



Impacts and issues of Big data and Open data in livestock management

Mariane CIMINO – France Génétique Elevage

New data > Big data > Open data



Health and
environment data



Knowledge

Genomics data



Identification and
traceability data

Images

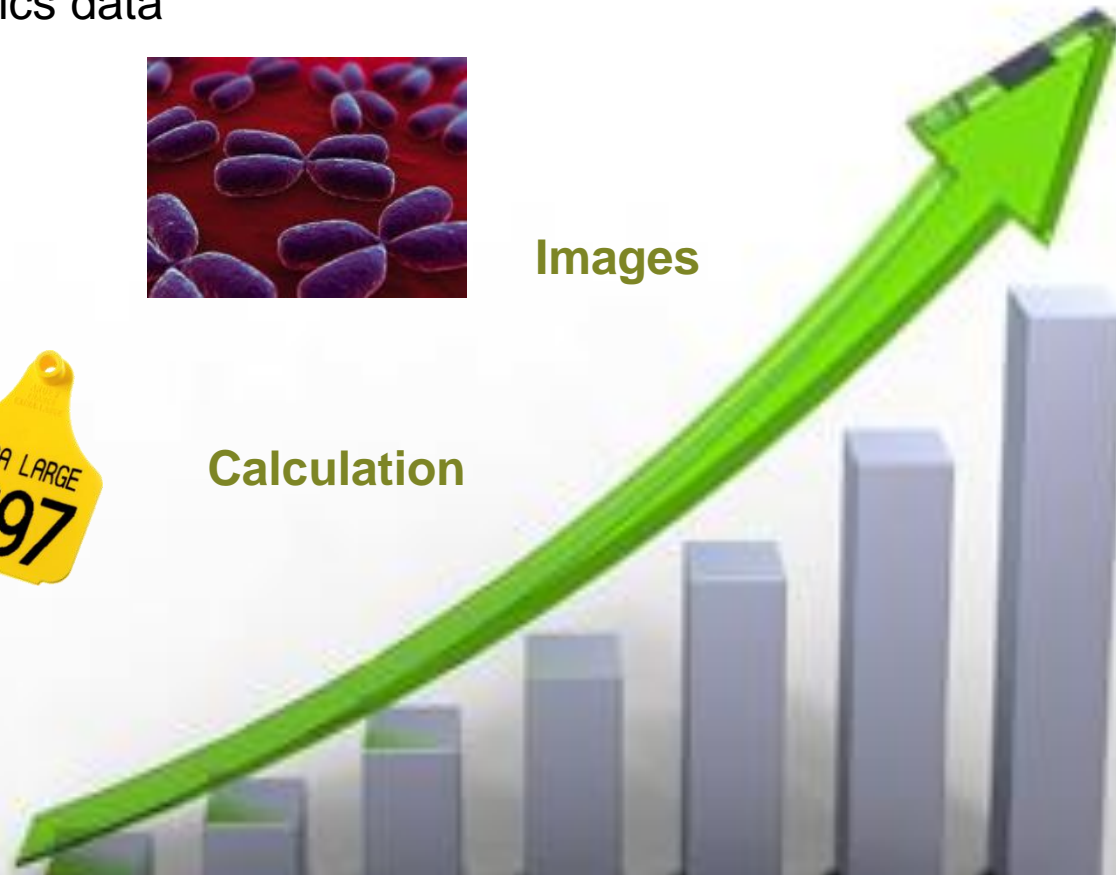
Financial data



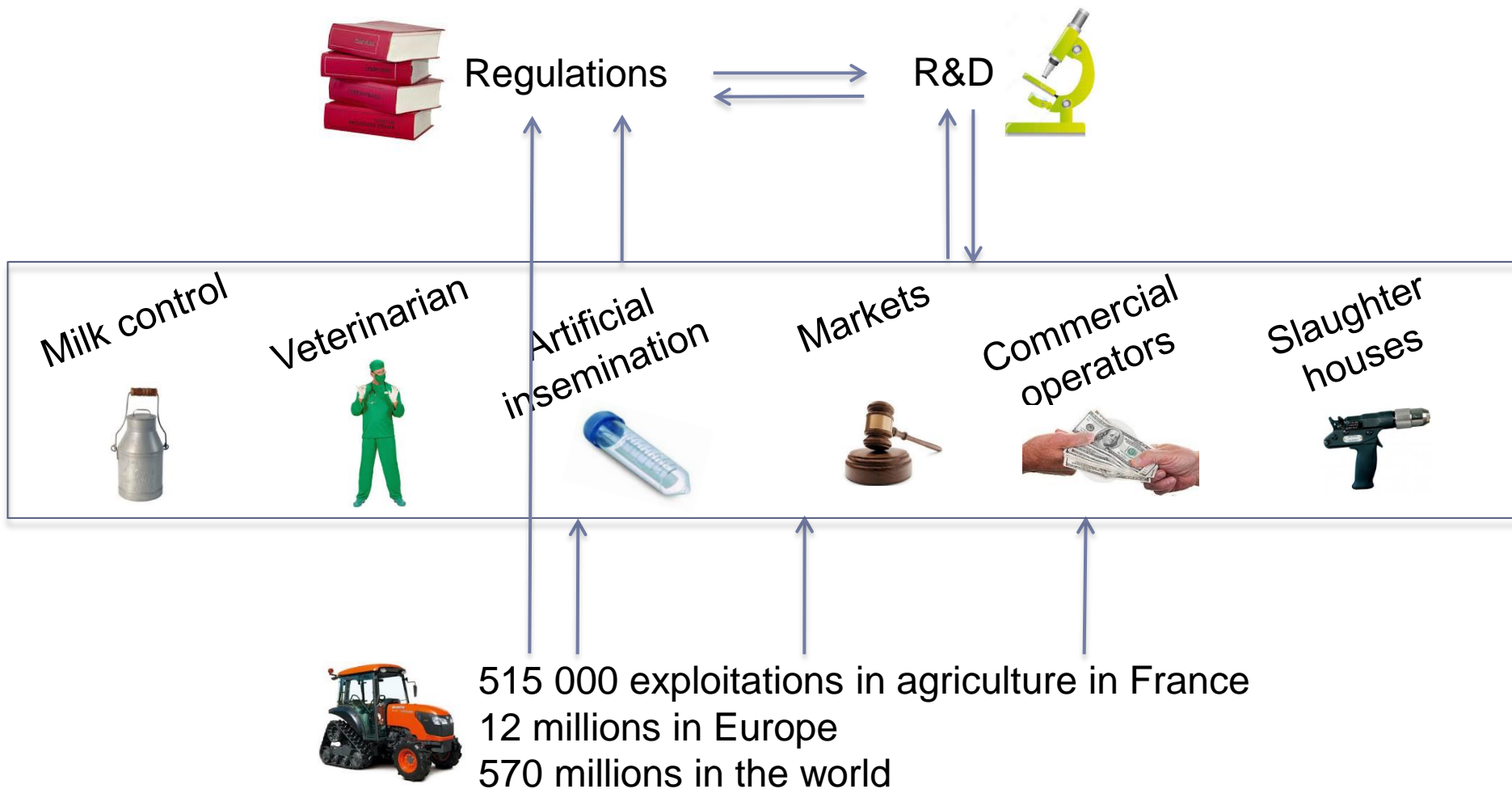
Calculation



