

AgriXchange WP4

Basic Design:

Starting point for interoperability of data
exchange in EU agriculture

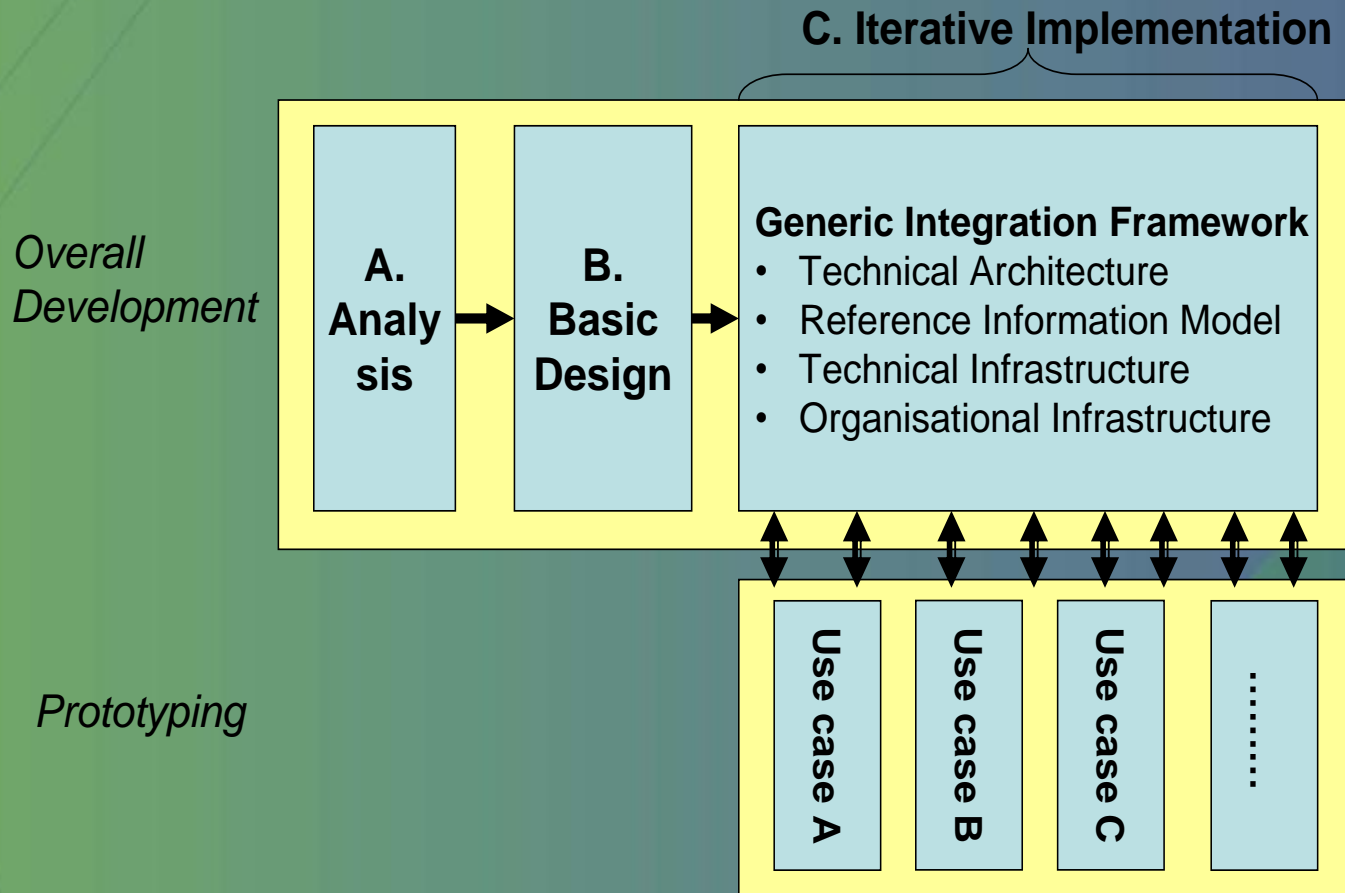
