

## Analyse attributs for German Credit data

Commercial banks adopt the "6C" principle for loan review. The "6C" analysis method is a traditional credit risk measurement method for commercial banks. Character, capacity, capital, collateral, condition, and continuity in business these six factors to assess its credibility.

1. **Character**, which is the most important. It reflects each credit transaction in the speed and amount of payment.  
(Attribut : credit amount, credit history, credits in this bank, personal status and sex, present employment since, telephone, present residence since...)
2. **Capacity**, including the client's operating ability, management ability and solvency.  
(Attribut : checking account status, savings account, other debtors, other installment plans, purpose, job...)
3. **Capital**, refers to the financial strength and financial condition of the client, indicating the background in which the client may repay the debt.  
(Attribut : checking account status, savings account, other installment plans, other debtors, property, people under maintenance, housing...)
4. **Collateral**, It is an asset that is used as collateral when a customer refuses to pay or is unable to pay. This is more important for customers who do not know the details or have disputed credit status.  
(Attribut : property, housing...)
5. **Condition**. The operating environment mainly refers to the internal and external environment in which the customer operates. When these environments change, will the customer's ability to pay back be affected.  
(Attribut : property, job, duration in month, installment rate in percentage of disposable income, purpose...)
6. **Continuity in business** refers to the possibility of continuous operation of the customer, which requires a comprehensive evaluation from the customer's internal financial situation, product replacement, and scientific and technological development.  
(Attribut : checking account status, savings account, purpose, job...)

Attribut	Discription	Types of features
<b>account_check_status</b>	A checking account is a deposit account that allows the holder to make numerous deposits and withdrawals. Very liquid, as opposed to less-liquid savings or investment accounts. DM (Deutsche marks).	Attribut qualitative
<b>other_installment_plans</b>	An installment plan is a system in which the buyer can take and use goods by paying a percentage of the price as a deposit, and pay the remainder due by a series of regular installments.	Attribut qualitative
<b>other_debtors</b>	A debtor is a company or individual who owes money. If the debt is in the form of a loan from a financial institution, the debtor is referred to as a borrower, and if the debt is in the form of securities – such as bonds – the debtor is referred to as an issuer.	Attribut qualitative
<b>property</b>	Property is a term describing anything that a person or a business has legal title over, affording owners certain enforceable rights over said items. Most properties hold current or potential monetary value and are therefore considered to be assets.	Attribut qualitative
<b>credit_amount</b>	Credit Amount means the maximum amount that Lender is committed to lend.	Continuous attribut quantitative
<b>credit_history</b>	Credit history is a record of a consumer's ability to repay debts and demonstrated responsibility in repaying debts. A consumer's credit history includes the following : Number and types of credit accounts, How long each account has been open, Amounts owed, Amount of available credit used, Whether bills are paid on time, Number of recent credit inquiries	Attribut qualitative
<b>job</b>	Job	Attribut qualitative
<b>credits_this_bank</b>	Number of existing credits at this bank.	Ordered attribut quantitative
<b>duration_in_month</b>	Duration measures how long it takes, in month, for an investor to be repaid the bond's price by the bond's total cash flows. In general, the higher the duration, the more a bond's price will drop as interest rates rise (and the greater the interest rate risk).	Continuous attribut quantitative
<b>present_emp_since</b>	Years worked so far. Present employment since.	Attribut qualitative
<b>Installment_as_income_perc</b>	Installment rate in percentage of disposable income.	Ordered attribut quantitative
<b>Personal_status_sex</b>	Personal status and sex.	Attribut qualitative
<b>telephone</b>	Telephone registered with customer name.	Attribut qualitative
<b>present_res_since</b>	Present residence since (no. of years)- a little dubious here take 4 as meaning 4+.	Ordered attribut quantitative

<b>age</b>	Age	Continuous    attribut quantitative
<b>people_under_maintenance</b>	Number of people being liable to provide maintenance for.	Ordered        attribut quantitative
<b>housing</b>	Housing.	Attribut qualitative
<b>foreign_worker</b>	Foreign worker.	Attribut qualitative
<b>purpose</b>	Purpose of loan.	Attribut qualitative
<b>savings</b>	Savings account/bonds	Attribut qualitative