Introduction

SalesPro's sale of their products has been found to be declining in the South while the sales in the North are booming. The disparity between these two figures cannot be understood, and the reasons behind it are therefore set to be investigated by analysis. It was noted that the sales of SalesPro products dipped by about 40% from the previous year whereas the sales improved by about 20% from the previous year. The cause of this variance in sales is disturbing and therefore a research on these values has been warranted.

It has been assumed that the SalesPro products are readily available in supermarkets and therefore this study is set in supermarkets. The samples will collected from 20 different supermarkets in the both the North and the South regions. Carrying out the research in the supermarkets makes the research design unbiased so that all people are able to participate in the research process. In this research, 10 supermarkets were selected from the North and 10 other supermarkets were selected from the South for this research. The research design will be by sampling method. This is because this method is cheap and effective and can be generalized to the rest of the population. For the data collection procedures, techniques that will be used include interviews, self-reported instruments and the instruments presented after a stimulus condition, so that any difference in the sales my be recorded.

The data to be analyzed can be classified as nominal data. This is because the type of data that is being dealt with is known and it is the specific products from SalesPro Company. Data analysis will mainly focus on the number of items sold in the North region as compared to the South region. For the interviews, company staff and the available customers will be asked on certain aspects of the SalesPro products to ascertain the level of purchase and reasons that will make it slow in sales progress. Data will also be collected on the number of items that are available for sale on the counters and number of items that have already been sold to customers; this is from the records of the supermarkets (Lind, Marchal & Wathen, 2010). These figures will then be compared in the analysis procedure.

The hypotheses of this study will be formulated and they will be as follows. The null hypothesis denoted as H0 while the alternate hypothesis will be denoted as H1.

H0

There is no difference between the sales of SalesPro products between the North and South regions.

H1

The mean sales values of SalesPro products are generally higher in the North region as compared to the South region.

For this study, the mean sales of the SalesPro products in the North will be calculated from the data obtained and also the same done for the values that will be obtained from the South. These mean values will be the ones that will be used for the comparison studies.

The difference in the means will be calculated and recorded. For this study, a level of significance of 0.01 will be selected for the calculation of these values.

The type of analysis of this data collected will be the two-sample test hypothesis. From the above data, standard deviations of the values will be calculated and used for this study. The standard normal distribution of z will be used and the test statistic will be taken as t (McNamura, 2010). This is because the standard deviations will be known. The sources of the data will be classified as primary data and secondary data sources. The primary data sources of this study will be the number of products available on the counters and also the number of items that have been sold by the supermarkets as observed from the records. The secondary sources of data will be from the interviews conducted to the supermarket staff and also the customers that will be present in the supermarket at the time of the research being done.

The sample size of this research will be computed in such a way as to give very accurate results and also to cover the larger population under study. Since the whole population cannot be covered and if it is it will be very costly, a sample of 20 supermarkets in the North and South regions will be selected, with 10 supermarkets from each region, the North, and South regions. Sampling is taken to be the most appropriate method for data analysis that is collected for a representative of the population. For this study, random sampling will be used, and that is why 20 different supermarkets were selected for the study. The random selection would therefore prevent biased results and also capture all the data that may be presented by the different supermarkets. In addition, since there is a disparity in the sales between the North and the South, the data will capture the reasons and bring out the underlying possibilities that are contributing to these differences (Lind, Marchal & Wathen, 2010).

The data collection will be done via interviews of the supermarket attendants and the customers of those supermarkets. In addition, the sales representatives of SalesPro company will also be interviewed for any information that may be important in finding the reasons for the sales disparity in the two regions. Data will also be collected on the number of items that are found on the shelves and the number of SalesPro products that have already been sold by each of the supermarkets. This will give a good idea of the flow of goods of the SalesPro products and hence a determination of the sales percentages can be computed (McNamura, 2010).

This study will also involve a two-end tailed analysis. This is because there is no defined value for the two hypotheses.

References

Lind D., Marchal W. & Wathen S. (2010). Statistical Techniques in Business and Economics. New York, NY: McGraw-hill Irwin.