Credit EDA Case Study

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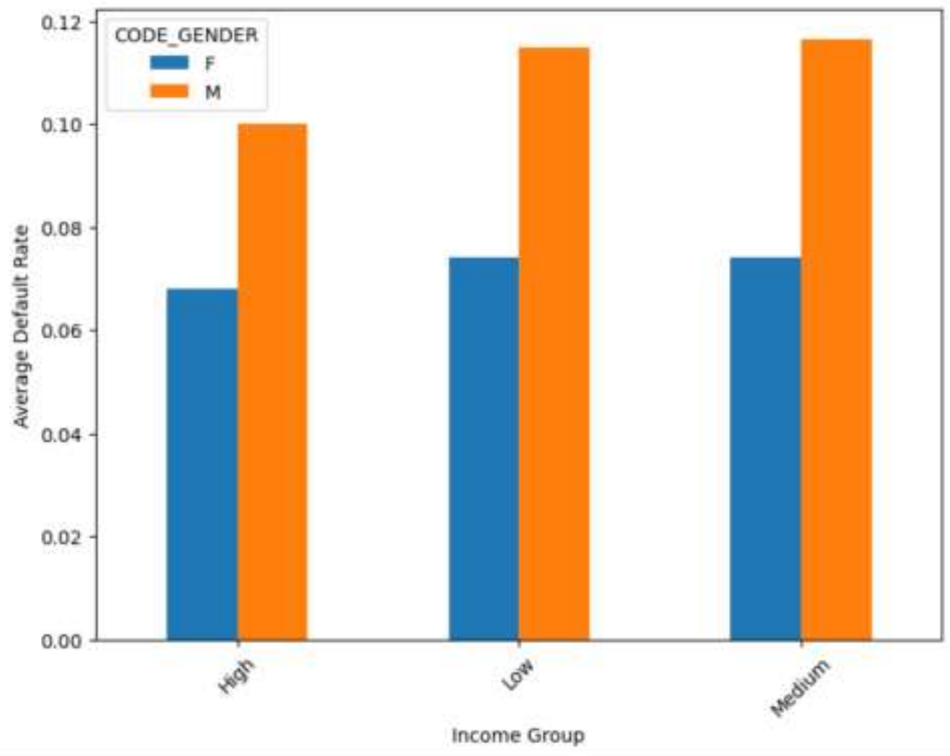
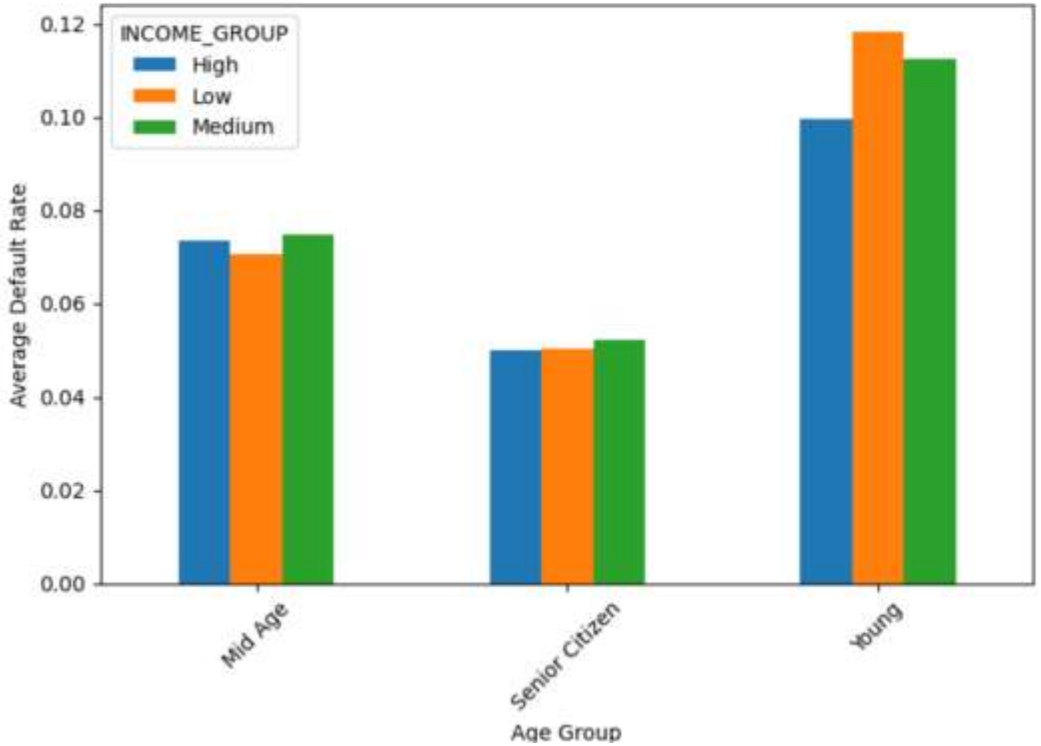
Current applications

