

# Choosing Best Life Insurance Cover (LIC) by using Data Mining Technique

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**Abstract-** Venture is the best arrangement for sparing cash. Sparing little measure of cash will give expansive advantages and enhance their way of life. Presently a-days extra security segment is expanding exceptionally with the goal that numerous individuals are intrigued to put some piece of their salary in the part of Life Insurance. LIC is utilized for benefit as well as for misfortune. Information digging systems are utilized for giving precise outcomes, client inclinations, and effect on deals, consumer loyalty, benefits and estimating. Such huge numbers of organizations are utilizing this information mining. This paper will decide the which strategy is suited for a person by breaking down different variables. By this expectations individual may get advantage in picking the best approach design utilizing affiliation display.

**Index Terms-** Association Rules, Customer Information, Life Insurance Policies, LIC, Socio-Economic Factors.

## I. INTRODUCTION

Data mining is the process of discovering patterns in large data sets involving methods at the intersection of machine learning, statistics, and database systems [1]. It is an essential process where intelligent methods are applied to extract data patterns. To do operations on large amount of data we go for data mining [5]. In Data mining the information is put away as datasets. On datasets we can perform numerous tasks utilizing diverse calculations. The general objective of the information mining process is to separate data from an informational collection and change it into a justifiable structure for additionally utilize Life Insurance Corporation of Asian country (LIC) is that the greatest life affirmation player in Indian Insurance business. LIC offers a dreadfully enormous and extensive differ of item occupation to needs of arranged areas of people in Asian country. LIC has the Trust that goes on the

far side ages. It's an administration possessed element, all together that our money lives on the most secure hands.

Data mining are often accustomed search through giant set knowledge of information to get patterns and trends that can't be analyzed just by data queries[5]. Information handling utilizes numerical calculations that basically encourage to anticipate the yield and valuate possibility of future occasions. It'll encourage to look out entirely unexpected examples and connections among the information. Information preparing is regularly proficient by building entirely unexpected models bolstered calculations that follow up on mammoth dataset. These models can encourage to mine the information and produce new outcomes. numerous algorithms and techniques like Classification, Clustering, Regression, computing, Neural Networks, Association Rules, call Trees, Genetic algorithmic program, Nearest neighbor technique etc., area unit used for information discovery from databases[20].

In this paper we are mainly focusing to help the person to choose the best suitable life insurance plan according to his/her information. Association rules are useful for finding relationships among all attributes[7]. In this paper, the different rules are generated based on individual's age, gender, monthly income, monthly expenses, etc. and their relationships with each other. All these factors can be considered for suggesting the right LIC plan for that person[1-20].

## II. RELATED WORK

A great many people have their first contact with an insurance agency through a protection deals specialist. These laborers help people, families, and organizations select protection arrangements that give the best assurance to their lives, wellbeing, and

property. Protection deals specialists who work only for one insurance agency are alluded to as hostage operators. Autonomous protection operators, or agents, speak to a few organizations and place protection approaches for their customers with the organization that offers the best rate and scope. In either case, specialists plan reports, look after records, search out new customers, and, in case of a misfortune, enable policyholders to settle their protection claims. Progressively, some are additionally offering their customers money related investigation or exhortation on ways the customers can limit hazard. Protection deals specialists, generally alluded to as "makers" in the protection business, offer at least one kinds of protection, for example, property and loss, life, wellbeing, incapacity, and long haul mind. Property and loss protection operators offer arrangements that shield people and organizations from monetary misfortune coming about because of car crashes, fire, burglary, storms, and different occasions that can harm property. For organizations, property and setback protection can likewise cover harmed specialists' remuneration, item risk cases, or medicinal negligence claims.

### III. ALGORITHM

#### A. Decision tree

Choice tree learning utilizes a choice tree (as a prescient model) to go from perceptions around a thing (spoke to in the branches) to decisions about the thing's objective esteem (spoke to in the takes off). It is one of the prescient demonstrating approaches utilized as a part of measurements, information mining and machine learning. Tree models where the objective variable can take a discrete arrangement of qualities are called order trees; in these tree structures, leaves speak to class marks and branches speak to conjunctions of highlights that prompt those class names. Choice trees where the objective variable can take persistent esteems (commonly genuine numbers) are called relapse trees.

In choice examination, a choice tree can be utilized to outwardly and expressly speak to choices and basic leadership. In information mining, a choice tree portrays information (yet the subsequent grouping tree can be a contribution for basic leadership). This page manages choice trees in information mining.

A choice tree is a guide of the conceivable results of a progression of related decisions. It enables an individual or association to measure conceivable activities against each other in view of their costs, probabilities, and advantages. They can be utilized either to drive casual discourse or to outline a calculation that predicts the best decision scientifically. A decision tree typically starts with a single node, which branches into possible outcomes. Each of those outcomes leads to additional nodes, which branch off into other possibilities. This gives it a treelike shape.

There are three different types of nodes: chance nodes, decision nodes, and end nodes. A chance node, represented by a circle, shows the probabilities of certain results. A decision node, represented by a square, shows a decision to be made, and an end node shows the final outcome of a decision path.

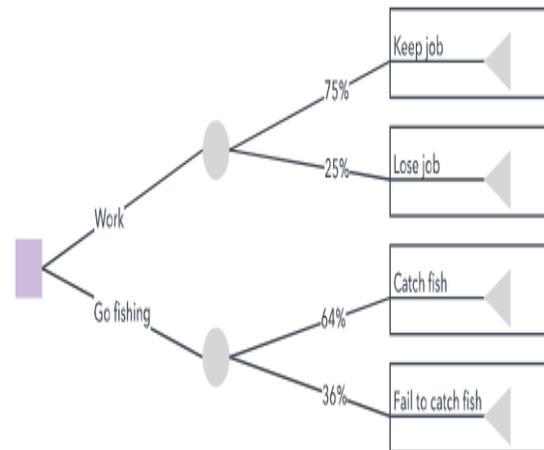


Fig 1: Decision trees can also be drawn with flowchart symbols, which some people find easier to read and understand.

By computing the normal utility or estimation of every decision in the tree, you can limit hazard and augment the probability of achieving an alluring result.

To compute the normal utility of a decision, simply subtract the cost of that choice from the normal advantages. The normal advantages are equivalent to the aggregate estimation of the considerable number of results that could come about because of that decision, with each esteem duplicated by the probability that it'll happen. In decision analysis, a decision tree and the closely related influence diagram are used as a visual and analytical decision

support tool, where the expected values (or expected utility) of competing alternatives are calculated.

A decision tree consists of three types of nodes:

1. Decision nodes – typically represented by squares
2. Chance nodes – typically represented by circles
3. End nodes – typically represented by triangles

Choice trees are ordinarily utilized as a part of activities research and tasks administration. On the off chance that, practically speaking, choices must be taken online with no review under fragmented information, a choice tree ought to be paralleled by a likelihood display as a best decision show or online determination demonstrate calculation. Another utilization of choice trees is as an unmistakable means for figuring contingent probabilities.

#### IV. CONCLUSION

This research paper proposed a decision tree in Machine Learning algorithm. These rules will guide the client to choose the perfect life assurance arrange. This paper solely focuses on life assurance policies offered by LIC of Republic of India and plenty of personal corporations will be extra to reinforce the feature of planned system and that one may got to modification the algorithmic program. Additionally additional user friendliness will be supplied with an honest accuracy so it will be enforced in reality.

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