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BUSINESS SCHOOL

Complexity DTC & Warwick Business School
MiniProject Outline: Networks and the Publishing Industry

Overview
This research project will allow students to use network analysis with a rich 'real world' data source, in order to further our understanding of the competition between companies within an industry, in this case, the publishing industry.

Research Objectives
This project investigates the current state of the UK Publishing industry. Example research questions include:

- Mapping the Publishing Industry: Allocating Price / Quality (reviews, rating) vs performance data (sales rank). A Strategic Groups review of the publishing industry. Evolution over time (by using publication date)
- Mapping Products: Network of 'similar' books ('customers who bought this item also bought'). Identification of gaps / structural holes within the network and their evolution over time
- Social networks: the importance of key reviewers on subsequent reviews

Background
Knowledge of social network literature:see http://faculty.insead.edu/shipilov/downloadablepapers.htm). Background reading of strategic management, e.g. *Strategic Management Journal* http://www3.interscience.wiley.com/journal/2144/home

Data Sources
Data acquired using the Amazon Associates Web Service (API) http://aws.amazon.com/associates/ including data on: product prices, categories, customer reviews &c. This data is freely available.
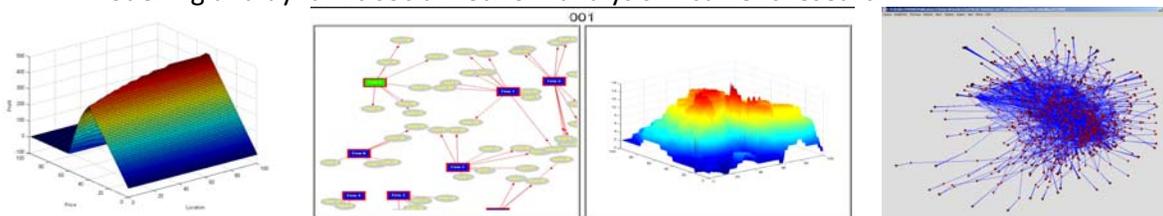
Recommended Techniques to be used
Knowledge of, or ability to learn:

- Database management (mySQL)
- Some basic programming language e.g. Java, C#, Perl, PHP (preferably PHP for web-based data acquisition)
- Social Network Analysis tools (e.g. Pajek) (optional)

Prospective Deliverables & PhD Prospects
It is hoped that this project be the basis of a PhD to be linked to the strategic management group of Warwick Business School under my supervision. The work of the project may be the central part of the thesis, but alternatives can be discussed during the project. As an example of interesting topics, I currently use agent-based modelling and dynamic social network analysis in current research.

Presentations from Prior Work