Income groups & gender



Income groups & age groups



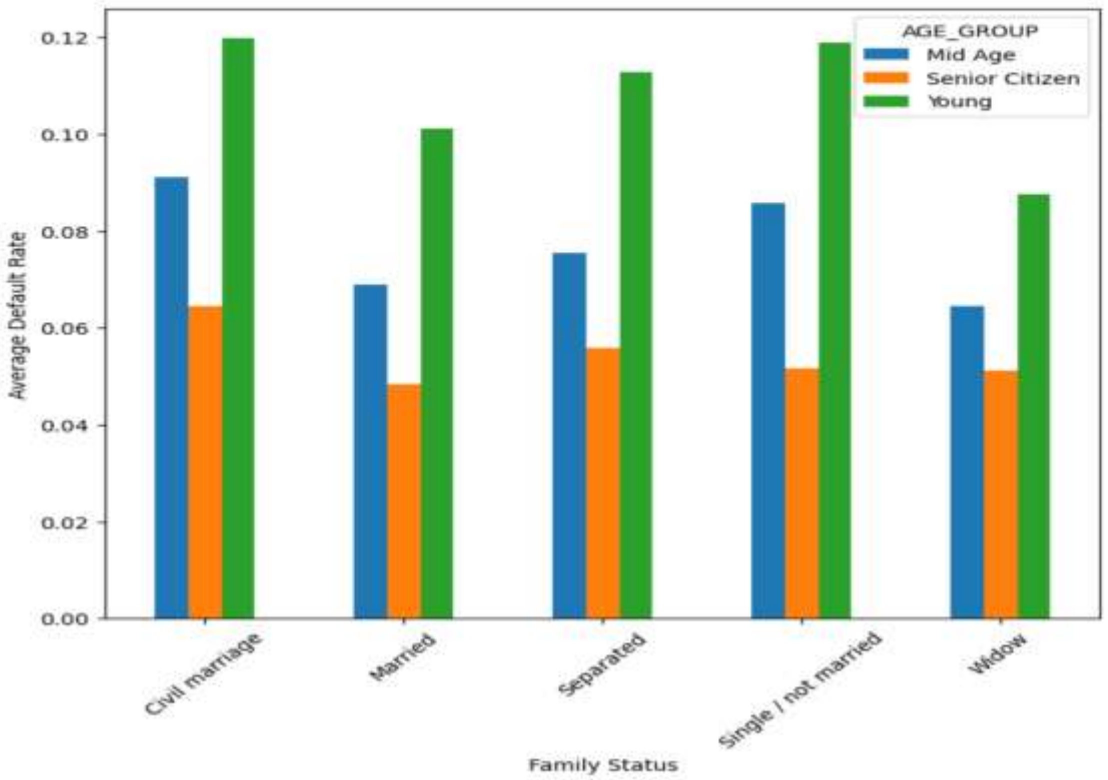
Inferences:

1. Individuals with higher incomes tend to default less frequently than those with lower incomes.
2. Middle-aged and elderly individuals have lower default rates compared to other age groups.

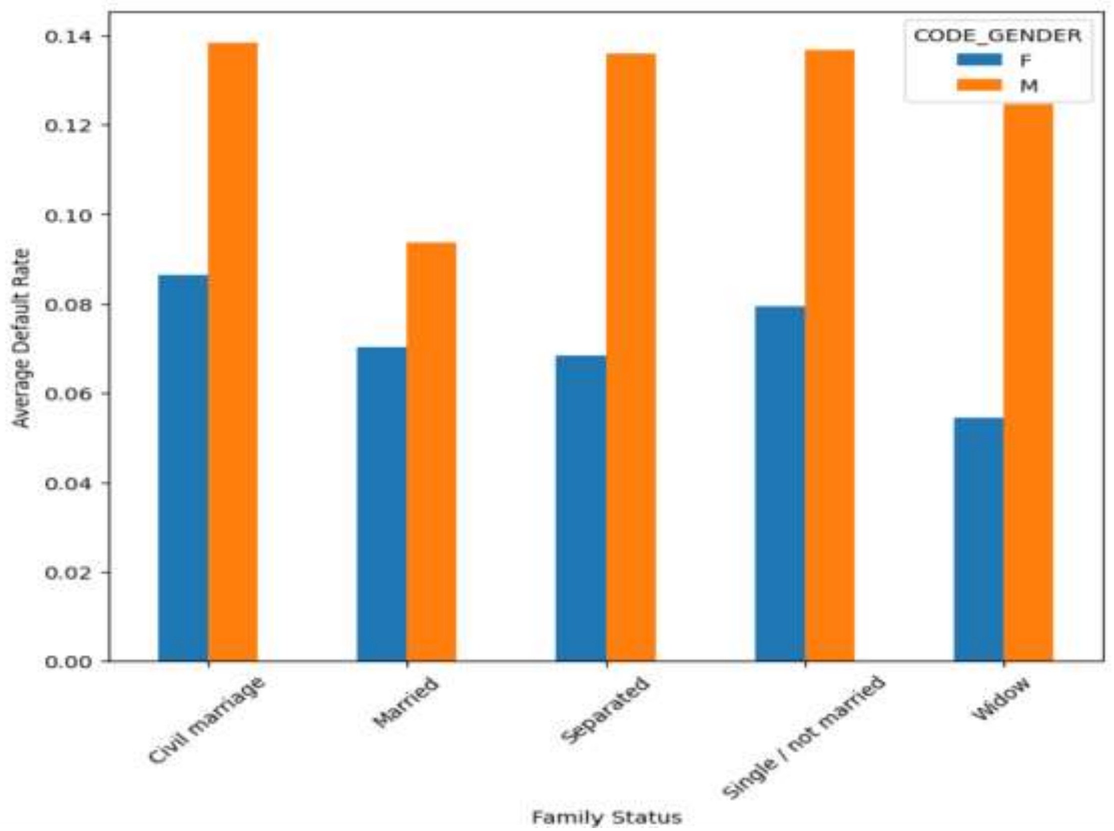
Recommendations:

