CHAPTER II

RESEARCH METHODOLOGY

2.0 Preliminaries.

As stated in chapter one, the present study attempts to explore the current position and prospects of internet marketing in the Republic of Yemen with special reference to travel agencies and hotels using internet in selected. To this purpose, this chapter will summarize, and present the research methodology and procedures employed in the collection of the data, related to the variable under investigation which includes: selection of the sample, techniques, coding and organizing the data, and the selection of the statistical tools.

2.1 Importance of the Study.

The importance of the study comes from it studies of essential subject to the economy of Yemen as well as travel and tourism organization specifically. The important points are as follows:-

- This study is considered to be the first study in the Republic of Yemen which studies the internet marketing and its prospects.

- The internet network has great importance in our age and thus invites us to study its effects on the domestic marketing.
To know the latest internet network technology and its effective advantages, in modern marketing.

This study aims to facilitate marketing of the products and services in domestic and international market.

The new international market works according to the new rules, procedures and bases. To join the international market is not compulsory now but, in future it will be a must. Therefore it’s important at present.

The results and recommendations of this research will contribute to the development of the internet marketing of the domestic organization.

This research conducted in the Republic of Yemen which is one of the developing countries so that many other developing countries may get the benefit from it, if they want to enter the internet network.

2.3 Sources of Data Collection.

To fulfill the set objectives of the study, both primary and secondary sources of data collection were tapped, the details of which are as under:

2.3.1 Primary Data:

The researcher adopted many instruments and manners to collect primary data for the study, which were as follow:
• **Field visits and preliminary exploration.**

The researcher did many visits to several organizations that work in the field of travel and tourism, which are located in Sana'a city, Aden and Taiz. The researcher also visited several governments’ agencies like the ministry of communications and information technology, ministry of planning, ministry of parliament and laws affairs, ministry of tourism, higher committee of tourism, tourism promotion council, consultation council, national center for information ,higher telecommunications institute , Yemennet, Tele Yemen and higher committee of post in Sana'a. From all of these visits, the researcher could collect the information he needs and also known the organizations that he will distribute the questionnaire to as sample of the study.

• **Personal interviews.**

The researcher conducted group and personal meetings and interviews with several numbers of general managers, marketing managers and sales managers of local travel and tourism organizations that are the sample of the study, in order to know:

- The current position of internet marketing in the organization and marketing as well.

- The problems and difficulties of internet marketing as viewed by workers managers in this field.

- To get answers to some questions asked by the researcher.

• **The survey instrument.**

The researcher designed a special survey questionnaire for this study to collect data that are related to applied section of this study which depends on the known scales.
The researcher benefited from some scales that used by (alzoubi, 1996), (alzoubi.1998),(alaali,1999),(almahmoudi,2001),(almahmoudi,1998),(alkero,2001),and(al saka,2000). Some of questions were put by researcher especially those who hadn't ready scales. The questionnaire consisted of seven positions distributed in to two parts that contained 35 questions. The first part of the questionnaire gathered demographic information on the general manager, marketing manager and sales manager. The first part consisted of scale items that utilize a 5-point Likert type scales. The anchors included: strongly disagree to strongly agree.

A self-administered survey questionnaire was used to collect data. The main part of questionnaire was delivered via the Yemen postal service to the randomly selected sample of travel and tourism organizations, and others were delivered by researcher.

Several measures were employed in an effort to enhance the response rate. A cover letter that was signed individually in blue ink and contained the name and address of the respondent in an attempt to show personalization was attached to each questionnaire. A self addressed, stamped envelope was included in the package being mailed. Three weeks after the survey was mailed, a reminder postcard was sent to those who had not returned their survey.6

2.3.2 Secondary Data:

Along with the primary data, the researcher has also compiled secondary data from various sources like books, researches, previous studies, statistical and issued reports, publications, magazines, journals, newspapers etc.

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For the purpose of collecting data, the researcher visited the following libraries, institution and offices:

1) Gokhale Institute of Politics and Economics, Pune.

2) Jayakar Library, University of Pune, Pune.

3) General library of Taiz University, Taiz Yemen.