GeoFARMatics2010, 25th of Nov 2010

Liisa Pesonen

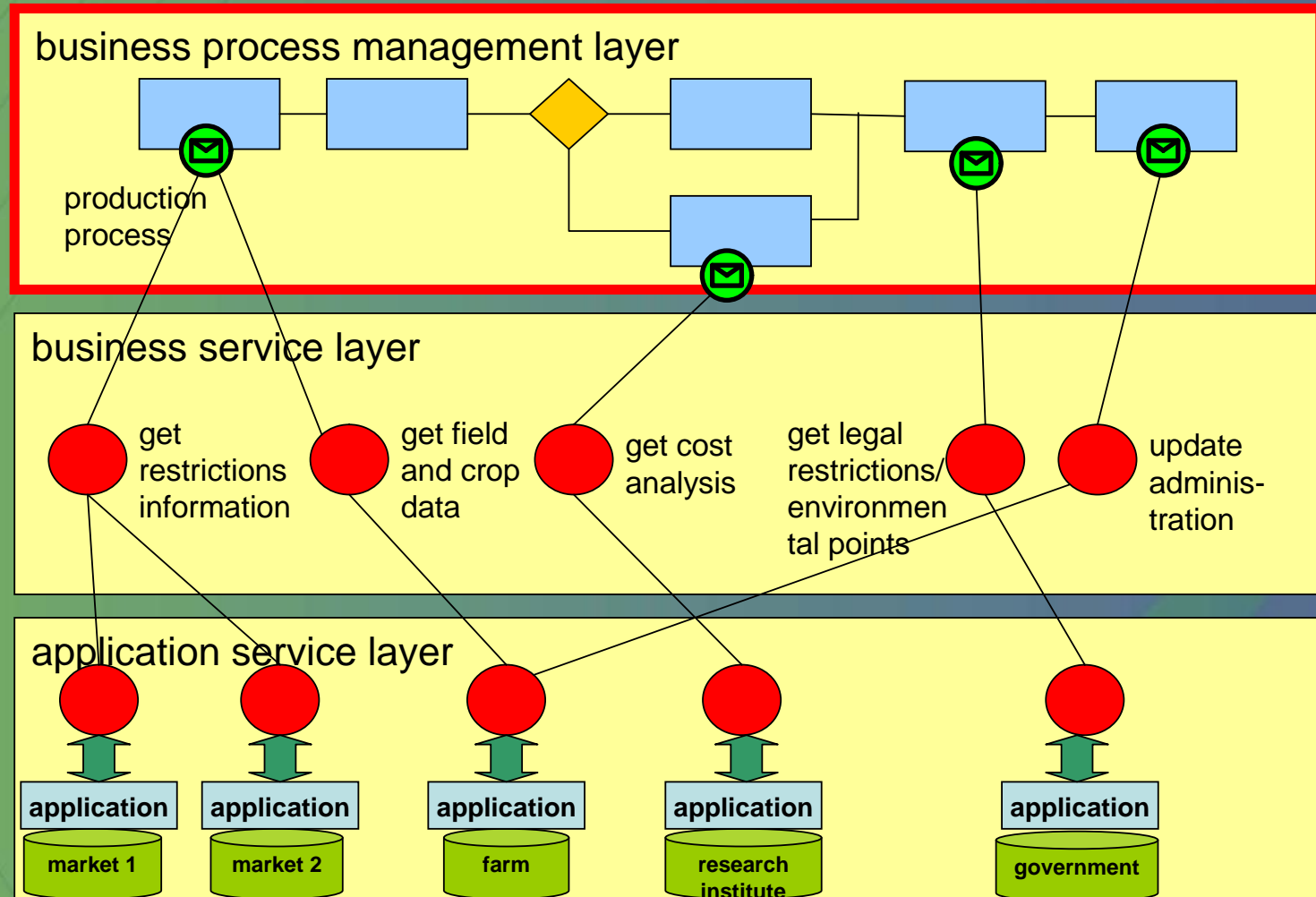
MTT Agrifood Research



