Y3 evaluation, November 2015

Introduction

Why data from the automotive industry?

A subset of data needed to be created, since the project consortium does not have access to unlimited storage and processing capacity. We decided to select the international automotive industry for the following reasons:

- an industry that is global by nature: good geographical and multi-lingual coverage
- highly complex ownership and partnership relationships: complicated organisational structures require a non-document driven analysis tool to uncover heretofore 'hidden' relationships
- highly dynamic: this industry is characterised by various events that drive large volumes of news coverage: mergers and acquisitions, bankruptcies, product recalls, new model launches, …

The dataset for this evaluation consists of news data on all major car brands ranging from 2003 to September 2015, as well as structured data (share prices, company financials for the 2010-2015 timeframe).

TASKS

1 E-vehicles/Tesla Motors/Mitsubishi

E-vehicles (i.e.: battery-powered cars) has become one of the hottest topics in the automotive industry: the increasing amount of emission reduction regulation and legislation forces 'traditional' car manufacturers to look beyond combustion engine-powered vehicles and explore alternative 'fuel' sources. This has also created opportunities for non-traditional players like Tesla.

Tesla is without a doubt the most visible company in the E-vehicle domain, not in the least because of the media coverage of its charismatic CEO.

1. How does news coverage for Mitsubishi around E-vehicles compare to 'fossil fuel' vehicles over the years?

2. What other companies is or was the Tesla CEO involved in? When did he start or end his involvement?

3. Which people/organisations are the key investors in Tesla, and when were their investments made?

4. Tesla went public in 2010: can you link key company events in the period from their IPO to now to fluctuations in their share price?

5. Which Tesla competitors can you find in the dataset?

2 Fiat-Chrysler Automobiles

FCA (Fiat Chrysler Automobiles) is a young company, but its predecessors (Fiat, Chrysler) represent many decades of automotive history. FCA is an interesting example of the industry's dynamics: changes in company and brand ownership, market strategy, funding, …

1. Can you identify the company's (or its predecessors) key events in the last 5 years?

2. What has led to the current organizational structure? Chrysler and Fiat used to be two separate manufacturers, what drove this single new conglomerate?

3. Which new car model launches belonging to FCA and/or its predecessors can you retrieve from the dataset? When did these launches take place?

4. What car brands are owned by the FCA entity?

5. Describe recent (last 24 months) changes in ownership structure of FCA and/or its predecessors

3 Takata

Takata, a world-leading manufacturer of airbags, used to be quite anonymous: usually only the actual car manufacturers get news coverage in the regular media. Being a parts supplier to well-known car makers, this Japanese company hardly received any news coverage at all, making it a big unknown to the average 'news consumer'.

That changed drastically, however: enormous amounts of their product didn't meet the safety standards they were supposed to be designed for…. This caused one of the largest examples of product recall (asking buyers to return their purchases so they can be repaired or replaced) in recent history.

1. Which companies were affected by the 'Takata scandal' in June 2015?

2. Can you find alternative suppliers to Takata in the dataset?

3. How many vehicles were recalled due to faulty Takata components?

4. Can you assess the total cost of damage caused by the recalls?

5. What do the Takata share price trends tell us about the recall actions?

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