Title: Effect of Real Mahala (Mahala means Free) Tariff on revenue growth at Zamtel

Subtitle: To assess the customers’ satisfaction on real mahala tariff at Zamtel.

(Conference ID: CFP/105/2017)

Authors Name/s per 1st Affiliation: Christopher A. Malambo
line 1 (of Affiliation): School of Business: Information & Communication University
line 2-ICU
line 3: Lusaka, Zambia
line 4-e-mail address: cam7581@yahoo.com

Abstract

The study looked at the Effect of Real Mahala Tariff on revenue growth at Zamtel. The concept of Game Theory was used in the study and how Zamtel applied it on real mahala tariff on revenue growth at organization.

For 100 years, Zamtel has been helping Zambians talk to each other. In fact, Zamtel installed the first telephone exchange in Zambia’s tourist capital in Livingstone in 1913. Since then, Zamtel has built up a competitive reputation for providing cost effective and high quality services for the customers in Zambian market.

Zamtel is the leading telecom in Zambia. In June 2010, the Zambian Government partially privatized the company and Lap Green Group acquired 75% share of Zamtel, with the Zambian Government still owning 25%. The Lap Green Group is no stranger to Africa, in fact it has its footprint in seven African markets, providing voice, data, fixed, internet and business continuity services to more than 5 million customers which makes them Live life today.

In January 2011, the Republic of Zambia repossessed Zamtel and became 100% wholly owned Zambian Government Company. Zamtel is one of three mobile phone networks in Zambia; the others are Airtel of India, Liquid Telecom, MTN of South Africa and Vodafone.

In 2011, Zamtel introduced the real mahala which was one of the biggest promotion in the country. Later on in 2014, Zamtel approved real mahala to becoming one of the tariffs for the company. The major reason why Zamtel introduced real mahala was to increase its customer/subscriber base as well
as increase its revenue. It was with this background that the study looked at the effect of real mahala tariff on revenue growth at Zamtel.

The target population for the research comprised 50 customers as a sample size of Zamtel. The field survey was conducted with a quantitative method, executed through the use of questionnaires. Responses were analyzed in frequency counts and percentages employing statistical tools the Statistical Package for Social Sciences (SPSS) and Microsoft Excel.

The study also demonstrated some types of Game Theory which are normally used in the competitive markets and how Zamtel applied the Game Theory in its business on Real Mahala.

Furthermore, the study assessed customer satisfaction on the real mahala tariff at Zamtel.

Real Mahala Tariff was critical part of the revenue growth at Zamtel and as such needed to be seen as an integral part of overall business performance. The study concluded that the real mahala tariff was a well-known product to customers and it could contribute greatly to revenue growth at Zamtel if the Game Theory was applied effectively.

However, it was clear that despite real mahala tariff being known by majority customers, it was expensive and hence was not affordable to many customers. This resulted in many customers not subscribing to the tariff hence at the end affecting both the customer base and revenue growth at Zamtel. Therefore, there was need to reverse the trend by applying the Game Theory effectively so as to grow the business.

Overall it was clear that there was customers’ satisfaction with real mahala tariff despite being expensive. This clearly indicated that Zamtel must further apply Game Theory in order to retain these loyal customers and attract more so as to grow the business.

The aim of the study was fulfilled by achieving the stated objectives and answering all the research questions.

1.0 Introduction

The study looked at the Effect of Real Mahala (mahala means free) Tariff on revenue growth at Zamtel. Telecommunications has now become an integral and important part of the social, economic and political fiber of our nation and the world as a whole. In addition to providing multimedia, entertainment and business services, contemporary networks also provide education, healthcare and other public and humanitarian services (http://www.zamtel.zm/files/3rill.pdf).

Real Mahala is one of Zamtel tariff where customers are able to call within Zamtel to Zamtel customers called on-net and also across networks
from Zamtel customer to other networks such as Airtel or MTN customer called cross-net at a small fee.

The Real Mahala Tariff plan has two (2) options being On-net Offer and All-network Offer. On the on-net offer, the minutes and SMS’s are for use for on-net calls and SMS only. On net means calls/SMS to Zamtel land line and mobile numbers only. The minutes and SMS are for use between 6am and 10pm. Data is valid from 6am to midnight (http://www.zamtel.zm/files/3rill.pdf).

On all network offer, the minutes and SMS’s are for use for on-net and cross-net calls and SMS. On net means calls/SMS to Zamtel land line and mobile numbers. Cross-net means calls/SMS to Airtel and MTN mobile numbers only. The minutes and SMS are for use between 6am and 10pm. Data is valid from 6am to midnight (http://www.zamtel.zm/files/3rill.pdf).

