# Lessons Learned Report

Thomas Higginbotham

## Business Insights:

Probably the most interesting thing learned during this analysis is that there is a very high correlation and covariance between the current default status and the prior month payment statuses.

Additionally, there is a very high correlation and covariance between the current month’s payment status and the prior month payment statuses.

Although there is also a high covariance between the credit limit and the payment status (customers granted higher limits see to have more current payment statuses), it’s likely that these customers have higher limits BECAUSE they have an excellent payment history, and not the other way around.

There doesn’t seem to a strong relationship between demographic factors (age, gender, marriage status, or educational attainment) and payment status or default status.

## Lessons Learned:

It’s probably a mistake to grant credit based solely on demographic factors.

The most promising lead is to grant or restrict credit based on their past payment history.

I don’t feel like we have enough information to determine how much credit we should extend to customers.

## Recommendations:

Consider enhancing the data with other items, such as the number of other active credit accounts, household income, and customer sales information with demographic data. This could give some insight into the customers’ need for credit (to increase our sales) along with some more information about the customers’ potential ability to pay.

Proceed with restricting credit limits for existing customers who have poor payment histories

Consider granting credit to new customers who have excellent credit histories

Evaluate customers with excellent credit histories for credit increases

Possibly evaluate some of the credit limit outliers to reduce the amount of unused credit at the highest levels.