

How to Make Sense of Your Data?



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SMART FARMING DATA SESSION – JUNE 12TH 2019



“Data is the new oil. It’s valuable, but if unrefined it cannot really be used. It has to be changed into gas, plastic, chemicals, to create a valuable entity that drives profitable activity; so must data be broken down, analyzed for it to have value.”— Clive Humby

What is Big Data?



Big Data can also be thought of as a **generic term** that describes the new way of understanding the world through personal data (Lemov, 2016; Lichy, Kachour & Khvatora, 2018)

40 ZETTABYTES
[43 TRILLION GIGABYTES]
of data created by 2020, an increase of 300 times from 2005



6 BILLION PEOPLE
have cell phones



WORLD POPULATION: 7 BILLION

The New York Stock Exchange captures

1 TB OF TRADE INFORMATION
during each trading session



By 2016, it is projected there will be

18.9 BILLION NETWORK CONNECTIONS

— almost 2.5 connections per person on earth



Volume SCALE OF DATA

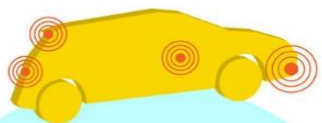


It's estimated that
2.5 QUINTILLION BYTES
[2.3 TRILLION GIGABYTES]
of data are created each day



Most companies in the U.S. have at least
100 TERABYTES
[100,000 GIGABYTES]
of data stored

Velocity ANALYSIS OF STREAMING DATA



Modern cars have close to
100 SENSORS
that monitor items such as fuel level and tire pressure

The FOUR V's of Big Data

From traffic patterns and music downloads to web history and medical records, data is recorded, stored, and analyzed to enable the technology and services that the world relies on every day. But what exactly is big data, and how can these massive amounts of data be used?

As a leader in the sector, IBM data scientists break big data into four dimensions: **Volume, Velocity, Variety and Veracity**

Depending on the industry and organization, big data encompasses information from multiple internal and external sources such as transactions, social media, enterprise content, sensors and mobile devices. Companies can leverage data to adapt their products and services to better meet customer needs, optimize operations and infrastructure, and find new sources of revenue.

By 2015
4.4 MILLION IT JOBS
will be created globally to support big data, with 1.9 million in the United States



As of 2011, the global size of data in healthcare was estimated to be

150 EXABYTES
[161 BILLION GIGABYTES]



30 BILLION PIECES OF CONTENT
are shared on Facebook every month



Variety DIFFERENT FORMS OF DATA



By 2014, it's anticipated there will be
420 MILLION WEARABLE, WIRELESS HEALTH MONITORS

4 BILLION+ HOURS OF VIDEO
are watched on YouTube each month



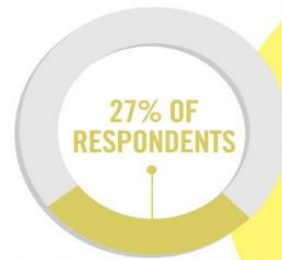
400 MILLION TWEETS
are sent per day by about 200 million monthly active users



1 IN 3 BUSINESS LEADERS
don't trust the information they use to make decisions



Poor data quality costs the US economy around
\$3.1 TRILLION A YEAR



in one survey were unsure of how much of their data was inaccurate

Veracity UNCERTAINTY OF DATA

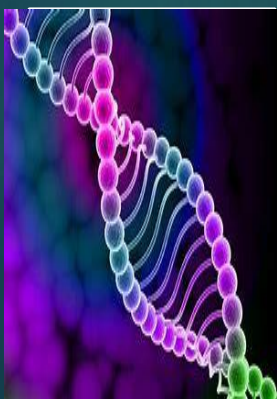
Types of Farm Data...



Milk
production



Genetics



Market prices
/ trends



Breeding

Farm Data...



