

EVALUATION OF SOCIAL MARKETING OBJECTIVES: A CASE STUDY OF THE EFFECTIVENESS OF OPERATION GCIN'AMANZI IN SOWETO, SOUTH AFRICA

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Abstract

This study was aimed at investigating the effectiveness of the social marketing goal in the implementation of Operation Gcin'amanzi (OGM) in Mofolo North, Soweto, South Africa. The paper is based on a quantitative in nature, although qualitative data was collected to confirm and clarify issues identified in the survey questionnaire. A process-based research approach was pursued in order to measure the impact of social marketing as a phenomenon that has been explored in changing consumer behaviour for the public good. Due to unsuccessful telephone calls to the Johannesburg Water's communication centre (JW) there is a lack of information from them on specific studies or surveys conducted specifically on OGM since its inception. It is anticipated that the findings from this study will add value to the knowledge in the public sector by elevating the significant role of social marketing in the delivery of basic services projects. These projects are complex in nature as issues of equity, access and the impact on development have to be considered, unlike in traditional marketing approaches where it is the benefit and satisfaction of an individual consumer that is key.

Keywords: Social Marketing, Project Management, Service Delivery

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1 Introduction

The City of Johannesburg, hereafter (CoJ) hosted a spectacular opening and closing ceremonies during the 2010 FIFA World Cup, entrenching its position as the epicenter of Africa. In spite of being Africa's second largest economy (McKinsey Global Institute, 2014), there are still remnants of the apartheid legacy especially among previously disadvantaged communities (Statistics South Africa, 2013).

Since the commencement of democracy, the CoJ has been challenged by a lack of basic service delivery in water and sanitation within the Johannesburg Metropolitan (Metro) (Gauteng Legislature, 2014) and more specifically to its major townships of Soweto and Orange Farm. In the last seven years, access to water has been a controversial issue in Soweto with the introduction of Operation Gcinamanzi (OGM) in 2003 (Gavin, 2009). The introduction of OGM, which emphasised water demand management through prepaid metering and other strategies, has resulted in confrontations between the CoJ and civil society.

Predominantly white areas, popularly known as the suburbs, were well serviced at the expense of the predominantly black areas, which came to be known as townships. As a result, infrastructure in the

townships is inferior, over and above the fact that with the advent of the new government in 1994, maintenance was not prioritised. Therefore, infrastructure has deteriorated rapidly in areas such as Soweto, which is one of the first black townships in South Africa.

2 The research problem statement

Due to the controversy generated by OGM in Soweto resultant of assuming ineffectiveness in achieving the social marketing or non-financial objectives, an integrated social marketing approach has been recommended. The purpose of this article is to discuss some of the issues that are related to the effectiveness of the social marketing in the implementation of OGM in Mofolo North, Soweto. The research objectives of this study were to: 1) investigate the effectiveness of the OGM and save water in the implementation of prepaid metering devices 2) determine the influence of demographics in adopting water saving behaviour, to investigate consumer perceptions, beliefs, and attitudes on the socio-economic impact of OGM 3) investigate consumer satisfaction with the implementation of OGM and 4) determine the positioning of OGM in the minds of the consumers in the CoJ.

3 Literature review

3.1 Theoretical foundation: growth and development of social marketing

There has been a growing interest in social marketing among academics in the 21st century despite its roots dating back to before World War I. Governments are mandated with improving the quality of life for the benefit of society in the delivery of public sector services. In the 21st century, globalisation emphasizes consumer-focused strategies in the delivery of public services. It is as a result of the growing exposure of the citizenry to private sector management techniques and the introduction of public sector reforms, to include cost recovery, that have resulted in people gaining the status of consumers (Allen, et al. 2006; Roch & Poister, 2006).

3.2 The social marketing theoretical framework

Over the last decade, social marketing has gained momentum resultant of the social challenges and limited resources facing the public sector in the public services delivery, especially in developing countries in the provision of basic services (Wiebe, 1951/1952; Wilkie & Moore, 2003, Proctor, 2007).

Public sector services consumers have become global citizens, being able to easily access information and are now demanding that the public sector adopt private sector management techniques to satisfy its mandate to the public and keep citizen dissatisfaction at bay (Baker, 1995; Hastings, 2007; Walsh 1994). Hence, social marketing is a strategic management tool in the application of public sector reforms such as the New Public Management (NPM) which is concerned with inter-alia consumer satisfaction and improved service delivery (Pollit & Bouckaert, 2004).

