Marketing of Public Water Utility Services: A Segmentation Analysis

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ABSTRACT

Market segmentation provides a valuable approach for identifying target markets. The study attempts to identify specific target markets of a water utility provider in a developing country. The study took place in Calabar. The cross sectional research design was used for the study. Data was collected from a systematic sample of 1000 city residents using a well-structured written questionnaire. Hierarchical cluster analysis divided the respondents into four homogeneous groups that were christened: (1) indifferents (2) loyalist (3) idealists and (4) moderates. The study investigated if the water utility customers differ in their perception of the services provider and if there is any significant difference in customers' perceptions of service delivery on the basis of demographic characteristics and behavioural characteristics. The study revealed that all the perceptual items show significant difference between the four clusters ($p \leq 0.05$); in demographic characteristics - place residency, marital status and occupational status of customers differ with the clusters ($p \leq 0.05$); in behavioural characteristic - usage level, duration of usage and number of persons consuming water from a meter point show significant difference between the four clusters ($p \leq 0.05$). It was therefore recommended that since the water customers differ in their level of perception, the water utility services provider should target homogenous groups that have positive perception towards the firms. This is because of the likelihood of having high consumer responsiveness resulting from targeting marketing.

Keywords: Water Marketing, Market Segmentation, Target Markets, Behavioural Characteristics, Demographic Characteristics, Customers 'Satisfaction, Service Quality, Customer Perception.

INTRODUCTION

The commodification of water and the transfer of water for varying consumption purposes signalled a paradigm shift in the conception of water as a commodity with attendant economic significant (Doria, 2010). This shift is as a result of the understanding that surface waters and underground waters are heavily affected by the degree of consumption. It is believed that over utilization of underground water can affect the integrity of the earth above and/or around it leading to negative consequences (Udoimuk, Osang, Ettah, Ushie, Egor & Alozie, 2014). Similarly overuse of surface water can also lead to deprivation of the water source for other uses such as recreation, fishing, irrigation, etc. and worst it can lead to shrinking of water volume.

Water supply differs with the ecological properties of the region, county or city; some areas have more water supply than the others. The study area, Calabar is in the tropical rain forest with an annual average rainfall of as low as 32mm per month in the dry season (Janaury) and as high as 862 mm in the rainy season (August) (Udoimuk, Osang, Ettah, Ushie, Egor & Alozie, 2014). The economics of water in Calabar is not construed on the economic principle of scarcity of natural water sources, but rather on the principle of availability or non-availability of good drinking water supply. This is a fact which is supported by a popular adage among the people, "water**,** *water, everywhere, but not a drop to drink*". The commodification of water becomes necessary, when the economic cost of transferring water from any of the natural sources and making it accessible to consumers at the right time, at the right place and in the right form is considered. This value-added makes water a commodity and attracts costs which necessarily must be transfer to the consumers to satisfy the law of demand and supply. The Cross River State water utility was established to meet the water needs of the city of Calabar. Several reforms have been carried out since its inception. At the moment the state water company is technical supported bythe National Urban Water Supply Scheme and financially supported by the World Bank. It is managed in partnership with Ophteh under a PPP arrangement. The research was necessitated by the need to understand the efficiency of the firm's management approach and to understand consumers' perception better. The water managers after extensive deliberation agreed that marketization of the water service delivery

system was necessary to stimulate the demand for the company products. To be effective the management was interested in understanding the consumers' concern for water supply and feels that the knowledge of this would help the water company in segmenting the water market for effective and efficient service delivery and maximum customer satisfaction. This study therefore seeks to investigate customer concerns of public water supply and the distinct differences in the consumers' concern for water consumption with a view of identifying the major public water market segments in Calabar. The knowledge of this will also facilitate product development and strategic marketing formulation.

RESEARCH OBJECTIVES

The following objectives guided the study:

- To define the major public water market segments in Calabar
- To determine if there is a significant difference between the market segments in terms of their concern for public water consumption
- To investigate if the concerns for public water consumption of the market segments differ with their demographic and behavioural characteristics

LITERATURE REVIEW

Conceptual Framework of Market Segmentation

One of the most important strategic concepts contributed by marketing discipline to business firms and other types of organizations is that of market segmentation (Kotler, Bowen, & Maken, 1998). Market segmentation is a powerful tool that serves to develop understanding of the differential influence of specific marketing variables across segments and to the development of more precise marketing strategies (Reid, 1983; Richard & Sundaram, 1994; Swinyard & Struman, 1986). An understanding of what various segments require and formulation of focused management strategies to fulfil these specific requirements effectively are the key to penetrate new markets and to maintaining a repeat customer base. Segmentation, when done properly, can actually enhance sales and profits, because it allows the organization to target segments that are much more likely to patronize the organization's facilities (Reid, 1983).

