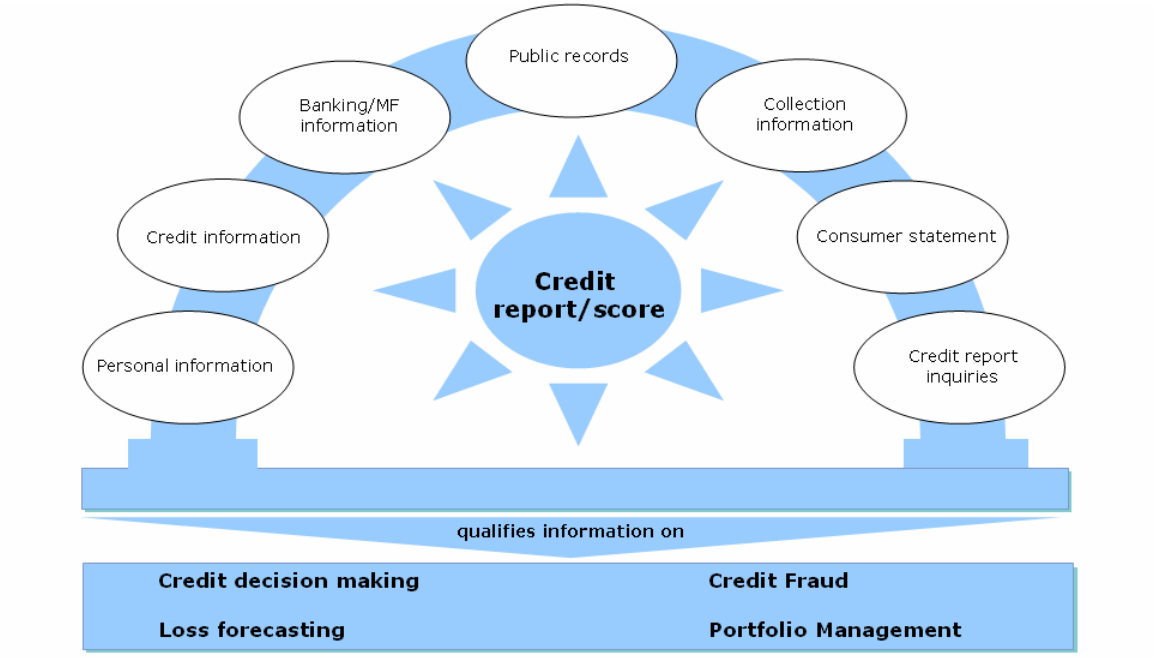
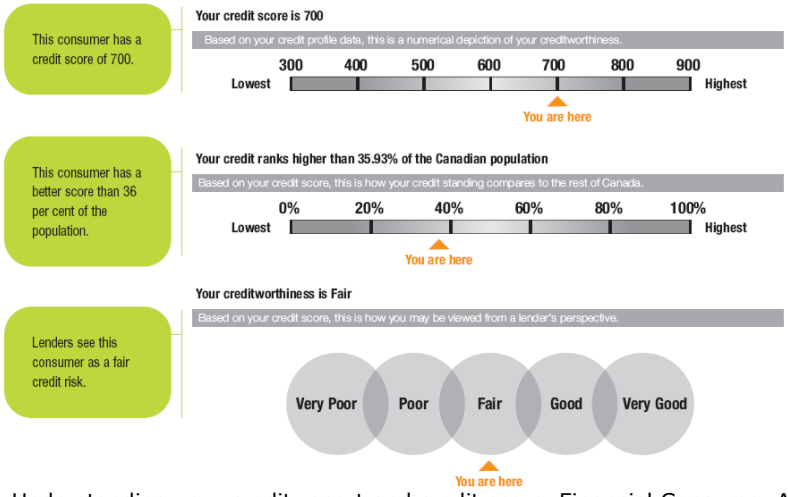
Credit scoring

Credit scoring is based on consumer specific information which aids lenders and other organizations to make qualitative decisions.