The strategic emphasis on social marketing is intent on influencing a change in consumer behaviour for the benefit of society. It further forms the backbone for this study and the extrapolation of the theoretical framework from an individual consumer behaviour perspective to sustainable and equitable service delivery for the benefit of society through the development of acceptable group behaviours.

3.4 Change in consumer behaviour

Due to the complexity of social marketing, a change in behaviour is influenced by multiple stakeholders through simultaneous partnership exchanges at the individual, interpersonal, institutional, community and public policy levels (Hastings, 2007; Hunt, 2002). Furthermore, in the public sector consumer behaviour is impacted by various social structures including the influence of ward councillors, ward committees, local government, provincial and national government in

the delivery of basic services (Rogers, 1995; Proctor, 2007).

3.5 CoJ's participation in social marketing

Andreasen (2006) commends the close engagement of society in public services discussions and decisions as a demonstration of the public sector acknowledging the public as critical stakeholders and consumers in the management of limited resources within government.

The outcome of these close engagements where social marketing is employed is that consumers become aware and informed of the consequences of adopting certain behaviours that government is advocating in improving the quality of life for society. In its objectives, the OGM infers that the programme is aimed at the following (Barry, 2007):

- Reducing water losses: 7 billion liters a month
- Encouraging water conservation and responsible use
- Addressing water supply and consumption problems
- Installing approximately 169 000 free pay meters
- Creating a conducive environment for payment of water and sewerage services
- Decommissioning mid blocks

3.6 Competition and positioning of the CoJ

Whilst trying to influence the citizenry to make use of public sector services with consideration for the benefit of society, social marketing objectives are challenged by competition in the internal and external environment of the consumers (Siegel & Donor, 2004; Kotler & Lee, 2006). Internal competition emanates from the current or preferred behaviour, while external competition arises from other factors seeking to position their influence in the minds of the consumers (Grier & Bryant, 2005; Reis & Trout, 2000).

Expanding on the impact of competitive positioning, Hastings (2007) observed that in the effort to adopt new constructive behaviour, a consumer's cognitive process is challenged by a myriad of competitive factors that include inertia, existing behaviours, alternative behaviours, and competition from commercial marketing and other organizations. For instance, in South Africa, the public sector is challenged by low revenue collection from the delivery of basic services that include water, sanitation and refuse removal due to the high levels of unemployment and poverty, which are estimated at approximately 40% and 27% respectively (Landman, et al., 2003). The CoJ has a 30% indigent rate, that is, households living below the poverty line, and an unemployment rate of 22.6% of the economically

active population (CoJ, DEDP, 2008). A major drawback to public sector reforms, like cost recovery as embedded in OGM, is poverty. Consequently, repairing a leaking faucet so that water can be conserved for the benefit of the community becomes of secondary importance like putting bread on the table for survival (Bond, 2002, Fiil-Flynn, 2001; McDonald, 2002).

In circumstances like these, the social diffusion process highlights that the rate of adoption of innovative behaviours is likely to be low due to the social standing and education of community members which affects the levels of awareness, knowledge and interest, and the survival instinct (Rogers, 1995; Bond 2002). However, Johnson (1999) and Fjelstad & Ajam (2004) argue that socio-economic disparities have no influence on the consumer's behaviour and attitudes towards taking responsibility for maintenance, and consequently the payment of services charges. They are of the opinion that in South Africa, consumers in Soweto and other previously disadvantaged communities have developed a culture of entitlement which leads to irresponsible behaviour that affects the whole community. These arguments are outside the ambit of this literature review, but they highlight important considerations that need to be taken into account in the assessment of the positioning of social marketing in the mind of the consumer. Nonetheless, careful product development that elevates the core benefits of social marketing and the augmented product by adopting a constructive behaviour has the potential to reduce competition.

Hence, the positioning of each of the six characteristics of a successful social marketing programme is critical since it informs the most competitive approaches within target segmentation (Stead, et al., 2007), thereby relying on innovation and creativity to bring value and behavioural change (Urban 2004, Kotler & Lee, 2006, McKenzie-Mohr, 1999). For example, the marketing mix should question the cost-benefit ratio of exchanging specific behaviour for another by looking at the product and price relationship, incentives and penalties, distribution channels and the communications in relation to the competition.

In analysing the marketing mix strategy, a clear unique selling proposition should entice the consumers to take an interest in the benefits of new behaviours that should provide superior value in relation to the old behaviours by creating a distinctive position in the mind (Reis & Trout, 2000; Kotler & Lee, 2009).

