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CURRENT TRL  
& TARGET TRL

**MITIGATION**  
OF MILK YIELD LOSSES

**DECREASE**  
OF ANTIBIOTICS USE

**BOOST**  
IN MILK PRODUCTION



## COUNTRIES



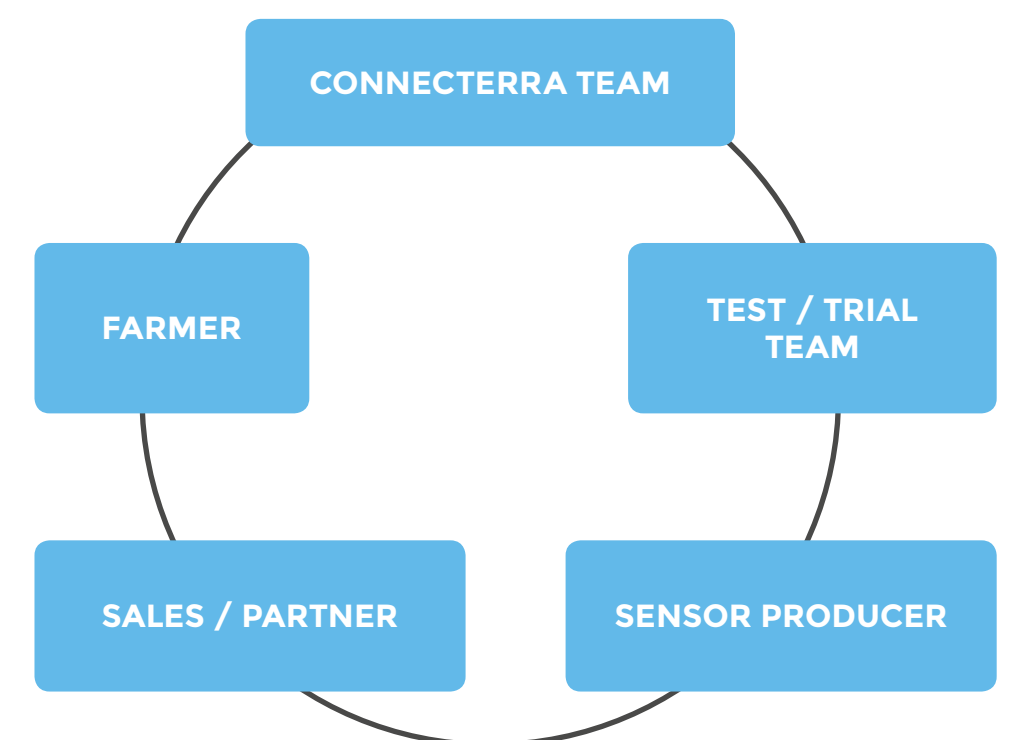
## PARTNERS



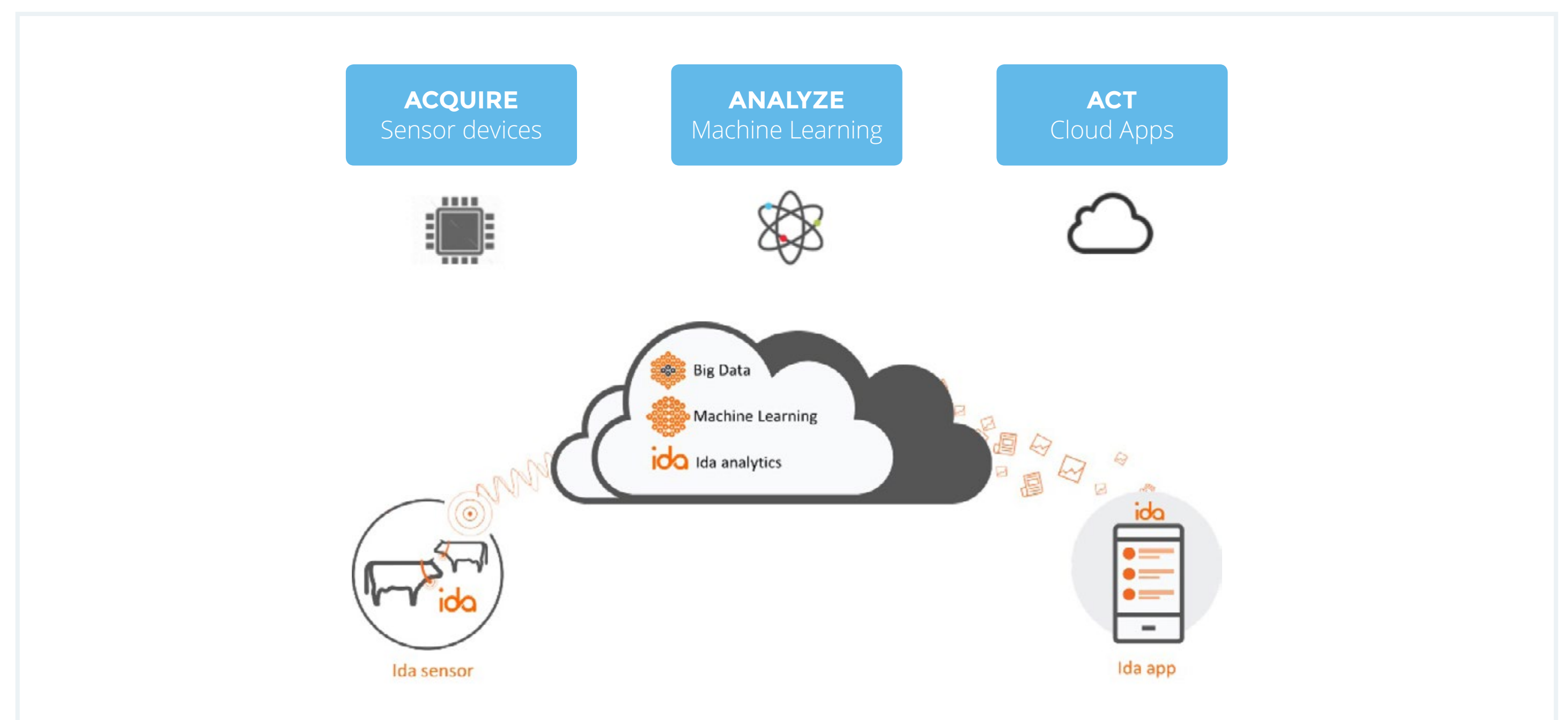
# 2.2 HAPPY COW

A modern dairy farm is a dynamic and complex business. With increasing demands on animal health, environmental impact and margins being under pressure, improving farm management is vital for dairy farmers to stay in business.

Therefore, the Happy Cow project aims to use state-of-the-art technology and artificial intelligence to provide farmers with insights on the fertility and health of their cows. Besides these goals, IDA (the Intelligent Dairy Farmers Assistant) will also self-learn and give insights on calving and feed efficiency.



## HOW IT WORKS



Cows wear a sensor that tracks their movements in 3 dimensions. From the data, a smart algorithm determines what behaviour the cow has expressed. All data is uploaded to "the cloud" where artificial intelligence is used to translate the data into insights. The insights are transmitted to the farmer via an app on his smartphone, offering suggestions on how to optimize the output of the farm.

## THE IMPACT

### OUR OBJECTIVES

To demonstrate that the approach of cloud computing and artificial intelligence works on farms.

IDA system is installed on two farms where on each, 50 cows are equipped with sensors. Two additional farms are to follow in 2018.

### ON ECONOMY

- A shorter calving interval; hence, higher milk production,
- Quicker treatment and severe disease prevention,
- Mitigation of milk yield losses and decrease of antibiotics use.

KPIs:

- Calving interval,
- 305-day milk production,
- Average number of days treated with antibiotics.

### OTHER IMPACT

A lower usage of antibiotics reduces environmental impact and benefits the prevention of antimicrobial resistance.