::::::::NEWS::

# TRY, TRY AND TRY AGAIN!

**BEN LUDFORD**

SWORDS recently organised a seminar covering how Information Visualisation is being used by Performance Analysts to inform them on the game of Rugby Union. Rhodri Brown; a performance analyst for the Welsh Rugby Union (WRU) gave background on the analysis that is completed at the elite level.

There are three main categories:

1. Training analysis – sessions are filmed so that footage can be studied.

2. Opposition scouting – looking for themes and weaknesses to create strategies for the squad. (4 of the 7 tries that Wales scored against Scotland in the 6 nations used these strategies.)

3. Match analysis – checking if the opposition is playing as predicted and working out ways to adapt strategies if required. This was the focus of the session.

For data to be available during a match, a team of analysts manually and probably frantically input information. After a Wales game, further data is entered and 600 metrics on team and individual performance are calculated. Research is looking into ways to automate this collection.

Presenting this data can prove a challenge. Amalgamating to match level misses detail as the result of one action can lead to a 14 point swing. Therefore the metrics need to be much more detailed with respect to time. On the other hand, coaches also worry about detail taking over, and losing sight of the big picture.

This is where Matthew Parry and SportsViz come in, who provide the software used by the WRU. The software takes the data that is input during the match from the analyst's laptops every 10 seconds for use by the coaches. They look at either a selection of statistics covering whatever period of the game they choose, or a detailed timeline of the match in a clever bit of data visualisation. This timeline shows a series of 'glyphs' that represent each event and provide detail on it, e.g. type, duration, location and result. These glyphs can be selected to see the video of the event. The background of the timeline holds information about the phases of play, each represented as a bar where colour is the team in possession, height is the distance gained and width is the duration. This was an excellent example of the benefit of representing data in the way of most use to the actual user.

Rhodri had also mentioned that there is the need to analyse chains of events or pairs of metrics changing together as this is where the big effects on the game can be identified. This is currently done by the eye of the rugby expert. Rhodri asked for ideas and suggestions to assist in this task and also in where predictive analysis could be applied to forecast events which highlighted the fact that this industry is still embryonic in its exploration of O.R. applications.

I will leave you with a quote from Rhodri regarding his team of performance analysts: 'we are a small department but we like to think we punch well above our weight'. It is a sentence that may sound familiar and signifies rather well the value of O.R.

**<OR>**

# SPECIAL INTEREST GROUPS

Contact details for all special interest groups and meetings past and present are listed at:

http://www.theorsociety.com/Pages/SpecialInterest/SpecialInterestList.aspx