

No AI Without Big Data

Key Points **History of Big Data**



The Beginning of the Information Overload

8 years to tabulate
Tabulate US Census Data

1880

1881

1900

1920

1930

1940

1960

1964

1993

1994

1995

1997

1999

2000

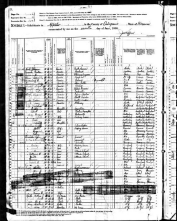
Economic Boom



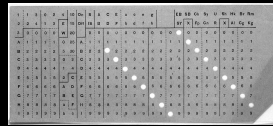
The rise of **Centralized Computing Systems**



World Wide Web growth amplifies big data problem



Taming the "big data"
Invention of Punch Cards
The Hollerith Tabulating Machine



The Impact on Libraries



Internet of Things coined



The term "big data" was first used by NASA researchers
The Problem of Big Data

Gartner's 3Vs

Volume, Velocity, & Variety



The Launch of AWS

2001

2002

2003

2004

2007

2012

2014

2015

2016

2017

2018

2019?

The Facebook

appears with the rise of social networks



Facebook reaches 1 billion users



Big Data

influences the outcome of US election?

Serverless Computing on the rise

Birth of the "Alicorns"

Apple Inc. & Amazon touch \$1 trillion mkt cap.



RavenPack is born. First alternative data for quant firms



Data science, fake news can be used to **manipulate public perception**

Data Privacy

GDPR, the Cambridge Analytica data scandal, global regulatory scrutiny...



Big Data **in Asset Management**



80%

of available data to hedge funds is
unstructured and most of it is text

Generating Alpha with **Unstructured Data**



Text

News, filings, social media, research reports, emails, chats, etc.



NLP Engine

Text parsing, named entity recognition, tagging, sentiment, novelty & temporal analytics



Analytical Tools

Statistical analysis, machine learning, & predictive modelling



Alpha Generation

Alpha signals, input factors, & overlays

NLP Engine



Entity Detection

Named entity recognition of people, places, and things



Relevance

Identify the importance of entities mentioned



Topic Tagging

Determine what documents are about



Parsing

Understand the meaning of words and sentences



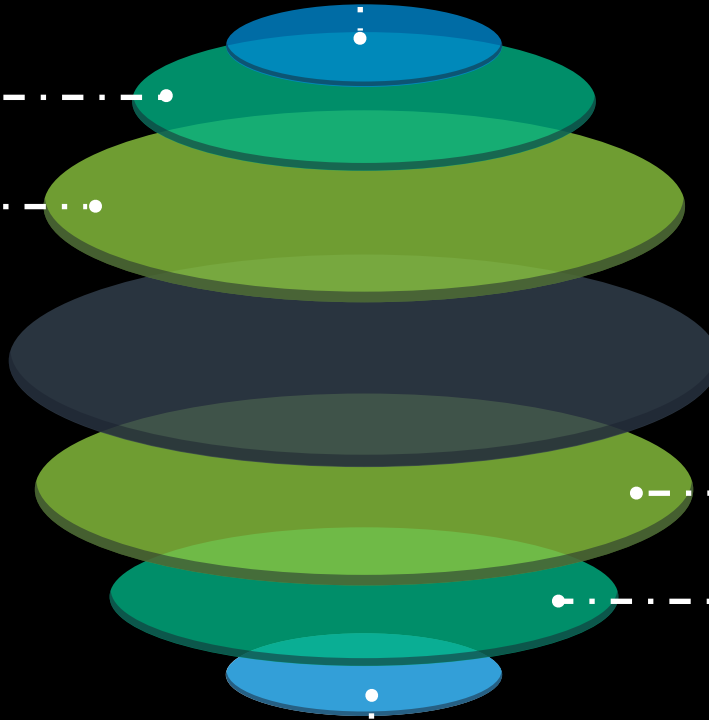
Novelty & Temporal

Similarity analysis and temporal data



Sentiment Analysis

Measure positive, negative, or neutral sentiment

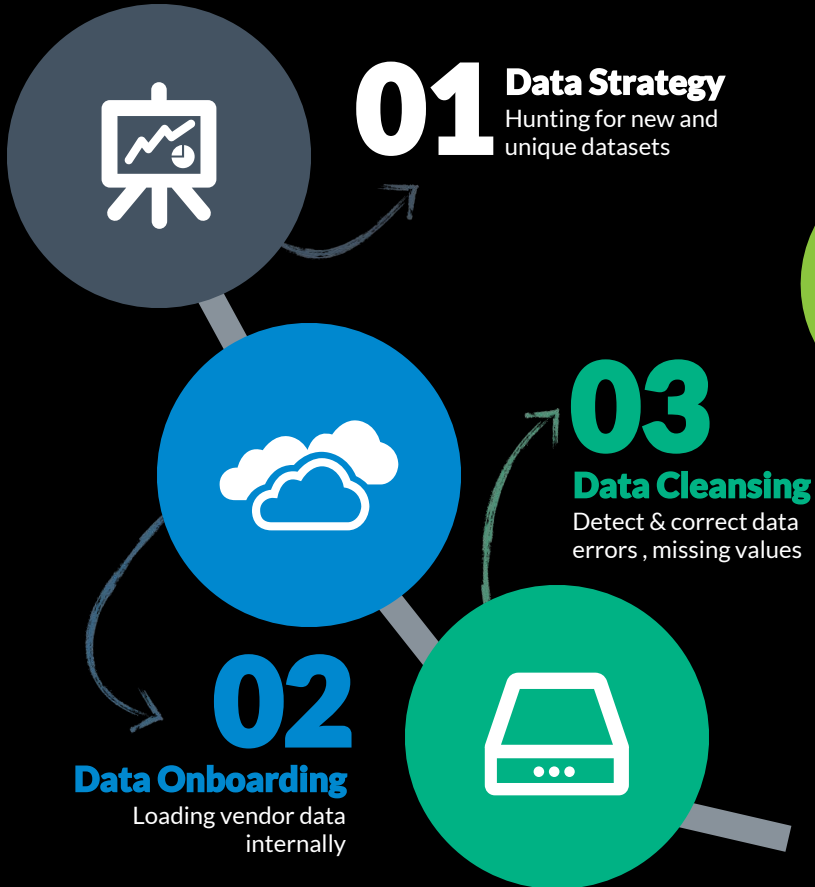


Big Data @ AI Funds



All about the data...

Big Data @ AI Funds



Build or Buy?

Evaluate true cost of sourcing multiple data feeds

Raw or Machine Readable?

Unstructured data cannot be handled by traditional data tools

DIY or Hire?

Hard painstaking tasks that take up valuable time and resources

All about the data...

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