (ii), identify and adapt best practices from amongst one's peers to your own situation. Internationally, benchmarking has been shown to lead to substantial improvements in water services performance and water services delivery efficiencies; with associated economic benefits. With the maturing of South Africa's water sectors regulatory tools it is now appropriate and possible to separate out regulatory performance monitoring from more introspective municipal performance benchmarking; i.e. ***Benchmarking For Municipalities, By Municipalities, to the Benefit of Municipalities***, separate yet ultimately supportive of national regulatory objectives and initiatives. The MBI builds on the learning's from the previous benchmarking initiative, and in particular aims to

use water services benchmarking to strive for continual and significant performance improvement by municipalities, while also being able to harness the experience of their peers to make the most efficient use of available resources to improve service delivery and customer services (or ***benchmarking municipal water services provision to better services, more effectively, more efficiently***).

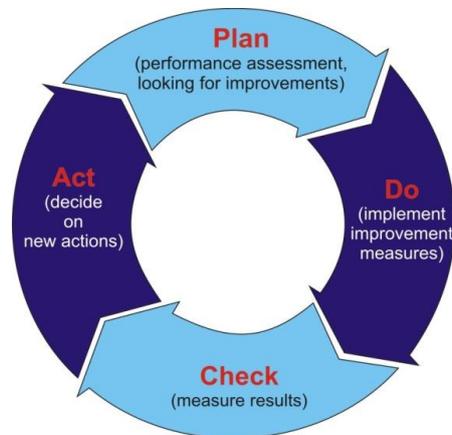


Figure 1: Benchmarking's Plan-Do-Check-Act Principle of Continuous Improvement

OBJECTIVES AND METHODOLOGY

The MBI aims to:

- Support improved efficiency and effectiveness in water services delivery through comparative performance benchmarking, peer-to-peer knowledge sharing and iterative performance improvements,
- Strengthen performance measurement, monitoring and management in municipal water services provision,
- Build communities of practice within and between municipalities, and
- Forge relationships of mutual respect and trust between municipalities and thereby strengthen the development of performance tracking, reporting and comparative assessment systems.

Achieving the aims of the MBI in the South African context across all municipalities holds significant challenges, and as such the following key components of the project approach are significant:

- Make benchmarking part of “normal, good business practice” that assists officials with their day-to-day operations and demonstrate economic benefits and value to the water services sector;
- Focus on hands-on support (“how do I do that?”);
- Create a support network and culture of information exchange between peers (“how did they do that?”);
- Use a web-based real-time data-capture and reporting system for tracking and measuring performance.

For municipalities, the key benefits of benchmarking are access to a support network of peers and dedicated professionals where they can share common experiences, achievements and challenges in a manner that supports and enables improved performance. The MBI is structured on a modular, tier based approach to benchmarking to encourage and enable all to participate, at a level aligned with their current capabilities and

future aspirations. Municipalities can therefore choose at what level they would like to participate (basic, intermediate or advanced) and migrate accordingly. The six introductory modules are focused on recognised national priority areas of municipal performance:

1. Water Demand Management
2. Backlogs and Service Delivery
3. Human Resource Management and Skills Development
4. Operations and Maintenance
5. Product Quality
6. Financial Performance



Figure 2: Initial water services related performance measurement modules and consideration of different levels of complexity within modules

In order to achieve the aims and objectives of the MBI project, a number of practical phases are required to introduce effective water services benchmarking to municipalities of South Africa. These phases are:

- Phase 1: Design of benchmarking process via consultation with core WSAs;
- Phase 2: Initiation amongst all WSAs;
- Phase 3: Institutionalization and consolidation across WSAs and the water sector; and
- Phase 4: Iterative and Ongoing Strengthening of Municipal Performance Assessment and Improvement.

These phases are indicated in the figure below (**NOTE:** The four phases are not mutually exclusive).