3.7 Policies

These are the regulations that guide the public sector. Water delivery in South Africa is guided by the Water Act (No. 36 of 1998) and services delivery is guided by the Constitution, and strategic plans instituted by the government (Department of Water Affairs and

Forestry, 1998). The implementation of OGM has focused on the policy aspect in the marketing mix evidenced by the standoff between government and residents. Most arguments have a socio-political angle which questions the legality of the intervention. Yet, the community has become consumers through the introduction of prepaid meters, which recover costs. The quality and effectiveness of the OGM should be measured specifically through consumer satisfaction surveys which should be used to draw lessons learnt for future planning.

3.8 The application of social marketing in the public sector

The literature highlights a strong allegiance towards public health and social services in the implementation of social marketing programmes (Weinreich, 1999). Within the public health and social services, social marketing has been prevalent in programmes relating to nutrition, criminal justice, wellbeing and associated social behaviour (Hastings, et al., 2005; Guindon & Boisclair, 2003; McDermott, et al., 2005).

Melkote, et al. (2001), Fine (1990) and Fraser & Restrepo-Estrada (1998) observed the successes of the application of the diffusion theory in social marketing programmes relating mostly to public health in developing countries. An example that can be associated with the delivery of public infrastructure is that of Trunnel and White (2005) who also applied the diffusion theory to influence a change in behaviour that resulted in the reduction of infections related to water and sanitation services.

3.9 Services delivery in post-apartheid South Africa

All over the world South Africa is applauded for having one of the most progressive constitutions, recognising diverse human rights which enabled a smooth transition from apartheid to democracy (Mammburu, 2009). The smooth transition raised high expectations from the previously marginalised and disadvantaged communities associated with an opportunity for all South Africans to have a better life irrespective of class, race, or social standing. However, judging by the increasing number of uprisings and riots in recent years, a better quality of life has fast become a distant dream in some communities (Williams, 2007; Mammburu, 2009).

In an effort to make good on the injustices of apartheid, the South African government found itself caught in a dilemma as to how to ensure that every South African had access to basic services. In 1994, approximately 90% of the population did not have infrastructure basic to the wellbeing of society, such as water, sanitation, and electricity (City of Johannesburg, 2014). Furthermore, revenue generation in previously disadvantaged communities

is challenged by high levels of unemployment and the inadequate budgeting practices of capital expenditure of the past. For example, the past regime allocated approximately ZAR 600 per person for infrastructure development in urban areas and ZAR 100 per person in the townships, and much less in rural areas (City of Johannesburg, 2014). This resulted in inferior infrastructure development which is rapidly deteriorating and requires upgrading or replacement. Also, the previously disadvantaged areas, due to other socio-economic conditions such as high levels of unemployment are perpetually dependent on government (City of Johannesburg, 2014).

In responding to this challenge, the government aligned itself with the practices of developed countries who adopted NPM reforms in the public sector. This entailed inviting more participation of the private sector through various funding mechanisms and structures such as Public Private Partnerships (PPPs), corporatisation and privatisation. The current local government dispensation is aligned with all the objectives of the NPM, including active consumer participation in the planning and delivery of infrastructure, and consumer-orientated approaches such as the adoption of 'Batho Pele' principles (Education and Training Unit, 2014), in public services delivery.

The NPM reforms regard the inclusion of the private sector as a critical stakeholder in public services delivery and are viewed by one school of thought as ideal to address the infrastructure backlogs. It is believed that the private sector has the potential to adopt market principles which, in effect, will benefit the poor and the marginalised through economies of scale and efficiencies. According to Savas (2005), the private sector has better financial resources and human capital strengths than the public sector. As a result, PPPs are more politically appropriate and the government encourages them as funding mechanisms to ease the frustration of the basic services backlog. Numerous studies have been conducted on the impact of PPPs in poor communities, and most of them indicate a change in the quality of life for the better (Development Report 142, 2000).

On the other hand, another school of thought views the NPM reforms as a classical case of perpetuating neo-liberalism. According to McDonald, et al. (2002), the poor are likely to be destitute if they cannot afford the services in an environment that perpetuates survival of the fittest. Some studies have been conducted with unsuccessful PPPs; for example, the Mpumalanga Water Concession cost the local government far more than expected and it is inferred that consumers are now carrying the burden until the concession agreement expires (Smith, et al., 2003).