1. Providing loans to middle-aged and senior clients who have high incomes is generally a secure option.
2. Offering loans to younger individuals within the low-income bracket poses a higher risk.

Family status & age group



Family status & gender



Inferences:

1.Men with a history of previously refused or unused offer applications have higher default rates.

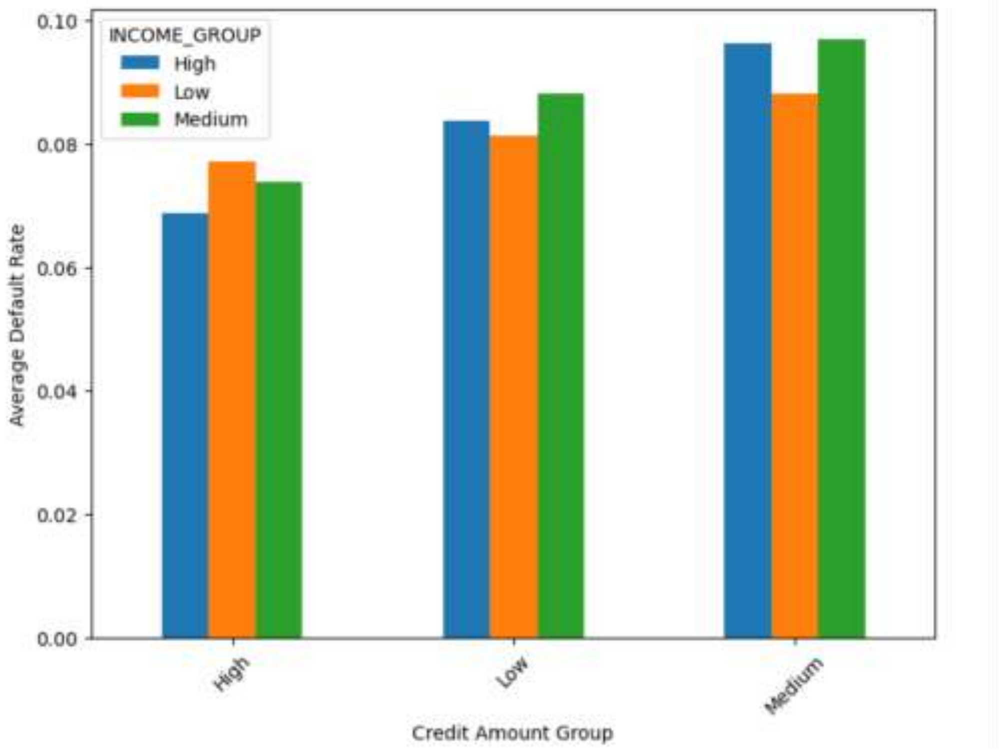
2.New clients who have not utilized previous offers are more likely to default.

Recommendations:

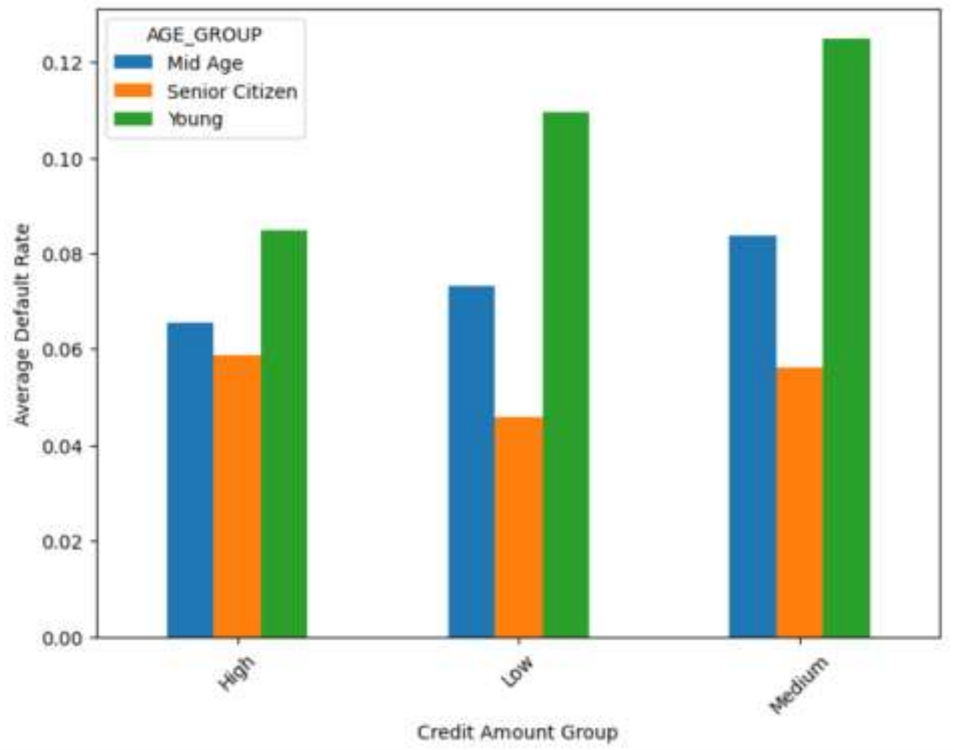
1.Providing loans to women who have had previous loan applications approved is advisable.