Source: Aaum research

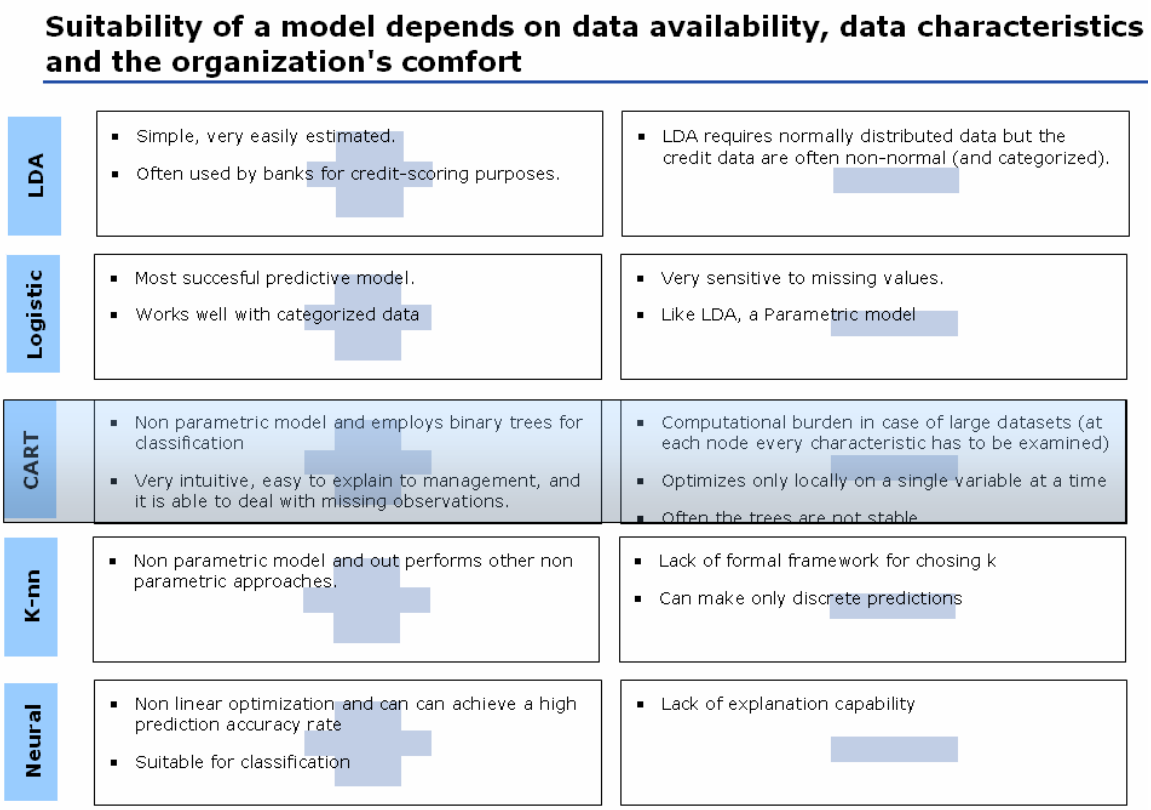
The benefits of credit scoring helps the credit institutes to make qualified decisions on the customer's present/future credit requirements. This is illustrated with TransUnion's Credit Score report below



Source: Understanding your credit report and credit score, Financial Consumer Agency of Canada

The score eventually qualifies the customer into high risk, average and low risk. There are many statistical techniques available to model the scoring.

An analysis by Aaum's researchers revealed that model formulation depends on data availability, data characteristics and the organization's comfort. The below diagram illustrates the advantages and disadvantages of various scoring methodologies.



The key insights coming out from the Aaum research are

- Logistic regression and LDA are most widely used scoring methodologies.
  - Much simpler and convenient.
- CART or neural networks are used mainly as support tools, either in the process of selecting variables or in the process of the model-quality evaluation.
- k-NN method is not used at all or is used very rarely.
- The facts are very surprising!

- The alternative (nonparametric) methods have excellent potential in pattern recognition and they are very competitive with logit regression.
- It seems that this potential is unrecognized by the current financial institutes!

- Logit method is the most favored method in practice, mainly due to (almost) no assumptions imposed on variables, with the exception of missing values and multicollinearity among variables.
- Contrary to this, non-parametric methods can deal with missing values and multicollinearity (or correlations) among variables, but often are computationally demanding.
  - Rules that are constructed on the basis of some of these methods can be hard to explain to a manager as well as to a client.

Please write to info@aaumanalytics.com if you are looking for expertise in credit scoring.