3.10 The CoJ metropolitan mandate

A large portion of basic services delivery has been mandated by the Constitution of 1996 for delivery by local government which includes Metropolitan, District and Local Councils (SALGA, 2011). The Metropolitan, District and Local Councils are differentiated by the functions allocated by the Constitution, S155.1a and the Municipal Structures Act 1998 (Act 117 of 1998) which expect that a Metropolitan Council should fulfill the functions of both District and Local Councils. Furthermore, the Municipal Structures Act of 1998 implements the expectations of the Constitution to develop Unicity, which implies that Johannesburg, East Rand, Pretoria, Durban, Bloemfontein and Cape Town would incorporate a mix of cities under their jurisdiction to avoid a duplication of functions and multiple service points for citizens (SouthAfrica.info, 2014). The CoJ is one of the six Metropolitan (Metro) Councils, in South Africa. Together with Ekurhuleni (Germiston) and Tshwane (Pretoria) Metropolitans, these cities constitute the Gauteng Province. As a Metro, the CoJ is classified as a Category A municipality, which is expected to be a centre of economic development with strong social and economic linkage (SALGA, 2011). The challenges of national government are cascaded down to local government, and the CoJ had to amalgamate with previously disadvantaged municipalities and came close to insolvency due to the inequitable distribution of wealth, the poor revenue base, and increasing demands on municipal expenditure (SALGA, 2011).

The first strategic plan, iGoli 2002, ended up with a structure that entailed 11 regions, five municipal entities for basic services delivery, five economic development entities, and four support services for planning, emergency services, the metro police and heritage services (City of Johannesburg, 2002). The CoJ also split the core functions of the municipality between the contractor and client function, thereby increasing efficiency and creating good organisation. The municipal manager is the accounting officer appointed to fulfill a role equivalent to the Chief Executive Officer (CEO) and reporting to the Chair of the Board (Executive Mayor) who reports to the Board (Council). The Integrated Development Plan (IDP) guides the services delivery agenda of the CoJ through the interlinking of the various functions in fulfilling the City's mandate.

3.11 The mandate of Johannesburg Water (JW)

JW is an independent municipal entity that was established following the adoption of the iGoli 2002 plan in 1999 (SALGA, 2011). The CoJ is the sole shareholder of the company which provides services to approximately 3.84 million citizens resident in over 1.69 million households in and around Johannesburg

(City of Johannesburg, 2014; CIA World Factbook, 2014). Its annual is approximately R 1.6 billion (City of Johannesburg, 2013) and it is managed along private sector management lines which foster customer satisfaction and cost recovery business principles. In the delivery of the water function on behalf of the city, JW has to take cognizance of various legislations such as the Constitution, the Water Services Act (1997), and the National Water Act (1998).

The vision of the JW is to become a world class water utility entity in South Africa and deliver quality water and sanitation services through sustainable, cost effective and affordable delivery (Johannesburg Water, 2013). It is also committed to upgrading services in low income areas and fosters a customer-friendly culture in services delivery. Its performance objectives entail the reduction of water and sanitation backlogs; reviewing metering policy, water and energy losses; and updating the water services development plan. OGM is one of the flagship programmes of the JW and is referred to in this study to determine consumer behaviour and satisfaction.

It has been observed that many problems have been reported since the inception of water metering under the OGM programme (WD-SA, 2009). These problems range from removal of meters, defect infrastructure, communities complaining about total disregard for their properties, complaints about leakages, protests against the programme and detention of anti-privatisation activists (McDonald, et al., 2002).

3.12 Implementation of OGM programme in Soweto

OGM which means ‘Operation Conserve Water’ is a R1 billion plus programme adopted by the CoJ Council in 2003 for implementation by JW to improve services delivery throughout Soweto over a five year period (Johannesburg Water, 2006). According to Johannesburg Water (2006) and Barry (2007) the objectives of OGM are to:

- Reduce the seven billion litres of water lost monthly in Soweto.
- Ensure a reliable and affordable service to every household in the area.
- Address water supply and consumption problems in Soweto.
- Address issues surrounding affordability, wastage, and loss, therefore creating an environment conducive to payment for the services of water and sewerage.
- Provide and implement a free payment metering programme.
- Relocate the reticulation system from the mid blocks to the road reserve, thus decommissioning the former.

Although not very clear in the objectives of the JW, the thrust of this paper on social marketing is

based on interrogating the effectiveness of the objectives that aim to encourage water conservation for the benefit of society.

