PROJECT REPORT

INSURANCE ANALYSIS USING TABLEAU

The Smart Interz in collaboration with Tableau
Authored by: VAISHALI GUPTA

PROJECT DETAILS

This project is made under the 15 day workshop organized by SmartInternz in collaboration with Tableau. There was 5 day bootcamp workshop and 10 days data challenge.

Domain Name: Insurance

Dataset: Financial Performance of National Insurance Company Ltd.(NICL) upto Second Quarter-2016-17.

ACKNOWLEDGEMENT

This project has taken a considerable amount of time and resources and I would like to acknowledge the help of all of those who have made the project possible. In particular I would like to thank my supervisor Mr. Hemant Kumar for his time, patience and guidance, and also for allowing the idea to be pursued originally. Further to these people I would like to thank the members of the SmartInternz workshop for their technical help .Also, I would like to thank all of the many thousands of people who have worked on all of the Open Source projects without whose efforts this project would not have been possible.

CONTENTS

1. INTRODUCTION

1.1 OVERVIEW

Policies. Premiums. Claims. Payouts. In the insurance world, every transaction is a data point ripe for analysis and action. Tableau makes visual insurance analytics available to anyone in your insurance company. Complex insurance datasets are no problem for Tableau, making it possible to explore in real time and react to change faster.
Project includes Net claim Ratio, net retention, Incurred Claim in different categories of sector which helps the insurance company to evaluate its customer's information.
This project is for Financial Performance of National Insurance Company Ltd.(NICL) upto Second Quarter-2016-17.

1.2 Purpose

This project aims at preparing a dashboard and stories on tableau platform to make the analysis of Insurance claims easier for the user.
This project is used to see how insurance companies are using data to better manage claims, quickly detect fraud, improve service to customers.

2. LITERATURE SURVEY

2.1 Existing problem

Three challenges which are faced by insurance data analysts are

- Fractured data and legacy systems prevent insurance companies from extracting value and making the data actionable.
- Data and analytics are managed at the product level rather than at the customer level, making it difficult to create a comprehensive view of the customer.
- Insurance companies recognize the need for new data sources, but do not have the necessary tools or talent in place to process and analyze the data.

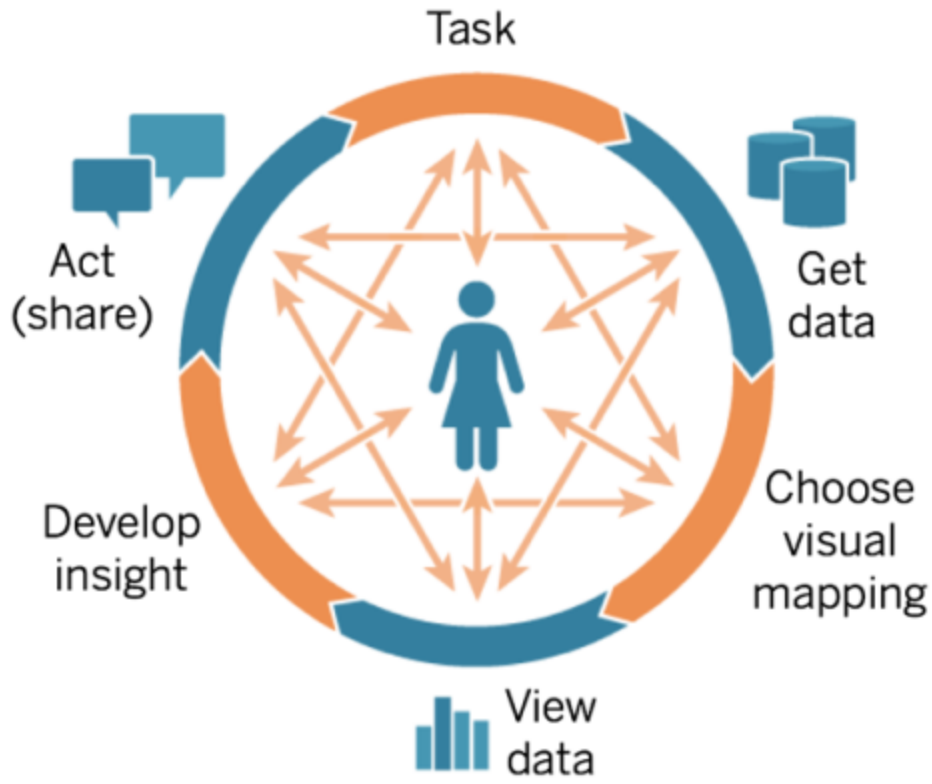
2.2 Proposed solution

These are some proposed results for this insurance project.

