

CHAPTER 4: FINDINGS AND RECOMMENDATIONS

Companies that are smart enough to tailor their offerings to the needs of low-income consumers and entrepreneurs will thrive in the 21st century.

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4.1 INTRODUCTION

The research aimed to provide insight into the current population coverage from telecom retailers in the South African market with specific reference to the BOP. All of the main telecom retailers were included in the study so as to cover the entire market. This chapter will provide a summary of the research conducted and aim to supply recommendations for accessing the BOP based on these findings. The discussion points will follow the same sequence as the study.

4.2 SUMMARY OF THE RESEARCH PROBLEM

The first chapter of this research establishes a background for the reader through a short literature overview aiding in supporting the research problem. The concepts of the BOP, technology acceptance with specific reference to mobile phone adoption and GIS are explained in brief. The latter has greater application to the methodology and as such is explained in brief whilst addressing limitations in the proposed research but also highlighting key points that the study can contribute. Limitations are mainly as a result of existing data variables. The study can contribute as input to drive a retail strategy change in the telecom market, highlighting the opportunity in different market segments.

Lastly, chapter 1 gives the scope and layout of the study. The scope of the study was to quantify the entire South African market. Thus, no sample was used in the study with the focus being on the entire population. The layout of the study is split over four chapters – Research problem, literature review, empirical investigation and lastly the conclusion.

4.3 SUMMARY ON THE BOP LITERATURE

Different research initiatives have identified the BOP by making use of different income levels. In essence, BOP income levels can be concluded as households having an annual income ranging from USD1,500 to USD3,000. The application of the literature dictated that households earning less than R38,200 per annum be identified as the South African BOP. Referring to technology adoption, all models discussed as part of chapter 2 highlighted similar variables to be considered when considering the rate of mobile phone adoption. Ultimately, the ownership of household goods indicated that of the 11% of households not owning a mobile phone as in 2011 only 6% were willing adopters.

It was found that the diffusion of innovation theory offers insight into linking the BOP with technology adoption. The BOP can subsequently be seen as late adopters given similarities between identifying criteria of the two groups. In essence, the criteria dictate that these groups have limited formal education which results in a lower literacy rate. This warrants a lower income which has negative influences on social status and -mobility. At the same time corporate social responsibility can be combined with profitably accessing the BOP.

Mobile phone expenditure is linked to income levels – the more you earn, the more you can spend. As mobile phone expenditure can be seen as a luxury (although this is fast becoming a requirement), first expenditure priority is placed on basic goods. This limits the potential expenditure on mobile phone per household in the lower income groups. However, given the larger volumes in the lower income groups the BOP still offers a significant opportunity. This is evident in a number of telecommunication companies with lower ARPU values but comparable financial results to those of companies with higher ARPUs.

In recent years, multiple channels have become available to corporates to sell product through. This placed pressure on retail stores to perform. The introduction of different channels to a developing world is, however, more difficult than in the developed world. This, combined with the majority of the BOP still transacting in the retail environment, allows for retail opportunities in areas previously not catered for.

4.4 MAIN FINDINGS OF THE STUDY

The market size as determined in the research compares favourably with that of previous studies. This is the first accuracy indication of the model applied. The second favourable outcome is determined through the case study of Moruleng Mall. Here it is evident that the dashboard results reflect actual opportunities which could be used in determining target areas. The case study furthermore suggests that shopping centre developers are in fact targeting the higher opportunity areas and that these are actively pursued.

This methodology applied can aid in finding opportunities or areas for expansion of retail networks. Conversely, areas that are already covered by the existing retail network can be optimised through store-specific analysis such as trading density or performance evaluation. Stores that are not optimal in performance could be increased in size if the store is over trading or should sufficient potential exist in the area, by introducing another store to the area. All these methods ultimately aid in fighting competitors for market share while increasing the probability or at least the opportunity for increasing market share in localised areas while achieving national growth.

4.4.1 Suggested model and approach

The methodology applied in the empirical investigation is based on different theories and approaches with GIS applied throughout as the dominant tool (software). This application of a geographic tool allows for not only a holistic view but also different levels of market opportunity by applying calculations to underpinning datasets. Three key elements were included in the development of the model. These include:

- Theories and generic models,
- Retail and demographic datasets,
- Benchmarks on mobile phone expenditure and adoption rates.

Theories applied throughout in the methodology were the principles of technology adoption and BOP characteristics. Principles of gravity modelling through SiteMarker software was applied in the second tier of analysis. Multiple regression modelling

was applied to determine the rate of mobile phone adoption. This regression was based on the principle that existing household goods would determine whether or not a household without a mobile phone would be willing to accept the technology and ultimately adopt one. The model developed is underpinned by retail and demographic data which establish a workable base for the model. By introducing GIS, additional variables such as the proximity calculation could be introduced.