A contentious element of the OGM implementation programme was the introduction of free pay meters. According to the CoJ the free pay meters make it possible for households who use less than 6 000 litres of the free basic water allocation to benefit there from it without having to pay any additional costs. Furthermore, the free pay meters provide a budgeting mechanism for consumers to track their usage and not be surprised by monthly bills (Barry, 2007). However, the installation of free pay meters is seen by anti-metering organisations as prepayment meters which are used to infringe on the rights of communities to access water. It is also viewed as discriminatory as it is implemented only in traditionally black townships (McDonald, et al., 2002).

This resulted in a controversial court case between the residents of Soweto and the CoJ. The Court rules are conflicting, favouring each side on certain elements and resulting in each party claiming victory. In 2008, the Johannesburg High Court ruled that the free pay meters were unconstitutional, together with the minimum water allocation of 6000 litres per household per month which translated to 25 litres per day for a family of eight; this was considered to be a reasonable average for Soweto residents (Southern African Legal Information Institute, 2009). In March 2009, following an appeal by the CoJ, the earlier judgment was upheld with modifications for a recommendation of 42 litres per family member per day, instead of 50 litres that was sanctioned earlier on. The CoJ and Phiri residents both then applied to the Constitutional Court which favoured the city’s position to install prepaid meters and ration water according to the current allocations (Southern African Legal Information Institute, 2009)

3.13 Demographics & socio-economic indicators of Soweto

Soweto is a mega township in the CoJ of which by 2008 inhabited by a population of approximately 1.3 million people and now it has over 3 million 2014 residents spread across 32 formal townships/wards and a number of informal settlements (Chauke, 2013; Siyabona Africa Travel, 2014; Soweto Vibe, 2014). The name Soweto is an acronym for South Western Townships, and has 305 000 formal households with an average of 4.2 family members. The township has approximately 12 800 shacks; 15% of the informal settlements in the CoJ.

Soweto has a high level of unemployment as well as a high level of poverty. Approximately 28% of the households earn about R800 per month, 40% of the total households are unemployed, and the weighted average of household income is about ZAR 3,800 per month, and 70% of the employed

population work outside of Soweto. The poorest townships include Phiri which was the first pilot site of JW's OGM roll out programme in February 2004 (Danchin, 2010).

3.14 Local economy and the state of infrastructure in Soweto

Currently Soweto contributes about 4% to the CoJ's Gross Domestic Product (GDP) (City of Johannesburg, 2014). It is estimated that, including social grants, the spending power is about ZAR 3.5 billion per annum, hence the interest in retail and property development. However, according to Dr. Anthony Turton from the Centre for Environmental Management, the province of Gauteng's economic development is in jeopardy due to the unreliable water supply and related shortages, which may have adverse repercussions for the major industries in the province contributing to the country's GDP (Molathwa, 2014). Gauteng, through its industrial and commercial activities, contributes a percentage of 34.7 to the national GDP (Statistics South Africa, 2014 in Alexander, 2014).

The impending water shortages imply that small contributors like Soweto to the GDP of CoJ may experience adverse impacts with the slowing down of infrastructure and development investments and therefore the ability to draw investors into the township to participate in economic development. The Gauteng unicities put together a task team to develop a strategy that will support water management and sustainability (DWAF, 2006).

3.15 The state of water infrastructure in Soweto

Soweto is one of the oldest working class townships in South Africa. The water infrastructure linking Soweto and Johannesburg is more than a century old. Approximately 15,000 litres of water are lost daily from the 9,500 kilometres of water infrastructure reticulating Johannesburg which feeds to Soweto (www.igoli.gov.za). The aging infrastructure may be perpetuating the belief that consumers are contributing to the water losses as most households also experience leaking toilets and pipes. One of the key mandates of JW is to reduce the losses through households which comprise at least 15% of the estimated water losses. The rest is allocated to free basic water which is accounted for through the indigent allocations (www.igoli.gov.za).

4 Research methodology

According to Creswell (2003), Trochim (2006) and Saunders, et al. (2007), the research approach chosen in a study highlights the epistemology or the philosophical thinking or knowledge of the researcher by providing the scope on the purpose of the study.

The epistemology is the underlying influence guiding the research to achieve its objective whilst also taking cognizance of the limitations.

In this study, a quantitative research approach was selected to complement the positivist epistemology in line with the objective to measure consumer behaviour and satisfaction, although in the methodology, a convergence of quantitative and qualitative data collection tools occurred. The study's approach was supported by Creswell (2003) and Krauss (2005), who state that although researchers have the quantitative or qualitative research approaches to select from, these are merely philosophical and not methodological, hence the emergence of a mixed research philosophy and the convergence of data collection tools.

