

QUANTQREDIT DESCRIPTION PRODUCT

Quantforce's QuantQredit software package, is a full-fledged predictive model development tool, allowing the user to generate a predictive modeling scorecard using the scoring methodology. The underlying philosophy of its development, has been to provide the data scientist with an easy-to-use model development interface, whereby transparency and control of the data analysis and the model development process have been key cornerstones.

Once the data file for the predictive model development has been prepared, it can be simply uploaded by a CSV or Excel file format. Zipped files are also supported.

The tooling features a white-spaced design pane, to which several functional nodes can be drawn and connected into an efficiently fluid model development process.

After uploading the file, a Qualification node will allow you to inspect each data field, and determine if it should be included or excluded from the analysis. QuantQredit will automatically detect the nature of each of the variables, whereby the user has the possibility to still select this manually.

The next step in the analysis is the univariate analysis, whereby each variable is analysed on its predictive pattern. The software will automatically summarize each variable's predictive data pattern. The user however can inspect each data field in much more detail and summarize at hand, or use the powerful in-built automated summarization functionality.

In contrast to other machine learning approaches and software, this univariate analysis allows a user to understand the data pattern of each variable, and confirm the way it will be used for the model development. It also automatically deals with missing data, such that no cumbersome data imputation would be required.

After completion of the univariate analysis, the user can export the code to a TXT file, such that the code can be used in other software packages, or be used in a production environment.

From the univariate analysis, it is a simple step towards running a regression and obtaining a true predictive model. This regression node uses advanced machine learning techniques, in an easy-to-use interface. As a user, the interface also allows to be run automatically, but it also allows the user to select or de-select one or more variables, and vary the machine learning accordingly. In doing so, a user is not restricted to the automated outcome of the machine learning selections, but can test and vary as required.

In the output panes, QuantQredit will automatically produce the most common statistics in scoring development, such as IV, KS, and GINI coefficients, and provide a set of tables and graphical performance visualisations.

In all, QuantQredit allows users to build their own bespoke credit scorecards. It provides easy access to powerful statistical analysis, with a full transparency of the model development process. On top, a user can control the analysis at any given time. And all of this in a setting which is focused on combining advanced analytics with easy-to-interpret and use visualisations.

QuantQredit has been developed for statisticians and data scientists, and allows to dramatically reduce the time required for the univariate analysis and model development. Often, what used to take some weeks to achieve, can now be done within a few days, without giving up any transparency or control over the resulting scorecard.

It has however also been known to be used by business experts and managers, who also have been enjoying the power of the tool and specifically its graphical visualisations.