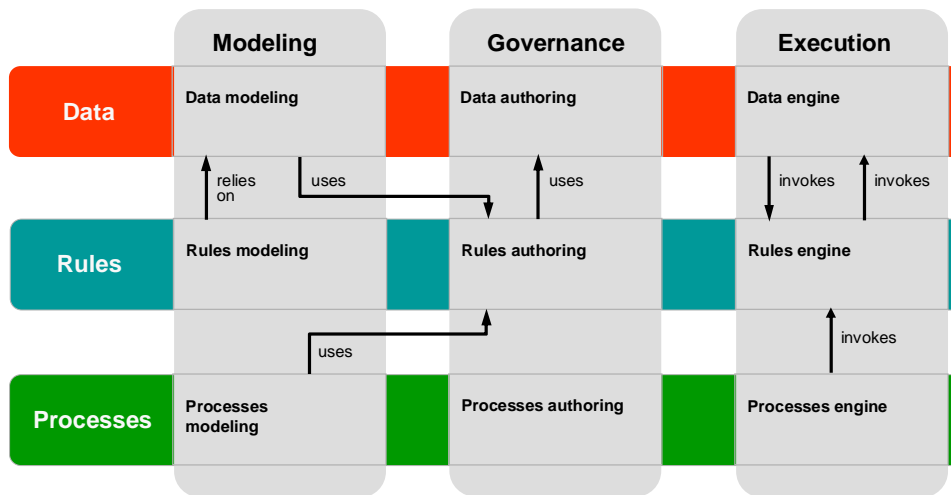


## Targeted IS/IT Foundation

### Integration between data, rules and processes business repositories



### Modeling domain

To really reinforce data quality, business rules must be defined when establishing data models. For example, before updating a financial key classification, a business rule is used to check the maximum authorized levels. Therefore, a relation “uses” is set up from data modeling to business rules defined within the governance domain.

On the opposite, when issuing the rules modeling, data models used by rules must be defined. For example, a business rule to reserve a car rental relies on a data structure that defined the fleet vehicles. Therefore, a relation “relies on” is set up from rules modeling to data modeling. A business vocabulary is shared between the two types of intangible assets, namely data and rules.

The modeling of processes uses business rules to describe the logical flows between the steps of processes. A relation “uses” is set up from processes modeling to business rules defined within the governance domain.

### Governance domain

Data authoring is enforced by using governance features brought by the foundation. This mechanism is well-adapted to data oriented applications such as reference and master data management systems. To tackle other types of applications, a development of dedicated UI and services still remains needed. If a rule must be applied when entering or modifying a data value, it has already been defined when modeling data. It means that a relation from data governance to rules governance is not required.

Rules authoring required reference and master data authoring, such as enumeration and decision tables. For example, this rule relies on a data value stemming from the Product-Category table: *if the category of the product is “STANDARD” then....* The “STANDARD” value is retrieved with help from the data governance domain. Therefore, a relation “uses” is set up from rules governance to data governance.

When authoring processes (parameterization), rules involved by these processes mustn't be defined since it has already been done when modeling processes.

## Execution domain

When accessing data, some validation rules can be invoked. Conversely, when executing rules, some reference and master data are retrieved by invoking data repository. Therefore, a bidirectional relation "invokes" is set up between rules repository and data repository.

When running processes, some rules are invoked to compute steps that the process must follow. Therefore, a relation "invokes" is set up from processes repository to rules repository.

## Organizational consequence

To deploy this targeted IS/IT foundation, a company must adopt a progressive approach. In particular, the modeling procedures applied to data, rules and processes require suitable business and IT skills. The goal is not to allow business users to model, govern and execute their data, rules and processes without any participation of IT specialists. Let's take an example to highlight how business users and IT must work with each other to model, govern and ensure the right execution of the system.

An organization and structure data model is established in collaboration between business actors and IT specialist. Rather than implementing this data model in a usual database without any governance features, it is set up in the data business repository. Therefore, governance features brought by the foundation are directly available and allow business users to author data, manage version, define permission, etc. In a second stage, a new data domain must be integrated. This is the modeling of sales structures. The same approach is enforced. It brings the same governance features but applied to the new data types defining sales structures. Since organization and structure have relations to sales structures, the unified approach of modeling and governance guarantees a reliable and auditable governance of data.

For an IT point of view, these databases must be connected to other systems within a company. At this stage, IT specialists must establish integration procedures and must control data flows. It is and IT work that takes benefit from data models defined within the foundation, as they are reused as pivot format.

When deploying the targeted foundation, many questions are raised and the IS Rating Tool is very helpful to check the ability of a company to conduct the project:

- Which models must be established? How to tackle the change management applied to these models?
- Which are the most important governance features and how they are used within the three business repositories, namely MDM, BRMS and BPM,
- Is the whole data, rules and processes of a system should be managed through the business repositories?