

Evendor Engineering has developed the initiative: "DEVELOPMENT OF NEW TECHNOLOGIES PREDICTIVE BASED ON DIRECTED MODELING" action funded through the Center for Technological and Industrial Development (CDTI), co-financed by the European Regional Development Fund (ERDF) through the Operational Programme 2014-2020 Smart Growth.

This action will allow to get an unprecedented system, based on the development of new strategies for models calibration, testing and training, which is conducted in a systematic and automated manner, following rigorous criteria of mathematical optimization, enabling an objective decision on the proposed models.

The executed R&D has benefits for all stakeholders in the anti-fraud sector where currently is applied. This R&D will allow a cost reduction by improving the detection rate of fraud and simplification in programming, operation and maintenance of the system.

Currently it is not known or projected a similar system with capabilities like those described. To achieve this goal, it has been used techniques based on:

- An automatized selection of optimal predictor variables for a Naive Bayes network building.
- A generalization of the models, paying attention not only to the algorithms but also the design of the computational aspects (yield, scalability, simplicity, etc).

The technologies adopted in the areas of Big Data and Machine Learning, have enabled redesign the computational aspects, facing the increasing complexity of the algorithms and the size of the databases. A good algorithm for commercial use must be scalable, enabling real-time response and it must solve the problems involved in analyzing a huge volume of data in the proposed timeslots.