4) General library of Sana'a University, Sana'a Yemen.

5) General library of the Ministry of Planning, Sana'a Yemen.

6) NIBM library, Pune.

7) British Council library, Pune.

8) British Council library, Sana'a Yemen.

2.4 Sample.

The population of this study is the organizations of travel and tourism in Sana'a, Aden and Taiz cities in the Republic of Yemen that are connected by internet network. Research population is the managers in the travel and tourism organizations connected by internet network till 2006 (general manager, sales manager, and marketing manager). The researcher gave attention to the homogeneity of population that the sample of this study was selected from it and the degree of accuracy.

First, a stratified sampling method was utilized to determine the number of respondents required from each city. Afterwards, a random sampling was used to select 100 respondents that were distributed in different cities 50 respondents from Sana'a city, 30 respondents from Aden and 20 respondents from Taiz city. The sample (mailing list)
for this study was obtained from the statistical annual report of the ministry of tourism for the year of 2006, which contains information about the numbers of hotels, travel agencies, restaurants and other tourism amenities that are located in different cities and provinces. The minimum size of sample should be at least 100 to ensure appropriate result and to minimize the chance of getting good or perfect goodness-of-fit indices due to small sample size. However, large sample sizes, over 400, are also likely to be problematic because they are likely to result in poor goodness-of-indices. The targeted usable sample size for this study was set at 100.

2.5 Research Area.

The study was conducted in the travel and tourism organization in Sana'a, Aden and Taiz cities, in which these organizations were connected by internet network since 1996 till 2006.

2.6 Pre-Test of the Measurement Instrument.

Since most of the measurement items are developed for the purpose of this study, pretest of the measurement instrument is necessary to validate the items in the scales. A pre-test of the measurement instrument is conducted in several stages. First, the survey questionnaire is circulated to several faculty and graduate students in the Departments of hospitality and Tourism Management, and business administration at college of management sciences in Taiz University. Participants are asked to provide feedback regarding the layout, wording, and ease of understanding of the measurement items. The feedback is then taken into account in the revision of the questionnaire. The revised questionnaire is pre-tested using a convenience sample of general manger, marketing
manager and sales manager of travel and tourism organization in the selected cities, this arranged questioner is delivered by hand to selected respondents. The responses from pretest are analyzed to test the reliability and validity of the measurement items. The questionnaire is revised based on the reliability and validity test and the final version of the questionnaire is developed. The questionnaire is produced in a booklet form.

2.7 Reliability and Validity.

Reliability deals with how consistently similar measures will produce similar results.\(^7\) Reliability has two dimensions: repeatability and internal consistency.\(^8\) The dimension of internal consistency refers to the ability of a scale item to correlate with other items of the same scale that are intended to measure the same construct. The adequacy of the individual items and the composites are assessed by measures of reliability and validity. The reliability of the measurement instrument is assessed by the Cronbach’s Alpha reliability and composite reliability. A Cronbach’s Alpha and composite reliability score of .70 or higher indicate that the measurement scale that is used to measure a construct is reliable. The composite reliability, as calculated with LISREL estimates, is analogous to coefficient alpha and is calculated by the formula provided by Fornell and Larcker (1981).\(^9\) Validity refers to the accuracy of a measurement, or how well the measurement taps what it is designed to measure.\(^10\) There


are several different types of validity to be concerned: face/content validity (i.e., the agreement among professionals that the scale is measuring what it is supposed to measure), criterion validity (i.e., the degree of correspondence between a measure and a criterion variable, usually measured by their correlation) and construct validity (i.e., the ability of a measure to confirm a network of related hypotheses generated from a theory based on constructs.\textsuperscript{11} The face validity of the measurement instrument is assessed by allowing several professors to examine it and provide feedback for revision. Afterwards, the survey instrument is given to 15 graduate students mainly in hospitality and tourism management to solicit feedback as well as to check for readability of the questions and estimated time to complete the survey questionnaire. Additionally, a formal pretest is conducted on a convenience sample. Discriminate validity is assessed for every possible pair of constructs by constraining the estimated correlation parameter between them to 1.0 and then performing a chi-square difference test on the values obtained for the constrained and unconstrained models.\textsuperscript{12} A significantly lower chi-square value in an unconstrained model indicates that discriminate validity is achieved. Convergent validity is assessed from the measurement model by determining whether each indicator’s estimated pattern coefficient on its posited underlying construct factor is significant. The value of Coronbach Alpha for all elements of scale was (81.30) this value is good reliability percentage.