2.There is a risk associated with issuing loans to clients who have had applications refused or offers previously unused.

Credit amount group & income group



Credit amount group & age group



Inferences:

1.Clients with medium-sized credit amounts tend to default the most, followed by those with low and then high credit amounts, across all income levels.

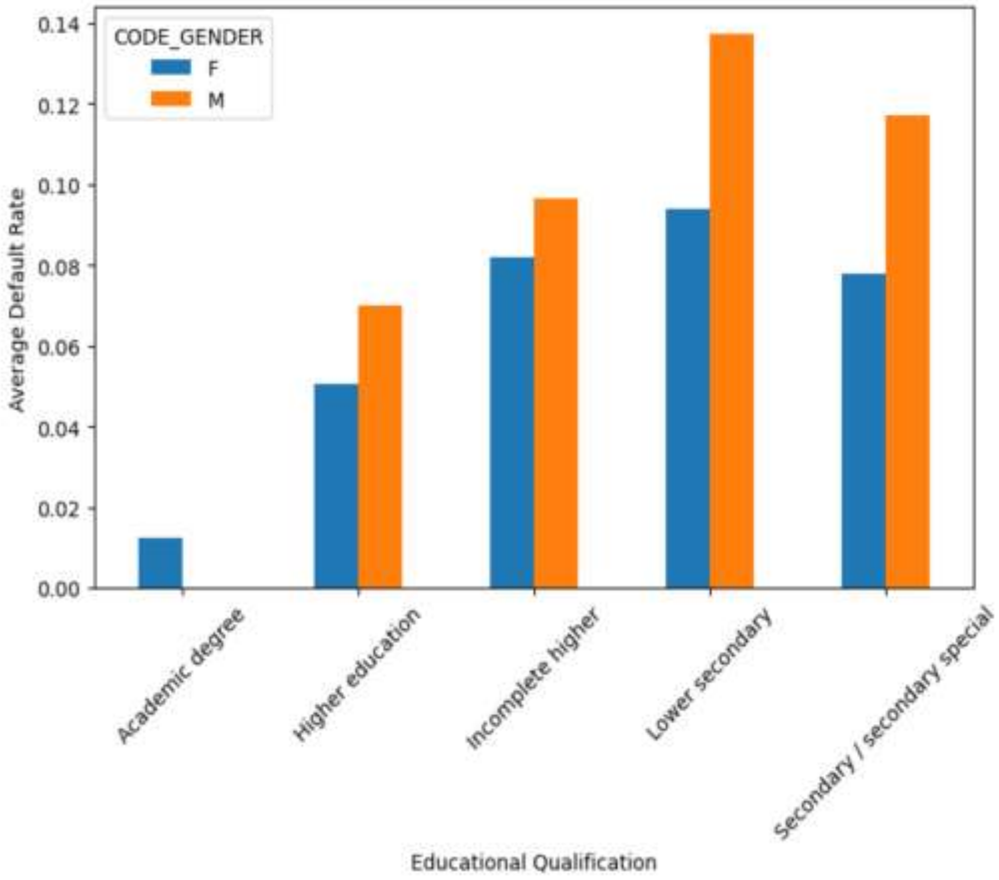
2.Young clients who have medium or low credit amounts are the most likely to default.

Recommendations:

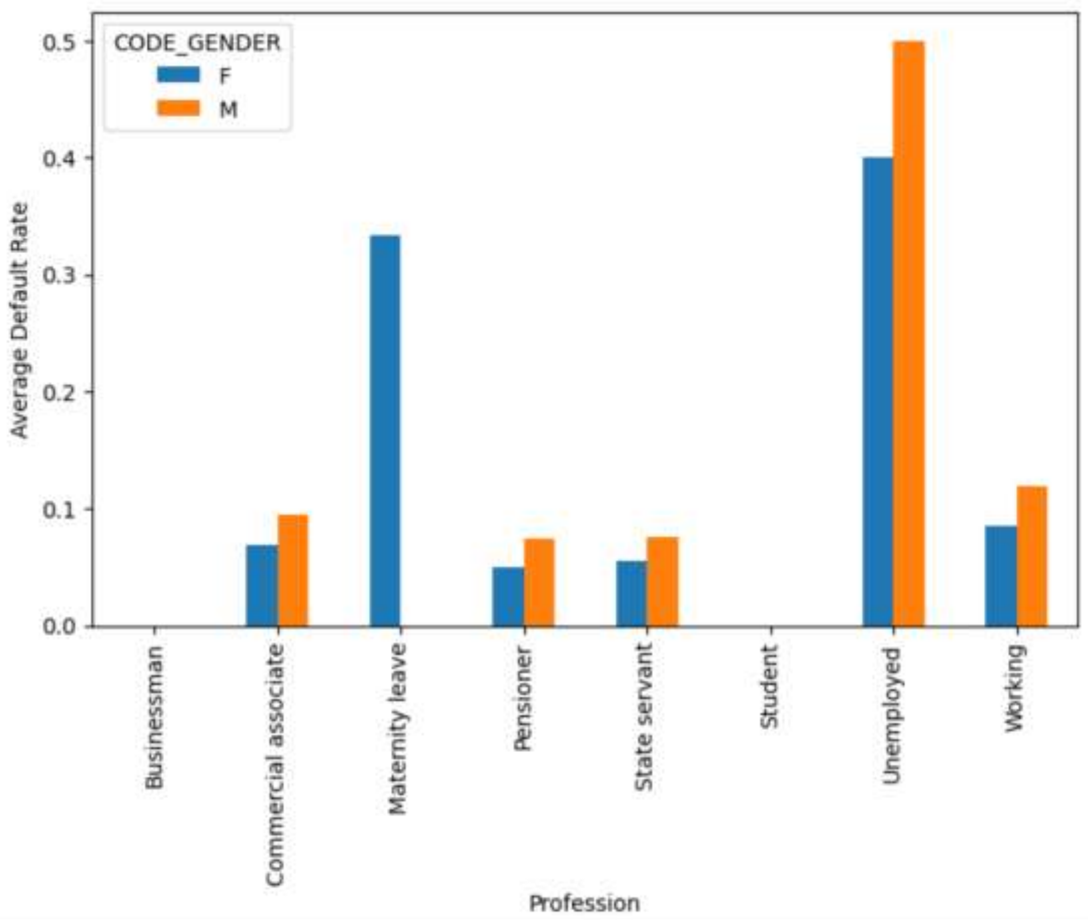
1.It is suggested to approve loans that are slightly larger than the medium amount for all income brackets.

2.Providing young clients with medium or low credit amounts is considered very risky.

Educational qualification & gender



Profession & gender



Inferences:

1.People with higher education levels have lower default rates, while those with lower secondary education default more frequently.

2.Unemployed clients and those on maternity leave have a high incidence of default.

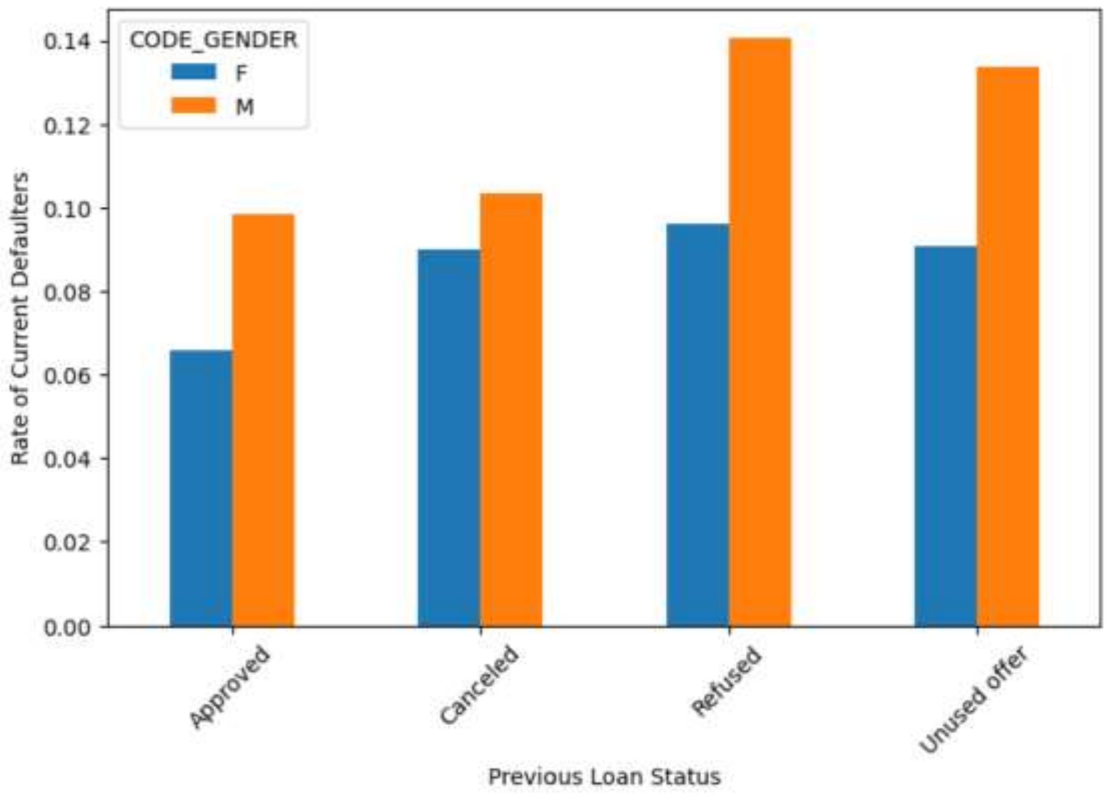
Recommendations:

1.It is generally safe to provide loans to clients with higher education levels, except for those who are unemployed or women on maternity leave.