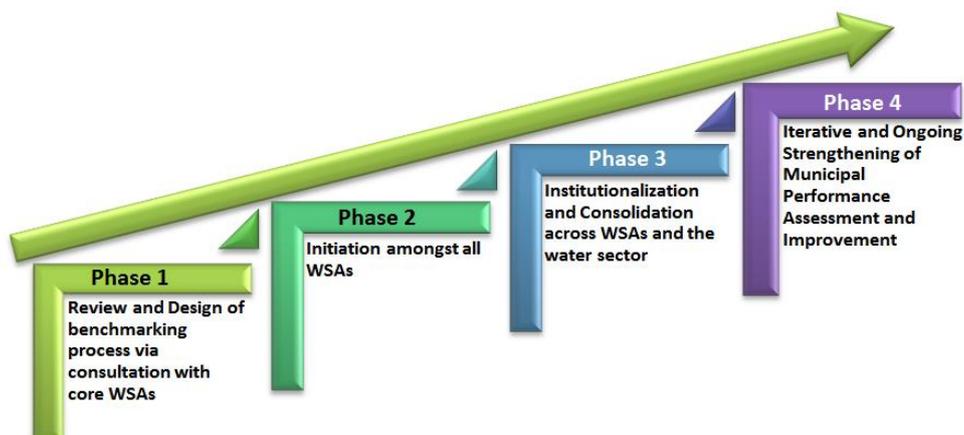


Figure 3: Required phases to re-introduce effective water services benchmarking to municipalities of South Africa

Key elements of each phase are shown in pictorial form below.



Figure 4: Phase 1: Review and Design of benchmarking process via consultation with core WSAs

In terms of the MBI, Phase 1 has been successfully completed.



Figure 5: Phase 2: Initiation amongst all WSAs

In terms of the MBI, Phase 2 has been successfully completed for champion, well-resourced municipalities, but not for all municipalities. In particular, it has been noted by the MBI project team that a complex inter-relationship between progress in the MBI and municipality status (or readiness for benchmarking) is noted (see Figure 6). In particular, for successful participation in the MBI, a number of critical enabling factors are required within a municipality, including: (i) culture, (ii) structures, (iii) systems and (iv) processes.

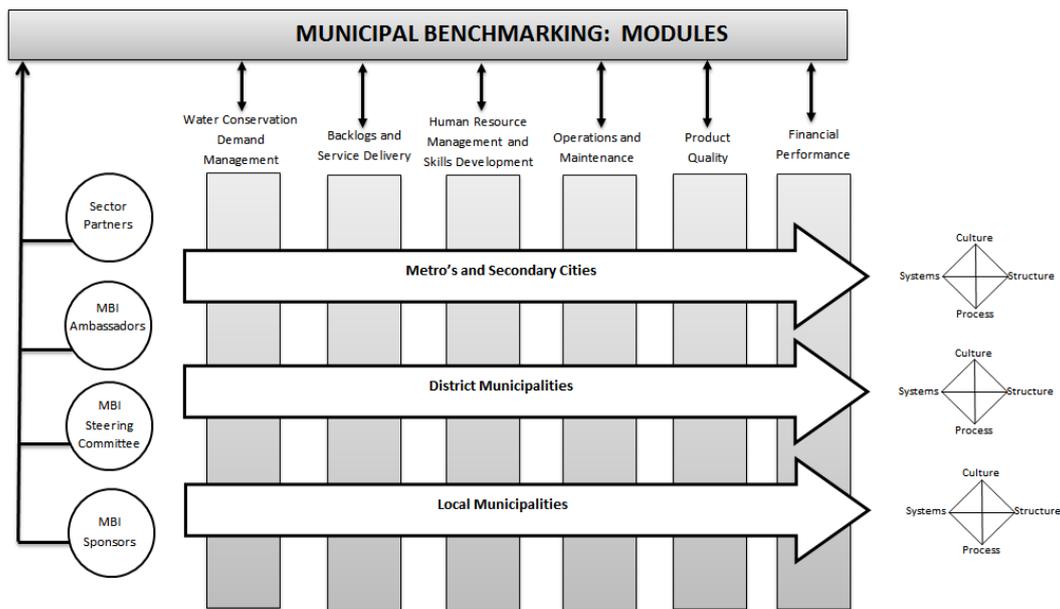


Figure 6: Complex inter-relationship between benchmarking progress, benchmarking modules and municipality status/readiness for benchmarking

