Currently, numerical data are already well established in some farms and more especially in dairy farms (administrative, accounting, production, health and environmental data). They are generated either by the farmers or by advisers, by on-farm sensors or by laboratories. Unfortunately, the recording, processing and enhancement of the data are still too often managed in an independent and partitioned manner, increasing then the administrative burden.

**Overview**

- **Extract**
  - Staging area
  - Usable data
  - Important data

- **Transform**
  - Deduplication
  - De-noising
  - Cleaning
  - Validation
  - Verification
  - Normalization

- **Load**
  - Usable data
  - Important data
  - Data warehouse

- **Data Sources**
  - Cloud
  - Database

- **ETL**
  - Map

- **Dashboard**
  - Data mining

- **Analytics**
  - Reporting

**Technologies**

- **on-cow sensors**
  - (1) Ear tag (RFID sensor),
  - (2) Halter,
  - (3) Neck collar with counterweight (Behavior sensor),
  - (4) Upper tail ring,
  - (5) Rear leg pedometer,

**Conclusion**

The future tool is in breach of the present, will allow a more direct relationship between the actors, more relevant advices proposing actions at the individual level (farmers, cows), more friendly for the environment. The whole contributes to support the farmers to be more economically efficient and better equipped to meet society’s expectations, as well as to boost their role in the value creation chain.

**References**


