

## **Retail Issues, Big Data and Research – Panel Session, Mark Birkin**

**DUG Conference, 10 October 2012**

The availability of masses of demographic and geo-referenced data does not necessarily guarantee enhanced market intelligence and decision –making. It is even more necessary than ever to mobilise value-adding techniques such as spatial analysis and simulation.

Take for example the case of Twitter. A two month period in summer 2011 generated more than 200,000 location-enabled messages in the city of Leeds alone. Bearing in mind that 99% of tweets in this country are outside Leeds, 95% of messages are not geo-located, and the propensity to tweet is increasing every day, the parent dataset is quite large.

Whilst many messages are relatively uninteresting, even simple statements such as ‘Chillin at Pizza Hut with Scott and Leon’, ‘Pizza and the Simpsons: Life is Exciting’, or ‘Just spent £50 in Asda – I only went for pizza’ can yield important clues about urban mobility patterns and behaviour. Geographers at Leeds are beginning to synthesise social media such as Twitter with other data sets (e.g. census, longitudinal surveys, market research, customer data) in order to construct better models than ever before of who is doing what, where, when and with whom. Whilst such models are absolutely vital for activities such as provision of emergency services and crime prevention, they might also yield substantial insights into customer behaviour patterns, attitudes and channel use. It is important that the latest research pays attention to emergent trends in data generation and availability, and can begin to promote imaginative and original ways in which to extract the maximum value.

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Reference and links:    ESRC Talisman Project: [www.geotalisman.org](http://www.geotalisman.org)

Malleson N, Birkin M (2012) Estimating Individual Behaviour from Massive Social Data for An Urban Agent-Based Model, 8<sup>th</sup> Conference of the European Social Simulation Association (ESSA 2012), 13<sup>th</sup> September 2012, Salzburg.

<http://nickmalleson.co.uk/wp-content/uploads/2012/01/essa.pdf>