A tiered approach was used in the empirical investigation. This also aided in determining the accuracy and validity of the findings. The first tier of analysis was to quantify the opportunity by each municipal area, nationally. By applying the principles, calculations and benchmarks to the dashboard, the researcher was able to develop a platform for easy viewing and analysis of data. This included the development of not only a dashboard but also an online map view summarising the result for each municipal area. The second tier made use of a case study and investigated the development of Moruleng Mall specifically and its estimated market by integrating gravity modelling principles. This estimated the anticipated market size by applying drive times, considering existing retail nodes and competition in the area in order to evaluate the attractiveness of each of the respective retail nodes.

Comparing the outcome of this empirical investigation (by applying the proposed methodology) with that of previous research indicated a positive correlation suggesting that the methodology applied is correct.

4.4.2 The BOP opportunity

The opportunity calculation was applied to a dashboard which also aids in data analysis. Currently Vodacom has the greatest number of stores offering their product ranges to the market in general. Even though Vodacom has a greater number of stores (153 more than MTN), on average they are only $\pm 500\text{m}$ closer to the consumer in general. The average proximity of formal retail (indicated by shopping centres) to the BOP is roughly 5km further than that of the ROP. This is also reflected in the proximity of telecom retailers to consumers as being closer to the ROP given that telecom retailers are subject to the availability of formalised retail space (shopping centre GLA).

Nationally, 42% (2.7 million households) of the BOP are not covered by telecom retail opposed to only 27% (2.2 million households) of the ROP. Provinces with a more disperse population distribution (households in rural areas) are also the provinces with the highest number of households not covered. These include provinces like Eastern Cape, KwaZulu-Natal and Limpopo. Although the Northern Cape has a relatively high percentage of households not covered, the volume (number of households) is less significant.

Applying the national average of 11,544 m² shopping centre GLA per telecom retailer it becomes evident that the Northern Cape and Free State are adequately catered for in terms of this ratio. This ratio indicates that the Northern Cape has the largest number of telecom retailers considering the total shopping centre space of the province. Conversely, when applying the number of households to this equation as households per 1m² GLA, the Northern Cape has one of the highest ratios. This indicates a discrepancy in the ratio which can again be attributed to the fact that the population is dispersed within the province. Gauteng and the Western Cape offer the most shopping centre space considering the population of the respective provinces. Similarly, these two provinces also indicate the lowest ratio of telecom retailers to shopping centre space. Conversely, these two provinces have the greatest coverage percentage of the BOP, indicating a sufficient number of telecom retailers. The Eastern Cape and Limpopo have the highest ratio of households to shopping centre space (1.28). This indicates a possible lack of retail space for telecom retailers to consider for footprint expansion purposes whilst the spread of the current shopping centres would determine the coverage of the BOP.

The total telecom volume, represented by simcards, was found to be 13.7 million in the BOP market with 14.6 million in the ROP. This is almost a midway split. The value of the BOP paints however a different picture. The total monthly telecom market in the BOP was estimated to be R563 million compared to the market in the ROP being R2416 million. This represents a more significant split between the two markets with the BOP only contributing roughly 19% to the total market. This difference in market value is also presented in the opportunity (markets not covered by telecom retail) although the volume not catered for is much greater in the BOP (5.8 million) than the ROP (2.8 million). The BOP offers a market of R247 million per

month while the ROP offers R379 million per month which begs the question of whether the BOP in fact offers a considerable opportunity. This difference in market sizes offers an interesting consideration in terms of market segments (BOP vs. ROP) that was answered through the Moruleng Mall case study.

4.4.3 Moruleng Mall as case study

Moruleng Mall in Moses Kotane municipality is a significant retail development at 30,000m² which offers opportunity for telecom retail to be established in an area otherwise not specifically catered for by telecom retail. The centre has a good orientation to the population distribution within the municipal area with no existing centre that would function as competition. Outflow considerations are, however, Rustenburg and Northam. This development offered a good opportunity to determine whether it would be viable to target the market as quantified in the first tier of analysis. This required the application of gravity modelling techniques. Variables that were used to determine the attractiveness of respective retail nodes included GLA, number of telecom retailers, commercial activity and drive time.

The result from the gravity modelling (through SiteMarker software) found that limited influence would be experienced from Rustenburg however that Northam's trade area would overlap considerably with that of Moruleng Mall. Ultimately, the ROP contributes to a much larger extent ($\pm 81\%$) to the total market of Moruleng Mall.

The Moruleng Mall case study indicates that whilst the focus is on the BOP, the ROP is also present in the same areas and subsequently covered by the same telecom retail store. Thus, the ROP adds to the viability of investing in certain BOP areas as the ROP increases the total market value. This requires a shift in strategy from the BOP specifically to rather a rural focus in order to incorporate the ROP and target the entire market present.

