



Traceability system in decentralized architecture

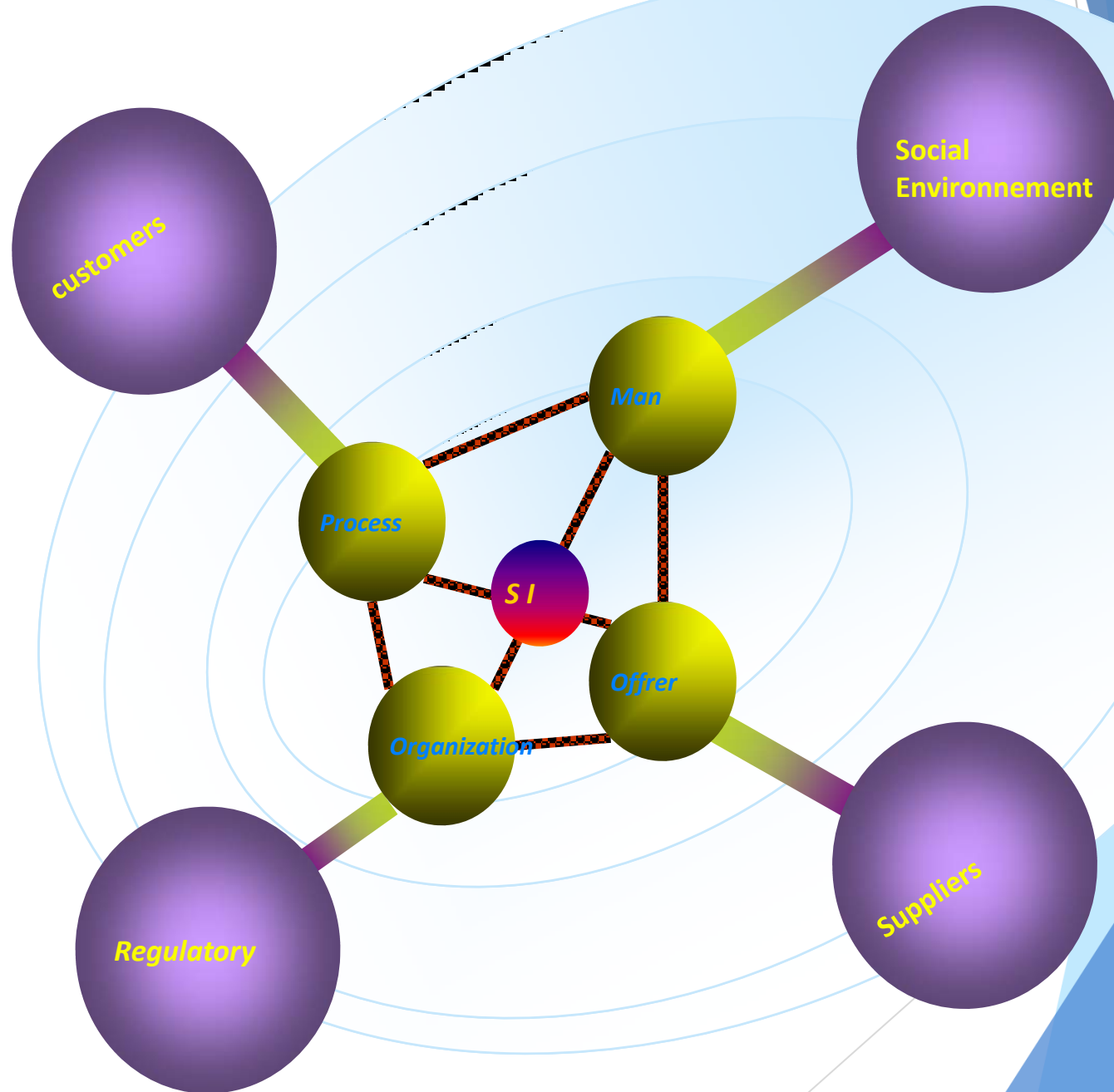
Example: Fertilizers

Context

- Globalization: increasing of flow of goods and information flows in the world
- Scarcity and inflation of raw materials
- Growing strength of sustainable development
- Demand for food safety and food quality (the precautionary principle, risk management)
- Shortcuts business cycles punctuated by crises (financial, monetary, ecological, societal)



The company in its eco-system



Context Fertilizer



The purpose of fertilizers is to provide nutrients to plants

Three categories of fertilizers:

Mineral fertilizers: they are produced from ores extracted from subsoils based on phosphate, potash or from nitrogen contained in the air. These mineral fertilizers can be simple (a single nutrient) or compound (multiple nutrients).

