**Business Objective:** To identify profitable and reliable customers based on their life-time value.

**Business Constraints**: Customer behavior and expectations, market competition, inadequate resources to invest on customers like better prices, offers, discounts, customer care services, etc.

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| --- | --- | --- | --- |
| **Name of the feature** | **Description** | **Type** | **Relevance** |
| Customer | Customer code | Nominal; Non-numeric | Irrelevant,  not useful for analysis |
| State | States of United States | Non-numeric | Irrelevant,  useful for analysis |
| Customer Lifetime Value | net profit attributed to the entire future relationship with a customer. | Numeric | Relevant,  useful for analysis |
| Response | Customer response | Non-numeric | Relevant, useful for analysis |
| Coverage | Type of coverage client has: Basic, Extended & Premium. | Non-numeric | Relevant,  useful for analysis |
| Education | Qualification of the Customer | Non-numeric | Relevant,  useful for analysis |
| Effective To Date | Till the date Policy is effective | Non-numeric | Relevant,  useful for analysis |
| EmploymentStatus | Employment status of the customer | Non-numeric | Relevant,  useful for analysis |
| Gender | Gender of the Customer | Non-numeric | Relevant,  useful for analysis |
| Income | Income of the Customer | Numeric | Relevant,  useful for analysis |
| Location Code | Location Code assigned : Urban/Sub-urban or Rural | Non-numeric | Relevant,  useful for analysis |
| Marital Status | Marital Status of the Customer | Non-numeric | Relevant,  useful for analysis |
| Monthly Premium Auto | Monthly Premium the customer pays | Numeric | Relevant,  useful for analysis |
| Months Since Last Claim | No. of months Since Last Claim | Numeric | Relevant,  useful for analysis |
| Months Since Policy Inception | No. of months Since Policy Inception | Numeric | Relevant,  useful for analysis |
| Number of Open Complaints | Number of Open Complaints for the Customer | Numeric | Relevant,  useful for analysis |
| Number of Policies | Number of Policies taken by the Customer | Numeric | Relevant,  useful for analysis |
| Policy Type | Type of policy taken by the Customer | Non-numeric | Relevant,  useful for analysis |
| Policy | Policy specification | Non-numeric | Relevant,  useful for analysis |
| Renew Offer Type | Policy renewal offer for the Customer | Non-numeric | Relevant,  useful for analysis |
| Sales Channel | How Policy was purchased | Non-numeric | Relevant,  useful for analysis |
| Total Claim Amount | Total Claim Amount | Numeric | Relevant,  useful for analysis |
| Vehicle Class | Type of the Vehicle for which the Policy has been purchased | Non-numeric | Relevant,  useful for analysis |
| Vehicle Size | Size of the Vehicle for which the Policy has been purchased | Non-numeric | Relevant,  useful for analysis |

We can make 4 clusters of this dataset.

**Inferences** : Cluster 2 customers are highest Customer lifetime value, Cluster 1 customers form the second promising business avenues. So, the company should always take care of these two clusters. Cluster 0 an 3 are showing least Customer lifetime value. Company can workout future strategies based on these Clusters.