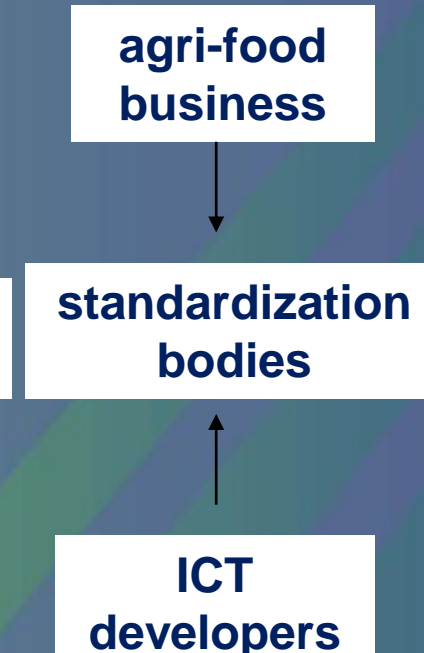
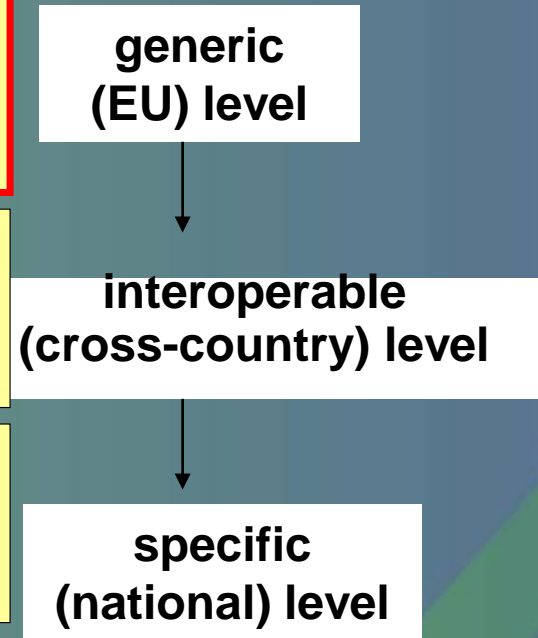
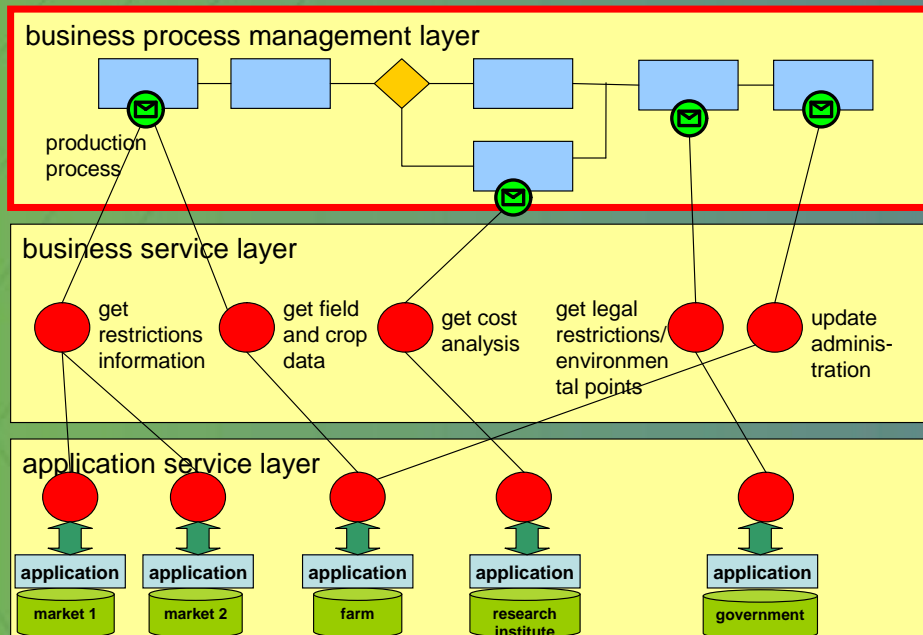
agriXchange methodology