Jaman (2012) defines market segmentation as the breaking down of markets into manageable parts of the consumer groups and treat them according to the similar characteristics. Jaman (2012) quoted Neal (2008) who observed that there are two scenarios that determine the way market segmentation could be carried out- apriori and post hoc. The apriori scenrerio iswhere a firm decides to adopt already known and usually used techniques and does not need to undertake any research. The post-hoc scenario is where a firm through consumer research, identify and comes up with its own market segments. Lilien & Rangaswanmy (1998:56) define market segmentation as "a process of dividing customers whose valuations of a product or service vary greatly into groups or segments containing customers whose valuation vary little within the group but vary greatly among groups". Market segment refers to a group of actual or potential customers who can be exposed to a marketing stimulus and is expected to respond in a similar way to that stimulus (such as product or service offer). The customers in the same market segment seek the same type of benefits or solutions to problems from the product or service, or they respond in a similar way to a company's marketing communications (Llilien & Rangaswanmy, 1997:56). A market segment consists of customers who share similar characteristics and are expected to respond in a similar way to the firm's product or service offer- price, promotion, product style, and design, etc. Market segmentation is therefore a process by which marketers identify and group the needs and wants of potential buyers based on their similarity, and the design and production of offering and marketing effort to satisfy the chosen target group. The understanding of customer group(s) or market segments influence the type of market strategy a firm formulates. Market segmentation is made up of three activities: segmenting the market, targeting the market, and positioning the market. The best way to appreciate the concept of market segmentation is by describing the process.

Theoretical Framework

Market segmentation process is required to divide the water market into small homogenous clusters based on consumers' perception of the water and service quality offered by the water source or utility firm (Wind, 1978). Perception study is relevant in public water management, because it highlights the consumers' concerns of the water and service quality attributes and other environment issues. The common consumer concerns are the perceived risk involved in using a given water source, the customer relation exhibited by employees of the utility firm and the availability of water products. Risk analysis refers to the probability of an undesirable event's occurrence that may lead to losses by enclosing people' value, knowledge, concern and awareness in reaction to such events (Pidgeon, 1998). Consumers are concern with the resultant effect of what unwholesome, polluted and poorly treated water could cause on consumption. The perception of risk may be high or low depending on the socioeconomic

and demographic factors of the consumers. Many studies have been conducted on the influence of these factors on consumer concern about water attributes and environmental issues. For example, Dogaru, Zobrist, Popesu, Sima, Amini & Yang (2009) observe that some studies found that women tend to perceived a high risk in water consumption than men. Other studies found that women and men do not show significant difference in consumer perceived risk of water supply (El-Zein, Nasrallah, Nuwayhid, Kai & Makhoul, 2005). Cluster analysis of water consumers in Texas also suggest that people's perception shows different spatial patterns in relation to socioeconomic and demographic factors (Stedman (2004). Employment and location of consumer's residence were found to influence consumer perception of water attributes (Salka, 2001).

Need identification is the theoretical underpinning of market segmentation. A market segment is determined by a match between the benefits offered by a firms offering and the need of the prospect. The needs underpinning a B2B is somewhat difference from those of B2C and C2C. The following are segmentation bases of B2B: reduction in expenses, improved cash flow, improved productivity, improved manufacturing quality, improved service quality, improved employee working conditions/ benefits, improvement in market share/competitive position, need for education, involvement with social trend, etc. This paper is concerned with the segmentation bases of B2C. The following are the segmentation bases of B2C:

Geographic Bases of Market Segmentation

This is segmenting of a market based on physical attributes such as the place where people live, work and play. Regional differences can greatly affect product consumption.

Demographical Bases Of Market Segmentation

Demography is the statistical study of human population and their vital characteristics. Demographic segmentation consists of dividing the markets into groups, based variables such as age, gender, family, income, occupation, education, religion, race and nationality. Demographic variables are amongst the most popular bases for segmenting customer group. Many of these common demographic dimensions are interrelated, or similar, from an analytical point of view.

