



WATER UTILITIES LEADERS FORUM
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Position Paper for Session 4 -
“Heart-Ware: An Essential Component of Water
Sustainability”

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Background: A 'Heart-Ware' Approach towards Water Sustainability

1. Water is the life blood of all mankind. With increasing urbanisation and industrialisation, ensuring its availability and reliability is increasingly becoming a pressing issue in many parts of the world. To ensure our future generations can continue to use and enjoy this vital resource, the global community needs to work together to pursue water sustainability in a smart, diligent and consistent manner.
2. Today, focusing solely on traditional hardware-based supply development which includes building supply capacity is no longer enough. A **'heartware' approach of building social capital**¹ in the population is equally important as well. It encourages greater acceptance of our messages which contributes towards demand management, an equally important aspect of ensuring water sustainability. Please refer to Annex A for a depiction of relationship.
3. When utilities engage and interact with the community, social capital is built in the form of trust and networks. It can be used to develop positive attitudes and practices towards demand management, as well as to reach consensus for policies. Social capital is also essential during times of crisis, as it can facilitate understanding and acceptance. These stated outcomes are important to help achieve water sustainability. Therefore, it is critical for water utilities to understand this 'heartware' approach of building social capital, and maximise its full capability.
4. We define the 'heartware' approach as comprising the following: *customer service, service delivery and community engagement*. A 'heartware' approach in **service delivery** aims to minimise inconvenience to stakeholders during project management while in **customer service** it ensures that the customer's concerns are met in an appropriate and timely fashion. The third component, **community engagement**, involves encouraging our stakeholders to play a part in conserving, valuing and enjoying water. Intrinsicly, community engagement also acts as a channel to reinforce the first two components; the more frequently we engage our stakeholders, the better we will be at meeting their needs and delivering the appropriate services. This paper will show that the three components interact additively to lead towards water sustainability.
5. Therein lies the question: ***how can we cultivate the "heart-ware" of the general public through customer service, service delivery and community engagement? What can utility leaders do to create a customer-caring culture in all aspects of water services?***

¹ In his book "Bowling Alone: America's Declining Social Capital", Robert Putnam defines social capital as the collective value of all 'social networks' and the inclinations that arise from these networks to do things for each other.

Part I: Customer Service

6. Water utilities are responsible for providing services to meet customers' needs in the following areas:

- I. reliable supply of water;
- II. acceptable drinking water quality;
- III. health, sanitation or special needs;
- IV. discharge of used water (wastewater); and
- V. storm water drainage.

7. Customers pay charges based on their demand or consumption, and they are equally aware of their rights to receive an acceptable level of services from the utilities. To ensure customers' concerns are addressed in a proper and timely manner, responsible utilities are often set up with performance targets or service standards to drive excellence in work. A review mechanism utilising a measurement and monitoring methodology should also be in place for continuous service improvement. The target-based performance of an organisation relies on the effectiveness of its management structure, in which the roles and responsibilities of every department in the organisation are well-defined, and every staff is well-acquainted with the procedures and service requirements.

8. To minimise any gaps in information flow, operations departments should provide adequate support to empower the frontline customer service staff in responding to customers' enquiries. Our challenge is the level of support an organisation should provide to customer service officers. ***How can we determine customer-accepted levels of service standards? What are some models of customer service department operations or organisational structures that can facilitate empowerment of frontline staff and support of operations, as well as more open and constructive feedback from customers?***

9. In answering those questions, the possible measures to enhance customer service are:
- I. Leverage technology and information technology. For example, a Customer Relationship Management (CRM) System to streamline and simplify the feedback process;
 - II. Optimise organisational efficiency to levels that are affordable to customers (e.g. streamlining procedures for applications; simplified complaint and dispute handling procedures; convenient billing and payment system etc.);
 - III. Benchmark performance against comparable utilities or service-providers in a unified approach; and