Basic Design: SOA



3-layer architecture



EU > Regional > National



Interface classes

By actors

- Farm machines
- FMIS
- External service
- Government
- Processing industry
- Trade
- Consumers

Data and communication

- Data content:
 - control, status
- Type of data:
 - files, message strings
- Amount of data
- Communication needs:
 - speed, frequency



Advantage of process-driven approach

- **Clasification of**
 - Technical architecture,
 - Technical infrastructure for communication
 - Actors and institutional embedding

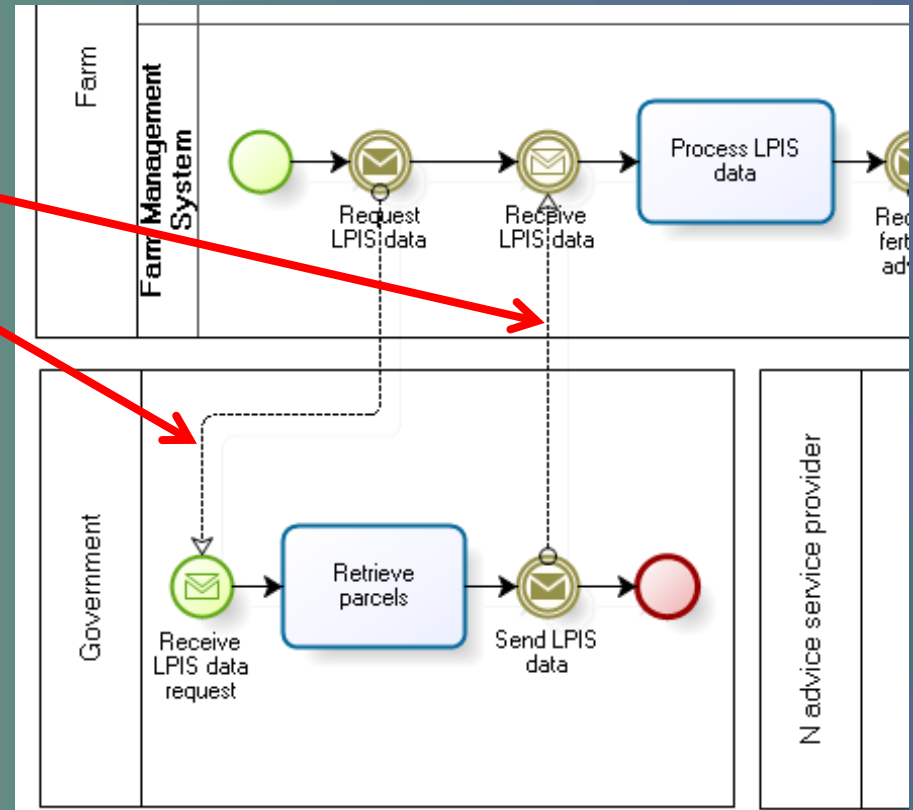


Data-oriented approach

Interfaces between actors can be picked up

”Arrows”

- data content
- data format
- protocols
- existing standards
- best practices
- dictionaries, ontologies



