# **Analysis Of Loan Data and Their Insights**

**Questions:**

1. **What factors affect the interest rate of loan taken?**

The factors that influence the interest rate are.

* Public Record – As the public record increases, the interest rate of loan taken increases as the risk is high in this scenario.
* Credit Policy – Even though the influence of credit policy as per the data is minimal this is also one of the factors that is considered as the factor that affects the rate of interest.
* Credit Score – As the credit score is less, the interest rate becomes higher, and this is one of the main factors to be considered for the rate of interest.

1. **What factors are used to evaluate risk level of customers?**

The Factors that determine the risk level customers are.

* Debt to Income Ratio – If the debt-to-income ratio is higher than the specified percentage of the bank, then the risk level of the customer is high.
* Public Record – If the customer has a bad public record, then the risk level of the customer is high.
* delinq.2yrs - The number of times the borrower has been 30+ days past due on a payment in the past 2 years makes the risk level of the customer high.

1. **What trends are observed w.r.t delinquencies - what kind of customer should the company avoid as inferred from given data?**

The company should avoid the following type of customers as the risk is high.

* Customers who have made a due in payment in the last 2 years should be avoided as the risk level is high.
* Customers who have a bad public record as per the visual should be avoided by the company.

1. **Which loan combination is best for company e.g. interms of higher loan interest rate, higher repayments, low default?**

The loan combinations that are best for the company are as follows:

* Education Loan – This is the first best because the interest rate is 20% and the Maximum installment would be 861 but defaulters for the past two years are just 3.
* The next combination would be small business, home improvement or major purchase because the interest rate and the installment are high but the defaulters would just be 4.

1. **Are there any trends that can be identified about customer from revolving utilization rate, revolving balance?**

Yes, there are trends that can be identified about customers when revolving utilization rate and revolving balance when they are checked separately with the purpose and if checked combined there are no specific trends.

As per the trend debt consolidation is the best purpose when considering both revolving utilization rate and revolving balance.

1. **Which purpose (loan category) is most beneficial to business?**

The loan category that is most beneficial to the business is debt consolidation as the installment is higher than the others and the rate of interest is 21% which is in the maximum category of interest rate. So, the company is getting more benefits from debt consolidation.

1. **How does the number of days with a credit line (days.with.cr.line) relate to the loan repayment status?**

When the number of days of credit line is higher the repayment history looks good as number of customers who have fully paid the loan is higher. This is how the credit line, and the repayment history are linked.

1. **Are borrowers with a longer credit history more likely to meet the credit policy criteria?**

Yes, If the number of days of the credit line is longer then the customer is more likely to meet the credit policy criteria.