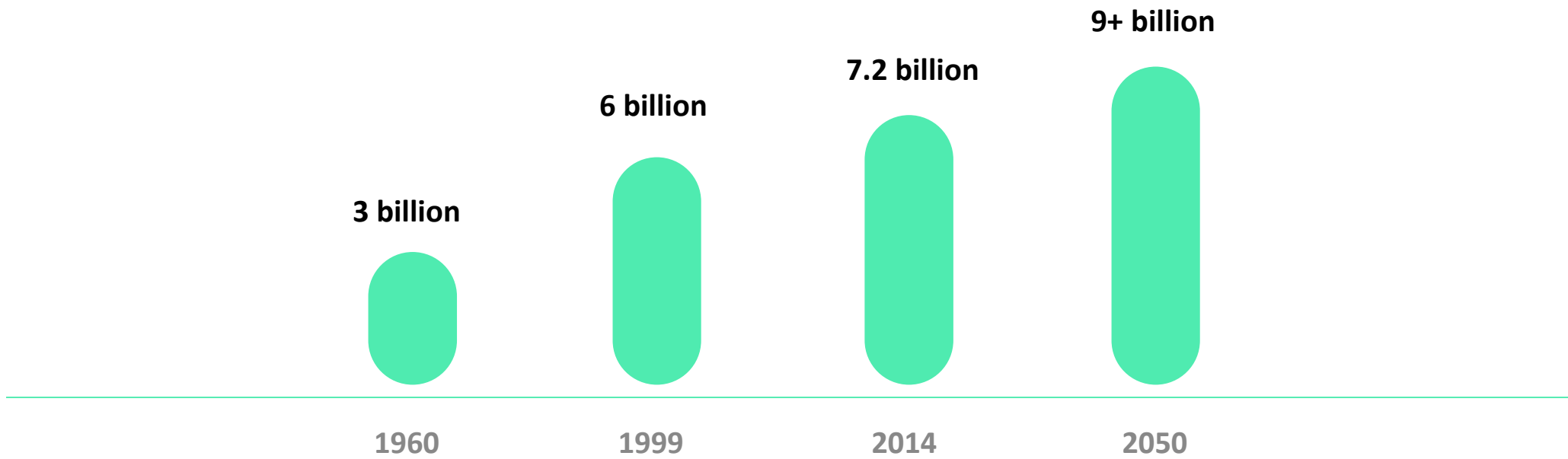


# Connecterra

Evolution Through Intelligence



To nourish another 2 billion people in 2050, food production must rise by 60%.

**4.2 Billion** People

Will enter the mainstream consumer class by 2025 (up from  
2.5Bn in 2010)

3000 Liters in 2014

The average water footprint of a typical consumer

Sustainable?