4.1 Quantitative research approach

The quantitative research approach is aimed at counting and measuring knowledge, attitudes, beliefs and behaviours through numerical data that can be statistically analysed (Cresswell, 2003; Bless & Higson-Smith, 2000). Furthermore, according to Fouche & Delport (2000) and Collis & Hussey (2003), it has a strong allegiance to the positivist research philosophy that seeks to test the trueness of what is already known through scientific extrapolations. The benefits of a quantitative research approach for this study were; the ability to create generalisations about the influence of OGM on consumer behaviour towards water management in Soweto and the ability to extricate the consumer satisfaction levels through the use of close-ended questions that required specific responses to issues of policy, socio-economics, attitudes and behaviours towards OGM.

4.2 The appropriateness of the data collection instrument

In marketing studies, it has been found that survey questionnaires are the most widely used instruments in soliciting attitudes, behaviours, and perceptions (Rasmusson, 1999). In order to mitigate the disadvantages of the quantitative research approach, the research method entailed the application of a qualitative data collection tool, focus groups, that were aimed at allowing the researcher to make judgments, draw relationships from variables following the application of open-ended questions, and gain insight that is not driven by measurements (Healey & Perry, 2000; Trochim, 2006).

4.3 Research design & process

OGM has been in implementation since 2003, backed by years of prior policy work and theory formulation (Water Services Act, 1997, the Constitution, 1996), hence it was appropriate to follow the process based

research design since it sought to measure the impact on consumer behaviour and satisfaction through quantitative and qualitative data collection methods. According to Hussey & Hussey (1997), there are fundamental steps that each research project must cover, irrespective of the research design, type or approach if it is undertaken under the auspices of a scientific study. Moreover, Punch (2000) advises that in pursuing these fundamental steps, the researcher elaborates on the tools and strategies by which empirical data will be collected and analysed, therefore providing the means to test the thesis statement and satisfy the objectives.

Thereafter, an overview was provided on the services of CoJ including OGM and a profile of Soweto where it was initially piloted. The findings of the literature review guided the selection of the epistemological approach that was pointing towards a quantitative approach and further highlighted that in view of the objective, the study was more suited to the process based research approach.

5 The sampling strategy

5.1 Target population: questionnaire survey

The target population, according to Gorard (2003), consists of all the possible and relevant subjects that are eligible to be selected for participation in the study. The target population for the primary data collection consisted of 1 600 households within the study location; Mofolo North, Soweto. Only the formal households in the area qualified for participation, therefore the informal settlements around the area were excluded, as were businesses and schools, as they were exempt from participating in the OGM programme.

Each household was counted as a single participant, despite the fact that some households had more than one family in the yard, mostly not related to the main family but renting out backrooms or shacks within the formal compound. However, their dependence on the main household infrastructure implied that these households were a homogeneous component of the main household.

5.2 Target population: focus groups

In the second phase of data collection, other stakeholders in the Mofolo North community were included to explore further the responses of the households from various professional and interest groups' point of view through focus group discussions. Their selection was conducted purposefully due to the interest in their expert opinion and standing in the community.

5.2.1 Group 1: Mofolo Home Based Care (MHBC) Board of Directors

The group consisted of a variety of community members with vast experience in different fields, ranging from business to public health and community welfare. The participants were of a mature age, between 35 and 75 years, and expressed themselves as heads of families and community development activists. The group consisted of seven members with an 80:20 gender representation between females and males.

5.2.2 Group 2: Mofolo Community Workers

A group of nine (two of whom were largely silent) community workers was identified for participation as a result of the practical, day-to-day hands-on experience in the community regarding quality of life. Therefore the group was able to contextualise the socio-economic impact of OGM in the community. The community workers were all female, aged between 22 and 47 years. Four of the community workers resided in the area.

5.2.3 Determining the sample size

The appropriate sample size in relation to the population articulated above was determined to be 310 households, which was appropriate for generalisations to be made to the population at large. The households were surveyed and expected to reveal broad behavioural aspects pertaining to attitudes, beliefs, awareness, and knowledge amongst the population. The sample size was determined in line with the statistical sample tables developed by Krejcie, et al. (1970). However, the study sampled 400 households to increase the generalisation value of the sample, allowing for spoilt responses without necessarily affecting the base sample size.

Numbers were created in an Excel spreadsheet for 1,600 households, cut into single numbers and placed in a container. The container was shaken to thoroughly mix the numbers and the first 400 pulled from the container were recorded for participation.

