CHAPTER - 4

RESEARCH METHODOLOGY

AND

FORMATION OF HYPOTHESIS

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Research Methodology And Formation Of Hypothesis

The objective of this study is to contribute in existing knowledge base, related to customer satisfaction and contribution of information technology in maintaining a customer relationship management of Life Insurance companies. A comprehensive and in-depth literature search conducted to assess the level of existing research and accessed gap area for further analysis.

Research Design

The research design is plan and structure investigation to obtain answers for research questions. It is a blueprint for the collection, measurement, and analysis of data. The preparation of such design facilitates researcher to be efficient to get maximum information. The research designed so that maximum possible factors must be cover to study the effects of existing variable. The main purpose of such study is to state something about existence of variables. In this study, two types of variables are consider, Dependent and Independent variables.

(A) **Independent variables**: The 4 variables are considered as **Independent variables.**

(i) **IT Based Services (IT):** In insurance, IT based services covered e-insurance, buying and selling of policies, online-payment of premium and online claim settlement, e –statements, fund record etc.

(ii) **Age:** For the research, purpose age is divided in to two categories.

Young (Age between 25 to 45)

Adult (Age between 45 and above)

(iii) **Gender :** It has two levels **Male and Female**

(iv) **Type of Occupation :** It has three levels

Business Class: This class covers all manufacturers, traders, entrepreneur, and professional like Advocate, C.A.

Services Class: Service class covers all individuals who offer their services to any organization like teacher, employee of any firm, bank, and employee of government department.

Other Class : Other class reflects the respondents like homemaker, students, retire employees etc

(B)   Dependent Variable: Customer satisfaction is a dependent variable, which is measured through various independent variables.

Research Technique:

Research technique is a method, used by researcher to find the result of research objectives. In this research, SURVEY is used as a main tool to collect information.

Many researchers used survey as an important tool of research; they defined the use of it as follows:

Survey research is an established method of research and uses a structured questionnaire to gather information from a sample of respondents *(Kerlinger. 1986)*[178].

A "survey" can be anything forms a short paper-and-pencil feedback form to an intensive one-on-one in-depth interview (socialresearchmethods.net).

Survey research can be categorized into exploratory. Confirmatory (theory testing) and descriptive survey research *(Pinsonneault and Kraemer, 1993*[179]*;Filippini, 1997*[180]*. Malhotra and Grover, 1998*[190]*)*.

In survey research, data are gathered from naturally accruing situations where the researcher has control over the events being studied (*Flynn et al, 1990*[191]*)*.

In general, survey research is a research method involving the use of questionnaires and statistical survey to gather data about people and their thoughts and behavior (*wikipedia.org*).

Therefore, it is found that Survey research is a scientific method that uses a structured questionnaire to gather information from a large group of people or population who serve as respondents. The method is often used such that the sample findings can be projected to some larger population of interest.

Survey research can be categorized into exploratory. Confirmatory (theory testing) and descriptive survey research. Descriptive research aims at describing the distribution of a phenomenon in a population thereby ascertaining the facts. In exploratory or analytical research the relationships, particularly, causes and effects of relationships are examined and explained. There is usually no model in exploratory research and the concepts of interest need to be better understood and measured.

Thus, such a comprehensive survey enabled the researcher to define the problem more precisely and to formulate the hypothesis.

Sample Plan

The sample plan for this study was taken in the following manner:

a) **Universe** - This is the first step in developing any sample design where the researcher clearly defines the set of objects. In the proposed study, the set of objects defined (i.e. the universe) is finite. For this research universe means the respondent who have insurance policy in companies like (LIC, ICICI Prudential, Max New York, HDFC Life Insurance, Bajaj Allianz) in INDORE region only.

b) **Sample Unit** - In this study, the researcher took the sample unit as insured that has insurance policies in any of the above said company in Indore. The reason for choosing Indore is it is the business capital of M.P. and having large population of all categories. The city has all kind of companies including nationalized, private, and foreign companies and ready to adopt new technologies with all its benefits.

c) **Sample Size** - This refers to the number of items to be selected from the universe. The size of the sample is neither excessively large nor too small. Hence, for this research sample size of 500 respondents from different demographic segments are selected. To collect the samples, the researcher has approached approximate 500 respondents wherein 301 customer's responses and 100

employee's responses were properly filled and found useful for research work and rest responses were not properly filled so ignored in study.

d)   **Parameters of Interest -** In determining the sample design, the researcher had to consider the question of the specific population parameter. This had a strong impact on the sample design, which the researcher would accept in this study, the researcher tried to find the customer satisfaction level of the IT based services in insurance sector.