In addition, and considering the stretched nature of officials within the current municipal environment, the module must be considered both urgent and important to the success of the water services business. Where good progress has been made (e.g. at Metro level through the Cities Working Groups), these critical enabling factors are in place and a strong urgency for performance improvement exists. By way of example, “Water Conservation and Demand Management” is a current national priority. As such, most (if not all) Metros already have a well-established organizational culture which acknowledges the importance of and need for water conservation and demand management, and this is generally well supported with appropriate systems, structures and processes in place to assist technical officials to develop water balances, minimize water loss, implement corrective actions, etc. It is therefore not surprising that this module has received good

participation and Cities Working Group meetings are well attended by municipal officials. These critical enabling factors are, however, not always in place in District and Local Municipalities, and progress with “metric benchmarking” (i.e. collecting and analyzing data) within these WSAs has been slow. Not only is this symptomatic of the lack of adequate systems, structures and processes in place to monitor, measure and manage performance of performance indicators at many municipalities, but is also an indication of the current culture within these organizations with municipal environment benchmarking seen as a “nice-to-have” and not a priority. In contrast to a lack of data, District Municipalities (DMs) and Local Municipalities (LMs) participation in learning events/peer exchanges (e.g. Water Services Master Classes) has been good, highlighting the need for and value of learning from others, networking with other municipal officials, etc. (i.e. “process benchmarking”). Considering this, the previously envisioned transitional shift from low support/low data analysis toward eventual low support/high data analysis over a 5 year period seems to have been accurate, and with additional support required to “poorer capacitated” municipalities.

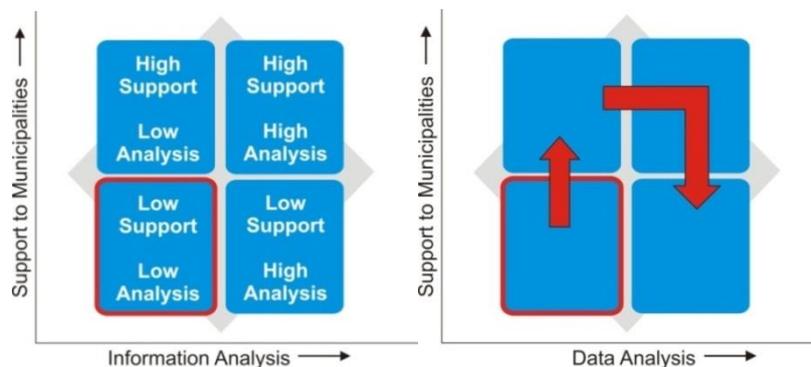


Figure 7: MBI transitional shift from low support/low data analysis toward eventual low support/high data analysis over a 5 year period

Phase 3 is a phase during which the value of participation would become very clear for participating municipalities.



Figure 8: Phase 3: Institutionalization and Consolidation across WSAs and the water sector

In terms of the MBI, some municipalities (e.g. Metros) have entered Phase 3. However, despite the substantial good progress made, by May 2013 only the Metro’s (and not all of them yet) could be regarded as being in the early stages of Phase 3 – during which with the clear generation of value arising through the Cities Working Groups. The bulk of the WSAs remain within Phase Two, requiring more sustained Phase Two support and progress before being ready to migrate to the Phase 3 stage of the project. On-going consolidation of participation by champion municipalities already in Phase 3, and initiation of MBI participation by struggling municipalities who have not yet fully advanced through Phase 2 is therefore required.

Once the MBI has reached a level of appropriate maturity (say after an additional two-year period), more emphasis can be placed on Phase 4 activities.



Figure 9: Phase 4: Iterative and Ongoing Strengthening of Municipal Performance Assessment and Improvement

Considering the aforementioned phases, key progress to-date will be discussed in the section that follows.

RESULTS AND CONCLUSIONS

In the sections that follow, key progress will be presented considering the following six main areas of MBI endeavour:

- **Module and Material Development** (e.g. development of South African appropriate, internationally aligned Performance Indicators (PIs)).
- **Municipal Engagement, Support and Events/Forums** (e.g. establishment of Water Services Master Classes, formation of Cities Working Groups, and national MBI workshop).
- **Database and Web tool** (e.g. design, development and implementation of Munibench web tool)
- **Business Analysis and Intelligence** (e.g. design of data and strategic analysis, alignment and agreement with Department of Water Affairs (DWA) such as to secure and exchange municipal data for use in MBI, data gathering from municipalities)
- **Business Management and Leadership** (e.g. alignment with and input to appropriate sector forums, and associated profiling).

Key elements of MBI progress are discussed in more detail below.

