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



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







Collect Data



Clean Data



Feed in Chunks



Wait



Act

Real-Time Processing



Instantly capture streaming data

Feed real Process Real Time

Time

Batch Processing --> Incomplete

Real-Time Processing --> Fast

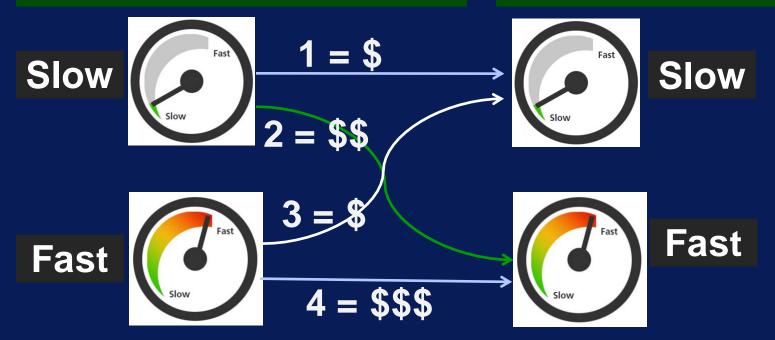
Rate needed for datadriven actions



Rate of generation and processing of data

Speed of Data Generation

Speed of Data Processing



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