

Big Data for the smaller business

TFMA 2015

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Golden Orb

What is “Big Data”?

45,000,000,000,000,000,000

- bytes of consumer internet traffic per month

80% of data created in the past 12 months

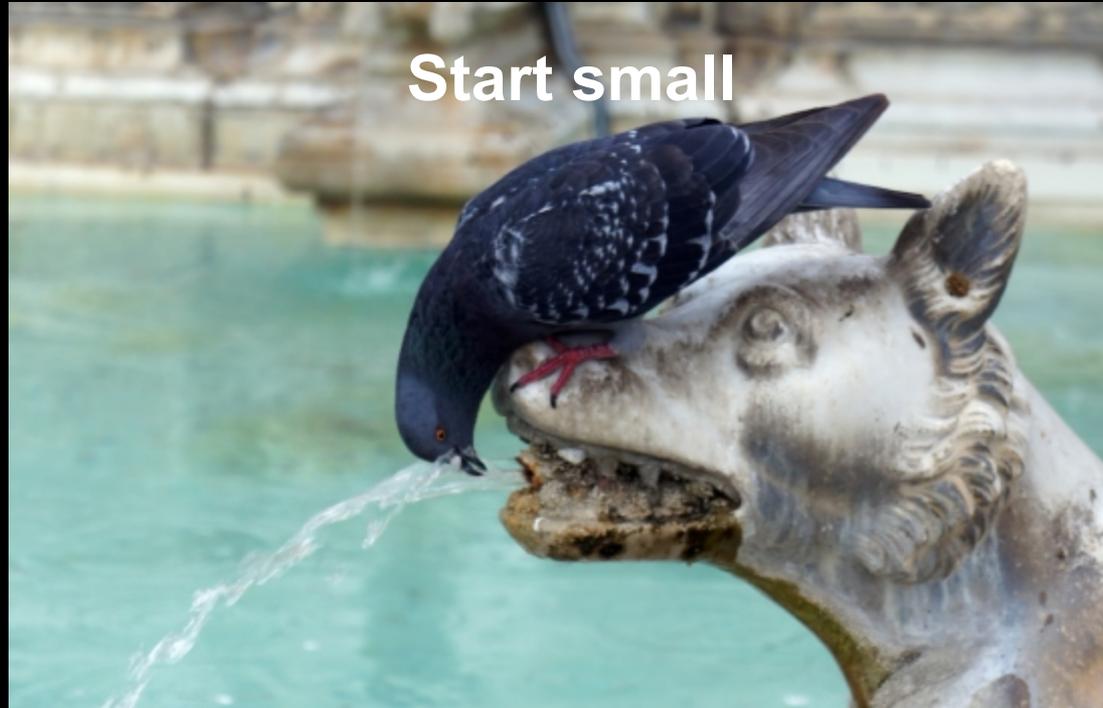
What is the relevance of **Big Data** to smaller businesses?

- New analytical capabilities
 - Much is open source
- New sources of data
 - Many free to use
- Real-time data/analysis
 - Adaptive websites
- Reduced cost of entry
 - Low-cost, cloud-based tools

Big Data - why bother?

- Because it's there!
 - Better insight
 - Better customer service
 - Improved profitability
 - New revenue streams
 - Competitive action

