



Strategic marketing of urban water services

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MANY URBAN WATER utilities and municipalities are not providing water services directly to a high proportion of the city population (50 - 70% in some cities). People who do not receive water services from the utilities often rely on water vendors, to whom they pay high prices, or they use alternative water sources, often at high cost, that may be contaminated. The situation is becoming worse with high urban population growths of over 2 to 6% per year. The twin objectives of improving water services to all customers (including the urban poor) while achieving financial sustainability is a key challenge facing water utilities, especially in Africa. However, there are opportunities for improvement.

Strategic marketing offers a systematic and flexible approach to providing improved and sustainable services to all consumer groups, including the poor. Research aimed at adapting and developing a marketing approach for use in the water sector was carried out in Mombasa, Kenya during August 2000. Mombasa is Kenya's second largest city and is located at the eastern coast of the Indian Ocean. The National Water Conservation and Pipeline Corporation (NWCPC) is the utility with mandate to provide water services to all customers in Mombasa. The findings were used to prepare a detailed case study to demonstrate how the strategic marketing approach could improve management of urban water services. This approach is derived from marketing concepts.

Strategic marketing concepts

Marketing has been defined as "*the management process responsible for identifying, anticipating and satisfying customer requirements profitably*" (Jones, 1989). This definition implies that ongoing communication with existing and potential customers is required to check the effectiveness of efforts to identify, anticipate and satisfy customer requirements. While different water utilities have different financial objectives, all utilities need to generate sufficient funds for future investment.

Another perspective on marketing is to view it as a set of tools. One such tool is the marketing mix or the 7p's of marketing (product, price, promotion, place, people, process and presence) which are aspects to be reviewed in order to respond adequately to demand. A utility with a marketing orientated philosophy would have its entire operations, its personnel and its technical systems, being geared to providing improved customer satisfaction and to contribute towards meeting its financial objectives. Market seg-

mentation, service differentiation and appropriate pricing are key to achieving these objectives.

Relevance of marketing in the water sector

A casual observation of the water situation in many African cities reveals that a thriving water market exists. Whereas the official water utility has the legal mandate to supply water to all customers in the city, other suppliers operate in the city as well. Evidence of the existence of a water market and the competition faced by utilities is seen in form of (Njiru and Sansom, 2001):

- Illegal connections to the water utility's distribution network.
- Private water vendors (hand carts, wheelbarrows, water tankers etc)
- Individual and/or private water sources such as wells and boreholes.
- Other non-utility water sources such as springs

Good opportunities exist for the utility to capture more of the water market served by these methods, through strategic marketing.

How to market water services

Progressive customer orientated water utilities appreciate the crucial importance of the customer as the reason why the utility exists. The key to marketing of water services is to know the customer. It is important to build beneficial exchange relationships with existing and potential customers. A useful approach to achieve this is to use the concept of "Customer Value Chain" (Sage R, 2000).

The concept of the "Customer Value Chain" is to *know, target, sell and service*. In the context of the water sector, the customer value chain involves developing customer knowledge through market segmentation, service differentiation, service promotion and service provision. This entails the following (Sansom et al, 2000):

- **Know** and understand the different customer and potential customer groups, including their attitudes, practices, perceptions, preferences and their willingness to pay for improved service options. Key methods for getting to know water users are through questionnaire surveys, focus group discussions, customer consultative committees and local observation.
- **Target** specific market segments with appropriate service options at sustainable water charges that consumers are willing to pay for. Options could include house

connections, yard taps and water kiosks, with or without storage tanks, at appropriate price levels. Other options that can be offered are payment options (e.g. take-and pay, weekly, monthly, by post, at a bank, or at a local office including flexible payment systems) and shared management options (private and community management).

- **Sell** options using suitable promotion techniques. This will require careful planning and implementation particularly when dealing with groups who use alternative water supplies or if they have unauthorised pipe connections and do not currently pay.
- **Services** provided to a good quality standard that requires utilities to adopt a programme of continual organisational improvement, centred on existing and potential customers. In addition, effective collaboration between different departments within a utility (such as customer relations, billing, operation and maintenance, financial management etc.) can enable the resolution of most customer complaints and enhance customer satisfaction.

The key to understanding existing and potential customers is market segmentation.

Market segmentation

Segmentation is the process of identifying groups of customers with enough characteristics in common to make possible the design and presentation of a product or service each group needs (Heskett, 1986). By identifying a segment's special needs, the service provider can then design services to meet them better and in a financially sustainable manner. A market may be segmented according to demographic dimensions such as, income, house type education level, family size and location.

The types of dwelling that people live in are generally a reflection of their socio-economic status. The people who live in slums and other informal settlements are generally the very poor, while those in well planned residential estates tend to be the more affluent in the population. The type of dwelling is therefore a convenient method that a water utility could use to segment the water market.

In the Mombasa research, dwellings were categorised in four segments:

1. Bungalows and maisonettes
2. Flats
3. 1, 2 or 3 roomed dwellings.
4. Dwellings located in informal settlements (slums) made of recycled or informal building materials.

In many cities in developing countries, needs and conditions differ from one customer group or market segment to the next. People also experience substantially different water services specific to their market segment. For instance, table 1 shows a summary of the water services experienced by the selected market segments in Mombasa.

Market segmentation provides a basis for water utilities to structure service delivery and pricing policy to suit the

special needs of each customer group. Suitable options for improved services need to be developed bearing in mind the different needs and demands of these groups. Though the *product* delivered to all segments in the water market would be similar (good quality potable water that meets the necessary standards), the method of delivery, and hence the *service* would be different to suit the segment's special requirements and willingness to pay.