## **Sensors**

Small and Cheap



## **Data Technologies**

Zetabyte scale,  
billions of data  
points processed  
fast



## **Cloud**

Low cost, high compute,  
GPU optimized for  
mathematics

**A Perfect storm of technologies**



The advertising industry is well and kicking with over \$1Tr of market cap

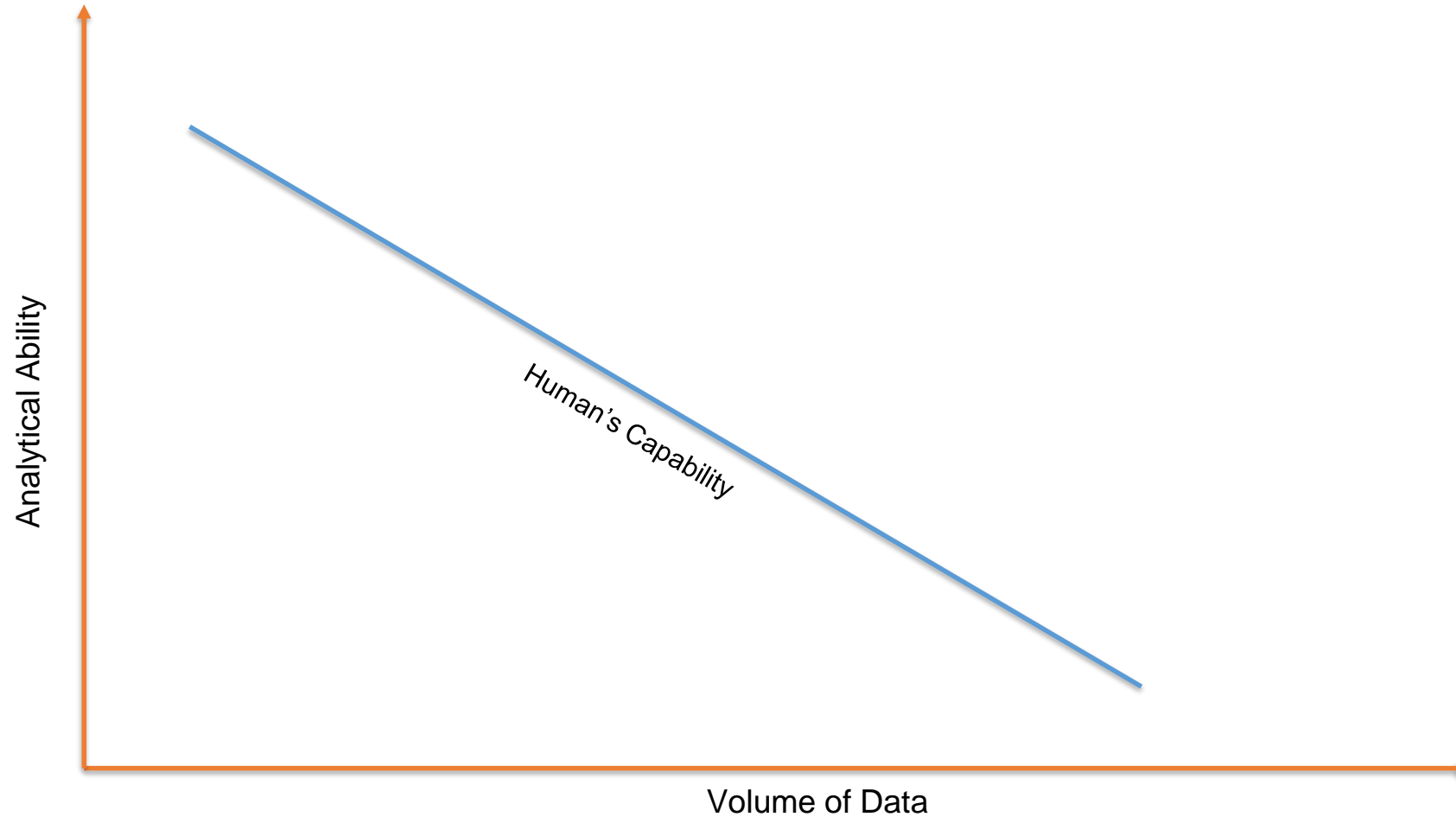
We don't really need more data



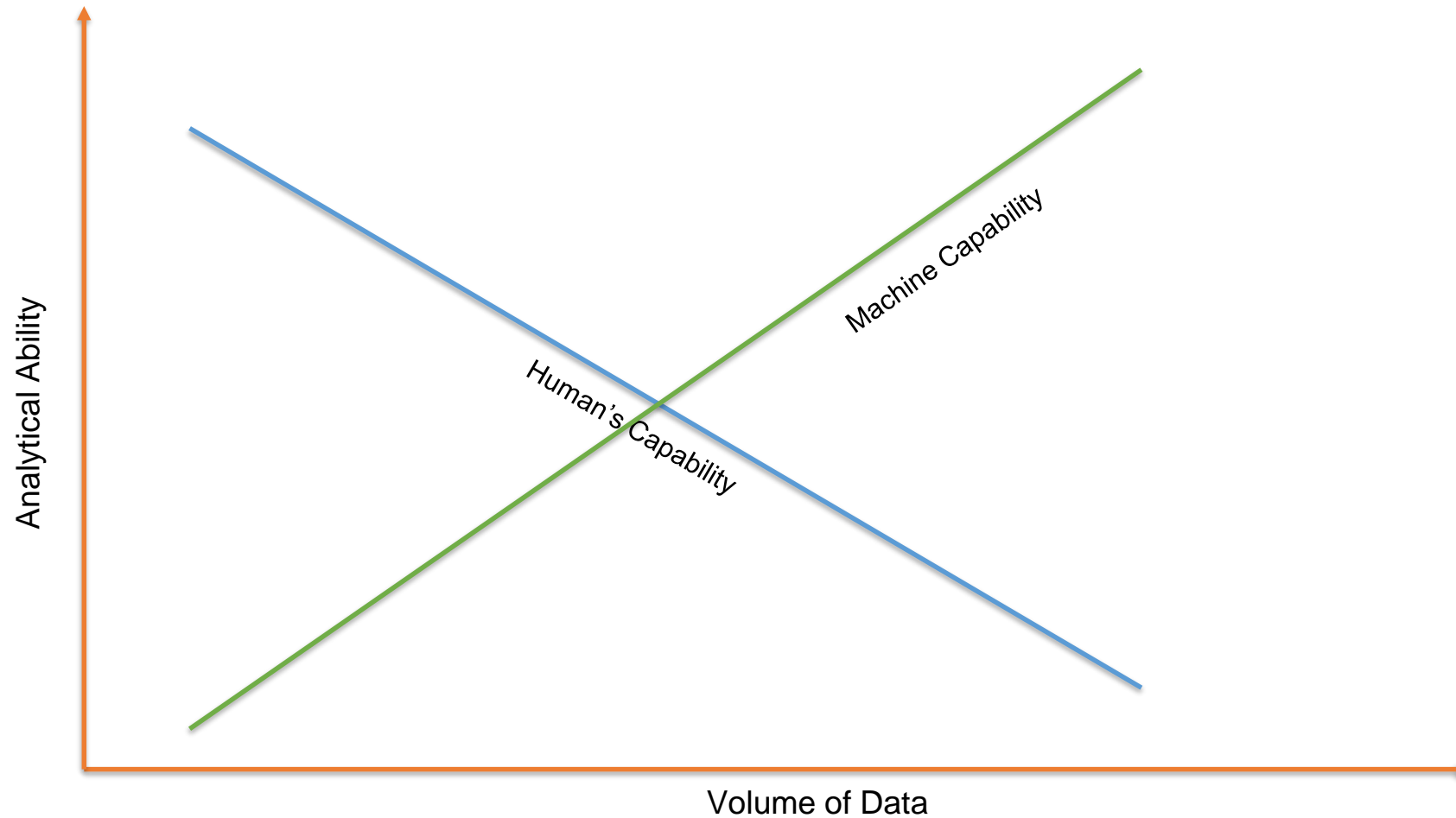
We need more insights

And insights need data; quality and volume