Getting started with Big Data



Getting started with Big Data



Getting started with Big Data

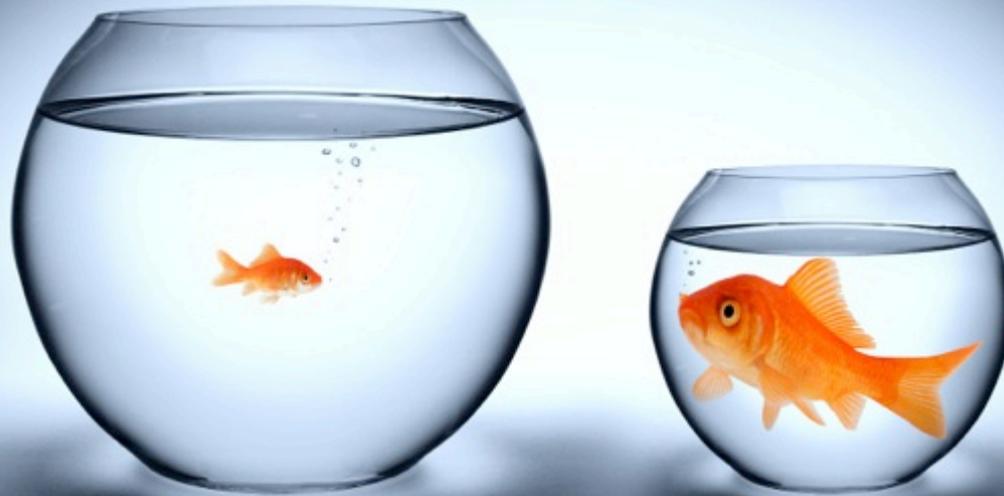


Visualise



Getting started with Big Data

Join Big with Small

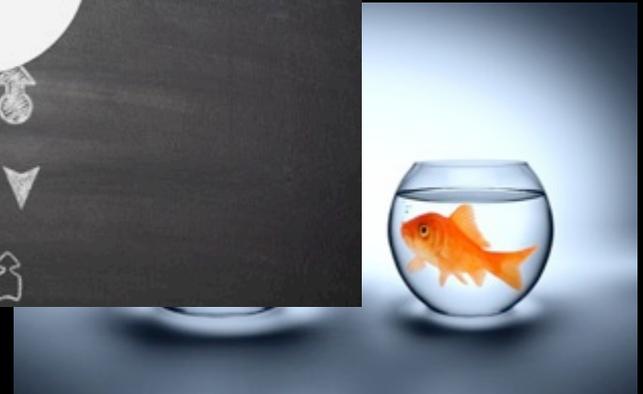


Getting started with Big Data



Think Big Data!

**BIG
DATA**



Tools and resources to get started with Big Data

- Platform
 - Google Cloud Platform
 - Amazon Web Services
- Language
 - Python, R
 - Google Apps Script
- Visualisation
 - Python/R built-in visualisation
 - Google Fusion Tables/Google Sheets
 - Tableau

Tools and resources to get started with Big Data

•Platform

```
import tweepy

auth=tweepy.OAuthHandler(consumer_key="xxxxx", consumer_secret="yyyyy")

api=tweepy.API(auth)

results=[]
for tweet in tweepy.Cursor(api.search, q="#tfma2015").items(500):
    results.append(tweet.text)
```

- Python/R built-in visualisation
- Google Fusion Tables/Google Sheets
- Tableau

Tools and resources to get started with Big Data

tableau+public Beta

GALLERY

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BLOG

RESOURCES

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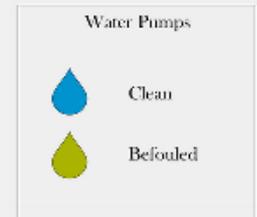
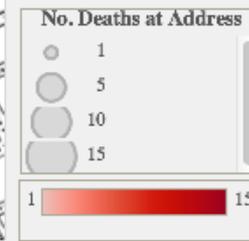
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Then, Snow mapped these data points onto a map of the Soho neighborhood.

The results were startling.

NB: The map reprinted here is Snow's original. I geocoded the addresses, introduced the number of deaths as a dimension in the dataset, and uploaded the map as a background image. Then, I conformed the dimensions of the map to the appropriate lat/long. Thus, the locations appear as they would have on Snow's map.



— | tableau

GoldenOrb.

Helping business to profit through technology

TFM&A 2015 - Big Data for the smaller business

Tools and resources to get started with Big Data

- Public tools and data sources

- Google

- Correlate, BigQuery, Custom Search, Prediction
 - Public data explorer, shared fusion tables