Water Services Master Class (WSMC)

Establishment of peer groups and networks within the MBI has been facilitated through the establishment of the very successful Water Services Master Classes (WSMCs) (and associated Cities Working Groups). The WSMCs comprise a series of municipal peer-learning exchanges in key areas of the municipal water services business. The WSMCs draw from local case studies and better practices, with an emphasis on “practitioner to practitioner” exchange. The primary target audience is Senior Water Services Technical and Management Staff. To-date, the following Master Classes have taken place:

- **Master Class 1** (in KwaZulu Natal, Gauteng and Western Cape) with topics including: (1) Blue Drop Certification, (2) Green Drop Certification, and (3) Water Loss and Demand Management
- **Master Class 2** (in KwaZulu Natal, Gauteng and Western Cape) with topics including: (1) Green Drop Certification, (2) Operations and Maintenance, and (3) Service Delivery and Backlogs

As the WSMCs have been very well received and proven popular with WSAs, the MBI team aims to continue hosting similar events in the near future.



Figure 10: Typical Water Services Master Class including case study presentations, discussions of challenges and site visits of good practice

Establishment of Peer Working Groups

Progress has been made in each of the three peer group categories (i.e. (i) Cities Working Group (CWG), (ii) District Municipalities Working Group, and (iii) Local Municipalities Working Group) with varied success. To-date, the CWG has proven most successful of the three peer group categories (but not without its own challenges). The MBI CWGs comprise the same nine municipalities that form part of the already well-established City Water Managers' Forum, and therefore consists of the eight metropolitan municipalities plus Msunduzi. A CWG has been established for each of the six initial modules included in the MBI. CWGs are ideally attended by officials directly involved on a day-to-day basis in the area of work included in the module. These working groups currently meet twice a year to discuss performance in terms of the module and share knowledge and best practice. Two CWGs meet in parallel. This is possible because different officials are responsible for the different areas of work covered by the modules. For some of the smaller cities, parallel CWGs potentially poses a challenge, as they are able to identify only one delegate to attend each meeting round. Note that while the City Water Managers' Forum (as the name suggests) is attended by WSA Managers or their delegates, CWGs are attended by those engaged in an area of work covered by the relevant module on a day-to-day basis. The meetings are hosted on a rotational basis and catering and venue costs are covered by the host municipality. Attendance at the CWGs is free (delegates only need to cover their own travel and subsistence costs).



Figure 11: Typical Cities Working Group Meeting

The MBI team continues to receive very positive feedback from delegates attending CWGs. Delegates have indicated that in many cases this is the only opportunity that they have had to meet others working directly in the same area of work as they do. Delegates have swapped phone numbers, taken notes of best practices and learnings from each other, and continued discussions and debates into tea and lunchtimes. The general feeling after each meeting is one of great energy. Some verbal feedback from recent meetings has included the following:

"I thought that I was the only one grappling with this issue. It is comforting to hear that others are having the same problems."

"I learned a lot just from listening to the other cities. I am going to go back and share this with my superiors. I hope that we can find a way to implement some of these ideas!"

"I have been trying to do calculations comparing our performance with other cities but have been unsure as to whether I have interpreted numbers correctly. Now that I have met my peers I can just call them and check next time."

It appears that these meetings are indeed establishing networks between municipalities. It is hoped that similar peer groups can be established in both DMs and LMs in the near future.

Benchmarking Modules

The IWA Manual of Best Practice for Benchmarking notes that "Benchmarking is a tool (or process) for performance improvement through systematic search and adaptation of leading practices". Historically, this has been done via both *Process Benchmarking* and *Metric Benchmarking*. Considering this, the MBI has made the following key progress:

- Process Benchmarking – How do you do what well? How can I learn from you? – Progress has been via the 2011 Conference, 2012 WSMCs, and the peer group interactions (of which only the CWG is effectively functional at this stage). Progress with Process Benchmarking has been substantial, has covered 5 of the 6 of the modules (Finances has only been done at metro level), has included Metro's, DM's, and LM's; and has generated exceptionally positive attendee / participant feedback.
- Metric benchmarking – Comparison of PI's using municipal data. Given the current overtaxed and under resourced status of technical departments, and as per feedback from the WSMCs, it became apparent that the gathering of voluntary submission of data would be a big challenge to the MBI. So such as to spur voluntary submission of data, the 2012 MBI Scorecard was generated for every WSA (all 152) for 28 PIs of a total possible out of a total possible 93 PIs (some 30% of PIs). WSAs were thereafter proactively encouraged by SALGA and the MBI team to add additional data; however, following little voluntary response, a special effort was made to have intense one on one interactions with some 50 WSAs and additional information and data was captured. Some 80% of these loaded additional variable data.