1. Enhance sales productivity, creating robust performance management dashboards, and forecasting sales for improved revenue visibility.
2. Gives the entire rundown on the process, the roadblocks and the future of advanced analytics in the insurance sector.

3. THEORITICAL ANALYSIS

3.1 Block diagram



3.2 Hardware / Software Designing

HARDWARE DESIGN

Laptop: The processor and RAM is very necessary to access the system.This will ensure that the computer runs quickly and smoothly

Internet: In order to download the dataset and publish your dashboard, access to a high-speed Internet connection can be vital.

SOFTWARE DESIGN

Tableau: *Tableau* is a powerful and fastest growing data visualization tool used in the Business Intelligence Industry.

We can configure this project on following operating system:-

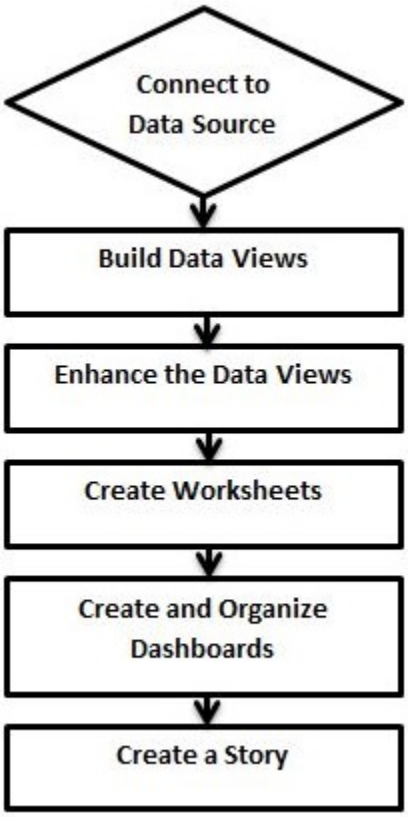
1. **WINDOWS-** Can easily be configured on windows operating system.
2. **MAC**- Can configured on Mac OS.
3. **LINUX-** Can easily configured on all the versions of Linux OS.

4.EXPERIMENTAL INVESTIGATION

1. Gross Premium of Motor sector is highest in both 2015-16 and 2016-17
2. Net Incurred Claim is almost same and highest in both motor and health sector in 2015-16 but it is highest in motor sector in 2016-17.
3. In 2015-16 Incurred Claim Ratio is highest in Aviation sector and ii 2016-17 it is the Miscellaneous sector with highest ratio.
4. Net Premium that is paid is highest in motor sector for both years
5. Health sector has the highest retention percentage.

5. FLOW CHART

This is the flowchart for this project:



6. RESULT

Dashboard has been created and now Insurance claims for both the quarters can be analysed by the customers and analysts. Dashboard has also been published to Tableau public where anyone who want to analyze or take some help from that dashboard.

7.ADVANTAGES & DISADVANTAGES

ADVANTAGES

1. **Generation of Leads**
2. **Enhancing Brand Value by Improving Customer Satisfaction**
3. **Reducing Fraudulent Cases**
4. **Predicting Accurate Risk for Underwriting**

DISADVANTAGES

1. Insurance data may be flawed or misinterpreted because they are often subject to selection bias or confounding.

2. Data analytics can breach customer privacy as information such as online transactions, purchases, or subscriptions, can be viewed by the parent companies.

8. APPLICATIONS

This project can be used by insurers, customers, insurance companies and investors to

- Prevent fraud
- Evaluate risk
- Analyze performance

9. CONCLUSION

This project gave me some basic working knowledge of the Tableau and showed me how to make dashboard and stories using the raw data. I can also publish it on Tableau public so that anyone can access it. From this, I can also analyze insurance claims, its retention ratio, claim ratio etc. The user can analyze the data in one glimpse through dashboard.

10. FUTURE SCOPE

The future scope of this project is valuable. The time duration of this project was only ten days. In this time duration I create this project with the help of mentors.
As for other future developments, the following can be done:

a. Can also be made into an application-based software.
b. Can also add features like modelling.
c. Can also add the geographical area section for the users.
d. Live data can also be shown.

11.BIBLIOGRAPHY

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