The concept of Game Theory was used in the study and how Zamtel has applied it through real mahala tariff at Zamtel.

Game theory is the formal study of conflict and cooperation. Game theoretic concepts apply whenever the actions of several agents are interdependent. These agents might be individuals, groups, firms, or any combination of these. The concepts of game theory provide a language to formulate, structure, analyze, and understand strategic scenarios.

The objectives of the study were as follows:

- To verify if customers were aware of real mahala tariff at Zamtel.
- To ascertain if real mahala tariff increased or decreased revenue growth at Zamtel.
- To assess the customers’ satisfaction on real mahala tariff at Zamtel.

However, this presentation only looks at one of the objectives of the study namely: To assess the customers’ satisfaction on real mahala tariff at Zamtel and the conclusion.

2.0 Literature review

A literature review is an examination of scholarly information and research-based information on a specific topic (Dawidowicz, 2010:6). Its goal is to create a complete, accurate representation of the knowledge and research-based theory available on a topic (Kaapanda, 2011:8). The study discussed the existing literature on the effect of real mahala tariff on revenue growth at Zamtel. This included both primary and secondary information on the area of study such as the reports, journals. Further literature examined or discussed Game Theory. A detailed discussion was done on how Zamtel has applied Game Theory against its competitors such as Airtel, Liquid, MTN and Vodafone in the market. A detailed account of types of Game Theory were outlined and how the specific type of Game Theory applies to Zamtel. Furthermore, a detailed account
of the effect of reah mahala tariff on revenue growth at Zamtel was discussed.

2.1 Customer Satisfaction

Customer satisfaction, a term frequently used in marketing, is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals." In a survey of nearly 200 senior marketing managers, 71 percent responded that they found a customer satisfaction metric very useful in managing and monitoring their businesses (Fandi Tjiptono, 1997: 24).

Customer satisfaction is the “complete fulfilment of one’s wishes, needs, and expectations” (Berry, 1983:141).

Therefore, the study also analysed if the real mahala tariff at Zamtel helped to increase the customer satisfaction since its inception and this in turn would increase both customer base and revenue growth at Zamtel.

2.3 Game Theory

Game Theory is the study of decision making under competition. More specifically, Game Theory is the study of optimal decision making under competition when one individual’s decisions affect the outcome of a situation for all other individuals involved. Zamtel has managed to compete favorably using reah mahala tariff by applying the game theory. For example, people have naturally encountered this phenomenon in everyday life: when you play chess or Halo, or even negotiate a price on a car, your decisions and the decisions of those around you would affect the quality of the end result for everyone.

2.3.1 Types of Game Theory

Game theory helps model, analyze, and understand the behavior of multiple self-interested agents who interact while making their decisions. In particular, it is a powerful tool for analyzing situations where the agents strive to maximize their (expected) payoffs while choosing their strategies, and each agent’s final payoffs depend on the profile of strategies chosen by the Company. Most business situations such as Zamtel can be modelled by a “game,” since in any business interaction involving two or more participants the payoffs of each participant depend on the other participants’ actions. In this case the competition is among these players (Airtel, Liquid, MTN, Vodafone and Zamtel) in the Telecommunication industry. The general methods and concepts offered by game theory, such as
strategies and equilibrium, could be applied and provide useful insights in many applications of business and social sciences. This chapter provided an introductory overview of basic concepts in game theory and gave examples of their applications in supply chain management and other business settings. “Having game theory in your corporate ‘bag of tricks’ could mean the difference between success and failure.” (Investor’s Business Daily, 1996) “Managers have much to learn from game theory – provided they use it to clarify their thinking, not as a substitute for business experience.” (The Economist, 1996). This could also be seen on how Zamtel Management has applied the game theory on the real mahala tariff to compete favorably in the market. There are many powerful tools, such as simulation, optimization, and decision analysis, which could aid managers in their decisions. We believe the use of game theory along with these other tools and the managers’ business experience could significantly improve the managers’ understanding of the dynamics in business interactions and lead to higher quality and more informed decisions.

Game Theory is a broad discipline within Applied Mathematics that influences and is itself influenced by Operations Research, Economics, Control Theory, Computer Science, Psychology, Biology and Sociology (to name a few disciplines). If you want to start a fight in bar with a Game Theorist (or an Economist) you might say that Game Theory can be broadly classified into four main sub-categories of study and we would look at how Zamtel has applied one of them to compete in the Telecommunication industry.

