INTRODUCTION

1.1 Overview

The Project describes about the Insurance sector specified to Postal Life Insurance (PLI) and Rural Postal Life Insurance (RPLI) from the year 2001-2002 to 2016-2017. The data pertaining to the specified time period is collected through the website (https://data.gov.in/) and processed based upon the need. The data collected consists of

- Postal Life Insurance (PLI) - No. of Polices in Force
- Postal Life Insurance (PLI) - No. of Polices in Force - % growth
- Postal Life Insurance (PLI) - Sum Assured Amount
- Postal Life Insurance (PLI) - Sum Assured Amount - % growth
- Postal Life Insurance (PLI) - Corpus of Fund
- Postal Life Insurance (PLI) - Corpus of Fund - % growth
- Rural Postal Life Insurance (RPLI) - No. of Polices in Force
- Rural Postal Life Insurance (RPLI) - No. of Polices in Force - % growth
- Rural Postal Life Insurance (RPLI) - Sum Assured Amount
- Rural Postal Life Insurance (RPLI) - Sum Assured Amount - % growth
- Rural Postal Life Insurance (RPLI) - Corpus of Fund
- Rural Postal Life Insurance (RPLI) - Corpus of Fund - % growth

The above data is collected from the years (2001-2002 to 2016-2017). The data is processed and visualized using Tableau software.

1.2 Purpose