Organic fertilizers: they are composed of nutrients of animal origin (manure, slurry, industrial by-products, etc.) or plant (compost, algae, etc.).

Organo-mineral fertilizers: They contain both organic matter of plant, animal and mineral origin.

The purpose of the amendments is to maintain or improve the physical, chemical and biological properties of soils.

Two types of amendments

Basic mineral amendments

Organic amendments

Context fertilizer

- ▶ Regulatory context
 - ▶ European regulation 2003/2003 evolution in progress, the product database will make it possible to make the link between these 2 regulations.
 - ▶ French regulation 4200-1 (Ammonitrate)
 - ▶ Approval (ANSES)
 - ▶ Mutual recognition 764/2008 (European regulation)
 - ▶ (2019/1009) validated by the European Parliament the June 5 2019 , Mandatory the July 16 2022
- ▶ ...



Objectives

- ▶ The implementation of traceability must be an interprofessional approach and involve all the players concerned.
- ▶ The implementation of traceability will have to be done step by step and will have to adapt according to the current level of traceability, the productions and the tools already in place in each company
 - ▶ Définition of a batch
 - ▶ Associate a batch at a quantity of product and a manufacturing period in a information systems
 - ▶ Associate a lot with a sample (analysis)
 - ▶ Allow access and / or transmit information relating to batches (eg analysis result) to customers