5.2.4 Data collection methodologies

Data collection facilitates the analysis of raw data into information and therefore requires an approach that is holistic to mitigate prejudice. A survey questionnaire and focus group interviews were selected to enable methodological triangulation (Sekaran & Bougie, 2009). Data was collected monthly in batches of 50 questionnaires, from January 2009 to August 2009, following the dispatch of 400 questionnaires to randomly selected houses in Mofolo North. The questionnaires were personally administered to the respondents and extensive follow up done. Hence it

took almost 12 months to distribute, collect and follow up

5.2.5 Focus group discussions

The first focus group with the MHBC Board met the first week of November 2009 in a session that lasted about an hour and a half. The second focus group with the community workers met in October 2010 in a session that lasted approximately an hour. The focus group interviews were manually recorded, with a summary of each response and the whole discussion confirmed by the participants. The facilitator allowed for a measured amount of debate and dialogue, which developed naturally and allowed the participants the opportunity to learn from one another and to understand the different opinions on the subject.

6 Data analysis process

Data analysis was primarily computed through the SPSS 18.0 for the questionnaire survey and manual transcription of the focus group discussions. The process entailed data clean up, coding and capturing.

6.1 Data clean up

A thorough and critical examination of the completed questionnaire is essential to determine compliance with the criteria for collecting data and to act upon deviations (Hardy & Bryman, 2009). For the purposes of this study, data clean up was pursued with a view of examining the questionnaire's completeness following the editing of data and identification of non-qualifying responses. In data clean up, the objective of the researcher was to process for interpretation the questionnaires that were 90% completed.

7 Discussion and results

Although the unit of analysis is households, it was important to get some demographic data on the representatives to provide background on the ability to complete the questionnaire. The remaining valid questionnaires indicated that approximately 84% of the respondents had high school education or better, hence the ability to complete the questionnaire. Also, education was important in gauging the rate of adoption of innovation. Rogers (1995), in the social diffusion process theory, alludes to the fact that education is important in the adoption of innovation. The early adopters of innovation are often highly educated and therefore able to influence others based on their ability to source the right information about new developments.

The analysis illustrates more female representation (53.3%) on the 212 household responses received in the execution of the questionnaire, which is in line with the gender demographics for the CoJ and South Africa which is

in line with 52% females and 48% males representation of the South African community as shown by Stats SA data of 2001 (StatsSA, 2001). It may also indicate an openness of females to participate in surveys. The modal age of the respondents was 29 to 38 years (29%) followed by the 18 to 28 years (27.8%) age group. This might indicate social factors: young people and the youth are likely to be better educated than other age groups following the education opportunities post-democracy and also implying knowledge and awareness about social issues.

The household demographics presented the model number of family members in the five to nine members range 72.5% and followed by smaller families with up to four members 19.9%. Factor analysis of the demographics on the six identified components did not yield any significant differences among the variables. The gender of the respondents did not have any effect on the mean scores of the six components; namely, general satisfaction, knowledge and information, responsible behaviour and understanding, commitment to OGM goals, satisfaction with feedback, responsiveness and household economics.

7.1 Study objective and question analysis

The factor analysis was presented in line with the research questions using descriptive statistical analysis. The factors included the following variables in line with the questionnaire as presented in a decreasing order of the component strength.

Question 1: Has the community embraced the 'save water' philosophy introduced by OGM implementation through water metering?

The study found that overall, consumers have not embraced the "save water" philosophy since five of the six components measuring the behaviour and attitude of water consumers have mean values above 3, which is the midpoint of the 5 scale Likert rating separating the strongly agree (1) and agree (2) responses and the disagree (4) and strongly disagree (5) responses.

7.2 Focus group observations

The focus groups felt that although the objectives of OGM were noble, the manner in which it was implemented was unjust and discriminatory and therefore has failed the community. Currently, the programme is perceived as dysfunctional, inefficient (poor infrastructure quality) and ineffective (billing systems are poor and therefore it is only prepaid metered households that actually pay for water) and does not consider the poor socio-economic dynamics of the area.

For example, in some families it may come down to a choice between buying bread or water once

the free allocation had been exhausted, hence the illegal connections which negate the programme.

Question 2: Did demographics influence consumer behaviour in the adoption of the OGM 'save water' objective in the interests of the public good?

The study found that demographics did not have any significant influence in the mean scores of the six components, except for age. An analysis of age indicated a variance in responses between the age groups in response to knowledge and awareness, responsible behaviour, commitment to OGM goals, and financial implications.