The Purpose of the project is to visualize the collected data and check the patterns associated with the No. of Policies in force, Sum Assured and Corpus fund that is changing with the year on year and predict suitable solution to increase the No. of Policies in force in Urban areas and Sum assured in Rural areas. This is also used to compare and predict the postal life insurance share in the market. The predictions made in the project is also useful for other insurance providing companies.

LITERATURE SURVEY

2.1 Existing Problem

The existing approaches vary from company to company and from place to place. The methods adopted by various key companies in the sector are deploying more human resource and widely spreading their product details using present advertisement strategies. This approach needs more financial support and technical support to get the required outcome. This are more laborious and are following from the decades. The nature of the customer has changed but the method the companies are following does not changed in that pace. In this competitive market the existing approaches won't run for the long run of the company.

2.2 Proposed Solution

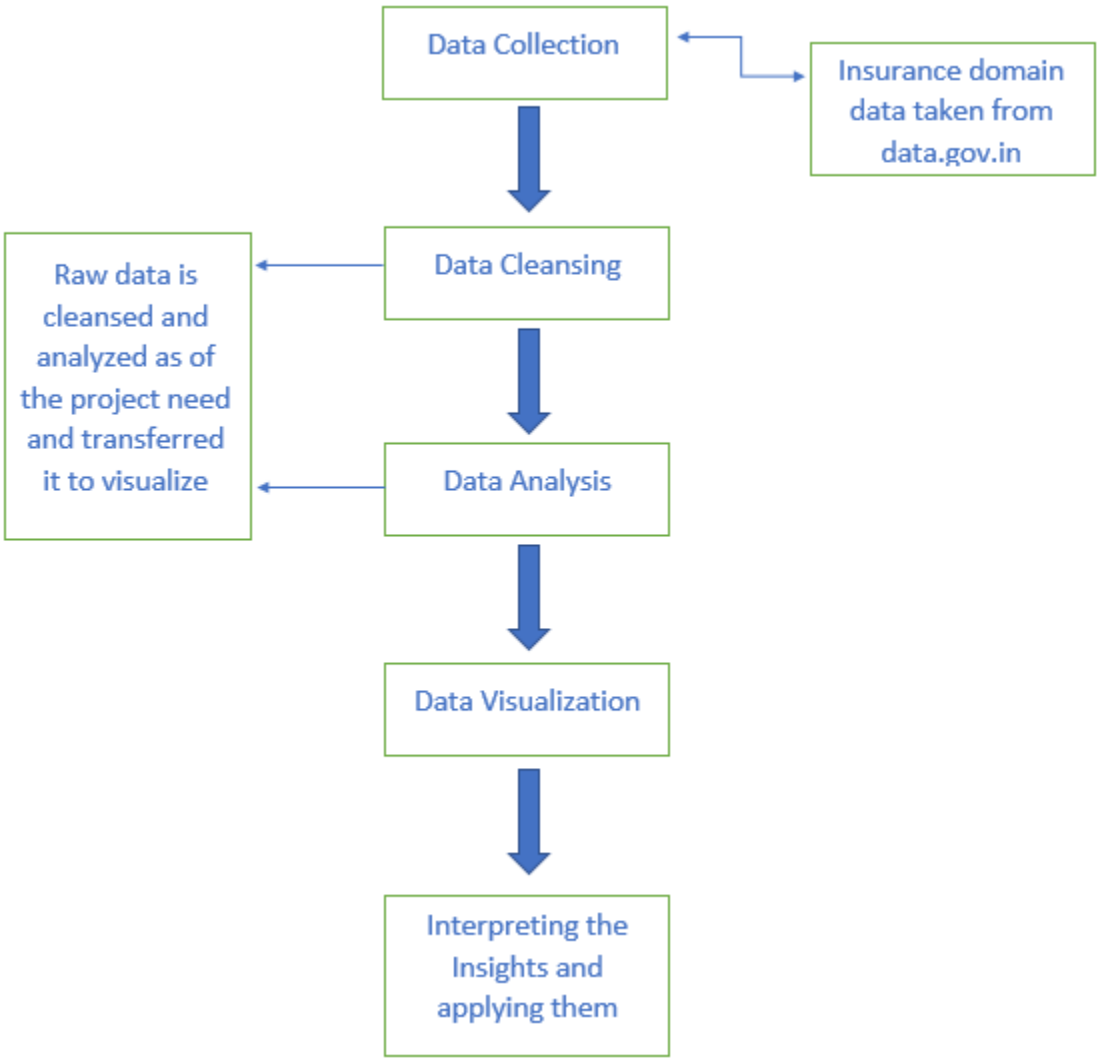
The Proposed solution deals with following criteria