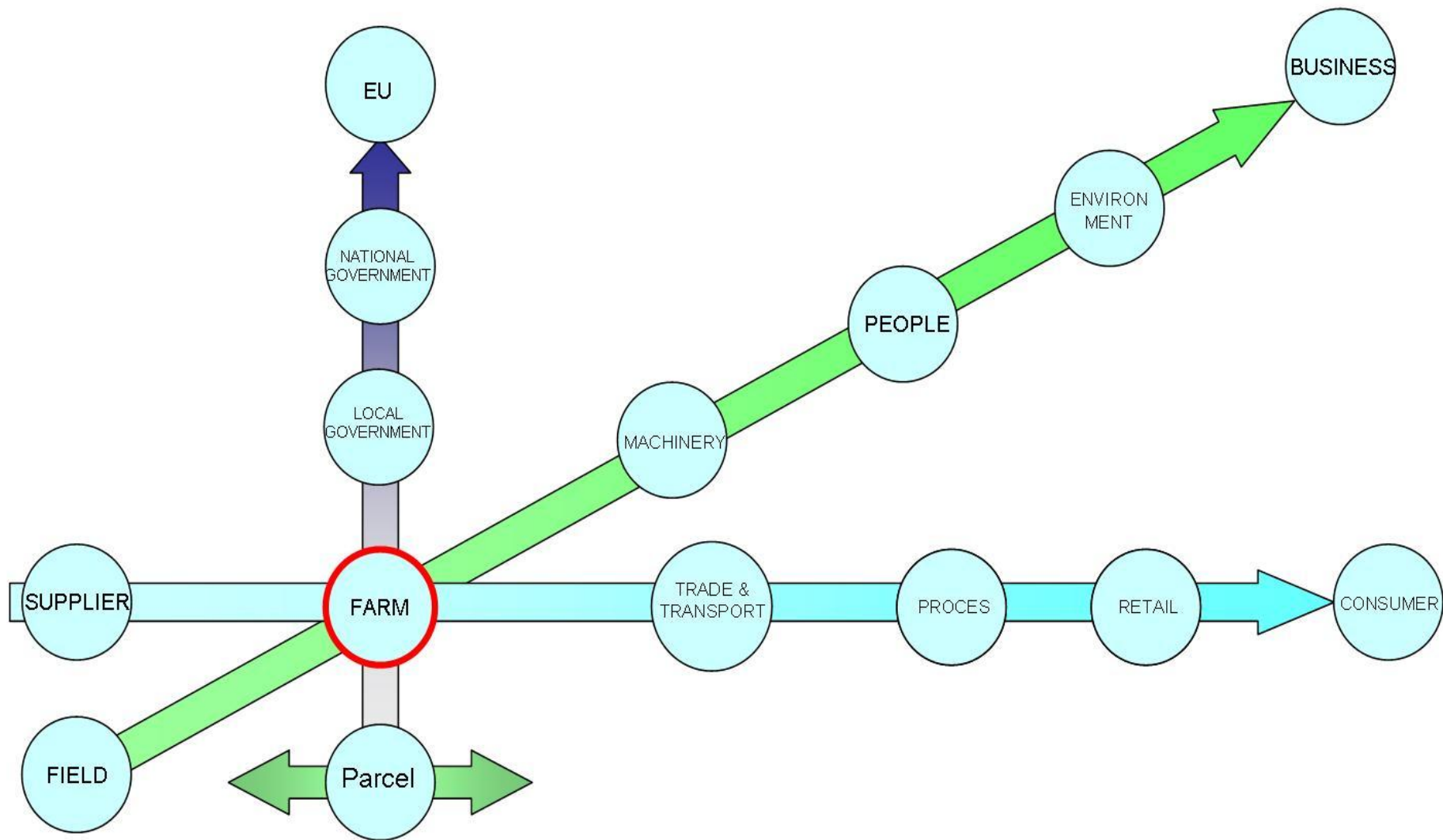
Classification of data > **Reference Information model**



Mix of process-driven and data-oriented approach

- Process driven approach sets the data exchange problem to a "map" and real context
- **Collection of interfaces** representing different type of data exchange transactions with description of the context in agri-food branch
- **SOA** as a basic concept
 - solutions can be copied and applied in other countries, processes, applications