Considering this, the following is noted:

- Metros: Through CWGS, WSMCs and associated data gathering mechanisms all 6 MBI modules have been covered.
- DMs/LMs: Through the WSMCs and associated data gathering mechanisms 5 MBI modules have been covered (i.e. Financial Management not yet covered).
- Data gathering through the CWGs has been very successful, where the peer group agrees to measuring certain PIs and reporting against these. As similar structures are

not yet up and running for DMs/LMs, data gathering for these WSAs to-date has been very haphazard.

Development and Implementation of Benchmarking Web-based Tool (Munibench)

Data collection for the MBI is via an on-line system, www.munibench.co.za. The aim of the system is to both (i) measure performance (through facilities for data input, comparison of PIs via appropriate dashboards, check participation progress, etc.); and (ii) improve performance (through access to material associated with shared learning, peer networks, case studies, guidelines, methodologies/techniques, training, etc.). The following system features have initially been developed: (i) Setup default variables, contextual information and PIs, (ii) Customise variables and PIs, (iii) Capture data, (iv) Draw charts of variables and PIs (individual and comparative performance), (v) Dashboard that display default and customised PIs and (vi) Upload of useful resources. Data can be entered and updated on the system at any time. The following screenshots show elements from Munibench.

The figure consists of two side-by-side screenshots from the Munibench web application. The left screenshot shows the 'Variables' configuration page for 'Absenteeism (water) (IWA B22)'. It features a tree view of variables on the left, a central text box describing the metric: 'Total number of days of absenteeism occurring during the assessment period. In the case of multi-function municipalities, the absenteeism of each employee shall be accounted for based on the proportion of time dedicated to water supply related activities. Absenteeism includes all absence to service, excluding vacation leave. Employees include every person who works for the undertaking in return for wage, and may include permanent and temporary personnel.', and a 'Save' button at the bottom. The right screenshot shows a data entry table for 'City of Johannesburg 20120630'. The table has columns for Variable, Code, Measured, Reliability, Accuracy, Value, Unit, and Comment. It lists various water service indicators such as 'Average operating pressure (water)', 'Billed metered consumption (IWA AB)', and 'Time system is pressurised (water)'. Each row includes a star rating for reliability and accuracy, and a progress bar for the measured value.

Figure 12: Munibench elements including (i) Activating variables and (ii) Data entry

Benchmarking Performance Indicators (PIs) and Associated Data

A key realisation by the MBI team is that benchmarking PIs will never truly be “finalised”, and that there is a need to be flexible to accommodate required changes to PIs based on sector needs, new thinking, emerging challenges, etc. A key requirement is to ensure that the selected PIs are relevant and useful to WSAs (i.e. Begin with the end in mind – Why am I measuring this? What’s in it for me?). Therefore, although the PIs might address metro/large municipality needs/aspirations, an on-going challenge is to ensure that the PIs are also (a) applicable/appropriate to smaller, more rural municipalities/water services authorities, and (b) challenging to smaller, more rural municipalities/water services authorities (i.e. push them out of their comfort zone) so that they aspire to do better and deliver a better service. The above challenge is an on-going focus of the MBI.

A key principle of the MBI is that WSAs are encouraged to start basic (*less is more*), entrench basic participation, and then expand participation as most appropriately suits themselves. To encourage such participation, the MBI team’s tactical approach has stressed the strategic importance of the MBI team sourcing / obtaining / utilising existing municipal data and pre-populating the Munibench system with such existing data – as far as is so possible – and thereby avoid duplication of municipal effort. It has previously been noted that a reliance on municipal provision of already provided data is likely to be seen as a frustrating extra burden to participating municipalities. By contrast, successes in securing and harnessing already provided municipal data by the MBI team would be well received by municipalities and would help ensure that there is no duplication in municipal effort, with

municipalities only having to fill in the gaps. Considering this, the MBI team has utilised a two-pronged approach to data collection, namely:

1. Accessing municipal data already provided to existing processes (e.g. DWA), and
2. Allowing municipalities to capture water services data of importance/relevance to improve performance (and establish benchmarking/peer networks).

