Figure 1. Hype Cycle for Advanced Analytics and Data Science, 2015

- **Predictive Analytics**
- **Big Data**

Source: Gartner (July 2015)
Dry Bulk Data Sources For The One Man Orchestra

Objectives and Sources
Vessel Operator‘s Research View
ETL
Disclaimer

• Own personal views of the presenter
• Some views may be outdated by developments in, say, UNCOMTRADE.
Utopia objective

- prescriptive analytics
- predictive analytics
- descriptive analytics
- analytics ready data
- Load
- Transformation
- raw data
- Extraction
Research Strategy

• High level plan to achieve one or more goals under conditions of uncertainty.
• Achieve predictive analytics without overload
Most is Files

Extract → Transform → Load
Objectives

- Annual supply, demand, utilization
- Monthly ditto
- AIS data analysis
- Forecasting timecharter rates

Pick two ... or one or... reduce scope
Objectives, detail 1

- Annual and Monthly detail analysis of supply, demand and utilization
  - Annual Fleet, speed, congestion
  - Annual trade in mmt by country to country, ballasting, ton-mile
  - Annual timecharter/earnings
Objectives, detail 2

- AIS
  - Daily data
    - Regional oversupply
    - Speed development
    - Anchored vessels at ports (congestion proxy)
    - Export activity
  - Hourly data
    - Competitor analysis
    - Port efficiency
    - Panama Canal efficiency
Objectives, detail 3

• Forecasting
  – using supply demand analysis and guessing
  – using regression short term

• Databases and code to support the analysis
• Maintain/udpate data
• Time and budget limitations
Potential Sources

- Clarksons.net
- Bloomberg Terminal
- PIERS, Global Trade Atlas, Fairplay Fleet Register
- UNCOMTRADE, Trademap
- MSI, MarSoft, Drewry
Data coverage matrix

<table>
<thead>
<tr>
<th></th>
<th>Bloomberg Terminal</th>
<th>Clarksons.net</th>
<th>IHS</th>
<th>UNCOMTRAD E + USDA</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade C-to-C</td>
<td></td>
<td>Bespoke</td>
<td>GTA</td>
<td>ANNUAL</td>
<td>TradeMap</td>
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<td>Fleet</td>
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<td>SIN TS + CrossSection</td>
<td>GFRS Cross</td>
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<td>Speed</td>
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<td>TS + Cross</td>
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<td>TimeCharter rates</td>
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<td>SIN TimeSeries</td>
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<td>Baltic Exchange</td>
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<td>Short term forecasting</td>
<td>Chinese indicators</td>
<td></td>
<td></td>
<td>Baltic Exchange</td>
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</tbody>
</table>

- another dimension is what years, each source cover each data area
ITC Trademap

• Excel download one country, one commodity.
• Mixed quantities
• Data seems late compared to other sources, eg for China.
• UNCOMTRADE monthly the solution?
• Graph system resets, and formats not powerpoint friendly.
UNCOMTRADE

- Best concept – data query and batch
- Very good subscription transparency
- Efficient ETL
- Inconsistent volume types reported in the past
- Wood and grains used to be messy
- Late data
- Malaysia and Indonesia ao.
Clarksons.net

- Pick a timeseries
- download it in excel
- ETL expensive
- Data query system without bespoke negotiation would be nice.
IHS Maritime

- Have bought key data suppliers.
- Poor search/filter transparency
- Cumbersome price negotiation
- No query system
- ETL expensive
- Sales and analysts too far from customer/ too generalist.
- Exclusive distribution of customs data?
- resolution A.600(15) on IMO numbers?

Maritime & Trade

Find IHS Maritime Industry Products and Solutions

See Results In

Filter By

Bought, amo, in the past 10 years
- PIERS
- Fairplay ship register
- Sea-Web
- Global Trade Atlas
- TradeMap (non-ITC)
- Harriman Chemsult

http://maritime.ihs.com/
https://www.ihs.com/industry/maritime.html
IHS’s „contact us“ wall
Why IHS?
Opportunity to Help Thousands of IHS Global Customers

[Image: Various company logos]
IHS Delivers Critical Information & Insight to more than 30,000 customers in 180 Countries across the globe

- IHS in Aerospace & Defense:
  Trusted solution partner across all sectors of the industry
Option to download all data available.

For PSD, seasons problematic in calendar year analysis.

Export data often does not match official data.

Would be better with monthly split, monthly smoothing or calendar year option for all commodities.
USDA, Export Sales Query System

• Excel again
• Weekly data, not exactly monthly
• Government shutdown needs correction
Bloomberg

- Set up auto-load into excel
- Write PS-script to get data that must be pulled via system.
Options for small operator research units looking to predict target vars

- MSI or just broker presentations/support for analysis of fundamentals – not forecasting
- Some inhouse models to know the methods – dont maintain them.
- Clarksons.net
- Bloomberg for timeseries for predictive analytics – incl AIS data
- Avoid MS Access; go SQLite or MySQL.
- Learn R or RapidMiner; excel limited for analysis
- Get into the hype cycle