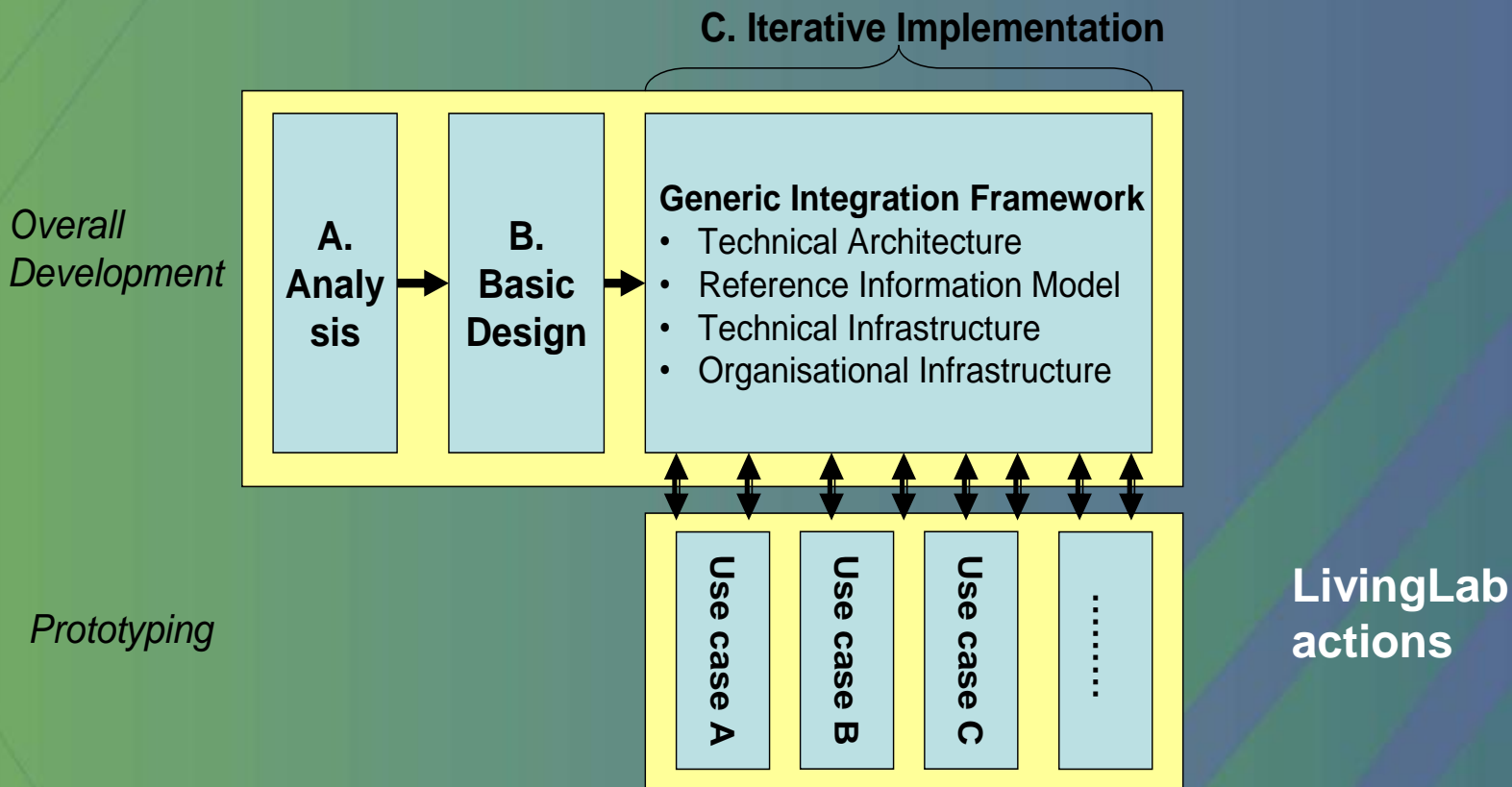


Agri-Food branch



Basic Design

is a starting point for interoperability of data exchange in EU agriculture



The work has just started,
follow our progress at
[www. agriXchange.eu](http://www.agriXchange.eu)
and the platform
[www. agriXchange.org](http://www.agriXchange.org)

Thank you!