Some of the types of Game Theory include:

i. Classical Game Theory
ii. Combinatorial Game Theory
iii. Dynamic Game Theory

2.4 Effect of Real Mahala

The effect of the real mahala tariff could be divided into the revenue growth, customer base and also customer satisfaction. This is discussed in details below:

2.5 Customer Satisfaction

According to the information extracted from Zamtel face book account, it was clear that customers were generally satisfied with real mahala tariff despite the increase in the price. However, many customers complained of increase in price as result this had reduced the number of customer opting in on the daily basis. This affected both on-net and off-net customers. This in return affected the revenue collection of the company.

"The creation of customer satisfaction could provide several benefits, including the relationship between companies and consumers are harmonious,
providing a good basis for the purchase and recreation of customer loyalty, and form a recommendation by word of mouth that can benefit the company” (Fandi Tjiptono,1997: 24).

3.0 Research methodology

Research methodology is the approach taken to acquire the information (McNabb, 2010:13). The study presented an overview of the important areas that need to be considered when undertaking research. It outlined the type of research, the rationale for choosing the methodology for this particular re-search, research design, research philosophy, sampling technique, sample size, defined and described the target population, research instrument, questionnaire construction, instrument for data, pilot study, procedure for data collection, collection of the questionnaire, data analysis techniques, triangulation, scope of the study, limitations of the study, bias, ethical considerations and gant chart.

4.0 Presentation of Research Findings and Discussion

The study presented the results by analysing the survey data undertaken. According to Creswell (2009:184; Moodley, 2011:46) analysis may be defined as the breaking down and ordering of data into meaningful groups, plus the searching for patterns of relationship among these data groups.

The questionnaires were analysed through the use of the SPSS and Microsoft Excel packages. Each response has been graphically represented according to the questionnaire results. This allowed easy identification of problem areas that required attention. The findings of the research study were linked to the literature review. Forty-nine (49) out of fifty (50) total population of respondents of Zamtel customers representing 98% response rate of respondents or customers who took part in this research. The questionnaires were given to customers by hand and some were done on one on one interview with the customers.

The findings were presented in the pie chart and frequency table form with the help of SPSS and Excel.

**Overall the customer is satisfied with the real mahala tariff at Zamtel**

For example Question 11 wanted to ascertain the overall customer satisfaction with the real mahala tariff at Zamtel

<table>
<thead>
<tr>
<th>Overall customer satisfaction with real mahala</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Valid</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Table 1: Overall customer satisfaction**

**Figure 1: Overall customer satisfaction**
Table 1 and figure 1 results revealed that out of fifty (50) questionnaires which were distributed, forty-nine (49) respondents representing ninety-eight percent (98%) said YES meaning they were overall satisfied with the real mahala tariff at Zamtel and only one (1) (2%) questionnaire was not attended to.

5.0 Discussion and Interpretation of the Findings

The aim of the study was to look at the Effect of Real Mahala Tariff on revenue growth at Zamtel. The study evaluated the effect of the real mahala tariff on the revenue growth and also assessed the customers’ satisfaction on real mahala tariff since its inception at Zamtel. To achieve this, it was necessary to meet the following objectives:

- To assess the customers’ satisfaction on real mahala tariff at Zamtel.

5.1 Has the Research Objectives Been Met?

The research objective was to be achieved through the research question. The research question for the study was answered and the results were evaluated in the light of the literature review. The research question for the study was as follows:

- Are customers satisfied with real mahala tariff at Zamtel?

This research question was directly answered by questions 11 in Appendix B. This question wanted to establish customers’ satisfaction in the effect of real mahala tariff on revenue growth at Zamtel. Customer satisfaction is the degree of happiness a customer experiences with a company’s products or services which results from the interaction and interrelationship of all people within that company (Kotadia, 1997:43). Ahonen (2001) defines customer satisfaction as the feeling of pleasure or disappointment after comparing the perceived performance in relation to what was expected. The answer to this question “are customers’ satisfied with the real mahala tariff at Zamtel” is based on the ex-planation given on the findings. Table 4.11 and figure 4.11 results revealed that out of fifty (50) questionnaires which were distributed, forty-nine (49) respondents representing ninety-eight percent (98%) said YES meaning they were overall satisfied with the real mahala tariff at Zamtel and only one (1) (2%) questionnaire was not attended to. Srinivasan (2009:118) indicates that customer satisfaction and service quality are closely related. It is further argued that it can be said that satisfaction assists consumers in formulating a revised opinion about their service quality perception. The connotation is that customers’ perception of the service quality of a telecommunication operator with which they have no existing knowledge depends on the customer’s expectations. For the Game Theory to be effective at Zamtel, there was need for the customer to be satisfied with the real
mahala tariff. According to the research findings, it was clear that customers who used the real mahala were generally satisfied representing 98% satisfaction. This was good for Zamtel because customers were satisfied with real mahala hence there was need to apply the Game Theory in a manner which would result in the high payoffs.