Socio-Economic Bases of Market Segmentation

An individual's socio-economic status is informed by the person's educational background, occupation and income. There is a direct relationship between these three variables. The more education a person has, the more the likelihood for a better position and increased earnings. Many companies target affluent consumers with luxury goods and convenience services. Good examples include: luxury hotels, air conditioners, expensive perfumes, luxury cars, etc. On the other hand, many companies focus on marketing products that appeal directly to consumers with relatively low incomes. Example include: a road side restaurant, some low cost bread, sachet beverages and detergents, etc. However, people have varying propensities to buy and so income alone cannot always accurately predict purchase behaviour.

Psychographics Bases Of Market Segmentation

Psychographics is made up of two major constructs; personality traits and lifestyle. Personality traits include sociability, self-reliance, assertiveness, etc. Lifestyles consist primarily of individuals' attitudes, interest, and opinions (AIOs). In practice, personality traits and lifestyles need to be considered collectively to provide meaningful marketing information (Kotler & Keller, 2005).Reference is often made to SRI consulting Business Intelligence's framework as one psychographic measurement model. It is based on responses to questionnaire featuring four demographic and 35 attitudinal questions (Kotler & Keller, 2005). The four demographics are high resources and innovation vs. low resources and innovations. In all, the model classifies individuals into eight psychographic (VAL) types: innovators, thinkers, achievers, experiences, believers, strivers, makers and survivors.

Behavioural Bases Of Market Segmentation

In behavioural segmentation, the market is divided into groups based on used occasion, usage level, customer loyalty, knowledge of product, attitude, benefit sought, perception, beliefs, etc.

Market Segmentation Approach

Segmentation has two phases: segmentation of the market using demand variables and the description of the market segments identified using variables that help the firm understand how to serve its customers. In the former, Lilien & Rangaswamy (1997) suggested a five step approach and in the latter, a two-step.

- In step one, the firm should identify the strategic rule of market segmentation. How it will help the firm achieve competitive advantage and what other activities the firm should undertake to achieve its objective.
- In step two, the firm should select a set of segmentation variables. These variables should be based on potential customers' needs and wants and should reflect differences between customers. The firm must have a good knowledge of the factors that drive demand for its products and services.
- At three stage, the marketing researcher choices the mathematical and statistical procedures to be used in aggregating individual customers into homogenous groups or segments. The choice of a market segment is the prerogative of the marketer. Segments may take various shapes; discrete (one customer segment), overlapping (a customer in two or more segments) and fuzzy (each customer is assigned a proportional membership in each segment).
- The responsibility of the marketer in step four is to specify the maximum number of segments to construct based on the segmentation variables.
- Stage five entails the search across those segments to determine how many of those segments to target. There is however, no theory to guide marketers in deciding on the correct number of segments, it is more of an art than science (Lilien &Rangaswamy, 1997). Various managerial and statistical criteria are used to eliminate those segments that are not managerially and statistically suitable.

RESEARCH METHODOLOGY

The research setting: The study took place in Cross River State. Calabar is one of the towns where the Second National Urban Water Sector Reform Project is on- going. Calabar City is made up of Calabar South LGA and Calabar Municipality. Calabar is the headquarters of the State and also the headquarters of Southern Senatorial District.

*Research designs***:** The survey research design was used for the study. This is necessary to capture the critical elements in the perception of stakeholders toward current water delivery processes of CRSWBL. Quantitative research focused on the collection of detailed amounts of primary data from relatively small samples of subjects by asking questions or observing behaviour.

*Target population and sample size***:** The target population for this study comprised all actual and prospective consumers of Cross River State WaterBoard Limited (CRSWBL): customers, policy makers, community leaders, media, private sector water resource managers, civil Society, NGOs, etc. The Topman formular using p=40%, e= 1.5% gave an estimated sample size of 983 respondents. A cluster sampling design was used for the study. From a total of 103 localities (Calabar Municipality 59 and Calabar South has 44), 20 localities were randomly selected from the two LGAs (NPC, 2006). A total of 50 households were randomly selected from each of the 20 clusters. The respondents for the study were heads of households or their representatives. The clusters drawn from each LGA was determined using proportional stratified approach. Since Calabar South has 43% of the total enumeration areas, 9 enumeration areas were randomly selected. Similarly, since Calabar Municipality has 57% of the total enumeration areas, 11 enumeration areas were randomly selected. This gave a total sample size of 1000 (20 clusters multiply by 50 households).