Sampling Technique

A sample design is a definite plan for obtaining a sample from given population. It also refers to the technique or the procedure that researcher adopted in selecting a sample. This is done before data collection. A sample was selected using a Non-probability sampling technique which is purposive convenience sampling especially, A sample was selected using a Non-probability sampling technique which is purposive convenience sampling especially, customers and employees of insurance companies of Indore were taken for the present study..

Data collection Methods

Before administering the final questionnaire, pilot test was conducted at both the employee and customer level. The purpose of pilot testing is to pre-test the questionnaire that has been designed. After the careful review of the respondent's answers during pilot survey, some questions were modified to convey their intended meaning and few questions were edited in the questionnaire as per the suggestions received from the respondents and experts. In customer survey standard 5 point likert scale has been used ranging from strongly agrees to strongly disagree. Some question in organizational / Employee questioner was yes/no type.

The Customer's questionnaire was categorized in two sections. First section enquired about customer's insurance information, their expectations and experience of using IT based services and its effects on satisfaction of various companies. Second section asked about their demographic and general profile, which includes gender, age, educational qualification, income, occupation, internet accessibility etc.

Source of Data

The research is mainly based on primary data. However, secondary data source has also been used.

Primary Source

The data is collected from the customers who have at least one Life Insurance Policy of selected Insurance Companies. Apart from customers, data is also collected from the employees of Insurance Companies. Customer's data is collected through questionnaire and Employee's data was collected through direct personal interview method.

The tool for data collection was standardized scaled questionnaire, which has questions related to customer's experience and satisfaction from IT based services in insurance industries. A standardized scale is used for purpose of this study.

Researcher used a questioner based on standard Likert scale ranging from 5-1 resp. i.e. 5 "Strongly Agree" ,4 "Agree", 3 "Neutral", 2 "Disagree", 1 "Strongly Disagree" for customer.

This questionnaire was divided in three section "A" searched about the "Awareness and knowledge of IT based services" section "B", used to collect the data of those respondent who were using IT based services, in Section "C" data was gathered about customer satisfaction through IT based services.

Section "D" is only for those respondents who do not prefer or interested in using online services.

Employee of life insurance companies were interviewed through Open-ended questionnaire.

Google Documentation was also used to collect the primary data from various online respondents through their e-mail and face book Id.

Secondary source

Secondary data was collected from existing literature relevant to the study like journals, magazines, books and various web sites. It provides information

about the various facts of IT based services in insurance companies, services qualities; attitudes of service industries towards IT based services etc.

Hypothesis Development

This study proceeds to find out the impact of IT based services on customer satisfaction. It also studies the awareness of customer about online environment.