- Amazon

- Elastic Map Reduce / Hive

- Open Government Licence

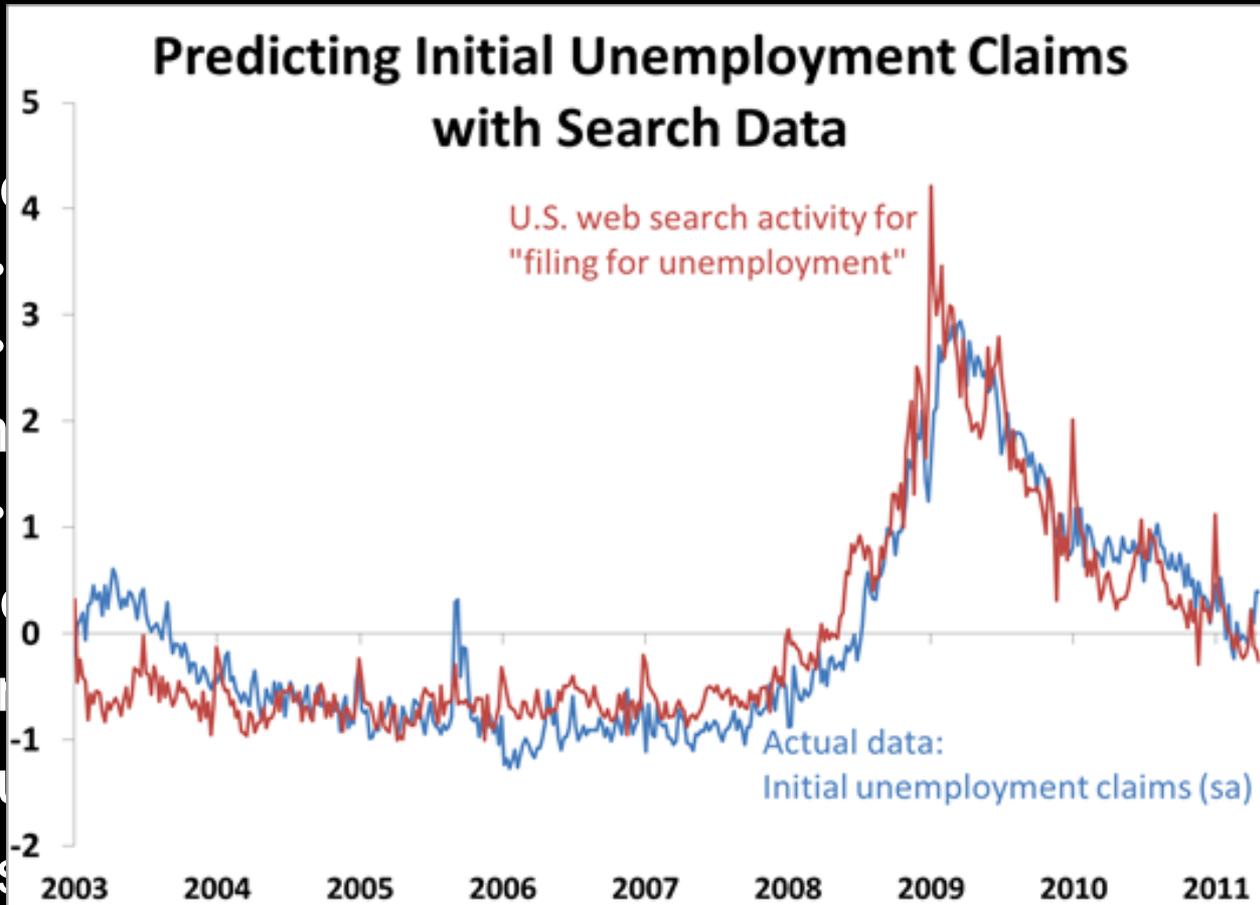
- Learning resources

- Coursera

- Roshan data mining videos

Tools and resources to get started with Big Data

- Public
- Google
-
-
- Amazon
-
- Open
- Learning
- Cour
- Ros

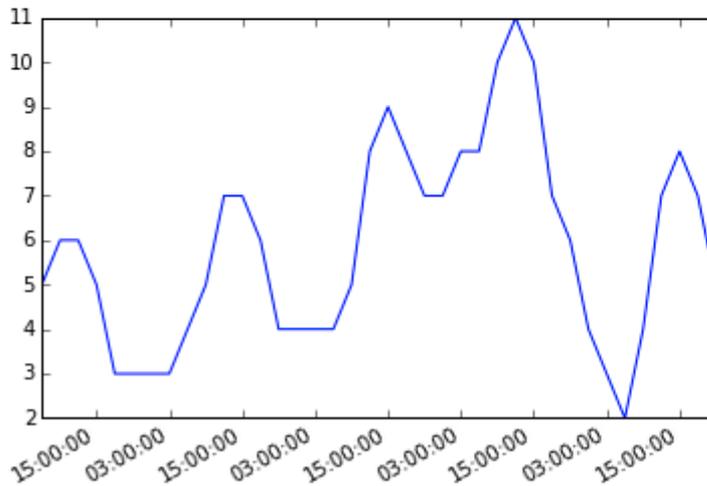


Tools and resources to get started with Big Data

• P

```
In [3]: import metoffer
M = metoffer.MetOffer(METOFFICE_KEY)
x = M.nearest_loc_forecast(51.4033, -0.3375, metoffer.THREE_HOURLY)
y = metoffer.parse_val(x)
```

```
In [4]: labels, temp = zip(*[(d['timestamp'][0], d['Temperature'][0]) for d in y.data])
p = plt.plot(labels, temp, 'b-')
p[0].figure.autofmt_xdate()
```



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Thank You

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