- Increase in the attributes (Age, Occupation etc) during the collection of the data and also analyzing them in depth before canvassing insurance product to the customer through agent.
- Using statistical modelling and clustering techniques to properly identify the range of customers and picking the right people.
- Understanding the customer behavior and modify the product suitable for present scenario.

THEORETICAL ANALYSIS

3.1 Block Diagram

The block diagram typically represented here shows the step-by-step procedure followed in this project.



3.2 Hardware/Software designing

The basic Hardware requirements are as follows

- A Computer/Laptop with minimum RAM of 2 GB and hard disk of 500 GB with i3

core processor.
- Proper Internet/Wi-fi connection.

The basic Software requirements are as follows
- Microsoft Excel (for Collection/Cleansing data)
- Tableau (for Visualization)
- Python (for Analysis)

EXPERIMENTAL INVESTIGATIONS

It is observed that the following details are also taken while taking of the policy

- Age of the Insured
- Occupation of the Insured
- Nominee for the policy
- Health condition of Insured
- Address of Insured

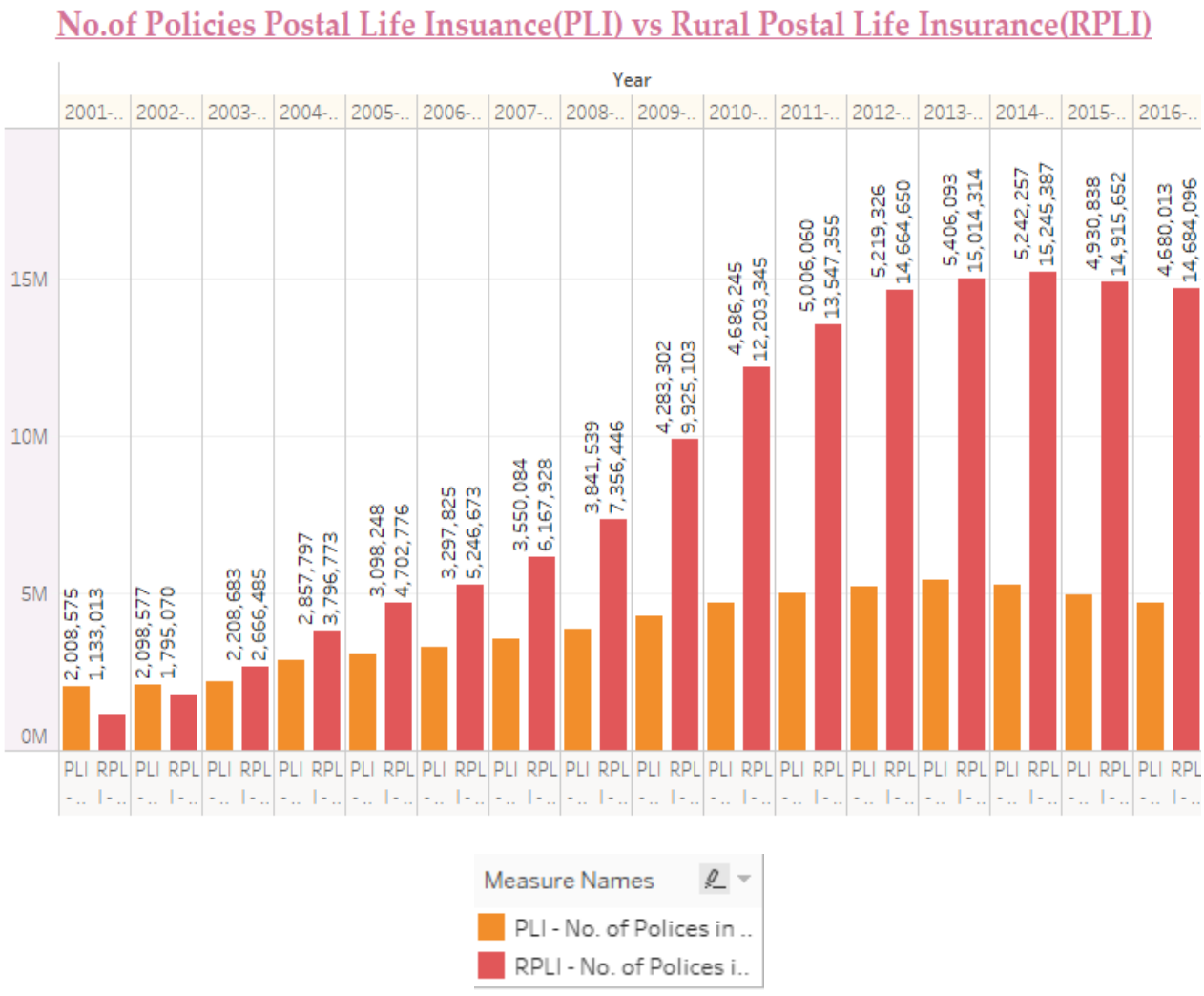
During the data storage if these details are also preserved and transferred for data analysis and visualization, it can help a lot for an analyst to find the age range of people who are willing to take policy and take suitable canvassing method to reach more people.

All these attributes play a major role in increasing the number of policies in Urban areas and also understand the occupational details of Rural people to increase the Sum Assured amount for the policies.