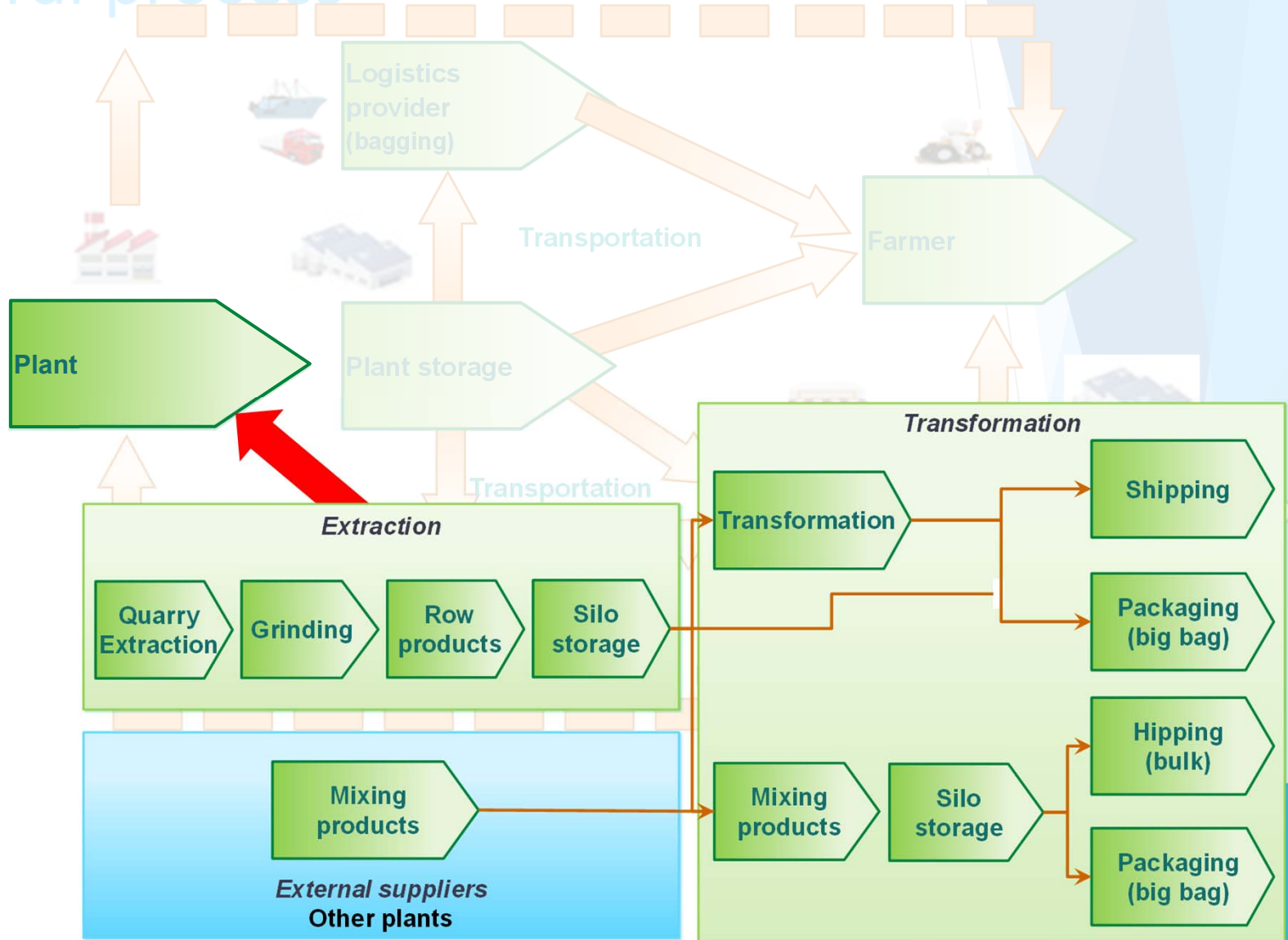
Objectives

- ▶ Propose a solution for the traceability of fertilizers from the production to the parcel
- ▶ Why?
 - ▶ Impact on food health
 - ▶ Traceability of the origin of the import
 - ▶ To know what to put on the ground (to react quickly in case of problems)
 - ▶ Sensitive product (need to localize fertilizers in real time)
 - ▶ Have the original information to better regulate agricultural machismo (impacts on agricultural practices).