4.5 STUDY EVALUATION

This section will evaluate whether the objectives as determined in chapter 1 were reached.

4.5.1 Primary objective

The primary objective of the study to “determine the size of the telecom retail market in the South African BOP” was achieved by making use of demographic data and applying industry benchmarks. The current coverage and balance (or opportunity) were also quantified through incorporating the location of current telecom retail stores.

4.5.2 Secondary objectives

Secondary objectives were also reached through the literature review and empirical investigation.

- “Establish a platform for easy viewing and interpretation of the result.” The development of a dashboard and online spatial mapping forms an integral part of the result.
- “Assessing the contribution of a GIS to retail business.” The underpinning software utilised was a GIS which adds a spatial dimension to the research. The value of the inclusion of GIS software is evident in the research which can also add value to business.
- “Identifying the characteristics of- as well as determining the extent of the BOP.” The literature review established the required background in identifying the BOP on which this research is based.

4.6 RECOMMENDATIONS FOR FUTURE RESEARCH

Future research that can aid in increasing the accuracy of this study and build on possible applications thereof include:

- Approaching the same research with a bottom-up approach whereby questionnaires are conducted amongst the BOP in an effort to validate the adoption methodology and expenditure benchmarks to determine the accuracy of the market size calculation.
- Apart from macro-locational factors, micro-site dynamics also influence optimal return from investment as different retail perform better in specific

areas given complementary retail, synergy hubs and/or competitor relation. Site analysis at a localised level, i.e. in a shopping centre, can furthermore add valuable insight into site selection and optimal retail placements. In essence this will encompass an investigation into the third tier analysis.

- Making use of cluster analysis to hypothesise suburbs or neighbourhoods with the same demographic data to identify market segments in the South African opportunity. This would then also allow for an improved method of targeting these areas through the awareness of geo-demographic or lifestyle information.
- Given that this research is based purely on retail coverage, company customer data may introduce additional insights to understand retail areas and the movement of customers between retail nodes. Similar research is proposed in Segal (1999). This would be of greater significance as the current penetration of existing stores outside their 10km radius would also be considered.

4.7 CONCLUSION

The notion of the retail store becoming less important as a result of the multichannel approach cannot be disregarded. However, the retail environment in South Africa as showed in Gaddy (2013) is still under-developed with the market still relying on retail stores for the delivery of products and services. The possibility of multiple channels developing cannot be disputed; however, this will take a lot longer in South Africa and the rest of Africa. This emphasises the importance of retail as the main channel for distribution of products and services in developing countries (at least for the immediate future) opposed to developed countries where the retail industry and economic conditions have become more conducive and susceptible to change.

In order to target the BOP successfully, the different market segments should be included as part of company strategy. Theory suggests that significant competitive advantage could be lost as a result of disregarding the rural or BOP opportunity. This is supported by the case study and ultimate research as conducted in the empirical investigation. Thus, the morphing of existing retail strategies should be considered for inclusion of the BOP and rural target markets to form an integral part of company

strategy. The exact method to adequately and optimally target the BOP also needs to be considered. Multiple channels exist for companies to reach their target markets. However the retail channel remains the main and most viable channel to offer their product to target the BOP. The decision on which channel and method within that channel will form an integral part of the company's strategy. Formal and informal methods are available in the retail channel. Informal methods would require a lower investment; however, product ranges would be limited given the lack of a supporting infrastructure. For this reason in order for telecom companies to cater sufficiently to the BOP, the formal retail channel (stores in formalised retail nodes) would have to be considered. This method would, however, require a greater investment. This makes it important to identify areas that offer greater opportunities which would ultimately drive a greater return on investment. Another consideration would have to be that even if a specific store is not financially viable in a remote area, what the potential gain in market share would contribute to the company as a whole – seeing the bigger picture.

Three underlying results are clear from this research:

- Firstly that a significant market is still not specifically catered for.
- Markets are becoming diluted as shopping centres are established closer to the population and thus the market is diluted, which requires retailers to follow suit.
- While the BOP may not offer as great an opportunity, the ROP (especially the rising middle class) makes these opportunities more attractive.

The South African market still allows for further retail investment from telecom companies. Conversely, as the South African telecom market is considered captured, the development of new shopping centre or retail nodes dilutes the market which requires retail presence. Subsequently retail investment is required to align with the ever-changing retail environment whilst remaining competitive. Although the BOP offers a significant volume, the value thereof is less significant when considering the entire market. This lower opportunity dictates an adjustment to the strategy from a BOP focus to a rural focus. By focusing on rural regions, the BOP would also be covered but the ROP aids in increasing the viability of accessing these markets. The

product offering within respective retail stores would, however, need to conform to the target market – BOP, ROP or both.