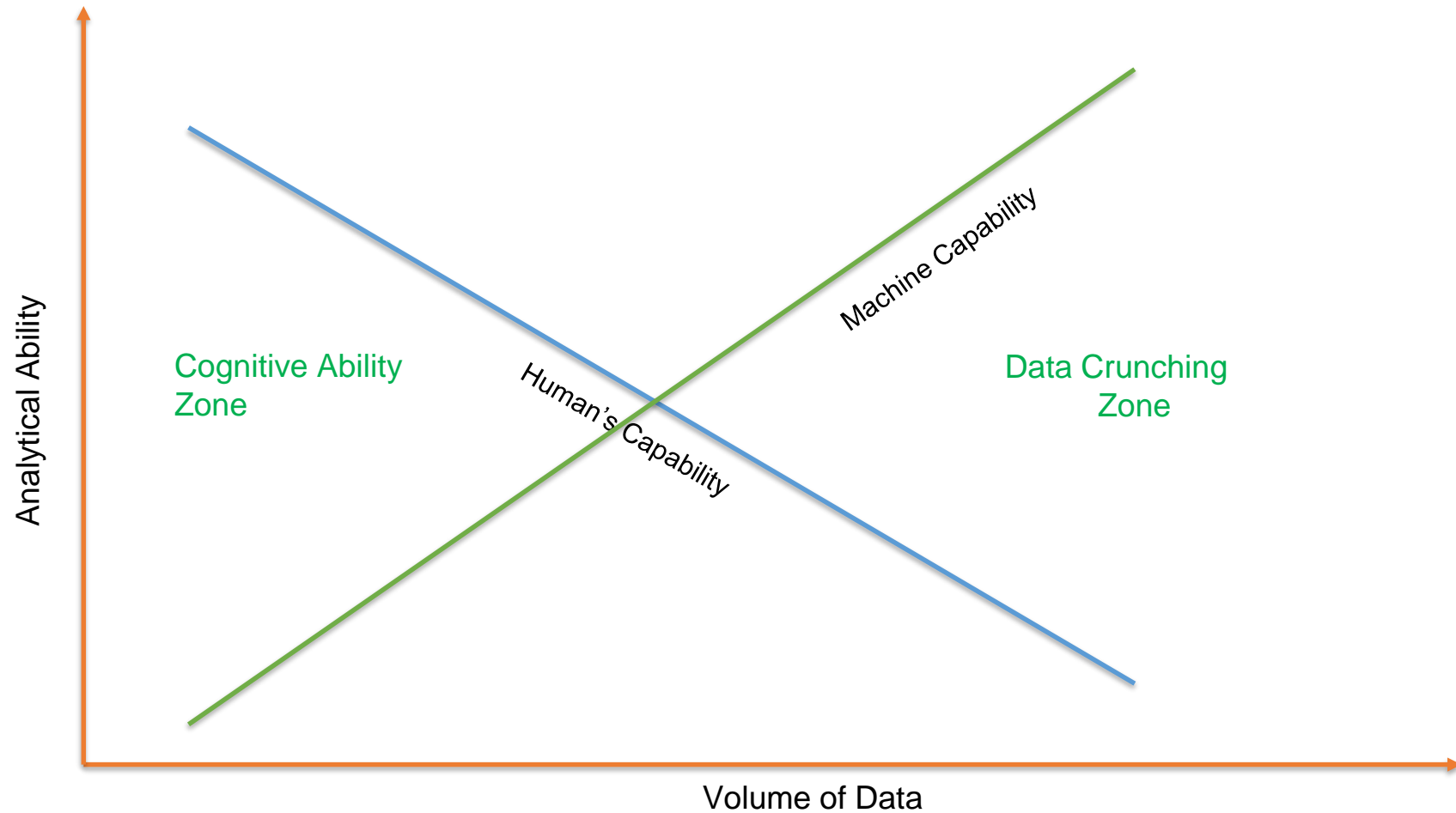
# The Paradox of data analysis



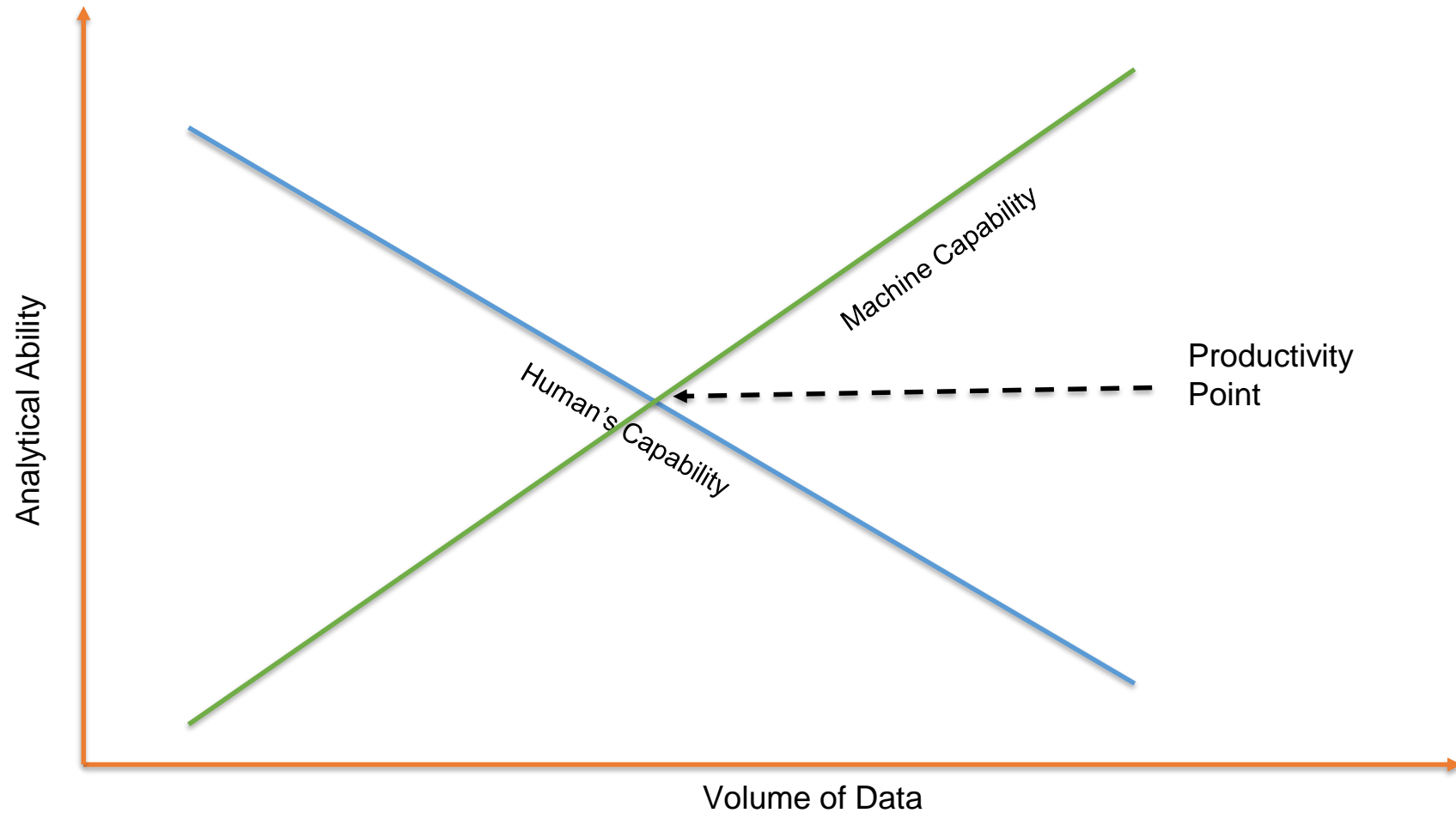
# The Paradox of data analysis



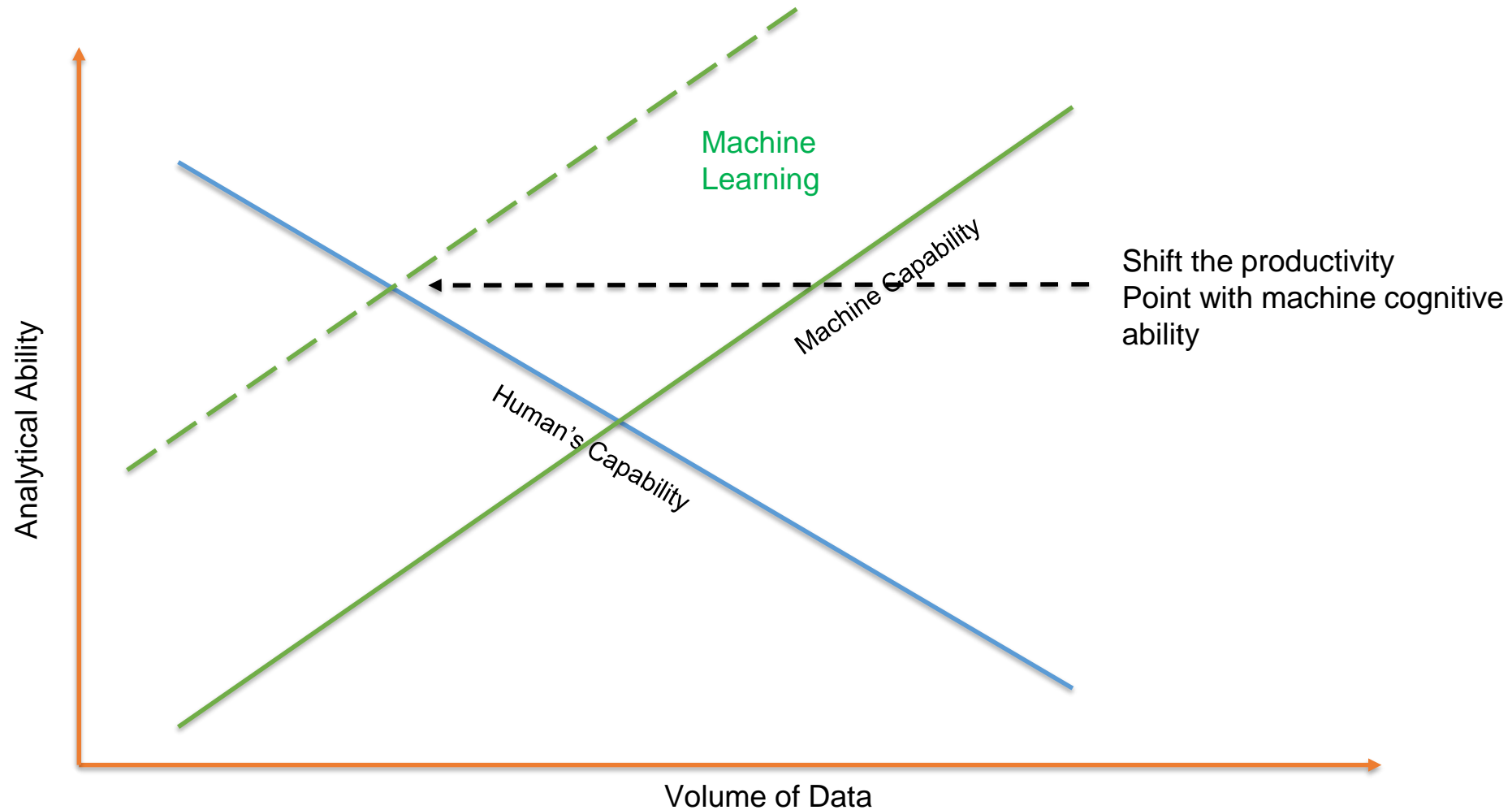
# The Paradox of data analysis