Conceptual models developed for this study was derived from existing research, and through review of related literatures. The hypothesizes framework specifying, the proposed research work is shown in figure 4.1
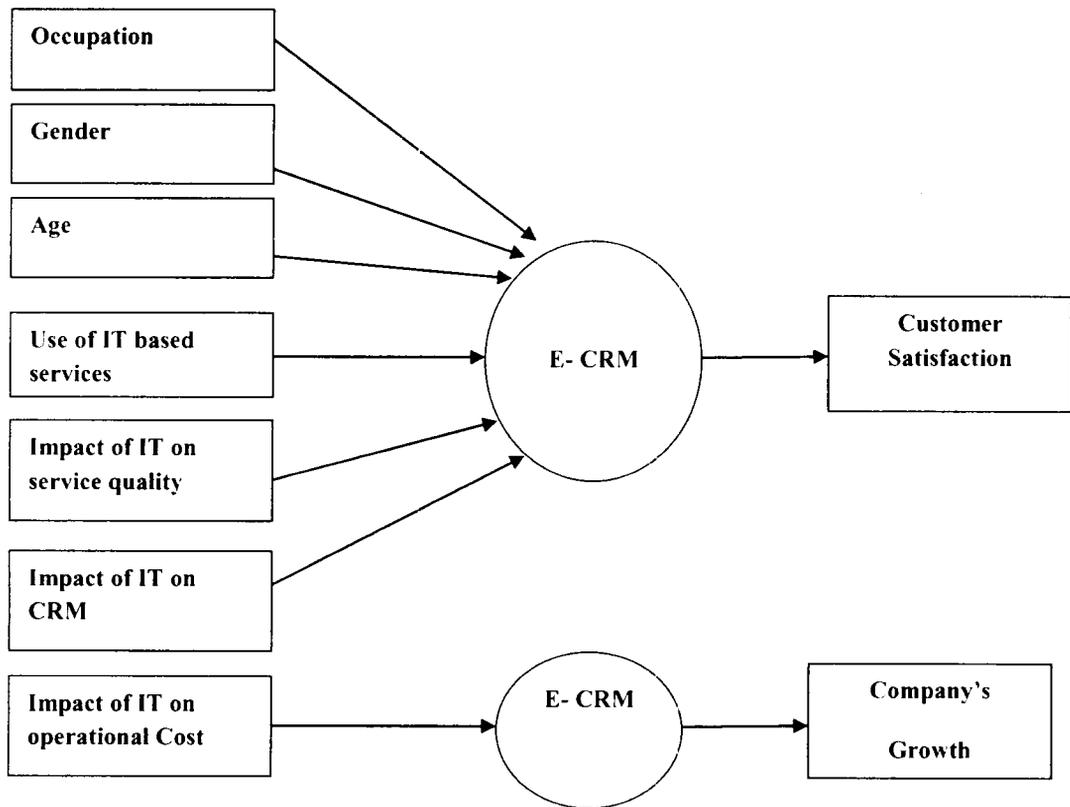

Fig 4.1

To find the relationship between above said variables and IT services, the following hypothesis formulated.

H_01. There is significant difference between business class and services class with respect to the use of IT based services in Life insurance companies.

H_11. There is no significant difference between business class and services class with respect to the use of IT based services in Life insurance companies.

H_02. There is a significant difference between business class and services class with respect to the customer satisfaction towards IT based services in Life insurance companies.

H_12. There is no significant difference between business class and services class with respect to the customer satisfaction towards IT based services in Life insurance companies.

H_03. There is significant difference between male and female with respect to the use of IT based services in Life insurance companies.

H_13. There is no significant difference between male and female with respect to the use of IT based services in Life insurance companies.

H_04. There is significant difference between male and female with respect to the customer satisfaction towards IT based services in Life insurance companies.

H_14. There is no significant difference between male and female with respect to the customer satisfaction towards IT based services in Life insurance companies.

H_05. There is significant difference between young age group and adult age group with respect to the use of IT based services in Life insurance companies.

H_15. There is no significant difference between young age group and adult age group with respect to the use of IT based services in Life insurance companies.

$H_0$6. There is significant difference between young age group and adult age group with respect to the customer satisfaction towards IT based services in Life insurance companies.

$H_1$6. There is no significant difference between young age group and adult age group with respect to the customer satisfaction towards IT based services in Life insurance companies.

$H_0$7. There is significant interaction among Gender, Age, Occupation and Use of IT services with respect to customer satisfaction in Life insurance companies.

$H_1$7. There is no significant interaction among Gender, Age, Occupation and Use of IT services with respect to customer satisfaction in Life insurance companies.

$H_0$8. Information technology helps to enhance service quality of life insurance companies towards its customers.

$H_1$8. Information technology does not help to enhance service quality of life insurance companies towards its customers.

$H_0$9. Efficient combination of IT and CRM has increased the level of customer satisfaction in Life insurance companies.

$H_1$9. Efficient combination of IT and CRM has not increased the level of customer satisfaction in Life insurance companies.

$H_0$10. Use of IT enabled CRM helps to decrease the operational cost of life insurance companies.(Based on employees' interview)

$H_1$10. Use of IT enabled CRM does not help to decrease the operational cost of life insurance companies.(Based on employees' interview)

Age, gender, and occupation are used to assess Customer satisfaction and experiences of e-service are used for further analysis. The data analyzed by parametric and non-parametric test based on its fitness.