A Hybrid Classification System to Find Financial News that is relevant

Dimitrios Kampas[1] and Christoph Schommer[1]

University of Luxembourg, Dept. of Computer Science and Communication,
`dimitrios.kampas@uni.lu, christoph.schommer@uni.lu`

Abstract. We understand Thomson Reuters Financial News as a mirror of time, in particular, as a mirror of the Sovereign Debt Crisis (SDC). We believe that the evolvement of the SDC can be comprehended more deeper (and better) in the presence of financial news that is relevant. The aim of this research work, therefore, is the design and implementation of a classification system, which is able to separate relevant news from noise and which allows a monitoring of flows of relevant financial news over time. To be more concrete, a news is being said as to be *relevant*, if it adequately consists of a sufficient number of thematic themes (*topics*) – a coherent set of financial terms, either given by financial experts or resulted by explorative a discovery process (hybridism). Each topic is described by a *relevance weight*, which is adaptive, and a topic *lifetime value*, which refers to a stable, fluctuating, and/or 'come-and-go' relevance. Testing the classification system on financial events like the *European Summits*, we expect a flow of relevances of different topics and weightiness, allowing a perspective anaylsis and a predictive relevance barometer.

This work is part of ESCAPE, a funded research project by the Fonds National de Recherche. ESCAPE is currently performed in cooperation with the Luxembourg School of Finance.

References

CHEN, C.C., CHEN, Y.T., SUN, Y., CHEN, M.C (2003). Life Cycle Modeling of News Events Using Aging Theory. In: ECML, vol. 2837, pp 47-59.

MANNING, C., RAGHAVAN, P., SCHÜTZE, H. (2008). Introduction to Information Retrieval, Cambridge University Press.

THOMSON REUTERS FINANCIAL NEWS ARCHIVE. http://thomsonreuters.com/

Keywords

TOPIC, CLASSIFICATION, RELEVANCE, FINANCIAL NEWS, SOVEREIGN DEBT CRISIS.