Survey Instrumentation: A structured written questionnaire was used to collect data on consumer perception and behaviour variables. Concern for attributes (the attributes are taste, smell, colour, clarity and safety) was measured on a 5 point -Likert scale with assigned values ranging from 1 being "very unconcerned" to 5 "very concerned". Demographic variables of consumers were measured on nominal scale. The instrument was pre-tested for validity and reliability. This was done by administering the questionnaire on 5% of the sample size (50 respondents). The pretesting was done in Akim Quo community. This was done to measure the respondents' understanding of the questions. The comments made by respondents actually helped in refining the instrument. Reliability of instrument was tested by the use of Alpha Reliability Test. Using the Scientific Package for Social Sciences (SPSS), the Alpha reliability coefficient for items measuring respondents' concerns for the four water attributes was 0.9143. The Alpha Reliability Coefficient for the nine service quality items was 0.8913. The result of the reliability test showed that the measuring scale would measure what it intends to measure.

Data Collection methods: The questionnaires were administered on representatives of households who were preferably heads of such households. The questionnaires were self-administered. The response rate was 87%.

Data Analysis: Data entry and analysis was done using the Statistical Package for Social Science (SPSS). Cluster analysis was used in segmenting the water market. Differences in the perception of customers segments and influence of respondents' demographic and behavioural characteristics were measured using ANOVA and Chi-square respectively.

RESULTS OF FINDINGS

Number of Clusters

The result of hierarchical cluster analysis produced four clusters. Four clusters were generated and considered appropriate. This was guided by the reading of the coefficient of the agglomeration schedule.

Relationship between customer segments and perception of water and service quality

To determine the importance of each attribute as expressed by respondents in each of the four clusters, Analysis of Variance (ANOVA) was used. The result of ANOVA showed that all 13 attributes contributed in differentiating the clusters ($p < 0.001$). This is shown in table 1.

The findings support the assumption that there is a relationship between consumers' perception of the water and service quality and customer segments. Accompanying descriptive statistics shows that cluster 2 scored highest in all the attributes, followed by cluster 3, then cluster 4 and lastly by cluster 1. This led to christening the clusters with names that depict their market behaviour. Consequently, cluster 1 was called indifferents; cluster 2 was called loyalist; cluster 3 was called Idealist; and cluster 4 was called moderate. The indifferents refers to those who expressed the least concern (below average) for the water and quality service attributes offered by the water utility. Moderates scored slightly above the indifferents, however their scores were below average in most of the attributes. The Idealists scored higher than the moderates in most of the attributes, except for smell, colour, safety and personnel friendliness. The Loyalists scored highest on all the attributes. The composition of each customer segments revealed that the indifferents (cluster 1) consist of 45%, moderates consist of 24%, the Idealists consist of 21% and the Loyalists consist of only 10%.

Customer segments and demographic characteristics

This section attempted to determine if there is any significant difference in residents' concern for water and service quality on the bases of demographic characteristics. The demographic variables considered were residency (resides in Calabar South or Calabar Municipality), sex, age, marital status, education, occupation.

Table 2 shows the demographic distribution of consumers across the four customer segments. Variable such as residency ($p < 0.000$), education ($p < 0.10$), marital status ($p < 0.05$), and occupation ($p < 0.05$) yielded significance difference. The three variables (residence, education and occupation) are very significant in assessing resident concern of water and service quality. Detail investigation using cross tabulation gave the spatial pattern in relation to consumer's demographic factors. For example, residency- those in Calabar Municipality were more in all the clusters except in loyalists. For occupation, the

Table 1: Relationship between respondents' perception and customer segments

Water attributes	Segments' mean				F	Sig.
	Indifferents	Loyalist	Idealist	Moderate		
The water has a good taste	1.83	4.6	3.4	2.61	177.079	0.000
The water has no smell	2.03	4.42	2.53	2.63	118.857	0.000
The water is colourless	1.73	4.13	2.30	2.84	140.310	0.000
The water is safe for use	1.60	4.16	2.59	2.35	147.651	0.000
The water tariff is fair charge	2.07	4.64	3.41	3.36	147.372	0.000
The personnel are friendly	1.90	3.20	2.84	2.68	185.951	0.000
The personnel response to complaints	1.833	4.56	3.27	2.95	206.824	0.000
The personnel are skilful	1.83	4.61	3.03	2.87	224.269	0.000
The personnel are considerate	2.00	4.68	3.30	2.88	191.143	0.000
CRSWBL prepaid meters are good	2.21	4.53	3.23	2.82	112.592	0.000
water is supplied regularly	2.38	4.73		2.99	119.458	0.000
The water connection is a problem free	2.17	4.56	4.35	2.67	194.640	0.000
The distribution of network is effective	2.37	4.92	4.80	2.67	248.604	0.000

