1. Suggest the probable business impact of each independent feature on the target

* **Independent Variables:**
* **Loan ID:** No impact on Loan status as it has unique values.
* **Gender:** Women appear to have more difficulty in paying off their loans due to gender wage disparities and differing financial obligations in other areas of life. Therefore males are more likely to get the loan status approved.
* **Married:** Being married may mean both should be committed to sharing everything within marriage – but in case spouse has bad credit, leaving him or her off the loan application is actually a good move. If applied for a loan as a married couple, the lender takes the lower credit score from both of your scores. This means that if one of them has bad credit, they may not be eligible for the loan.
* **Dependents:** Having dependents could affect the loan approval, in that the lender may consider the additional cost of supporting these people when evaluating the borrower's financial situation.
* **Education:** The more the education qualification, the better the annual income will be and there is more chance of getting the loan approved.
* **Self Employed:** This might have no impact on the loan status as long as their income is good. To get approved it depends on many factors like tax returns, proof of success, high credit score, low debt ratio and many months of reserves. If the income is not good it might reduce the chance of loan approved.
* **Applicant Income:** Having more income helps in getting the loan approved. Lenders don’t look at income on its own. They consider income as part of your debt-to-income (DTI) ratio. This is the percent of your gross monthly income that goes toward minimum debt payments. Your pre-existing debt obligations have an impact on affordability. And typically, the more debt you have, the less you can afford to spend on a loan repayment.
* **Co applicant Income:** Applying for a [personal loan](https://www.tatacapital.com/personal-loan.html) with a co-applicant who has a good CIBIL score can boost the chances of your loan getting approved. You can be eligible for more competitive interest rates and a higher loan amount. Conversely, a co-applicant with a low CIBIL score can lower your loan approval chances.
* **Loan Amount:** Having more loan amount may result in loan not getting approved. When your proportion of loan balances to loan amounts is high, lenders perceive you as a greater risk of defaulting on the loans. In some cases, they might not even approve new installment loans if they see that you have very high proportions of them compared to how much you originally borrowed.
* **Loan\_Amount\_Term:** Longer loan tenures also benefit the lender as they result in much higher interest income from borrowers than shorter tenures do. They are thus more likely to approve loans with longer tenures than those with shorter ones.
* **Credit History:** The Loan ID’s having credit history has more chance to get the loan approved since their past record is available. Some lenders may work with you even if you have less than perfect credit, while others may only work with borrowers who have excellent credit.
* **Property Area:** Having the property in urban areas has more chance to get loan approved than semi urban and rural as the value of the property is higher in urban than semi urban and rural. Same applies for semi urban and rural. Having the property in semi urban has more chance in getting the loan approved.
* **Dependent Variable (Target Variable):**
* Loan Status:

1. Suggest ways in which the organization can benefit as a result of analyzing the data

In every business, having an idea about your consumers’ credit worthiness is an important metric in accessing consumers’ value to a business. This will later form a basis for measuring essential business metrics such as

* **Sales revenue**
* **Customer acquisition costs**
* **Estimated customer lifetime value**
* **Customer churn**
* And will be useful when building a **credit score** for a potential customer.

1. Suggest missing features that can help with the analysis based on business logic

The missing features that can help with the analysis I believed are mentioned below.

* **debt:** whether the customer has ever defaulted on a loan
* **purpose:** reason for taking out a loan
* **loan per term**
* **income per term**

1. What is the best way to collect data for the suggested features?

Debt status and purpose of the loan data can be get from the client and the other features can be calculated from the available information.

Loan per term = loan/ no of days (term)

Income per term = loan/ no of days (term)