



Risk Management Collaboration through Sharing Interactive Graphics

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Risk management involves the cooperation of scientists, underwriters and actuaries all of whom analyse data to support decision-making. Results are often disseminated through static documents with graphics that convey the message the analyst wishes to communicate. Interactive graphics are increasingly popular means of communicating the results of data analyses because they enable other parties to explore and visually analyse some of the data themselves prior to and during discussion. Discussion around interactive graphics can occur synchronously in face-to-face meetings or with video-conferencing and screen sharing or they can occur asynchronously through web-sites such as ManyEyes, web-based fora, blogs, wikis and email.

A limitation of approaches that do not involve screen sharing is the difficulty in sharing the results of insights from interacting with the graphic. Static images accompanied can be shared but these themselves cannot be interacted, producing a discussion bottleneck (Baker, 2008). We address this limitation by allowing the state and configuration of graphics to be shared (rather than static images) so that a user can reproduce someone else's graphic, interact with it and then share the results of this accompanied with some commentary. HiVE (Slingsby et al, 2009) is a compact and intuitive text-based language that has been designed for this purpose.

We will describe the vizTweets project (a 9-month project funded by JISC) in which we are applying these principles to insurance risk management in the context of the Willis Research Network, the world's largest collaboration between the insurance industry and the academia). The project aims to extend HiVE to meet the needs of the sector, design, implement free-available web services and tools and to provide case studies. We will present a case study that demonstrate the potential of this approach for collaboration within the Willis Research Network.

Baker, D. Towards Transparency in Visualisation Based Research. AHRC ICT Methods Network Expert Workshop. Available at <http://www.viznet.ac.uk/documents>

Slingsby, A., Dykes, J. and Wood, J. 2009. Configuring Hierarchical Layouts to Address Research Questions. IEEE Transactions on Visualization and Computer Graphics 15 (6), Nov-Dec 2009, pp977-984.