• Cluster 1, n=391; Cluster 2, n=90; Cluster 3=182; Cluster 4, n=207
• Significant at P≤0.001

unemployed and civil servants were more among the indifferents. For education, those with tertiary education were more in indifferents and moderates and at the same time the least in the loyalists and idealists. For marital status, the singles and married were more in indifferents and loyalist. There was no separated in loyalist. The other demographic variables such as sex, age, and marital status did not show significance difference in their perceptual concerns. This means that respondents in each of the segments have approximately the same distribution with respect to the water and service quality concerns of the utility firm.

Customer segments and users' behaviour

The moderating effect of users' behaviour on perception across customer segments was also analysed. The users' behaviour variables considered were source of water, customer status, pattern of consumption, category of users and duration of usage, and number of people per single water point (table 3).The cross tabulation shows that there is significant difference in customer segments with respective to pattern of consumption ($p \leq 0.05$), duration of usage ($p \leq 0.05$), and number of people per a single water point ($p \leq 0.05$). For pattern of consumption, the heavy consumers were more in indifferent, the moderate consumers were more in moderates and the low consumers were more in the idealist. For number per water point, consumers who are one to three people using a single water point were more in the indifferent and those who have seven to ten people using a single water point were more in the moderates. For duration of water usage, those between 1-3 years (50%) were more in the indifferent and those 7-10 years were more in the moderates. The other factors: source of water, customer status and category of user did not show significant difference. This means that respondents in each of the segments have approximately the same distribution with respect to respondent's perception of water issues.

Table 2: Evaluation of customers' segment relative to demographic characteristic respondents

Demographic variable	Segments' (%)				X	Cramer V	Sig.
	Indifferent	Loyalist	Idealist	Moderate			
Residency							
Calabar south	37.5	17.9	16.2	28.4	0.234*	0.234	0.000
Calabar municipality	44.9	10.3	20.9	23.4			
Sex							
Male	42.6	11.5	22.2	23.7	0.065	0.065	0.304
Female	47.8	8.9	19.3	23.9			
Age							
21-30	48.7	8.9	21.4	21.0	0.171	0.099	0.114
31-40	37.2	14.1	23.0	25.7			
41-50	46.4	9.6	18.2	25.8			
51-60	52.9	4.7	17.6	24.7			
61 and older	56.5	6.5	21.7	15.2			
Marital status							
Single	47.7	10.7	20.6	21.0	0.136 *	0.078	0.0384
Married	45.4	10.6	19.6	24.3			
Divorce	30.0	10.0	33.3	26.7			
Widow (ee)	36.4	6.1	27.3	30.3			
Separated	25.0	0	50	25.0			
Education							
No formal	36.4	22.7	36.4	4.5	0.178**	0.103	0.068
Primary	38.1	11.9	26.2	23.8			
Secondary	43.4	12.8	21.3	22.4			
Tertiary	48.1	7.4	18.9	25.6			
Occupation							
Farmer	48.9	14.9	19.1	17.0	0.200**	0.115	0.068
Business pers.	42.1	12.3	21.0	24.6			
Home exec.	39.4	13.8	21.1	25.7			
Civil/public	50.9	5.1	28.2	30.8			
Unemployed	61.3	4.8	21.0	12.9			
Artisans	38.1	8.3	27.4	26.2			
Others							