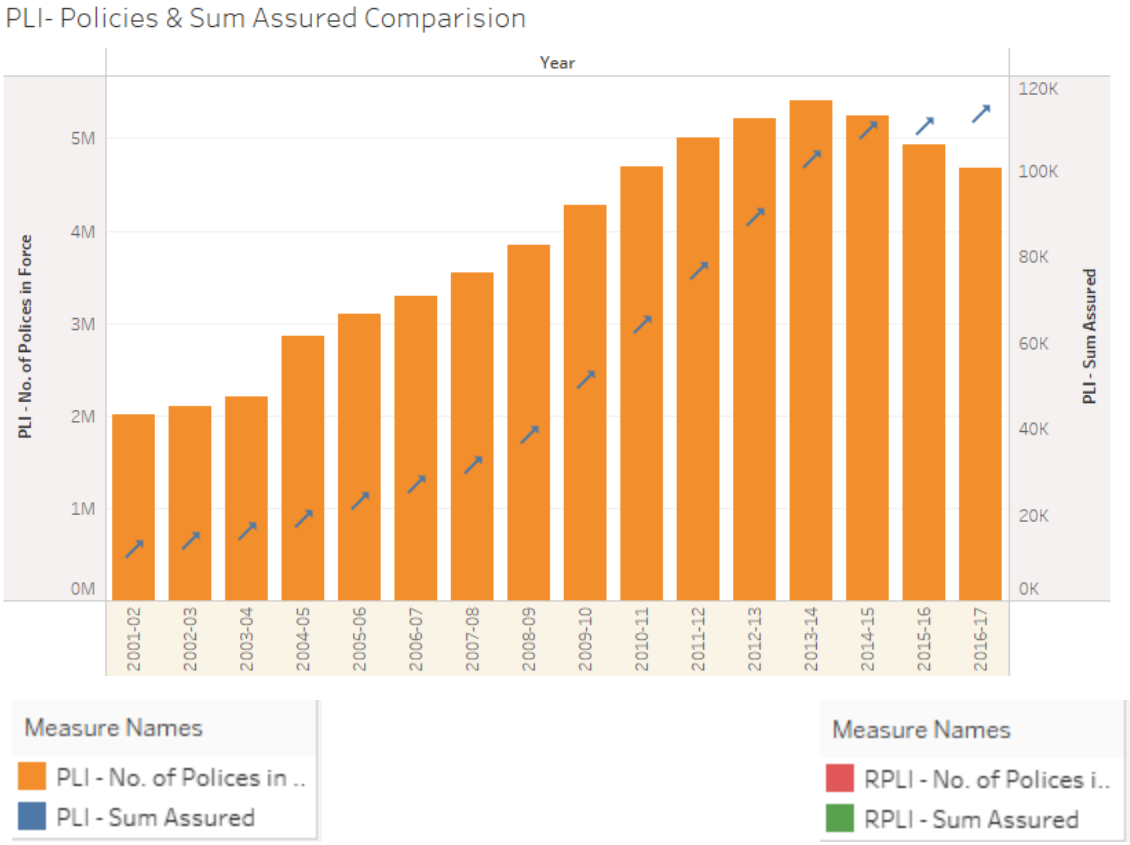
RESULT

The collected data is properly analyzed and visualized using Tableau software. The collective information is divided and compared as shown below

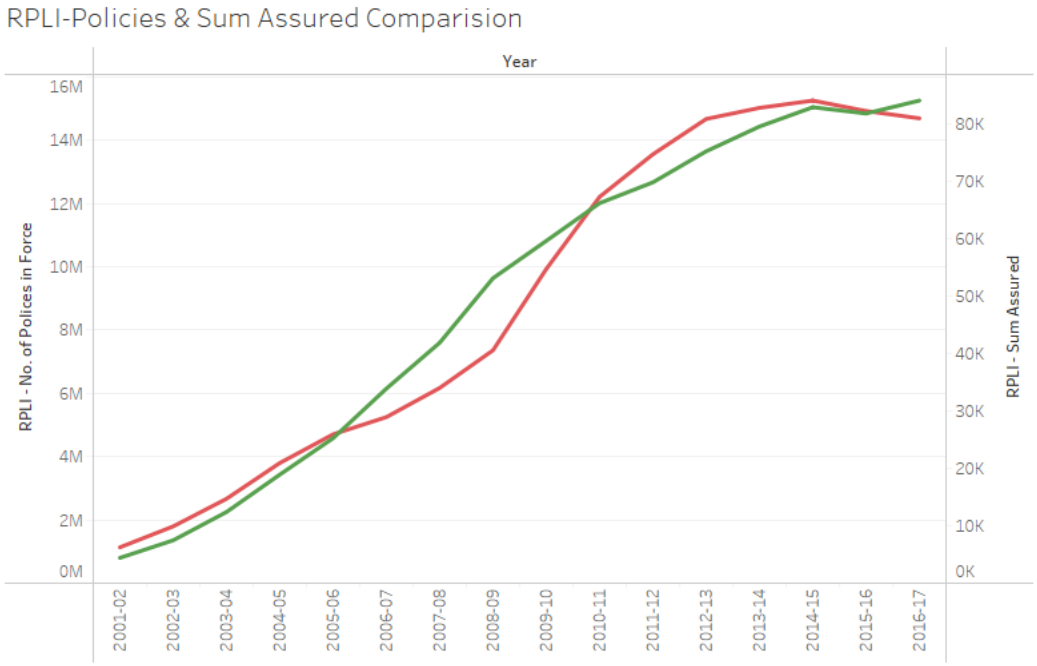
1. Comparison of Postal Life Insurance (PLI) No. of Policies in force and Rural Postal Life Insurance (RPLI) No. of Policies in force



