## Process and use cases

Concept

Simulation

Definition

Manufacturing

Support

## **Domains**

**Product specification** 

Configuration

Document structure

Effectivity

Delta change

Physical structure

Part, version, view identification

Geometric shape Transformation

Person, organization and address

Date and time

Approval, contract and project

Activity

Work management

Requirement

**Property** 

Breakdown

Identification

Name and description

Multi linguism

Material

Classification

Information right

Process plan

Part occurence

Assembly structure

## Concerns

- \* Requirements
- \* Translations (languages not geometry!)
- \* Materials
- \* Prices

Dimensions, Tolerances and Checks/Metrology

Annotations

- \* Coatings
- \* Composites
- \* Simulations
- \* Units
- \* Supply / suppliers

Physical model Kinematics / Joints

Anchors

Parts libaries

→ 3D exact vs 3D tesselated vs 3D history/parametric

Electrics / electronics

(BOMs), auto generated

- → Building process
- → Tooling

Manufacturing / CAM files

## Constructing an information system around a product is a data modeling problem

Text only → versionnable

20% of a complex model (e.g. AP242) should cover 80% of the needs (Pareto)

Topology and geometry handled by scripts and neutral files

The single location of truth is the data model and its content, scripts and Uis only act on the model and its content

Some parts of the data model are specific to a project, others are generic (e.g. languages, units, materials ...)