IV. Organise capacity building programmes for staff with frequent contact with customers.

10. These are several customer service case studies:

- (i) In France, Lyonnaise Des Eaux, a water supply and sanitation company, used Suez Environment to manage its billing. It launched a new water bill format that provides a clearer overview of the water cycle and costs of different services. Additionally, it established a 24 hour customer service hotline. Its efforts have been rewarded with winning the first prize in the "Service Companies" sector of the 2009 Customer Relations Competition for 2 consecutive years. More importantly, from an annual survey 10 000, their customer satisfaction rate increased from 50% to 93% between 1997 and 2006.
- (ii) In India, the Ministry of Urban Development benchmarked 28 performance indicators for water, sanitation, solid waste management and stormwater drainage. With the aim to increase accountability, one of the performance indicators was to attain 80% efficiency in redressing customer complaints.
- (iii) In Hong Kong, the Housing Authority (HA), the authority of public estates in the territory, has introduced a Total Maintenance Scheme (TMS) since 2006 as an innovative and proactive approach to the maintenance of the public rental housing stock (> 700,000 flats). The scheme aims to provide regular checks on both the external and internal condition of flats and common areas of the estates. Under TMS, "In-Flat Inspection Ambassadors" (IIAs) are employed to carry out scheduled in-flat inspections, arrange timely one-stop repair service, and promote maintenance education to tenants. Mobile maintenance education booths were arranged in estates where TMS inspections would soon be carried out. The scheme which is in its 2nd 5-year cycle has been well received by the tenants.

11. Amongst all measures, the most important "Heart-ware" for excellence in providing customer services is that front-facing officers need to feel valued by the organisation so that they can be empowered to show their sensible heart to customers' emotional response and particular needs for tailored service.

Part II: Service Delivery

12. In the aspect of service delivery, customers' expectations of higher efficiency and quality of utilities' work (e.g. construction of water infrastructure for water supply) evolve with the fast

pace of socio-economic development today. To meet this challenge, water utilities should recognise the following factors that can affect the efficiency and quality of their work:

- I. multi-sectoral dynamics among stakeholders such as policy makers, district council members, government departments, manufacturers, contractors, environmentalists, other utilities, customers and licensed plumbers etc.;
- II. diverse needs of different types of customers in domestic and commercial sectors;
- III. Customers' high expectations of the infallibility of service delivery and
- IV. Customers' desire to be aware of all aspects of utilities' work through internet and electronic communication media.

13. In planning infrastructural development and extension of service, utilities leaders have to consider the tradeoffs between ensuring adequate and timely infrastructure development and incorporating public feedback. ***How can utilities help the public understand the nature and rationale of work?***

14. The following measures could be taken to help improve the situation:

- I. Hiring Public Relations Officers (PROs) and/or Public Relations consultants for all construction projects;
- II. Organising consultation sessions during the planning process prior to construction;
- III. Facilitating access to information through media outlets, educational collaterals and consultation sessions;
- IV. Implementing customer-oriented service for meeting diverse needs (e.g. promotion of web self-service, enhancement of call centre's service etc.); and
- V. Conducting surveys to gauge the feedback and concerns of customers.

15. These are several service delivery case studies:

- (i) During the Cheong-Gye Cheong river restoration in downtown Seoul, Korea, the Seoul Metropolitan government conducted a land use analysis and created a complaints counselling site office. This project was particularly difficult as it involved demolishing a highway that ran through downtown Seoul and disrupted a large number of nearby businesses. By the end of the project, the complaints counselling office handled 13,800 cases on-site, visited 7,400 shops and held 23 public hearings. They agreed to provide extra parking, reduce parking fees, promote subsidies for business and most commendably, struck special arrangements with displaced vendors.
- (ii) A project website was created in conjunction with the construction of the Pantai 2 Sewerage Treatment Plant in Kuala Lumpur, Malaysia. Scheduled to be completed in 2016, this sewage plant with a park on top of it is estimated to cost 983 million Ringgit.

The website (<http://www.pantai2stp.com.my/>) disseminates information such as the implementation schedule, monthly progress photos, scope of work and public information centre details; while keeping the feedback channel open through the call response centre.

16. The key to efficient and quality service delivery is to have a listening heart so that the public will buy into projects. After all, a Heart-ware approach is a people-centric, transparent and thorough information and consultation process.

Part III: Community Engagement

17. Community engagement is an essential aspect of both customer service and service delivery, which in turn can help to regulate water demand. In general, water demand management includes measures for controlling wastage and undue consumption through pricing, regulation, conservation, leakage control, re-use and recycling of water and use of water saving devices etc. Unlike supply development, the successful outcome of demand management hinges on the perception, cooperation, response and habitual behaviour of stakeholders. Having realised the importance of public participation in water demand management, water utilities have endeavoured to design measures that are best received by the public. Participation increases a sense of belonging, encourages the notion of water as a shared resource, and effectively promotes ownership of a specific social subject like water sustainability. Good measures of demand management should be developed through considerations of economics, sociology and psychology to meet the evolving public expectations. To achieve effective community engagement, utilities leaders have to contemplate the solutions to the following questions:

- I. **What is the role of engagement in policy?**
- II. **What does an effective communication strategy encompass in the face of rapid changes to culture and environment/technology?**
- III. **How does the rise of social media impact engagement?**