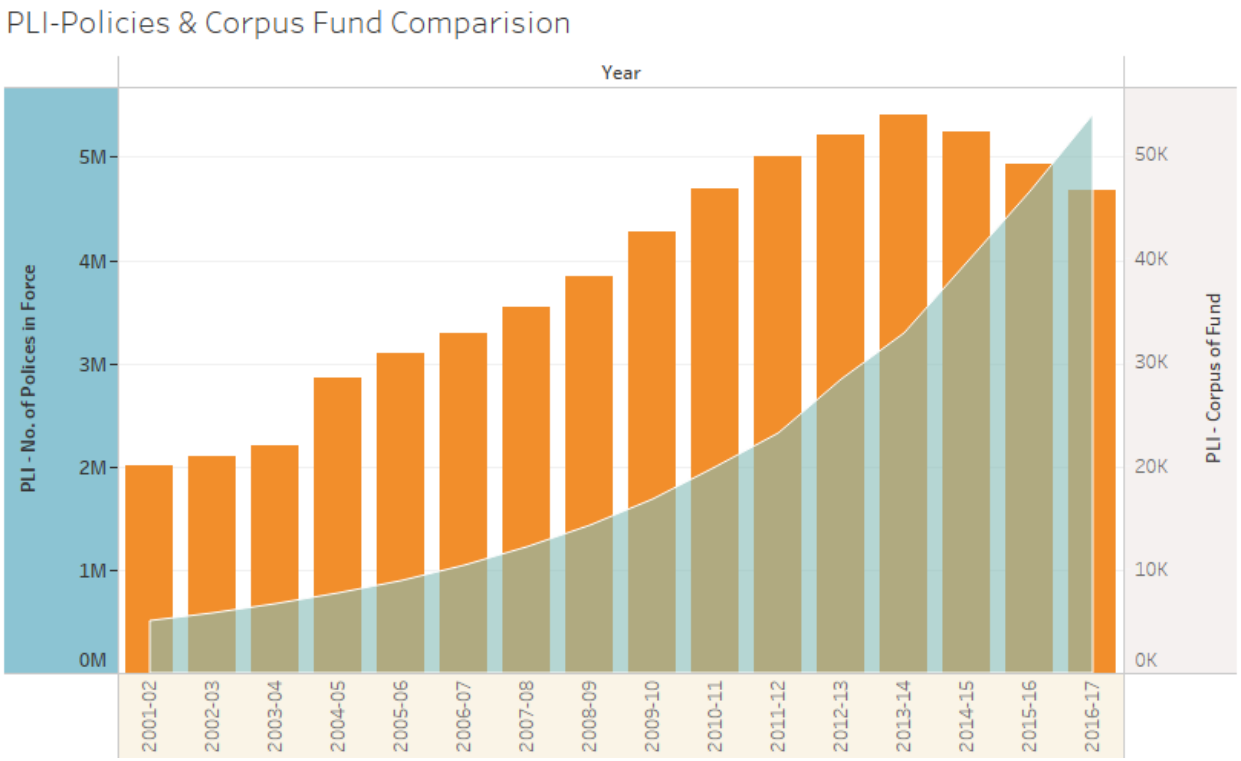
2. Relation between No. of Policies in force & Sum Assured in Postal Life Insurance(PLI)



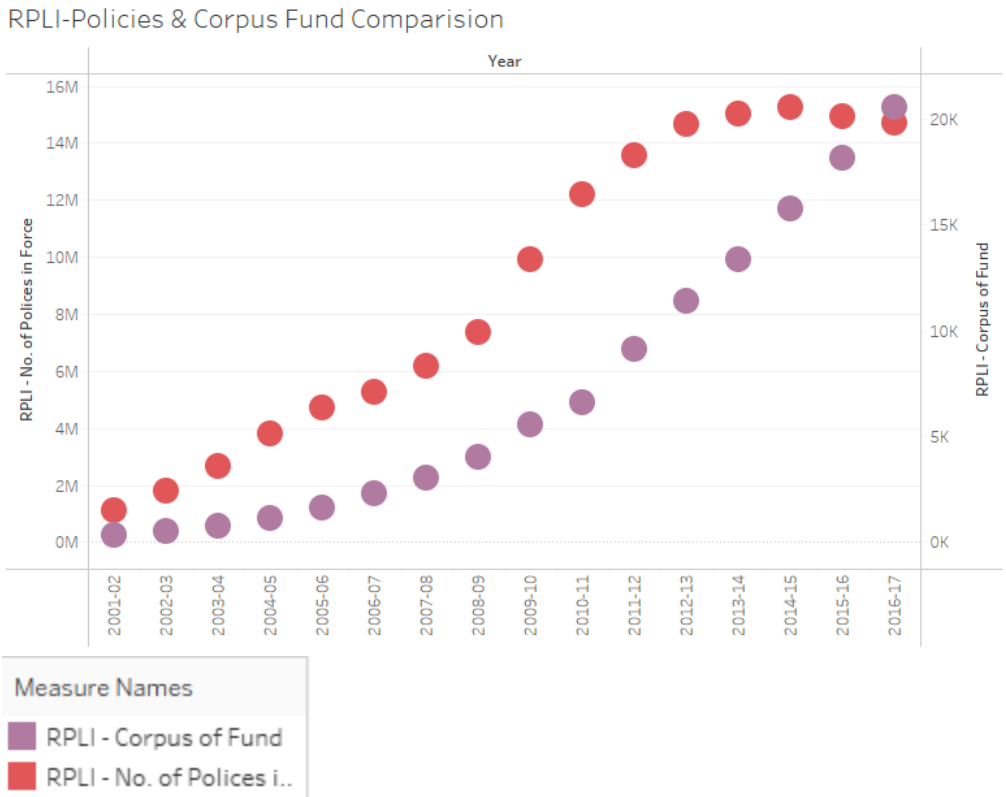
3. Relation between No. of Policies & Sum Assured in Rural Postal Life Insurance(RPLI)



