SAFE

Social Analytics for
Financial Engineering
E!8188 SAF€

Project objectives

This project aims to reduce the unbalance in information about the risks involved with financial products between supplier and providers of financial products in Europe. This will be achieved by using the powerful combination of machine translation and semantic sentiment analysis to capture the multilingual "wisdom of the crowd" for financial decision making.

In the domain of consumer targeted financial services the balance of knowledge between the buyers and suppliers is extremely uneven. Suppliers of financial products specifically design their offers to tempt consumers who, due to the extremely complex nature of the financial markets are unable to assess the risk involved. By automatically harnessing opinions and experiences of a wide range of international experts and product users this unbalance is reduced. The highly valuable information will be provided as a (free) service to consumers and as a paid configurable subscription feed to financial service providers or independent news providers to restore consumer confidence.

The combination of machine translation and automatic sentiment analysis has proven to be effective as semantic sentiment analysis appear to be relatively insensitive to grammatical translation errors. Especially in verbose and plentiful (highly redundant) social media messages even imperfect translations allow for reliable sentiment extraction. This was demonstrated in a precious project (Lets'MT www.letsmt.eu) where 81% translation accuracy was sufficient to drive adequate sentiment extraction from financial news messages.

To establish this potential valuable opportunity, a high capacity prototype will be created, that sources social media "Big Data" and determines the financial sentiment according to a set of selected service offerings (e.g. stock market investments, life insurance, mortgages, saving or lending money etc.). The resulting sentiment will be visualised in a GUI suitable for broad dissemination and a generic API will be delivered to enable integration in social media outings. The output will be quantitatively evaluated according to a golden standard (team of acclaimed human experts) and the actual market development.