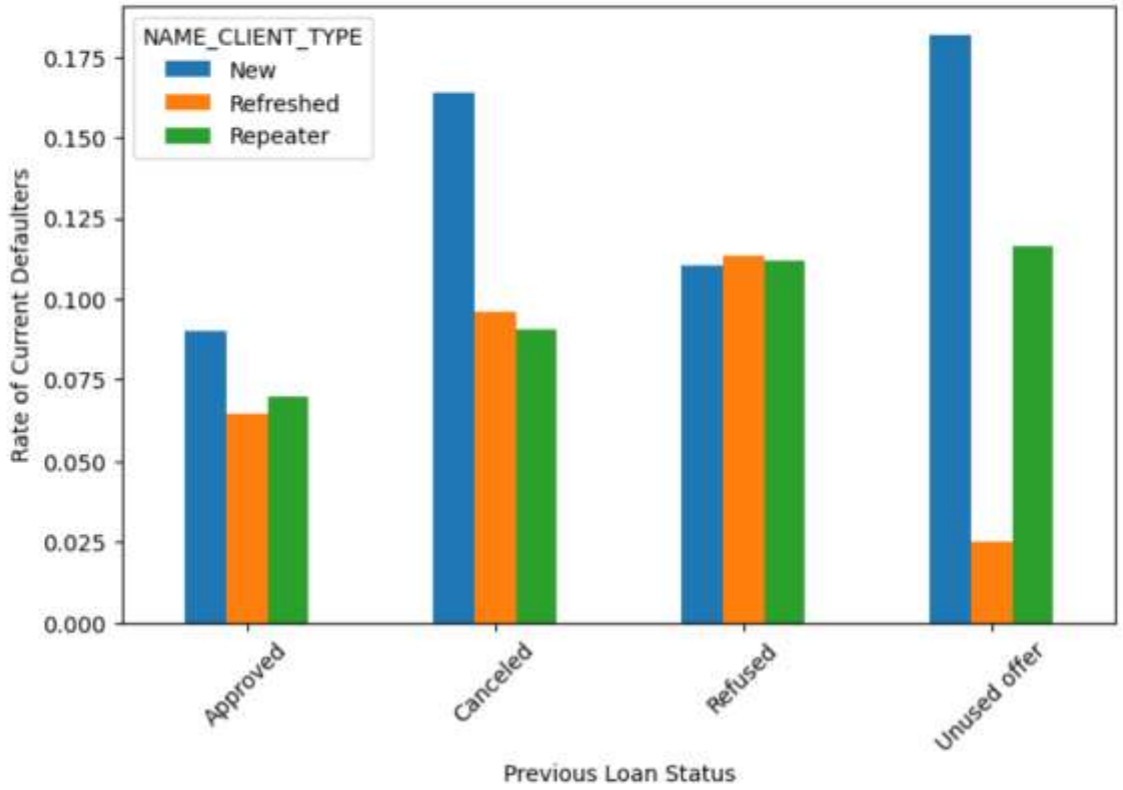
Correlated Analysis Deductions

Current and Previous

Previous loan status & gender



Previous loan status & client type



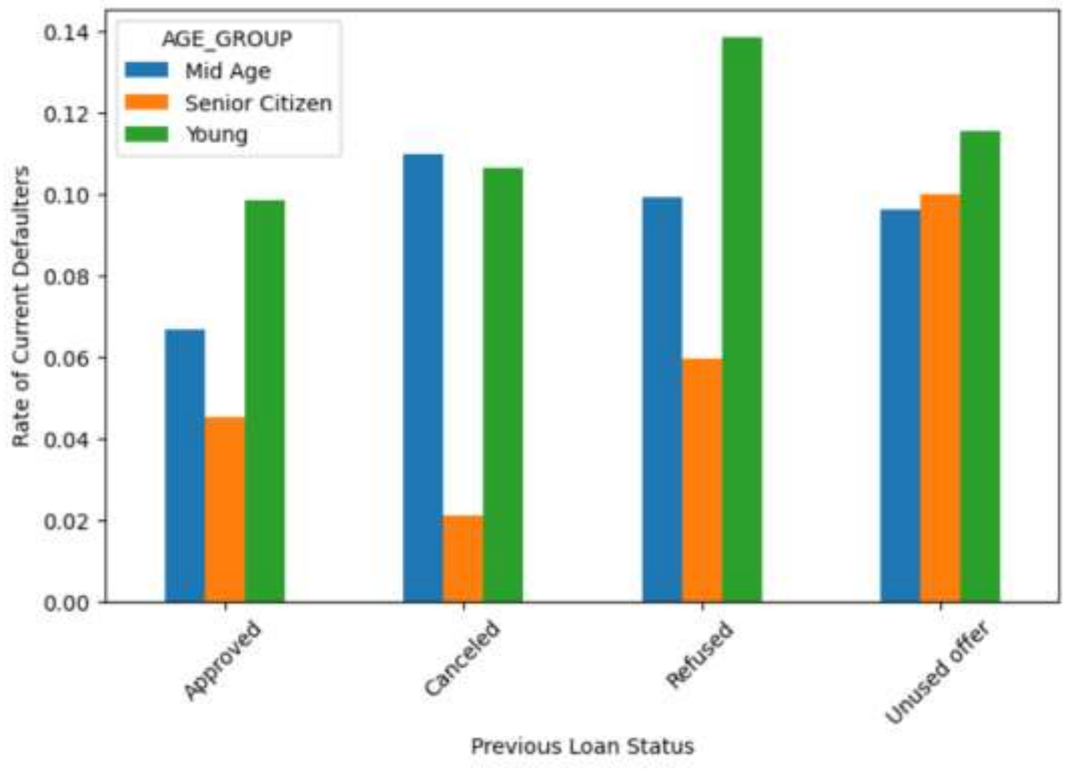
Observations:-

1. Previously refused and unused offer applications were more defaulted in male.