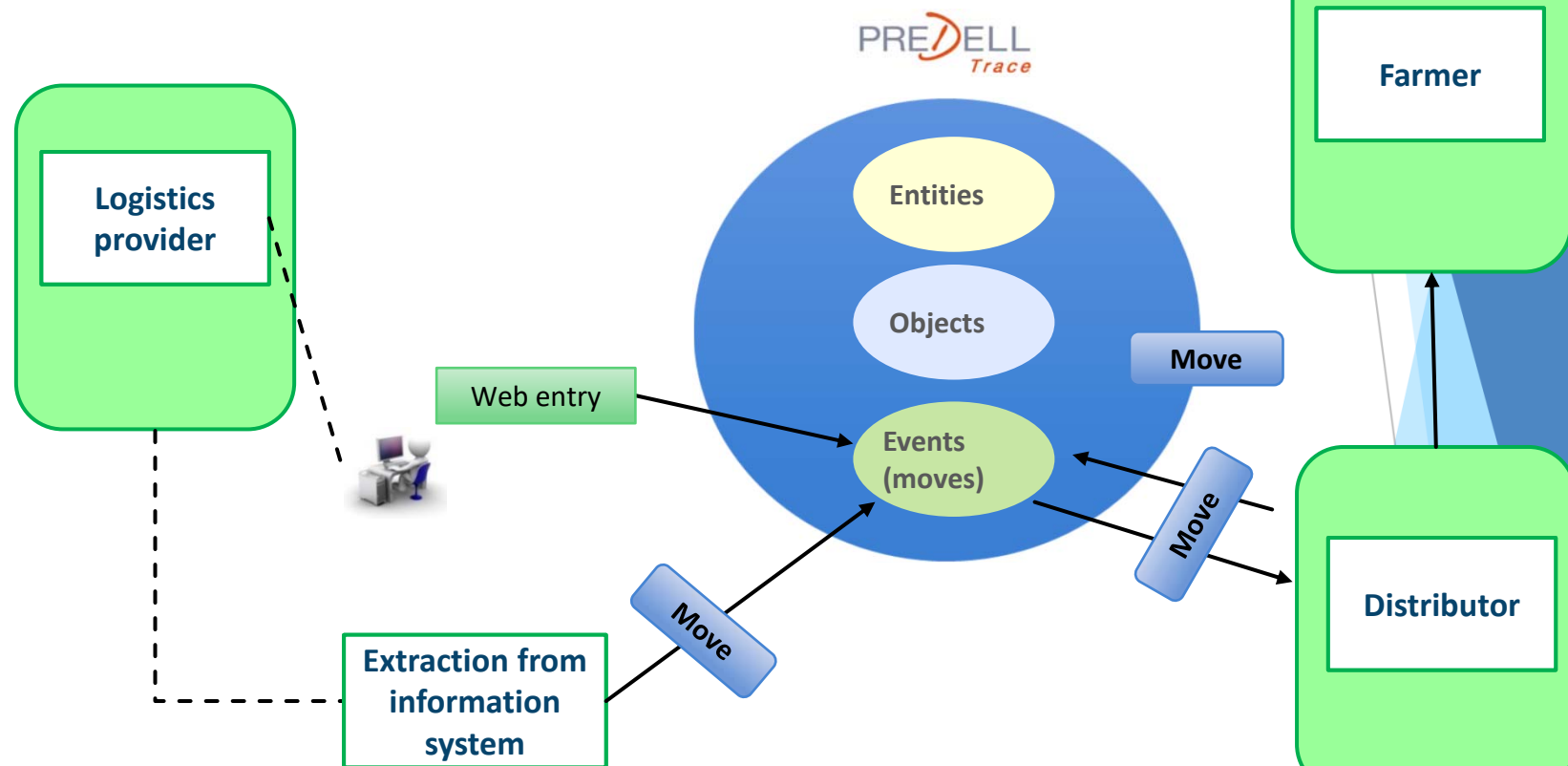




General process



Technical architecture



Expected benefits

- ▶ Promote and provide additional service to marketed products and therefore to customers
- ▶ Optimize the management of returns and losses
- ▶ Prevent risks related to the safety of risky products
- ▶ Increase responsiveness in responding to controls and inquiries about products.



Why Agro EDI Europe ?



L' ACTEUR DES ÉCHANGES NUMÉRIQUES AGRICOLES



AGRO

For the upstream of agricultural, agro food and agro supplying sectors

EDI

Harmonization of electronic data exchange

EUROPE

Creation and deployment of international standards

Agro EDI Europe ?

▶ Non lucrative association

- ← Funded by annual membership fees
- ← Board of directors elected by the members

▶ Created in 1992 by the founding members:

- ← Coop de France (Professional syndicate of agricultural French cooperatives)
- ← ANR (National Association for Revision)
- ← In Vivo (Union of cooperatives)

invivo

ANR
ASSOCIATION NATIONALE DE RÉVISION
DE LA COOPÉRATION AGRICOLE

▶ Promotion of professional electronic exchanges (EEP) and EDI (Electronic Data Interchange) in agriculture



COOP
DE FRANCE
une force en mouvement

AGRO EDI
Europe

Members



- Retailers and collectors: agricultural cooperatives, agribusiness
- Suppliers (phytosanitary products, seeds)
- Logistical platforms
- Technical institutes : ACTA, INRA, Arvalis, IRSTEA, etc.
- Accounting companies
- Agricultural software editors
- remote sensing operators
- Ministry of agriculture, ministry of fisheries
- Agricultural chambers



Role of Agro EDI Europe

- ▶ Technical Association for cooperation and dialogue open to all agricultural stakeholders
- ▶ Vocation for the promotion and standardization of agricultural EDI
- ▶ Organization and facilitation of ten sectoral working to meet the needs of association members
 - Technical aspects
 - Supply chain
 - Technical data repository
 - Etc





Thank you

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