*Significant at P≤0.05; **Significant at P≤0.10

Table 3: Evaluation of customers segment and users' behaviour

Variable	Segments (%)				X	Cramer v	Sig
	Indifferent	Loyalist	Idealist	Moderate			
Sources of water supply							
River	42.2	8.9	28.9	20.0	20.41	0.088	0.310
Borehole/well	43.0	10.7	23.2	23.0			
Bottle/sachet	45.6	13.9	17.7	22.8			
Water Board	49.8	7.4	15.3	27.4			
Stream	33.3	33.3	22.2	11.1			
Others (rain, vendors)	62.5	12.5	12.5	12.5			
Customer status							
Current users	48.2	11.3	15.7	24.8	13.19	0.071	0.154
Disconnected	34.2	11.4	26.6	27.8			
Non-users	45.0	9.7	22.9	22.5			
Pattern of consumption							
Heavy	55.6	11.1	6.2	27.2	26.22*	0.123	0.000
Moderate	38.6	14.4	17.4	29.5			
Low	45.7	8.8	24.2	21.3			
Category of user							
Institutions	40.6	3.1	21.9	34.4	14.35	0.074	0.110
Households	44.0	14	16.5	25.5			
Commercial	48.0	0	20.00	32.0			
Usage							
≤3 years	50.0	12.8	14.0	22.3	22.57*	0.093	0.032
4-6 years	31.9	11.1	25.0	31.9			
7-9 years	31.6	15.8	10.5	42.1			
>10 years	66.7	0	8.3	25.0			
Number per water point							
1-3 people	50.0	11.6	17.9	20.5	28.150*	0.104	0.021
4-6 people	44.4	14.1	18.2	23.2			
7-9 people	29.3	9.8	12.2	48.8			
More than 10	34.8	15.2	17.4	32.6			

*Significant at P<0.05; **Significant at P<0.10

DISCUSSION OF FINDINGS

The water market for public water supply was divided into four clusters as revealed by the dendroogram. The dendrogram showed that cluster one has 391 respondents cluster two has 90 respondents, cluster 3 has 182 respondents, and cluster four has 207 respondents. The groups were distributed and differentiated by the variation in the perception of the water and service quality attributes. The import of this is that, each of the cluster is a unique market segment with similar characteristics and dissimilar from other customer segments. The loyalists, because of their concern are likely to be very critical of the offering of the firm, high perceived risk of water quality and safety. Because of this, it may require much effort in term of service delivery in appealing to such market. The indifferents who expressed very low concern for the firm's water and service quality attributes have lower expectations and will require less effort of the firm to meet the market expectation. The strategic marketing implication of this finding is that, the water managers can now understand the consumers' concerns and the needs of each target market.

Out of all the demographic and behavioural factors considered in this study, residency, marital status, occupation, pattern of water consumption, duration of usage and numbers of persons using a water point are critical factors in the marketing of public water utility services. Residency is a factor because as at the time of this research, the water network distribution in Calabar differs between Calabar South and Municipality. The researchers observed that most parts of Calabar South were not yet linked with the utility's main pipelines. The situation is better in Calabar municipality than in Calabar South. These results agree with Dogaru et al (2009) who assert that a general conclusion cannot be made of the influence of socioeconomic and demographic factors on the perception of water consumers as it differ from case to case. In this case not all the factors showed significant difference. The import of this is that, the managers understand the moderating factors that have the tendencies to influence consumer perception of the utility's water and service quality delivery and their strategic importance in product formulation and marketing communication. At the moment, the utility offers both analog and smart meters, household tap water and institutional water supply, bank payment and POS bill payment system. The communication is mostly by SMS text

messages, television advert, outdoor adverts. The extent to which the utility firm has differentiated its market is not known. These significant factors will have significant relevance in the strategic formulation of the firm.

CONCLUSION AND POLICY IMPLICATION

This study attempts to x-ray the strategic marketing relevance of market segmentation in water marketing. The study has shown that consumers of the Cross River State public utility company have varying perceptions of the firm's water and service quality attributes which led to the market been segmented into four clusters. The variation in the way respondents perceived the offerings of the firm gave rise to the four clusters been named*; indifferents, moderates, idealists and loyalists*. The clusters also differ in their responsiveness resulting from the identified demographic and behavioural characteristics of the respondents (residency, marital status, occupation, pattern of water consumption, duration of usage and numbers of persons using a single water point).

With the competition in the water supply market: abundant rainfall and surface waters such as streams in the raining season, the marketing activities of package sachet and bottle water), the utility can meet its strategic goal of profitability, financial viability, and sustainability by understanding of the market characteristics. The following recommendations were advanced to enable the firm derive the benefit of market segmentation. The firm should engage marketing experts who will handle the market segmentation function of the firm. In the light of this study, the firm should factor the significant demographic and behavioural factors in developing its strategic plan.The firm should ensure that market segmentation is done regularly (3-5 years) according the planning phase of the firm. This will reveal the emerging characteristic of the consumers, which is the bases of market segmentation.

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