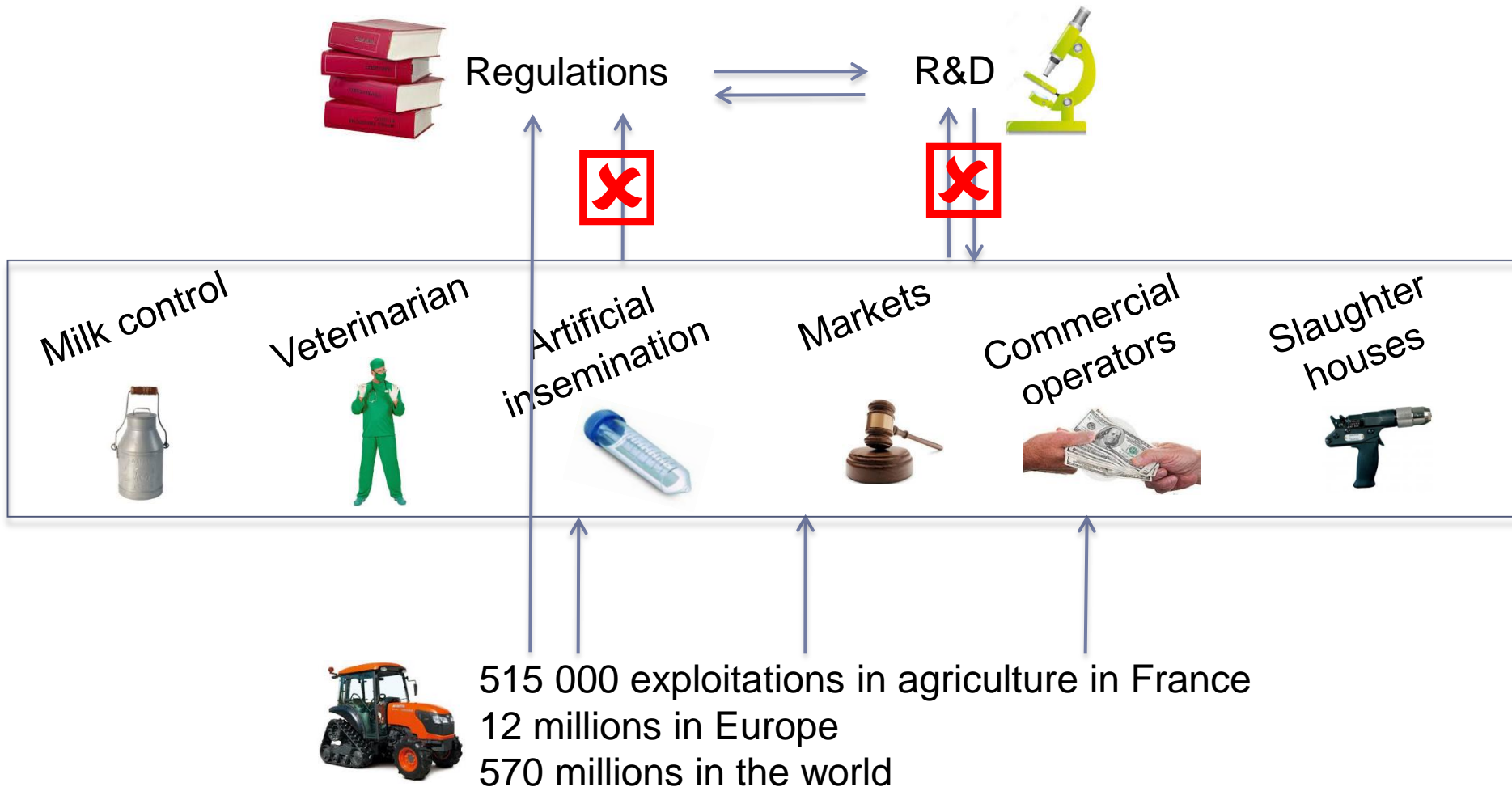
Text



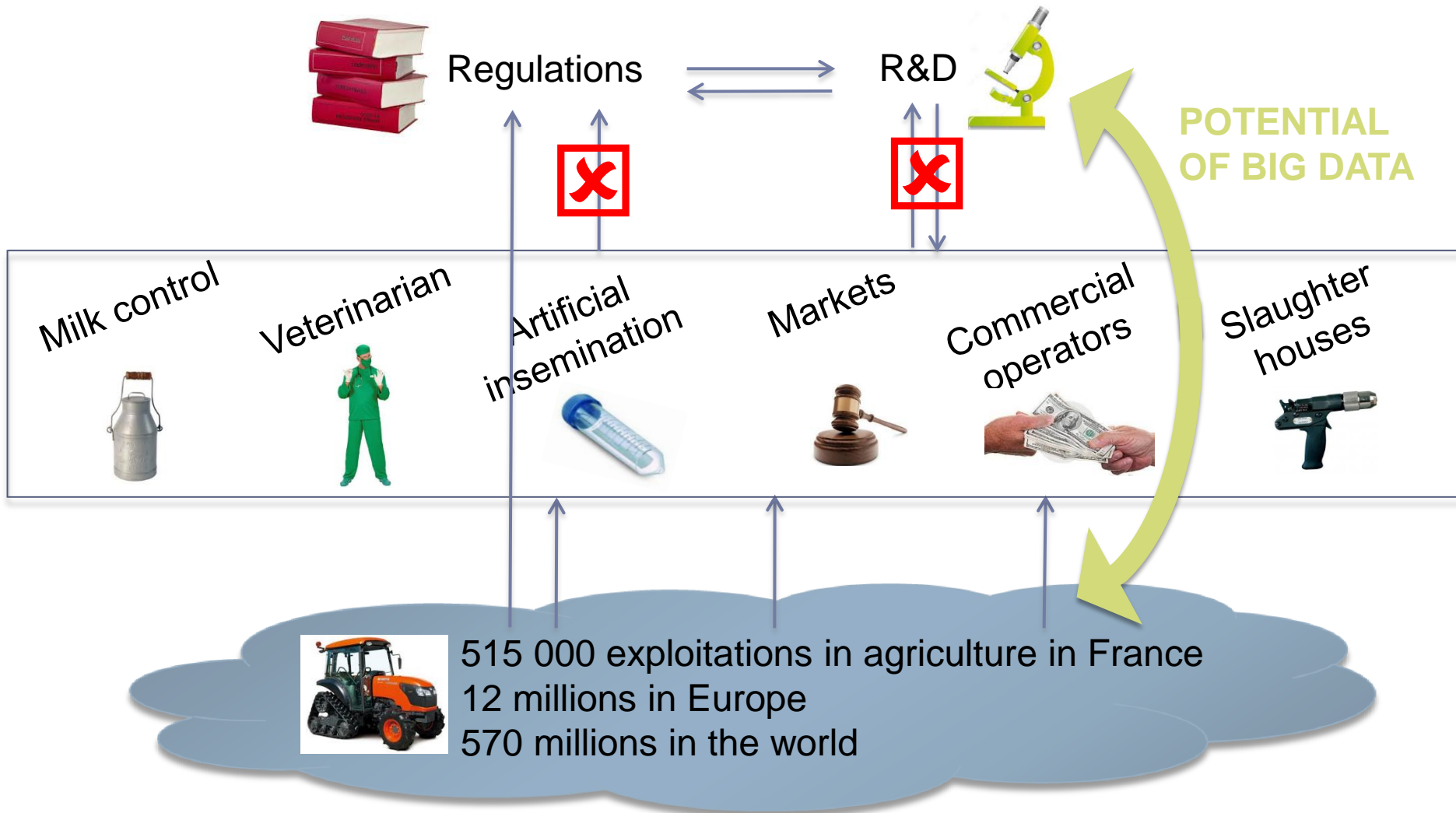
The exchanges of information by the past