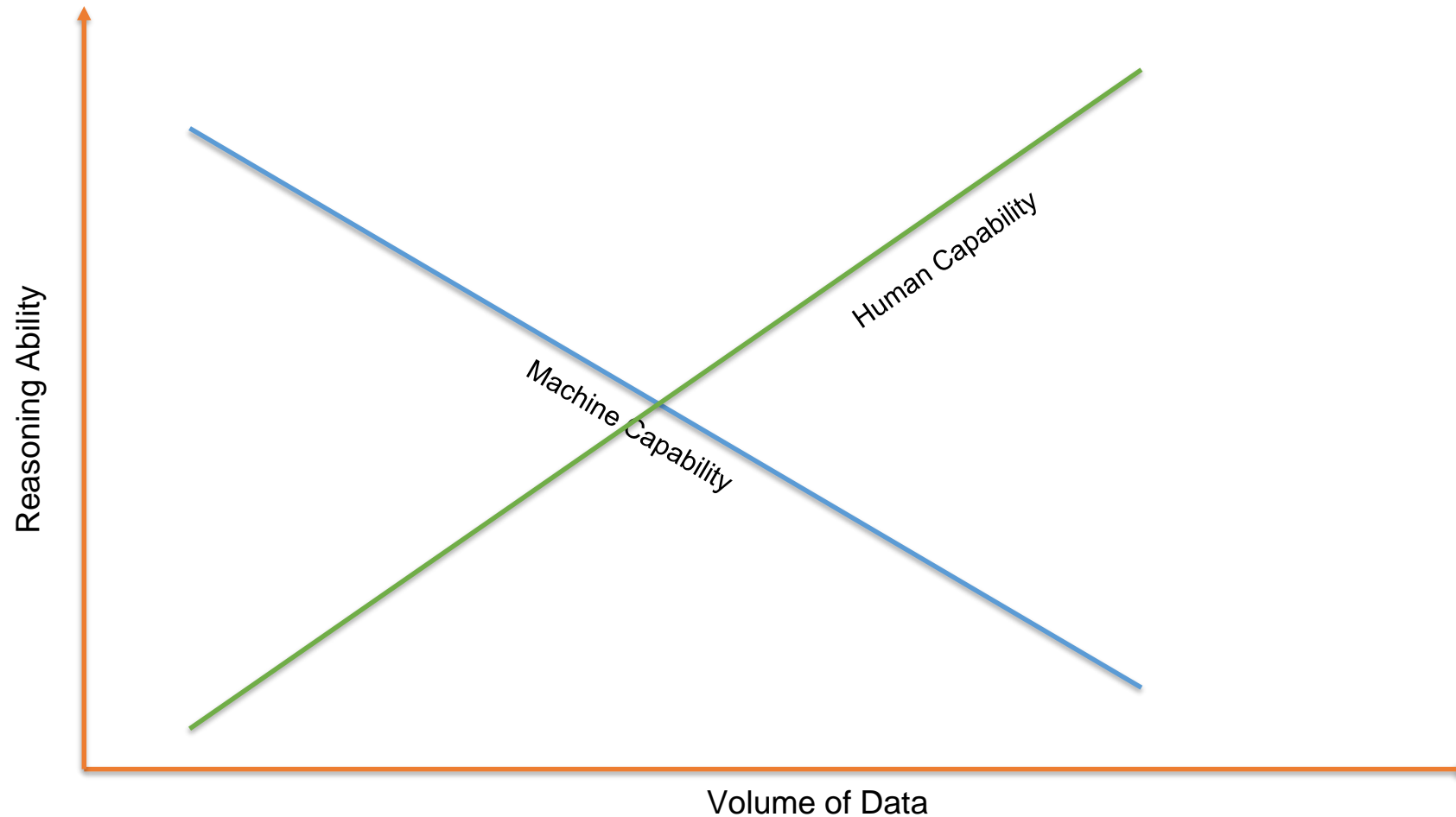
# The Paradox of data analysis



# The Paradox of data analysis



# But the trick is in asking the right question!





Process large amounts of data with reasoning ability = Insights



.....the year so far in the machine learning world

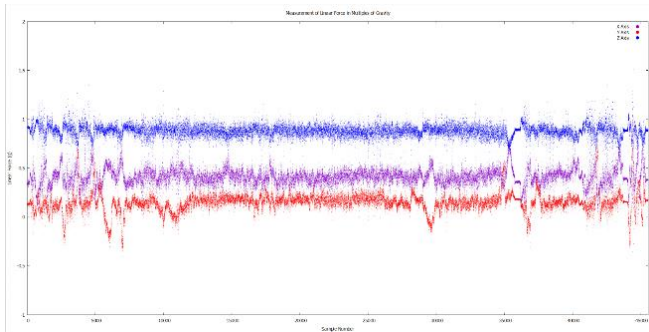
**Connecterra combines the experience and intuition of humans, with acute sensors and the power of AI**

ida



**Hi, my name is Ida,  
I am a dairy farmer's  
assistant. I can learn about  
your farm and help you run a  
more efficient operation.**

ida



Sensor Data



Cow shows an unusual eating behaviour.

#9998 Oh Well

Insights

# An example of what we found

## Insights

New (4)

Archived (0)