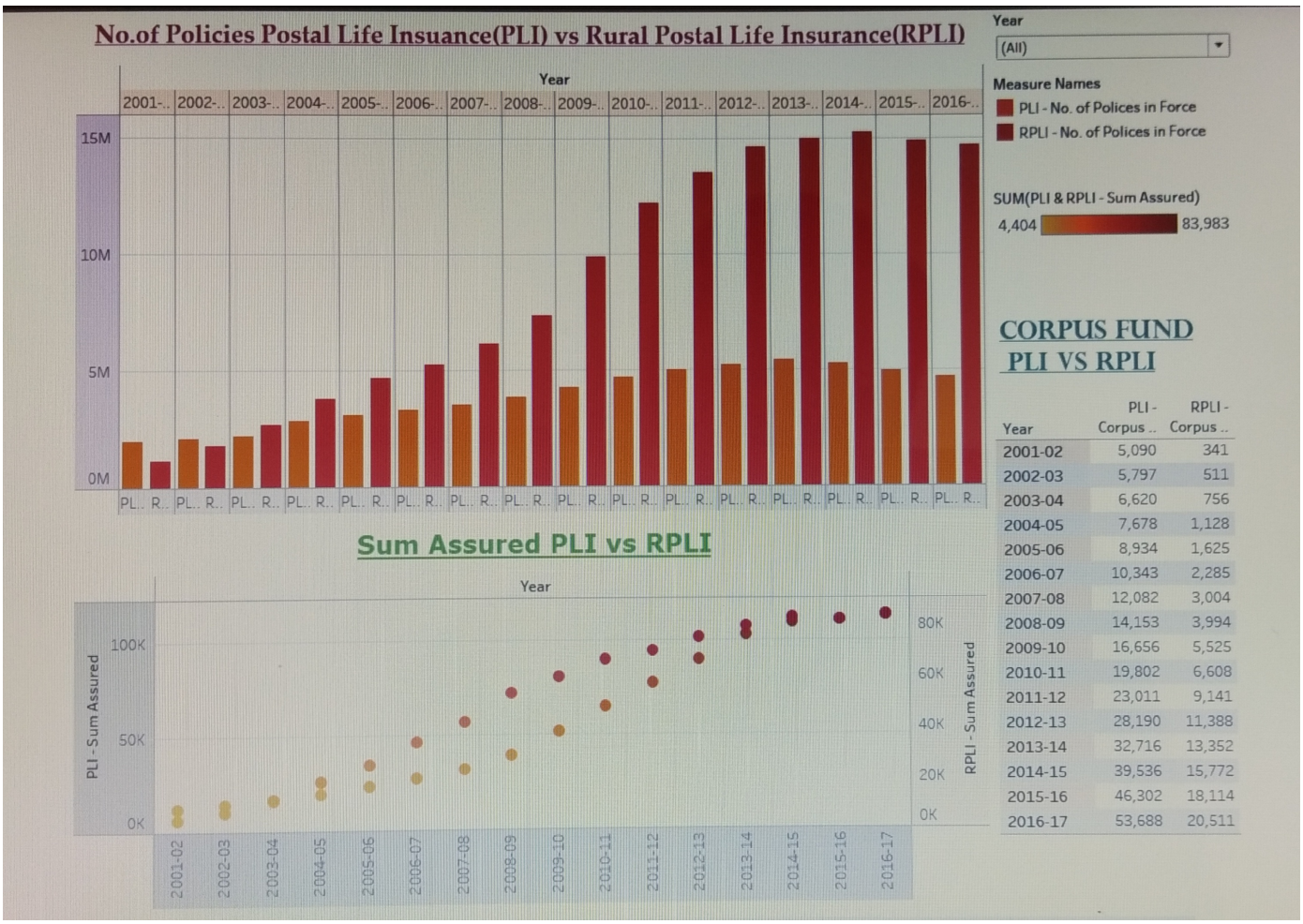
4. Relation between No. of Policies in force & Corpus Fund generated in PLI