Field Data



Live Stock
Management



Retail Data

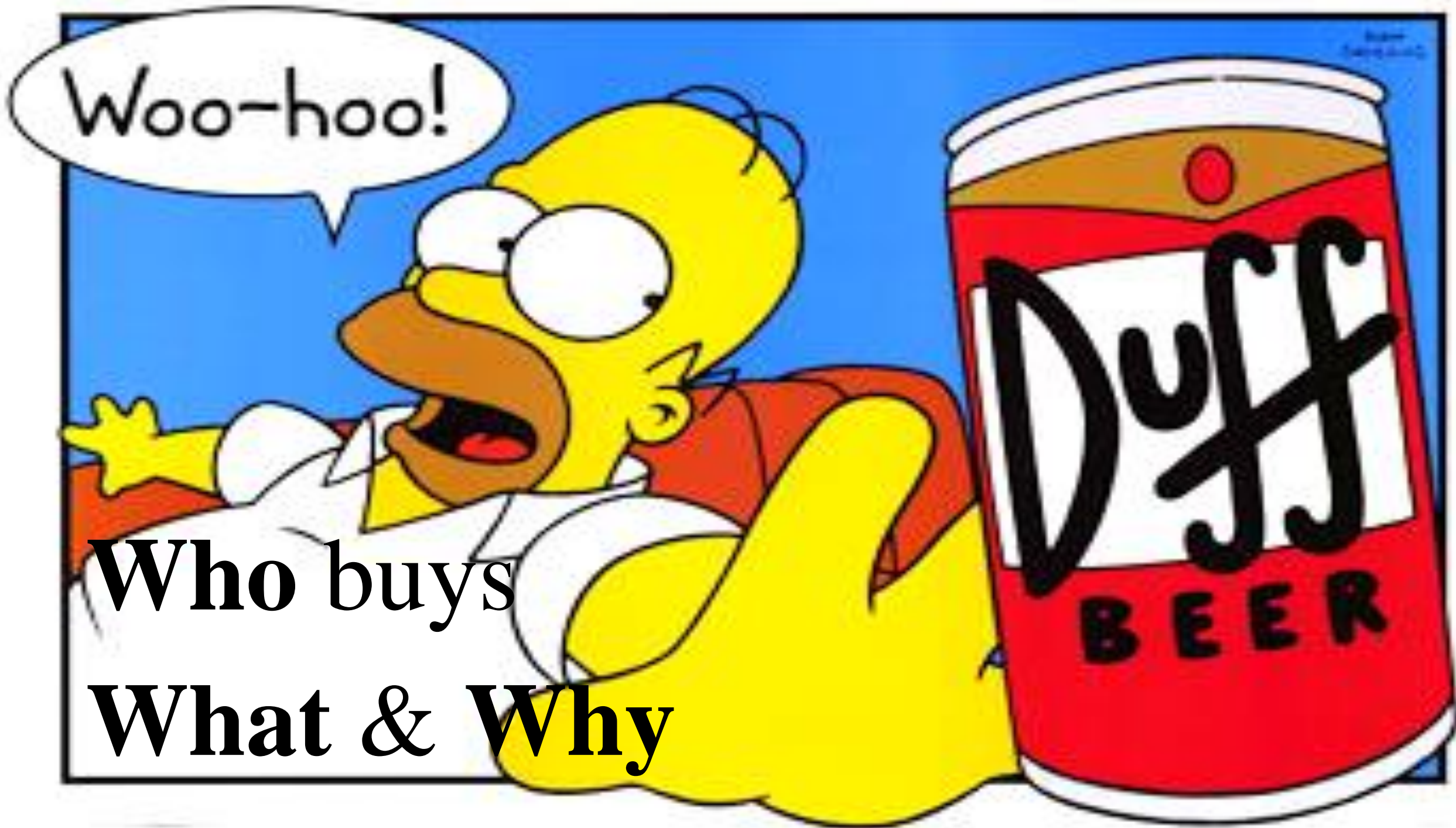


Climate
Weather



Satellite /
Drone Data





Woo-hoo!

**Who buys
What & Why**

COLLABORATION ...



Department of
**Agriculture, Environment
and Rural Affairs**

dunnhumby

WHO WE ARE WHAT WE DO CAREERS INSIGHTS CONTACT

WE'RE A CUSTOMER SCIENCE COMPANY

We use
data and
science to:

**PUT CUSTOMERS AT THE
CENTER OF EVERY DECISION**



University of
Kent

University of
ULSTER

The world's first Customer Data Science platform

With our unique mix of technology, software, and consulting, we are democratising Customer Data Science, empowering businesses everywhere to better compete and thrive by putting their Customers First.

[Watch ▶](#)[More ▶](#)

Why partner with dunnhumby?

For nearly 30 years, we've partnered with businesses around the world to use Customer Data Science to deliver exceptional customer experiences, personalised to their needs and expectations, wherever they are – in-store, offline and online. The results: competitive advantage against traditional and new market entrants, and increased revenue and profitability.

Open for
Questions /
Discussions.

Thank You.