2. New clients with previously unused offer are more defaulted.

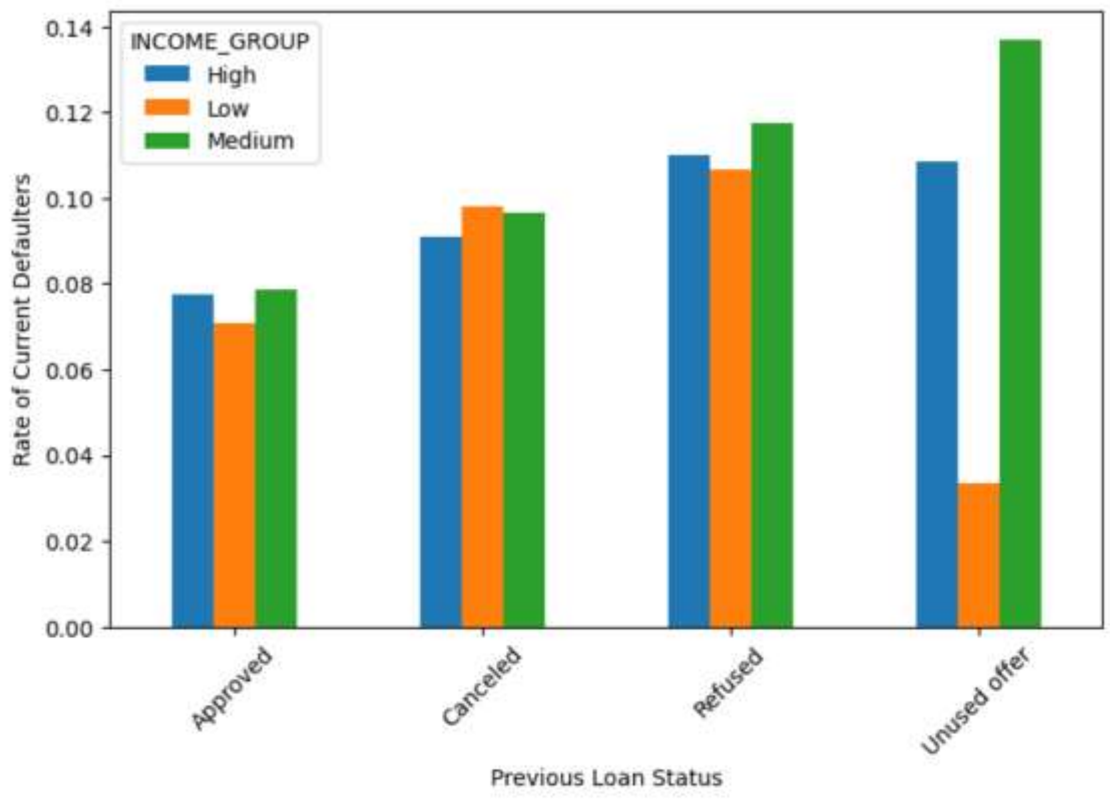
Recommendations:-

1. It is recommended to provide loans to previously approved females.
2. There is a risk to grant loans for clients, whose applications were refused or unused previously.