5. Relation between No. of Policies in force & Corpus Fund generated in RPLI



6. Interactive Dashboard showing the relation between No.of Policies in force, Sum Assured and Corpus fund generated for both Postal Life Insuranace (PLI) and Rural Postal Life Insuranace (RPLI)



Year	PLI - Corpus ..	RPLI - Corpus ..
2001-02	5,090	341
2002-03	5,797	511
2003-04	6,620	756
2004-05	7,678	1,128
2005-06	8,934	1,625
2006-07	10,343	2,285
2007-08	12,082	3,004
2008-09	14,153	3,994
2009-10	16,656	5,525
2010-11	19,802	6,608
2011-12	23,011	9,141
2012-13	28,190	11,388
2013-14	32,716	13,352
2014-15	39,536	15,772
2015-16	46,302	18,114
2016-17	53,688	20,511

ADVANTAGES & DISADVANTAGES

Advantages:

- It helps to identify the correct set of people who are willing to get insured.
- It is used to compare the data regarding the growth of the company.
- The Sum assured of the policies can be increased which eventually helps the company.
- The Corpus fund will automatically increase since it is dependent on Sum Assured.

- It reduces the man power needed for the company.
- It increases the productivity of employees since we have selected the customer base by using various techniques, it will be easy for employees to pitch the product.
- Understanding the company's growth with the collected data becomes easy and simple.
- The revenue of the company can be increased by automating the sales process.
- The collected data helps to predict future requirement's of the company.
- The robustness of modifications to the products can be minimized.

Disadvantages:

- The collection of quaity data is a frantic task and needed more time.
- It needs skilled team to cleanse, analyse and visualize the data.
- Taking proper insights from the data is a difficult task.
- The collected data may mis leads the decisions in some situations.

APPLICATIONS

This kind of solution with minor modifications can be used in various other insurance products like

- Term Insurance
- Health Insurance
- Motor Insurance
- Property Insurance
- Travel Insurance
- Mobile Insurance
- Bit-size Insurance

CONCLUDING REMARKS

The understanding of the Postal Life Insurance(PLI) and Rural Postal Life Insurance (RPLI) from the year 2001-02 to 2016-17 is made clear with this project. The visualization clearly shows that the No. of Policies in force in RPLI is clearly dominating the No. of Policies in force in PLI. In the context of PLI the Sum Assured is increased

even if the No. of Policies in force has decreased from 2001-02 to 2016-17. The Corpus Fund is simultaneously increased with the increase in the years. Mean while in the RPLI also the situation repeated same as PLI with the Sum Assured and Corpus Fund. While comparing the Sum Assured difference beween PLI & RPLI, in the starting years there exist a difference but moving on both are merging with each other but here the Corpus Fund didn't follow the Sum Assured. The difference in Corpus Fund between PLI & RPLI is huge and RPLI is dominated with PLI.

It also helps for projecting the values for future prediction in Postal Insurance domain. The comparision between PLI and RPLI in No. of Policies in force attribute helped to take necessary actions to overcome the differences in between them and also helps to reach more number of people. The other attributes Sum Assured and Corpus Fund involved in this project helped to understand the pooling of money in the long run. The comparison between No. of policies in force & Sum Assured in PLI & RPLI explained the inter-relation between these attributes. The context between No. of policies in force and Corpus fund in PLI & RPLI is also clearly stated. The interactive dashboard which comprises of all the attributes helped to understand the project in a more visualized manner.

FUTURE SCOPE

The project can be enhanced with more number of data attributes to have a detail understanding of the sector. The data collection involved needed more advancements to check the accuracy of the collected data and for doing necessary modifications if required. The inter-relationship between the different attributes need to be studied further to take best data driven decisions.

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