18. Community engagement for water sustainability may consider:

- I. Integrating water resource management and public education for acceptance of alternative water resources;
- II. Having a clear direction on extent of engagement for utilities (information → consultation → collaboration → co-creation);
- III. Conducting perception surveys in regard to the introduction of new service;
- IV. Promoting ownership through programmes that target specific demographic groups; and

- V. Starting demand management and extensive public education programmes for water conservation.
19. These are several community engagement case studies:
- (i) In Hong Kong, the Water Supplies Department (WSD) has a series of educational programmes to promote water conservation. For example, water conservation is incorporated in the secondary school curriculum through the 'Teaching Kit for Liberal Studies entitled "Water: Learn and Conserve". This enables the students to understand water from the environmental and sustainable development perspective. In addition to educational programmes, WSD has organised and supported campaigns that propagate water conservations messages through television, radio and newspapers.
 - (ii) In Singapore, PUB set up the NEWater Visitor Centre in 2003 to educate the public about recycled water as a viable source of water for the country. As of 19 June 2013, more than 1 million visitors have taken the interactive tour at the visitor centre, which is integrated with an operational NEWater factory. Many of these visitors are students who visit as part of their school curriculum. In addition to the tour, there are opportunities for students to further explore their interest, through programmes like the NEWater Scientist Programme. Under this programme, students dress up as scientists in a lab coat and hard hat to discover how Singapore manages its water resources and the science behind NEWater.
20. From these community engagement examples, it is important to note that they serve as stepping stones towards the ultimate goal of community ownership of our water resources. Similarly, a water saving culture that is much needed for sustainable development can be fostered through appropriate communication strategies and school programmes. While changing mindsets (e.g. ownership or accepting alternative water sources) is a gradual process, utilities leaders are duty bound to explore and undertake tailored approaches according to the demographic context peculiar to their societies.
21. In conclusion, a 'heartware' approach for service delivery, customer service and community engagement helps to move us one step closer towards achieving water sustainability because it builds social capital and encourages greater acceptance of demand management messages. Thus a 'heartware' approach can be viably and effectively incorporated into utilities management.

Disclaimer: This position paper has been prepared by staff from PUB Singapore and Water Supplies Department, Hong Kong, to provide outline information to stimulate dialogue at

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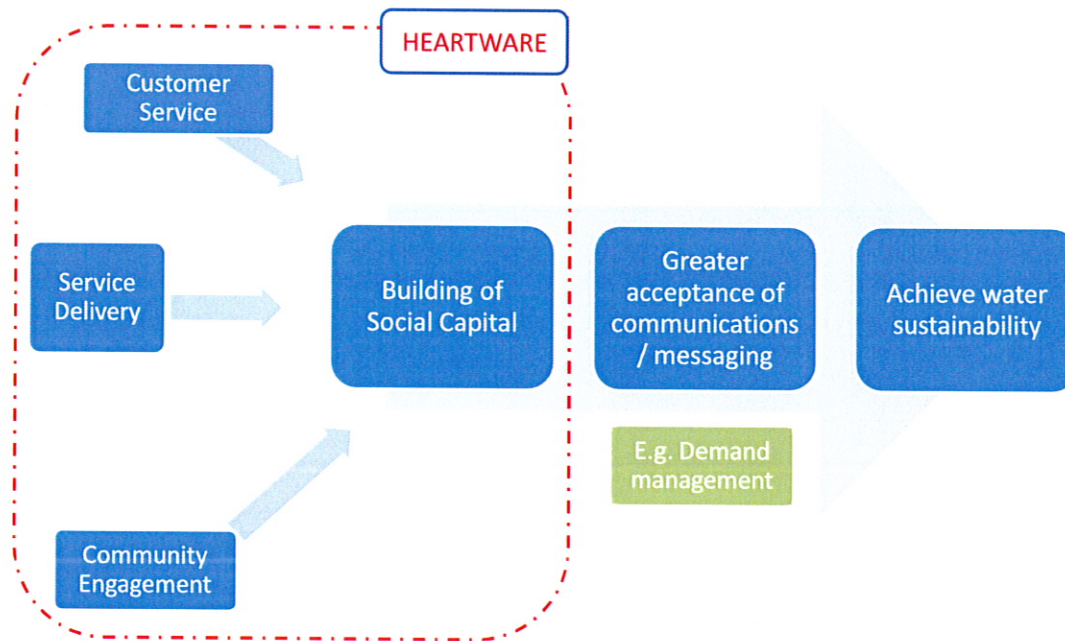


Figure 1: Relationship between customer service, service delivery and community engagement with water sustainability

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