Implementing the strategic marketing methodology

A common principle of strategic marketing that can be followed by water utilities is (Wilson & Gilligan, 1997):

- Where are we now?
- Where do we want to be?
- How might we get there?

Where is the utility now?

Utilities wishing to implement the strategic marketing approach need to obtain information about their existing and potential customers. This information can be obtained by carrying out a comprehensive customer survey and willingness to pay study in all customer groups. Data on existing and potential customers is confirmed and a summary of existing water services obtained. An example of such a summary is shown in Table 1. Customers' preferences and willingness to pay for water service options priced at cost covering levels are also obtained. In some customer groups such as those living in the informal settlements, focus group discussions can be conducted to collect additional data including their perceptions and preferences for priced water service options. An institutional analysis of the utility and its water supply infrastructure is carried out including analysis of the utility's operating environment.

Achieving utility objectives (Where do water utilities need to be?)

A progressive urban water utility or municipality typically has the objective to improve service provision to all groups of customers, while meeting its financial objectives. Other objectives for utilities may include:

- To capture more of the water market
- To achieve equity in service provision by serving the poor, most of who are currently not served and rely on alternative sources
- To improve customer service and
- To improve the utility's financial position

The data collected (Where is the utility now?) is used as the basis for making projections of necessary improvements in water supply infrastructure. Results of the customer survey, willingness to pay study and the population profile are used to estimate take up of service options. Projections of costs for improvements and the revenue that the utility can obtain from improvements in water services are then worked out. It is recommended that average

Table 1. Summary of existing service levels for people living in respective market segment in Mombasa

Selected parameter	Bungalows & Maisonettes	Flats	1, 2 or 3 roomed dwellings	Informal settlements
Do not receive water directly from NWCP (the utility)	35%	17%	58%	96%
Receive continuous supply of water from NWCP	30%	31%	13%	2%
Receive water once or twice a day from NWCP	27%	40%	24%	1%
Households with Individual house connections	94%	78%	23%	2%
Households with shared connections	Nil	12%	28%	4%
Households without any piped water connection	6%	10%	49%	94%
Obtains water from handcart vendors	18%	45%	57%	46%
Obtain water from kiosks	Nil	22%	56%	79%
Main water source	Own house connections (59%) and own B/holes or wells (25%)	Own house connections (71%) & shared connections (12%)	Water kiosks (44%) and shared connections (23%)	Water kiosks (70%) and B/holes or wells (18%)

NWCP - National Water Conservation and Pipeline Corporation (Kenya)

incremental cost (AIC) method be used to project costs of infrastructure improvements.

Revenues are estimated with tariff set taking into account the willingness to pay for each segment of customers. In setting tariffs, cross subsidies may be made (for equity purposes) between customer segments while maintaining the required average tariff. The costs of providing the required services are then compared with proposed revenues to check for financial sustainability.

How might we get there?

Implementation of the necessary improvements in water supply infrastructure to facilitate provision of the required services is carried out. Proposals for institutional and management improvements necessary for provision of the required services at the prices indicated by respective segments of existing and potential customers are then developed and implemented.

Once the lists of service options and prices to be offered to each market segment have been agreed, a comprehensive promotion strategy and institutional improvement plan will be required to achieve adequate take up of the options that can lead to financial sustainability. An example of

projections for options take up in each market segment in Mombasa is shown in table 2.

Research has shown that people living in inadequately served areas often pay high prices to vendors (\$1 to \$5 per cubic metre in 3 cities in East Africa). This suggests a high willingness to pay for improved water services. The results of the customer survey and willingness to pay study (WTP) for each service option and respective market segment in Mombasa revealed that customers and potential customers are willing to pay substantial amounts for improved water services. The study shows the potential for water utilities to achieve the above objectives using the strategic marketing approach.

Conclusion and recommendation

In this paper, the authors have attempted to provide the rationale for using a strategic marketing approach in the urban water sector. Strategic marketing offers a systematic and flexible approach to providing improved and sustainable services to all consumer groups or segments, including the poor.

The strategic marketing methodology adapted using research data from Mombasa demonstrates that by structuring service delivery with appropriate pricing, utilities

Table 2. Projections for option take-up in each market segment in Mombasa

Service options	Projections for option take-up in each market segment
12-24Hour supply at individual house connection	<ul style="list-style-type: none"> Bungalows & maisonettes (100%) Flats (80%) 1, 2, or 3 roomed dwelling & Swahili Houses (25%)
12-24Hour supply through shared connection	<ul style="list-style-type: none"> Flats (20%)
12-24Hour supply at shared yard connection	<ul style="list-style-type: none"> 1, 2, or 3 roomed dwelling & Swahili Houses (30%) Dwellings in informal settlements (10%)
12-24Hour supply at shared yard connection with storage tank	<ul style="list-style-type: none"> 1, 2, or 3 roomed dwelling & Swahili Houses (30%) Dwellings in informal settlements (10%)
Privately managed kiosks with storage	<ul style="list-style-type: none"> 1, 2, or 3 roomed dwelling & Swahili Houses (10%) Dwellings in informal settlements (40%)
Community managed kiosks with storage	<ul style="list-style-type: none"> 1, 2, or 3 roomed dwelling & Swahili Houses (5%) Dwellings in informal settlements (40%)

can improve services to existing customers and serve more potential customers, at affordable cost and achieve financial sustainability. It is recommended that water utilities should consider using the strategic marketing approach as it has potential to improve services to existing and potential customers while meeting utility objectives such as improving the utility's revenue base. Guidelines on how to use strategic marketing approaches to the urban water sector are under preparation at WEDC and will be published by the end of 2001.

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