The exchanges of information nowadays



The exchanges of information nowadays





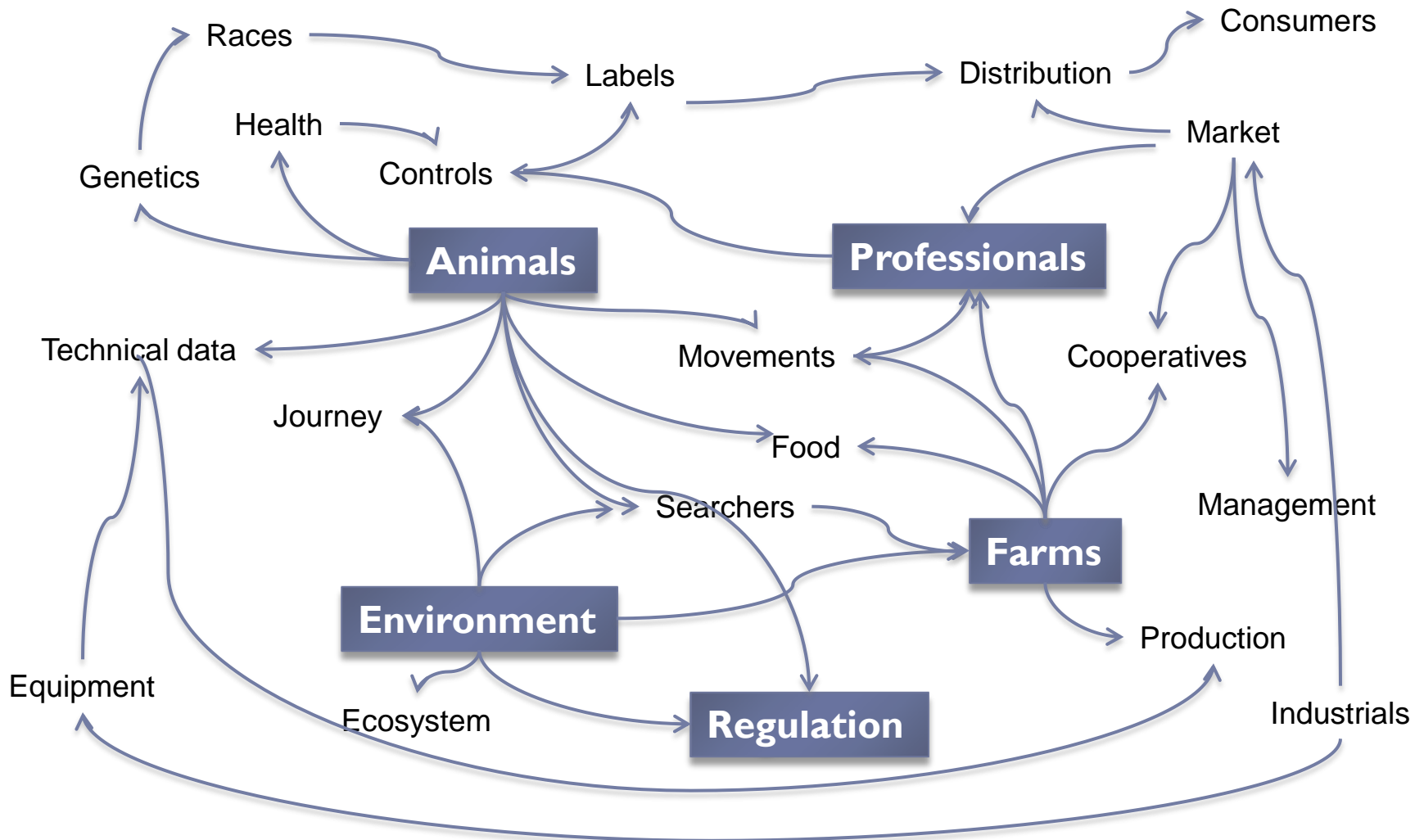
- ▶ **Uncompleted value chain**
 - ▶ Data on live animals
 - ▶ No data on the downstream distribution cycle: meet, milk...
- ▶ **Few experts and searchers in data analysis**
- ▶ **No link between structured historical data and new data (web, open data...)**

Potential services



- ▶ Notarization In/Out animal flows (traceability)
- ▶ History of the animal
- ▶ Predictions of production on the basis of economic data
- ▶ Analysis of the mortality of young calves
- ▶ Increased traceability for labels, to locate herds
- ▶ Uses of epidemiology and pharmaco-vigilance data
- ▶ Control of health costs
- ▶ Control of environmental impacts
- ▶ Support for local agricultural policies
- ▶ Choice of breeds best suited to a breeding operation...

Meta-data



Big data approach

