

# Risk Analysis & Risk Management - A study on Insurance Sector

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**Abstract-**India economy is growing at the rate of 5.4% with a significant rise in working population and has a large potential for the development in the field of insurance sector. A large amount of population in India is still uninsured. It is also estimated that the sector will grow at a rate of 15-20% in next 10 years. All assets in this world have some economic value and some amount of risk carrying with them. All assets have some expected life also and if it's get lost or destroyed there are many chances that owner will suffer some amount of loss which can be financial or in any other form. So to protect the owner from suffering a huge amount of loss we can assure these assets. Insurance is a contract between the insurer and insured in return for a premium, the insurance company promises to pay a specified amount to the insured on the happening of a specific event. The paper highlights to know about different types of risk that can cover by insurance policies and how to analyse and manage those risks. The paper focus on the various things that customer should consider before buying an insurance policy and various steps that need to consider before buying it. Finally the paper concludes the demographic factors such as growing middle class, young insurable population and growing awareness of the need for protection and retirement planning will support the growth of Indian life insurance.

**Keywords:** Demographic factors, Insurance, Risk Analysis, Risk Management and Types of Risks, Awareness among the insured.

## I. INSURANCE SECTOR IN INDIA

1818 saw the advent of life insurance business in India with the establishment of the Oriental Life Insurance Company in Calcutta but in 1968, the Insurance Act was amended to regulate investments and set minimum solvency margins. But actually grow in the insurance sector in India begun from the year 2000 with the formation on IRDA. IRDA is a regulatory body to manage working of all the insurance company in India. Foreign companies were allowed ownership of up to 26% and invest in insurance policies in India. The insurance sector is a colossal one and is growing at a speedy rate of 15-20%. Together with banking services, insurance services add about 7% to the country's GDP. Life insurance Company has acquired in India. With the entry of new private players insurance sector has seen a huge growth in last five years and it is expected to grow in future.

The various data which is represents the market share of top five insurance companies in India

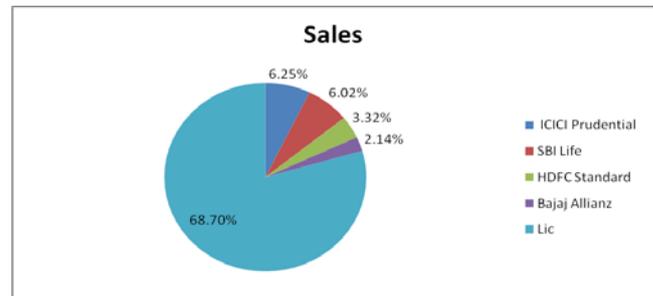


Fig. 1.1 2016-17

Most of the Indian population is without life insurance cover and still a huge amount of growth is possible in Indian environment. At present people do not prefer to invest their saving in insurance policies but it is expected to change in future.

## II. RISK MANAGEMENT:

As there are different types of in insurance police in the market it becomes difficult for a customer to understand the actual value of its life i.e. Human Life Value. Before buying an insurance police a person should to knowing the purpose for which he is buying the insurance and how to analyses its value.

It might be confusing for many that for what value they should buy an insurance policies i.e. how they are worth for.

There are two methods to calculate the human life value

- Income replacement method
- Simple method

**INCOME REPLACEMENT METHOD:** This method takes into consideration the future income earning potential of a person during the remaining years of their working life. It is a two-step method:

**STEP 1:** Calculate the income of person in the future working years.

**STEP 2:** this is its HLV, now take inflation in account and calculate how much should be enough for his family in case of his death.

**SIMPLE METHOD:** In this method we consider the present interest rate in a fixed deposit in a bank and then we calculate that how much amount person should get insured.

But we always need to keep in mind that HLV is not a one-time calculation and it should get revised from time to time.

