

Characteristics of Big Data:

Velocity

After this video you will be able to..

- Describe the velocity of Big Data
- Add the term “real-time streaming” to your big data vocabulary
- Identify why data velocity is more relevant in today’s world than ever before

Velocity == Speed

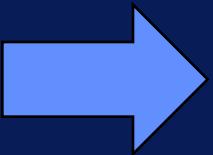
$$V = \frac{\Delta x}{\Delta t}$$

Speed of creating data

Speed of storing data

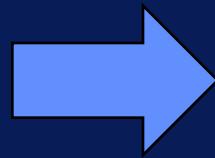
Speed of analyzing data

Big Data

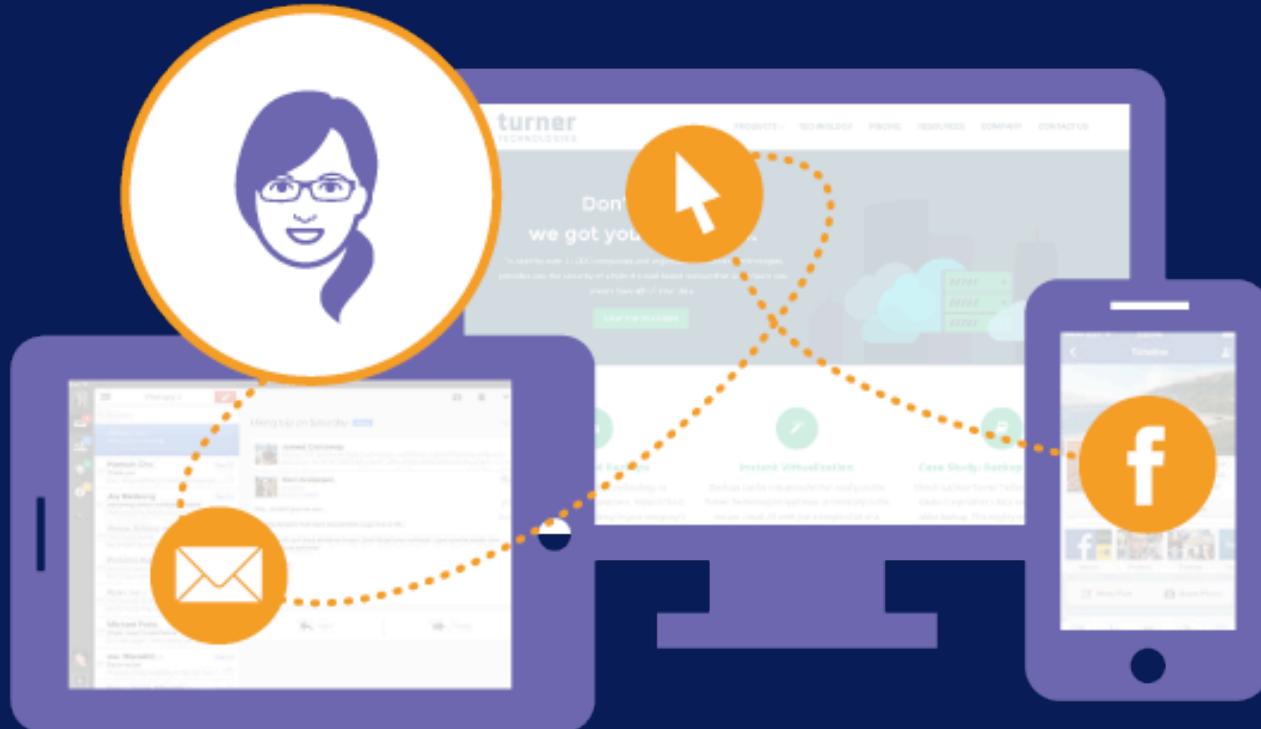


Real-time action

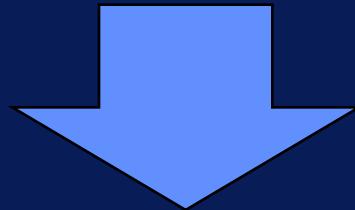
Big Data



Real-time action



Late decisions



Missing opportunities



LET'S TAKE A
— ROAD TRIP —

How to decide what to pack ?

How to decide what to pack ?

Use weather information
of last year at this time?



How to decide what to pack ?

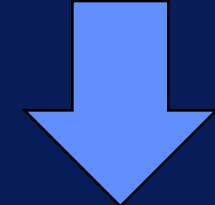
Use weather information
of last month ?



OR

Use weather status of
this week or today ?





Action

Real-time Processing

Batch Processing



Real-Time Processing



Batch Processing



Incomplete

Real-Time Processing



Fast

Rate needed for data-driven actions



Rate of generation and processing of data

Speed of Data Generation

Slow



1 = \$

Speed of Data Processing

Slow



2 = \$\$



3 = \$

4 = \$\$\$

Fast

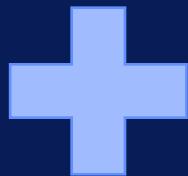
Fast

Which path to choose?

Streaming data

=

“what's going on
right now”



Streaming data

=

gets generated at a
varied rates

Real-time processing

Agile and adaptable business decisions