The MBI methodology to facilitate involvement by all/benefit to all municipalities by ensuring a very low or no barrier to participation and receipt of benchmarking PIs at the “basic” level has been well received and supported. In particular, use of current available municipal data from current sources (e.g. DWA Municipal Strategic Self-Assessment of Water Services (MuSSA) – see below) and presentation of a “reflected/mirror” view that encourages and guides municipal further involvement has been praised.

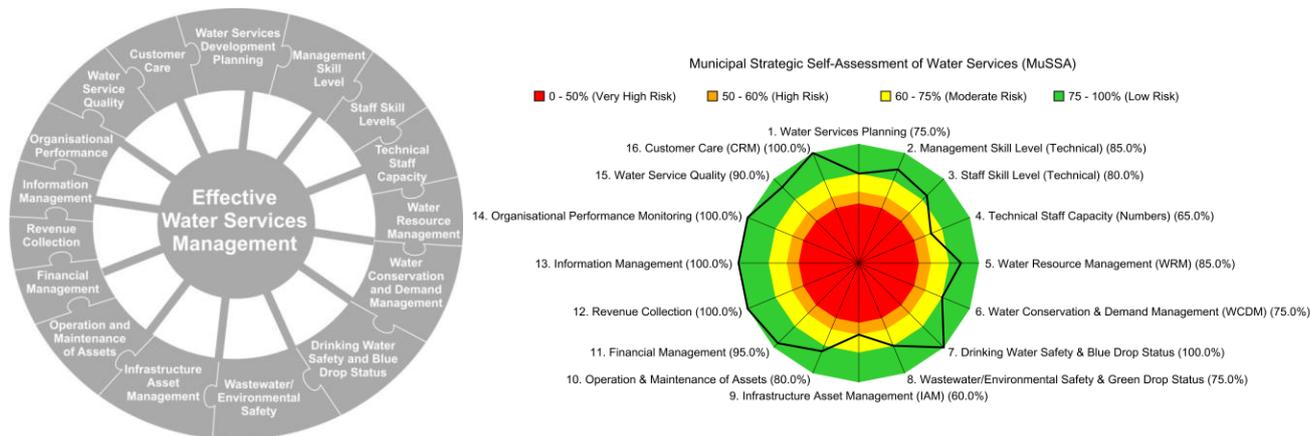


Figure 13: Utilizing existing data sources to allow basic participation by all municipalities (e.g. DWA MuSSA – Vulnerability of Municipal Water Services)

For performance enablement to become effective it is important that simple yet effective measures are put in place to alleviate identified vulnerabilities preventing good performance; this is managed through a “Plan-Do-Check-Act” continual improvement framework. Although participation and progress by DMs and LMs in “process benchmarking” has been good, the DM and LM response to requests for data submission for “metric benchmarking” has to-date been very poor. In order to take the LMs and DMs forward and grow participation, the MBI team envision a greater focus on process benchmarking and getting “Peer Group” based interactions to lead and drive data submission. According to MBI Ambassadors from DMs and LMs lack of data submission is also mainly due to not having staff available for data gathering and loading, and in some instances data is just not available. By using MuSSA vulnerability findings and the associated Municipal Priority Action Plan (MPAP) process for determining practical strategic actions, roles and responsibilities, resources and timeframes to address the prioritized areas of vulnerability of each WSA, local government needs can be progressively met. Through such a process, data availability will improve, and traditional “metric benchmarking” should be enabled.

Therefore, although significant progress has been made with mobilising municipalities to start measuring, much work is still required. Currently more focus is placed on data collection and trying to ensure that municipalities understand the importance of data quality, and extensive data analysis has not yet occurred. Indeed, at this early stage it is not advisable to critically analyse this data and draw too many conclusions regarding

performance. It is more important to understand where municipalities are participating and where they are not, and how to address any identified gaps.