Now as there are many insurance policies in the market it becomes difficult to decide which will be suited best for you. So it is always best for anyone to take the policies which is best suited for them. Anyone can easily find out which policies are best suited for them by following these three steps:

Step 1: Identify your needs: you always need to understand your goals and need after considering these factors:

- marital status
- future financial goals
- number and age of dependants on you
- employment status
- income – which includes salary, business income and income from other sources and investments
- existing protection, savings and retirement provision

Step 2: Quantifying needs: Then you need to quantify your needs and then calculate suitable amounts that you need to save in the future.

Step 3: Priorities your needs: then you need to prioritize your needs based upon your requirements. It is important because you have only a specific amount of money to invest and that money should be invested in a best product mix.

Step 4: Compare: it is always best for you to compare the policies which you are going to take with all the other similar policies in the market.

So this is how any individual can decide on what policy is best suited for him and whether he should consider to buy that specific insurance policy or not.

### III. RESEARCH METHODOLOGY

#### 1. Statement of the Problem:

As the insurance sector is expected to grow around 15-20% in the next 10 years it is important for a customer to understand the basic steps to buy an insurance policy. It is also going to help companies to understand that how can they convince their customers to buy an insurance policy. The project has been undertaken with the aim to analyze insurance firms and how to calculate your need analysis.

#### 2. Objective of the Study:

- To make people aware about the steps they should consider before buying insurance policies.
- To know about various analytical tools that can value an insurance policy.
- To find whether need analysis is compulsory before buying an insurance policy.

#### 3. Scope of the Study

The scope of the study is limited to only insurance & no other financial instruments were considered. The study will help us to know the perception of customers about insurance policies. The various risks involved in buying an insurance policy and how to tackle it. It will also help us to get a basic knowledge about need analysis calculation and its requirement.

#### 4. Methodology:

##### Primary Data:

Primary data is the one which is collected specifically for the purpose of the project, and can be obtained from various people working in the organization. For this study the primary data was collected from the following sources.

- Questionnaires

##### 5. Secondary Data:

It refers to the statistical material which is not originated by the investigator himself but obtained from someone else's records, or when primary data is utilized for any other purpose at some subsequent enquiry it is termed as secondary data. However, it plays a significant role in the project. For this study the secondary data was collected from the following sources.

- Books related to risk management and insurance
- Websites related to risk management and insurance

#### 6. Limitations

- The study is limited due to constraint of time and information available
- Possibility of error in data collection because many of the respondents may have not given actual answers of questionnaire.
- This project only talks about three risk analysis tools there are other tools also which can be used.
- The study had been done only on 100 respondents.

### IV. DATA ANALYSIS

#### 1. Risk Analysis and Need Analysis

As a customer you should always know your value in the market so that you can take a policy according to your exact value. Three various approaches are used to determine the amount of life insurance to own:

1. Human life value approach
  2. Needs approach
  3. Capital retention approach
2. Human Life Value Approach

HLV can be defined as the present value of the family's share of the deceased breadwinner's future earnings. It can be calculated by the following steps:

1. Estimate the individual's average annual earnings over his or her productive lifetime.
2. Deduct federal and state income taxes, social security taxes, life and health insurance premiums and cost of self maintenance.
3. Determine the number of years from person's present age to the contemplated age of retirement.
4. Using a reasonable discount rate, determine the present value of the family's share of earnings for the period in the previous step.

Examples: Assume that Raj, age 25 is married and has two children. He earns Rs25000 annually and plans to retire at age of 65. Of this amount Rs10000 is use for federal and state taxes, life and health insurance and his personal needs. The remaining 15000 is used to support his family. What should be value of insurance if discount rate is 6%?