Table 2: Overall customer satisfaction

<table>
<thead>
<tr>
<th>Satisfied</th>
<th>Not Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>49,49</td>
</tr>
<tr>
<td>Not Satisfied</td>
<td>0,49</td>
</tr>
</tbody>
</table>

The Table 2 above clearly showed that the dominant strategy for this question was Satisfied-Satisfied. Hence Zamtel could capitalize on this strategy and have high payoffs thereby grow the business.

6.0 Conclusions and Recommendations

The conclusions and recommendations of the study based on the previous chapters. An effort was made to illuminate the extent to which the study was able to address the research objectives and questions. Essential to this chapter was the evaluation of the link between the literature review and the research findings so as to come up with sound recommendations. These recommendations would be made available to the management of Zambia Telecommunication Company Limited for possible assimilation into strategic decision making. Furthermore, suggested areas for further research were outlined. In this chapter conclusions and recommendations were made and linked to the research objectives.

6.1 Key Findings from the Literature Review are as follows

Extensive review of relevant literature was done in order to evaluate the effect of real mahala tariff on revenue growth at Zamtel. However, only a summarized report was presented under this heading and was presented into three components below:

Customer service is the provision of service to customers before, during and after a purchase. According to Turban et al., (2002: 40), "Customer service is a series of activities designed to enhance the level of customer satisfaction – that is, the feeling that a product or service has met the customer expectation." While Customer satisfaction is the customer’s evaluation of a service or product in terms of whether that service or product has met his/her needs and expectations (Wilson, 2008:80.). Some of the critical core competencies in providing customer service and satisfaction include:

- To provide better customer services
- To provide better customer satisfaction
- To provide better service quality delivery (SERVQUAL)

Service quality is so important that companies have gone to great efforts to evaluate and keep records of service quality levels (Hauser and Clausing, 1988;
Phillips, Chang and Buzzell, 1983; Zeithaml, Parasuraman and Berry, 1990). Further, rewards can come in the form of increased market share (Buzzell and Gayle, 1987; Phillips, Chang and Buzzell, 1983). Researchers have varying suggestions for use of service quality measurement instruments. Some researchers recommend using service quality instruments in order to spot problems, determine how to correct the problems and to evaluate the improvements (Kettinger and Lee, 1995). Others believe that companies should use service quality surveys to warn of possible problems that could lead to departing customers (Zeithaml, Berry and Parasuraman, 1996). Additionally, these same researchers suggest using the survey to modify service offerings to be consistent with what the customer wants. Given the importance of service quality to the services sector, Taylor and Baker (1994) encourage further operationalisation of service quality. Service quality is defined as how well the service meets or exceeds the customers’ expectations on a consistent basis (Crosby, 1979; Parasuraman, Zeithaml and Berry, 1985).

According to the information extracted from Zamtel face book account, it was clear that customers were generally satisfied with real mahala tariff despite the increase in the price. However, many customers complained of increase in price as result this had reduced the number of customer opting in on the daily basis. This has affected both on-net and off-net customers. This in return has affected the revenue collection of the company.

"The creation of customer satisfaction could provide several benefits, including the relationship between companies and consumers are harmonious, providing a good basis for the purchase and recreation of customer loyalty, and form a recommendation by word of mouth that can benefit the company" (Fandi Tjiptono, 1997: 24).

6.2 Key Findings from the Primary Research were as follows

Findings from the study were presented in accordance to the extent in which the research question was answered:

- The study revealed that out of fifty (50) questionnaires which were distributed, forty-nine (49) respondents representing ninety-eight percent (98%) said YES meaning they were overall satisfied with the real mahala tariff at Zamtel and only one (1) (2%) questionnaire was not attended to. Overall it was clear that customers were happy with real mahala tariff and this was a better opportunity for Zamtel to apply the Game Theory effectively so as to increase the payoffs. Oodan et al., (2003:14) point out that the service providers who offer quality and reliability will enjoy a more favourable
elasticity of customer loyalty even in time of economic difficulty and down turn. Reliability of service implies that service is delivered as agreed and promised, meeting customers’ expectations.