Discussion

In many ways, the MBI is a “**change management process**” as it requires municipalities to both think and act differently. Many change programmes, however, fail before they start, as most people and organisations don’t like change, and change introduces risk or requires focused effort. For a change management process to be successful, it needs both high quality leadership and excellent management. In addition, the MBI faces the challenge of operating in an overtaxed municipal context. The following core challenges are noted:

- Benchmarking is not a municipal priority nor is it part of current municipal culture – changing this will take time (i.e. need interest, commitment and involvement from councilors, senior management, and technical staff and the supportive involvement and alignment from key municipal and Water Services Sector groups (e.g. DWA, DCoG, National Treasury).
- Further strengthening and alignment of data collection mechanisms are required to minimise duplication, data burden, etc.
- There is a need for more frequent municipal engagement through site visits (to all municipalities, regardless of “status”)
- Commitment to additional funding is required to ensure medium and long-term sustainability of MBI

Driving, guiding, facilitating, achieving cooperation, and achieving a cultural change in the whole water services sector is much more of a challenge and will take more time and patience than simply gathering data and distributing the results. Ensuring a successful MBI is therefore a mammoth task that is very much based on the co-operation with and choice of each individual municipality. The MBI is therefore currently in a state where the value of participation is not very clear to all participating municipalities. Only the Metro’s (and not all of them yet) could be regarded as being in the early stages of this value realisation, with the clear generation of value arising through the CWGs. The bulk of the WSAs remain within the early stages of benchmarking, requiring more sustained support and progress before being ready to migrate to a higher, more independent stage of benchmarking. Accordingly, it is clear that true voluntary participation has not yet been reached and that the MBI has not yet reached the “growth (or bandwagon effect)” stage of maturity (see figure below). This implies that extended additional effort is required to achieve this.

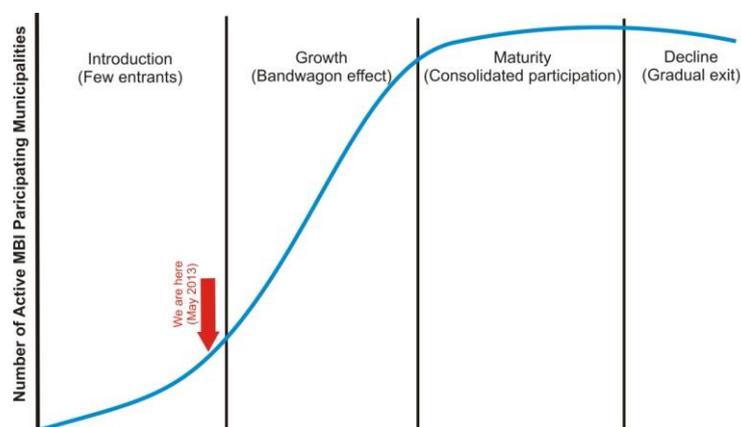


Figure 14: Current benchmarking progress

The MBI team feel comfortable that within the reality that benchmarking is a voluntary process, the project has made good progress, and that additional “proactive nurturing” will allow the generation of momentum across the DMs and LMs which we is starting to be achieved amongst the cities.

CONCLUSIONS AND WAY FORWARD

The work effort and associated progress has been substantial; yet needs to be seen in light of this being a fledgling process which has included a need to test & research approaches and respond appropriately. A gradual start with gathering momentum is a normal situation with Benchmarking processes, and the experience in Europe, Canada and elsewhere is that it takes multiple years before true momentum is in place. In order to overcome identified challenges and still make significant progress, the South African MBI considers:

- Creation of peer networks with associated data/information sharing and learnings.
- Peer Review via checking adherence to regulatory requirements (e.g. as specified via DWA).
- Calculation of benchmarking PIs via measurement of associated key variables to indicate performance in particular areas of interest/concern.
- Accessing and utilising existing municipal data (e.g. utilising the MuSSA findings to identify and address noted fundamental water services gaps/issues (i.e. through the MPAP process)).

Although significant progress has been made with sensitising municipalities to benchmarking and mobilising municipalities to start measuring, much work is still required to ensure that: (i) Municipalities are actually monitoring/measuring performance, (ii) Municipalities are reporting and assessing their own performance with a view to improve, and (iii) Municipalities are engaging other municipalities and sharing experiences, challenges, issues of concern and through this process improving their performance. Ongoing reinforcement of these principles by the MBI team to municipalities (especially via peer group activities) is therefore of primary importance. With time and commitment the MBI can lead to substantial breakthrough improvements in water services delivery in South Africa. In addition to the efforts of SALGA, WRC, Municipal Benchmarking Ambassadors and the project team, success will be dependent on interest, commitment and involvement from municipalities and the supportive involvement and alignment from key water services sector groups including *inter alia* DWA, DCoG and NT.

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