It was further observed that although all the varying sources of income were accepting the save water philosophy, the households involved in informal and formal economic activities were more inclined to embrace it ($M=2.70$, $SD=0.829$) than the households dependent on other activities as they were on the verge of not buying into the philosophy ($M=2.95$, $SD=0.942$). The level of income was also not a deterrent in buying into the philosophy with both categories buying in.

7.3 Focus group interviews

The observations of the focus group discussions highlighted the following:

The area has households living next to each other with one having a prepaid meter and the other with no prepaid meter, resulting in different levels of awareness. In all of the three focus groups there was consensus that the households that have prepaid meters are more conscious of their water utilisation. One member of the focus groups said,

"It hurts me to see my next door neighbour who does not have a meter waste it like that since they know it does not affect their pocket. They don't mind leaving the tap dripping the whole day."

Therefore, the comments are in line with the questionnaire findings which indicated that despite the demographics, on average, the community has not embraced the save water philosophy.

Question 3: What are consumer perceptions and attitudes towards the legislation, policies, government plans and intended outcomes of OGM?

The respondents demonstrated a high level of awareness and answered all the questions in the affirmative. The positive response was the same for all demographics tested which included gender, age, number of working family members, source of income and approximate income.

7.4 Focus group observations

Focus group members felt that the rationale behind OGM, from a philosophical perspective, was understood by the community and households to be primarily about saving water. However, there was a general consensus that very few households are

committed to the goals beyond awareness and knowledge about the programme.

Focus group one, consisting of community workers who do not necessarily all live in the area ($5/9 = 55\%$), appreciated OGM in Mofolo North because the area does not have burst and unattended water pipes and people are more conscious of their water usage, unlike the areas they come from which do not have the programme. As one member said:

"In my area there's always water running down the street from the yards or street infrastructure because of a burst pipe and also people are not conscious of their water usage".

However, the remaining members of the group ($4/9 = 45\%$) resident in the area felt that although OGM is a good initiative it has become an overkill in Mofolo North as on a daily basis there's water rationing where water is unavailable for certain periods of the day, especially on weekends, denying water to the community and therefore making it hard to commit to the goals of the programme.

8 Recommendations

Based on the research findings, this article makes the following recommendations.

- Social marketing should become an integral part of the OGM delivery planning, implementation and post implementation plans. The Court case between the government and the Soweto residents has tainted the credibility of OGM and therefore an approach that is responsive and engaging is critical in paving an amicable and effective way forward. There is no value in incurring costs such as prepaid meters, especially with the provision of FBW, when communities can be asked to come up with alternatives and achieve the same objectives.

- A social marketing strategy should be developed for Soweto taking cognisance of the social dynamics and the communities through processes similar to those followed in the IDP processes. CoJ should take responsibility for the development of an area-specific plan, considering implementation and post implementation activities.

- The CoJ should consider setting up street water committees consisting of a water representative for each street in the area to undertake infrastructure audits, monitoring, and street campaigns.

- On a monthly basis, the street water committee should engage with the representatives for government, the service provider and community representatives, including civil organisations, to discuss issues of mutual interest; for example, complaints and concerns and action to address these.

- The CoJ and JW should give communities the choice to decide whether they want to participate in the OGM prepaid metering scheme or the monthly billing scheme, but also ensure that the billing systems are effective to boost the morale of the prepaid users.

- Develop incentives for sound water management; for example, if the FBW is not exhausted, it should be carried over to the next month. Communities should access tokens that are immediately credited to the account and be advised on limits as well as the availability of emergency water.

- The water steering committee, together with the representatives of the service providers, should be able to track water losses and the source, and report them in a newsletter.

- The street water committee should report on a monthly basis on the indigent support provided to the pensioners, the disabled and child-headed households to Council and in the newsletter.

- The vendors and sub-contractors should ideally be from the area, within a walking distance, and allow top-up through the cell phone to ensure 24 hour water accessibility.

9 Conclusion

The study confirms the article problem statement that considering the challenges faced by the CoJ in the implementation of OGM since 2003, an integrated social marketing approach in resolving the water crisis in the CoJ is recommended. Although the CoJ reflects elements of the social marketing approach, the results highlight the need to emphasise the non-financial aspects of the programme as much as the financial aspects. The social marketing approach should extend beyond promotion (advertising and media campaigns) and focus on achieving the desired mindset of the water users. There is need for corporate effort of the city management to promote social marketing in educating the community in the use of resources such as water.

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