### Rumination Decreased

#9212 Daisy

11 days ago



### Low activity

#0091 Brownie

10 days ago



### Potential foot problem

#5182 Donut

10 days ago



### Risk of rumen acidosis

#0921 Cookie

10 days ago



### Rumination Decreased

Daisy's rumination has been lower than usual the past 48 hours



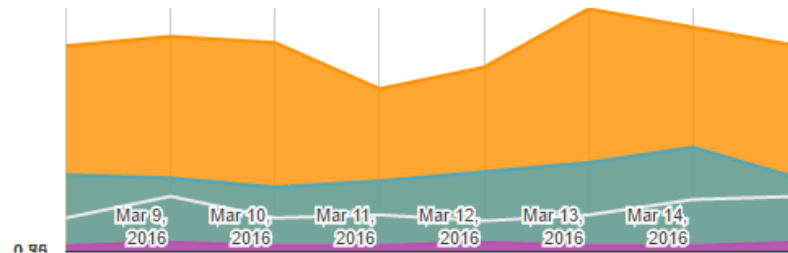
#### AFFECTED COW

#9212 Daisy

#### TO-DO

☒ Check the concentrates level for Daisy

FEED ACTIVITY MEALS ALL



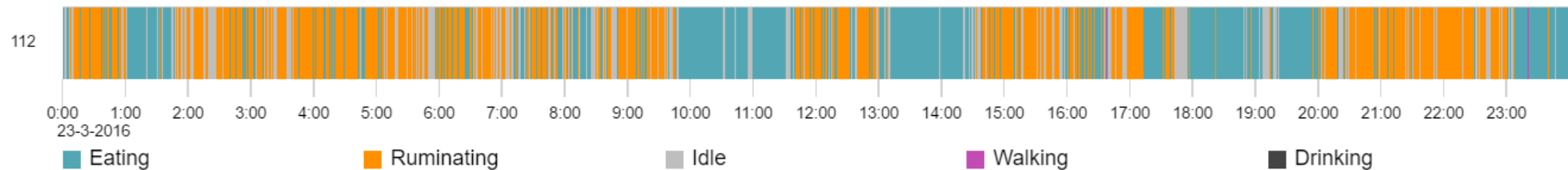
#### VALIDATE INSIGHT (OPTIONAL)

almost accurate

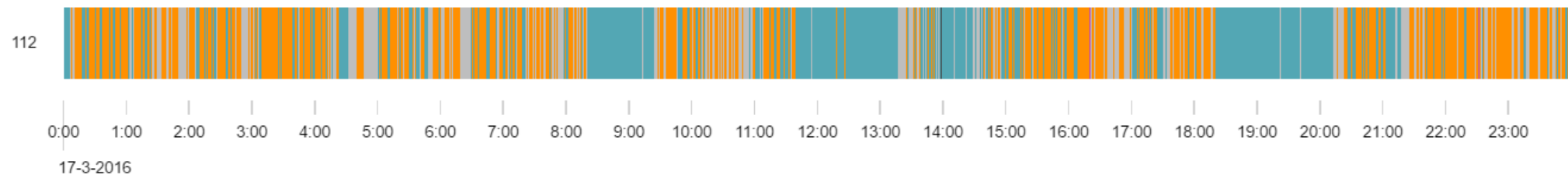


Farmer gives fresh food on 10:00 every day.  
Pushes food back to gates in afternoon, 18:00 and 23:00.

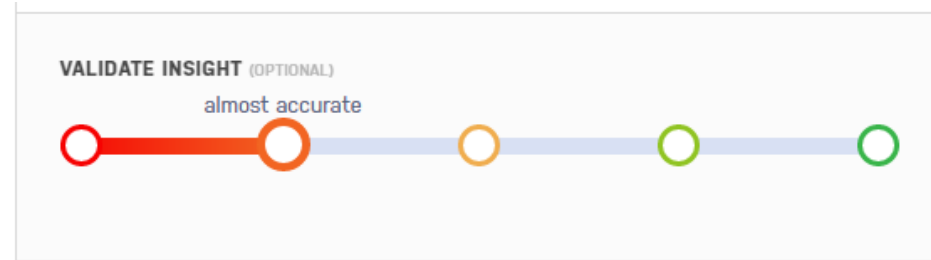
### Typical patterns for Daisy



### After a change in feed input



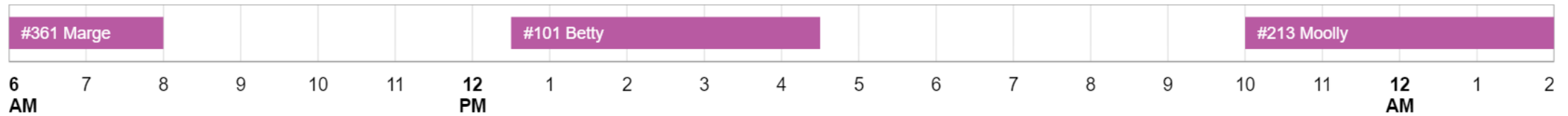




Including the farmer in the feedback loop creates cognitive ability of the system

A system that has cognitive awareness also has predictive capabilities

### Upcoming Inseminations 3



Predicting estrus cycles and optimal insemination time is based on the learning from past experiences

A system that has predictive abilities and massive scale gets better with multiple forms of data

Additional sensors

Financial Data

Partner Data

Help us feed the world by 2050,  
Spread the word

[www.connecterra.io](http://www.connecterra.io)

Thank you.