\textsuperscript{11} Keven, Bollen, Structural equations with latent variables, New York: Wiley.1989, p.189.

2.8 Selections of Statistical Tools.

Prior to the stage of statistical analysis, the selection of the statistical tools had been determined in accordance with the objective and the nature of the study.

Generally, descriptive as well as inferential statistics were employed. A brief explanation of these statistical tools or terms will be useful for those who are not familiar with statistics to make the results of the research more accessible.

2.8.1 Descriptive Statistics.

In descriptive statistical analysis, the data is summarized and described numerically within a certain group of individuals. No generalizations or conclusions can be drawn beyond such a group.

The Mean (X), Standard Deviation (SD) and Standard Error (SE) are usually used in carrying out descriptive analysis.

The commonest measure of location, or central value, is the arithmetic mean (Commonly abbreviated to "mean" or "average"). It is simply the sum of all the observations divided by their number. In other words, the mean is the sum of all scores divided by the total number of items. And it is the most commonly used and most widely applicable measure of the central tendency of distribution.

The standard deviation, the square root of the variance, is most frequently used as a measure of spread or dispersion of scores in a distribution or in variability. It aims at finding the variability of all the scores around the mean. The larger the standard deviation, the more variability from the central point in the distribution indicating a heterogeneous group. The smaller the standard deviation, the closer the distribution is to
the central point, indicating a homogeneous group. The standard deviation tells us how far out from the point of central tendency the individual scores are distributed.

The standard error refers to a statistics used for determining the degree to which the estimate of a population parameter is likely to differ from the computed sample statistics.

2.8.2 Inferential Statistics.

In inferential statistical analysis, unlike the descriptive one, generalizations and conclusions are drawn from samples based on observation.

It should be noted that statistical inference or generalization is based upon the theory of probability. A variety of different statistical techniques are used to determine the probable degree of accuracy of generalizations about the population from which a sample or set of data is selected. The F-test, the ANOVA and the MANOVA are among the tests used in an inferential statistical analysis.

- The F-test.

The F-test is a statistical device used when comparing two means of two groups. It shows whether the independent variable has an effect on the dependent variable or not.

- The ANOVA (Analysis Of Variance.)

The purpose of analysis of variance (ANOVA) is to test significant differences between means. ANOVA technique allows the sampling variation and the testing variation to be separated and their magnitudes estimated. It is also used to find out whether the difference among the means of two groups is significant or not.

The variance is computed as the sum of squared deviations from the overall mean, divided by \( n-1 \) (sample size minus one). The variance is a function of the sums of
(deviation) squares, or (SS) is usually referred to as Error variance. However, the SS effect is due to the difference in means between the groups.

To summarize, the purpose of analysis of variance is to test differences in means (for groups or variables) for statistical significance. This is accomplished by analyzing the variance, that is, by portioning the total variance to the component that is due to true random error (i.e., within-group SS) and the components that are due to differences between means. These latter variance components are then tested for statistical significance, and, if significant, we reject the null hypothesis of no differences between means, and accept the alternative hypothesis that the means (in the population) are different from each other.

Hence, Anova is a much more flexible and powerful technique where we can test each factor while controlling all others.

- The MANOVA (Multiple Analyses Of Variance).

The MANOVA is used to compare the mean score of two or more groups. If the overall multivariate test is significant, we conclude that the respective effect is significant.

The researcher also used the following statistical tools for analysing the result of field work to test the hypotheses:

- **Frequencies and percentages** - for the purpose of presentation and analysis the answers of respondents.

- **Standard deviation** - for determining the important of important and the level of answers of respondents.
• **Seperman correlation factor** - to know the relation between the variables.

• **T test** - to know the significant of relation.