7.0 Implications

The study was undertaken to evaluate the effect of real mahala tariff at Zamtel. This would help to ascertain whether the Game theory has been applied well at Zamtel. This would also help Zamtel to design more appealing competencies which would deliver better customer value and thus providing the required returns. The aim of the study was fulfilled by achieving the stated objective and answering the research question. The objective of the study was: to assess the customers’ satisfaction on real mahala tariff at Zamtel.

The Table 2 clearly showed that the dominant strategy for question 11 was Satisfied-Satisfied. Hence Zamtel could capitalize on this strategy and have high payoffs. For the Game Theory to be effective at Zamtel, there was need for the customer to be satisfied with the real mahala tariff. According to the re-search findings, it was clear that customers who used the real mahala were generally satisfied representing 98% satisfaction. This was good for Zamtel because customers were satisfied with real mahala hence there was need to apply the Game Theory in a manner which would result in the high payoffs.

8.0 Recommendations from findings

Based on the findings of the study, the following were recommendations on the effect of real mahala tariff on revenue growth at Zamtel:

➢ Zamtel must maximize on the overall customer satisfaction. Ninety-eight percent (98%) of customers interviewed overall were satisfied with the real mahala tariff at Zamtel. Overall it was clear that customers were happy with real mahala tariff and this was a better opportunity for Zamtel to apply the Game theory effectively.

➢ There is a need to educate members of staff to resolve customer complaints as quickly as possible so as to satisfy the customers’ needs.

➢ Most customers interviewed indicated that the network is not good hence there is a need to provide service quality through network quality, network extension and upgrade.

➢ Enrich customer’s service experience and loyalty. Value the importance of day-to-day interactions, such as response quality in call centre, skills of staff in retail outlets, speed
of technical repair and other measures.

➢ Members of staff must learn to listen to the customers. Listening is central to learning, improving and engaging with customers.

➢ Zamtel Management must pay attention to staff skill possession, knowledge, attention to customers and their needs, offering of fast and efficient services and general attitude to customer services.

➢ Zamtel Management must consistently monitor what customers want and what they get through the feedbacks, then identify the gap in between through research and bridge the gap through continuous innovation

9.0 Area/s for further Research
The study had limitations and delimitations. The following areas were suggested for further research;

• A similar study could be extended to a large sample of customers say 200 who use real mahala at Zamtel

• A similar study must be extended to Zamtel members of staff in order to ascertain the true picture on the effect of real mahala at Zamtel.

• There must be a need to include open-ended questions to probe the reasons for customers’ selection of the service quality satisfaction on the effect of real mahala at Zamtel.

10. Executive summary
The primary findings assisted the researcher in answering the research question that was formulated for the study. Real Mahala Tariff was critical part of the revenue growth at Zamtel and as such needed to be seen as an integral part of overall business performance. The study concluded that the real mahala tariff was a well-known product to customers and it could contribute greatly to revenue growth at Zamtel if the Game Theory was applied effectively.

However, it was clear that despite real mahala tariff being known by majority customers, it was expensive and hence was not affordable to many customers. This resulted in many customers not subscribing to the tariff hence at the end affecting both the customer base and revenue growth at Zamtel. Therefore, there was need to reverse the trend by applying the Game Theory effectively so as to grow the business.

Overall it was clear that there was customers’ satisfaction with real mahala tariff despite being expensive. This clearly indicated that Zamtel must further apply Game Theory in order to retain these loyal customers and attract more so as to grow the business.

11.0 Acknowledgment
First and foremost, I am grateful to Almighty God for giving me grace, health, strength, wisdom and perseverance to start, sustain and finish this Bachelor’s Degree in Economics.

Secondly, I would like to thank my supervisor, Mr. Fred N. Mukonda, for his guidance, support, prompt feedback and encouragement throughout the process of formulating my ideas was invaluable. He has not only been my supervisor, but, he was also my mentor too, hence, making this an exciting and enriching journey of learning.

Thirdly, I would like to thank the following individuals, without whom this research would not have been successful:

1. All the participants who took the time to complete the survey questionnaires. The data collected made it possible to obtain results and complete my research,

2. I would like to thank the Management and the entire staff at Information Communication University for enrolling me to do a Bachelor’s Degree in Economics and for the support and encouragement rendered to me during my study period.

Fourthly, to my wife Tamarah and daughters Luyando and Lumuno thank you for making a tremendous sacrifice over the last few years. I am highly indebted to you for your encouragement and support rendered during my Bachelor of Arts with Economics programme. Thank you for being patient.

Lastly but not the least, I would like to thank all the individuals, who contributed in one way or another to my successful compilation of this Bachelor’s Degree in Economics dissertation.
12. References


