**Machine Learning Analysis for Insurance Company**

**Client: UK based Insurance Company**

We have done machine learning analysis for the data from a leading UK Insurance company for the purpose of risk prediction.. Implementation of the risk assessment tools assures the prediction of risk and limits it to the minimum in order to cut losses. There are two major types of risk: pure and speculative. The risk assessment process is called to bring balance to the company’s profitability and to avoid both these types.

Risk assessment lies in identifying the risk quantification and the risk reasons. These are the basis for data analysis and calculations. The matrix model of the analysis is widely applied in this field. This model provides a systematic approach to risk information comparable in time. It is based on the algorithms which detect and combine the data concerning individual risks which vary by nature, character, and effect. Then, the potential risk groups are assessed. Thus, the overall company’s risk is forecasted via prediction of the exposure group risks.

**(**a) Typical Problems (Not all inclusive)

* Column headers are values, not variable names
* Multiple variables are stored in one column
* Variables are stored in both rows and columns
* Multiple types of observational units are stored in the same table
* A single observational unit is stored in multiple tables
* Not able to understand what the data is

*(b) Expected Solution:  Machine Learning based ‘Understanding’ about data and ‘Reasoning’ to identify it.*

*i.e. (1) find what could be potential headers.*

*(2) Find out most probable missing value in any column*

*Our Approach, High level design, demo were the logical steps for delivering the solution.*