Age group & previous loan status



Income group & previous loan status



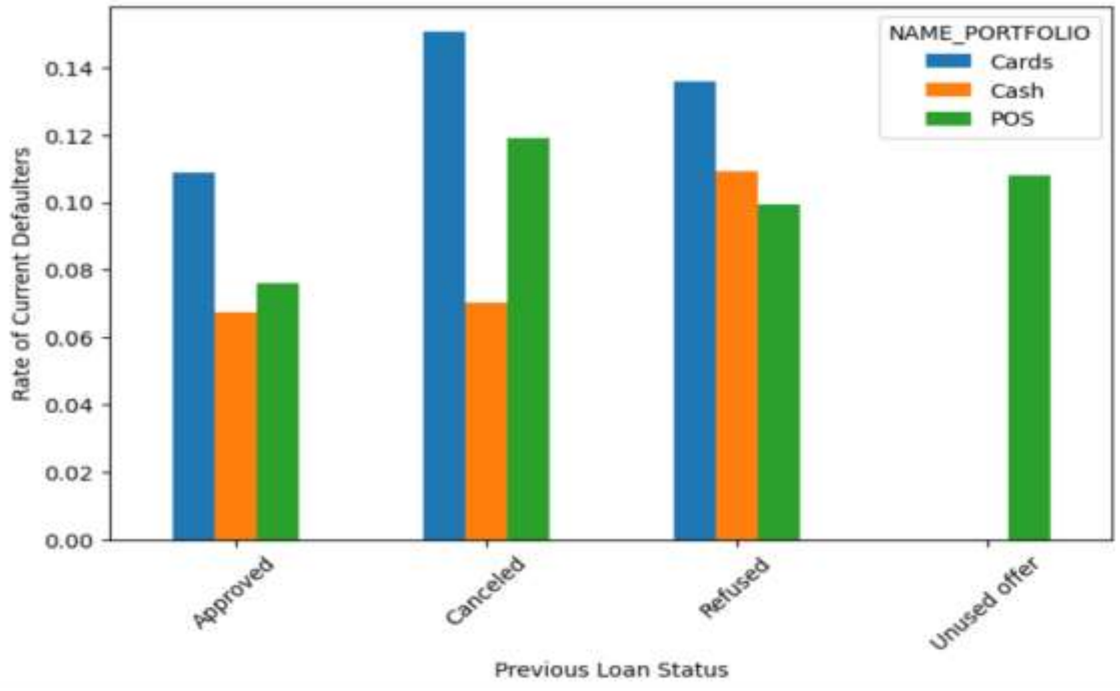
Inferences:

1. Young individuals with a history of loan refusal have the highest default rates.
2. Senior citizens have lower default rates regardless of their past loan approval status.
3. Among all income groups, those who have had loan applications refused in the past tend to default more often.

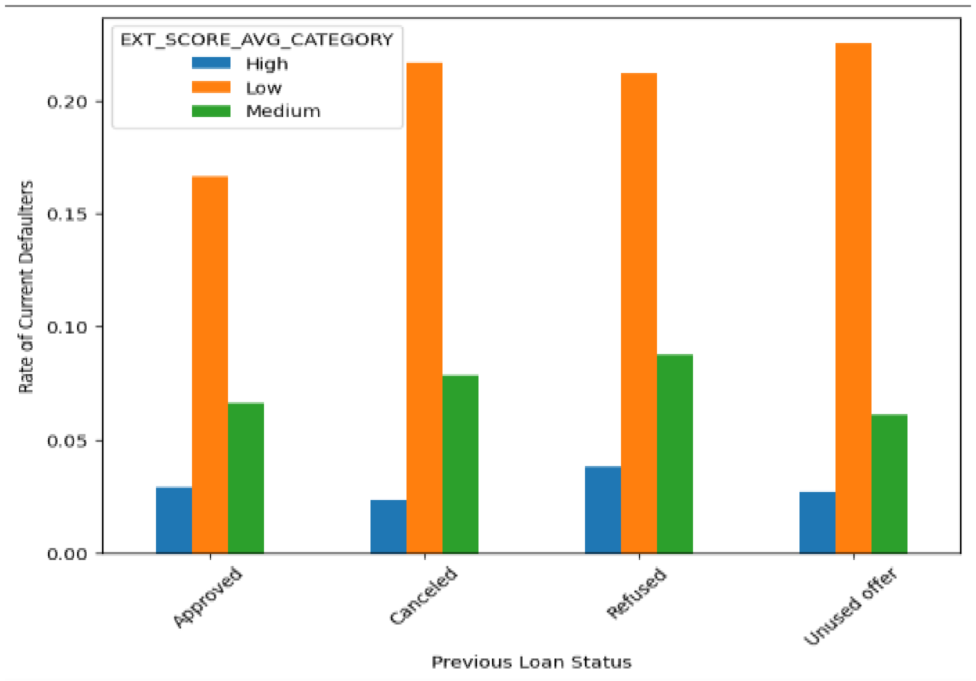
Recommendations:

1. It is safer to approve loans for senior citizens.
2. There is a lower risk associated with granting loans to applicants who have previously been approved

Portfolio & previous loan status



External source score & previous loan status



Inferences:

1.Applications for portfolio Cards and Point of Sale (POS) have a high default rate.

2.Cash loan applications that were previously refused also have a higher rate of default.

3.Applicants with low scores from external sources tend to default more, regardless of their previous loan status.

Recommendations:

1.It is generally safer to extend loans across any portfolio to applicants with a history of loan approval.

2.There is a high risk involved in issuing loans to applicants with poor external source scores,

Final note

Highly Recommended Groups:

1. Clients with previously approved applications.
2. Highly educated clients who also have a higher income.
3. Clients with high scores from external sources.
4. Senior citizens across all categories.
5. Married clients, as opposed to those with other family statuses.
6. Female clients, as they are generally more favorable than male clients in terms of default rates.

High-Risk Groups:

1. Clients with a history of previously refused, canceled, or unused offers.
2. Clients from low-income groups who have had a previous refusal status.
3. Unemployed clients.
4. Clients with poor external source scores.
5. Young clients, who pose a higher risk compared to middle-aged and senior clients.
6. Clients with lower secondary or secondary education levels.

Thank you !