Solution: Using the give discount rate the present value of Rs1 payable annual for 40 years is Rs15.05 So Raj has a human life value of  $(15000 \times 15.05) = \text{Rs}225750$

#### V. NEEDS APPROACH

The second method for estimating the amount of life insurance to own is the needs approach. The various family needs that must be met if the family head will die are analysed. The most important family needs are following:-

- Estate clearance fun
- Income during the readjustment period
- Income during the dependency period
- Life income to the surviving purpose
- Special needs
- Retirement needs

##### 1. Capital Retention Approach

This method preserves the capital needed to provide income to the family. This methods works in following step:

- Prepare a personal balance sheet
- Determine the amount of income producing capital
- Determine the amount of additional capital needed

Preparing a personal balance sheet:

The first step is to prepare a personal balance sheet that lists all assets and liabilities .Example

##### Assets

House	125000
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Automobiles	15000
Personal and household property	45000
Securities and investment	28000
Checking account	2000
Individual and group life insurance	200000
Private pension death plan	20000
<b>Total</b>	<b>435000</b>

##### Liabilities

Mortgage	100000
Auto loan	10000
Charge a/c and other bills	5000
<b>Total</b>	<b>115000</b>

#### Determining the Amount of income-Producing Capital

The next step is to determine the amount of income producing assets that can provide income to the family. This step is performed as follows:

<b>Total assets</b>	435000
Less:	
Mortgage payoff	100000
Auto loan and credit	
Credit card	15000
Final expenses	10000
Emergency fund	10000
Educational fund	60000
Non income producing capital	185000
<b>Total deduction</b>	<b>380000</b>
<b>Capital income now available</b>	<b>550000</b>

So these three analysis tools can be used by the customer to determine the exact value of a life insurance required customer to support their family. It will also help them to decide on which type of polices they should invest according to their requirements. It will also help in determining amount of risk in that policy.

## 2. Risk management in Insurance:

- All Risks are not Insurable
- Essentials of Insurance
  - Insurable Interest
  - Utmost good faith
- Procedure for Insurance
  - Identification of Risks
  - Quantify the Insurable value
  - Evaluate the choices
  - Proposal
  - Payment of premium
  - Policy Documentation

## • Claims

## • Administration System

## 3. Focus Areas for Insurance Management:

- Identification of Internal & External Pure Risks
    - Existing Risk Control Measures Review
    - Risk inspection
    - Risk Audit
  - Scrutiny of Existing Insurance Covers
    - Coverage
    - Rates & Deductibles (Compulsory self insurance)
  - Defining Standard SOP for Claims Control
    - Guidelines on documentation
4. Key Areas of Consideration:
- Choice of Insurer
    - Industry Rating
    - Claims Settlement ability
    - Sustainability of the company
    - Service levels & infrastructure
  - Choice of Intermediary
    - Representation of the insurance market
    - Knowledge of insurance amongst all industry segments
    - Service levels & infrastructure

## VI. SUGGESTIONS

- Customers should be made more aware of need analysis as there is low awareness level among them.
- Insurance companies should take more effort in spreading awareness about need analysis calculation.
- Insurance companies should also give training to their advisors to explain about need analysis calculation to customer properly as customer how do need analysis are more satisfied with their policies.
- Insurance companies should have a reasonable premium rate as most of the customers prefer so.

## VII. FUTURE SCOPES

- Risk Cover: life is full of uncertainties, so insurance helps your family members to continue to enjoy a good quality of life from unforeseen events and to cover the risk of loss.
- Protection from Rising Health Expenses: The cost of health insurance is increasing day by day so at this time, insurance protects the people from diseases and hospital expenses.
- Planning for Future Needs: It also helps as long-term investments. It helps people to meet their future goals like children's education, marriage, and building home planning and plan for relaxed retired life.
- Assured Income Through Annuities: Insurance is one of the instruments for retirement planning. Money saved at the time of earning life and that money will be utilized after retirement.

## VIII. CONCLUSION

Insurance sector in India is growing at a very high rate and it is expected to grow more in future. This study had made an attempt to understand to understand the various risk involves in investing in insurance an how to manage those risk. I observed that most of the people buy an insurance police under someone's influence and not according to their requirement. Also there is a very low awareness about need analysis calculation. Many people do not pay their premium as they did not purchase their policies according to their requirement.

Customer satisfaction plays a very important role in increasing the market share of the company and it is very hard to get. So insurance companies should sell their insurance policies according to needs of customers in this way they can easily acquire customer's loyalty.