GROUPE SMABTP
CONSTRUIRE EN CONFIANCE

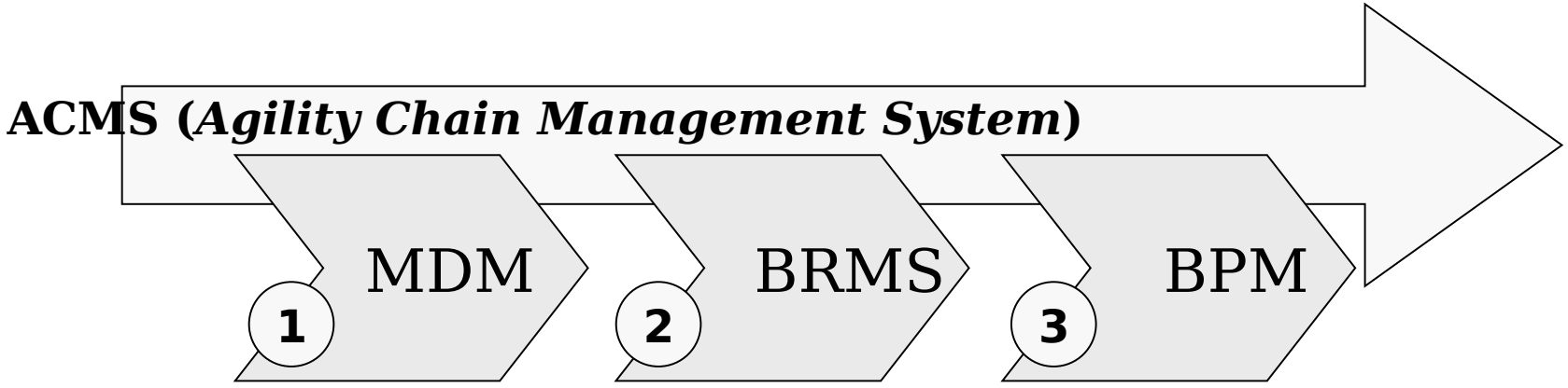
The agility road for the SOA journey

JM Detavernier, Deputy CIO SMABTP

The creation of the sustainable IT system with SOA

- **Creation of a flexible structure that will turn IT software assets into reusable, loosely coupled services, linked together with messages**
  - Package the existing assets or new components
- **Services orchestration to create processes more easily**
  - Use BPM tools to reach this goal
- **Make more agile the services using MDM and BRMS tools**
  - Exposing parameters and rules in systems directly accessible by users
- **Use of industry standards to link these software together**
  - Allowing evolutions of systems
- **Need of a methodology to accompany the step**

Agility chain for SOA – Need of a methodology



- **Rationalize the reference data and parameters management**
- **Create independence for the services execution with**

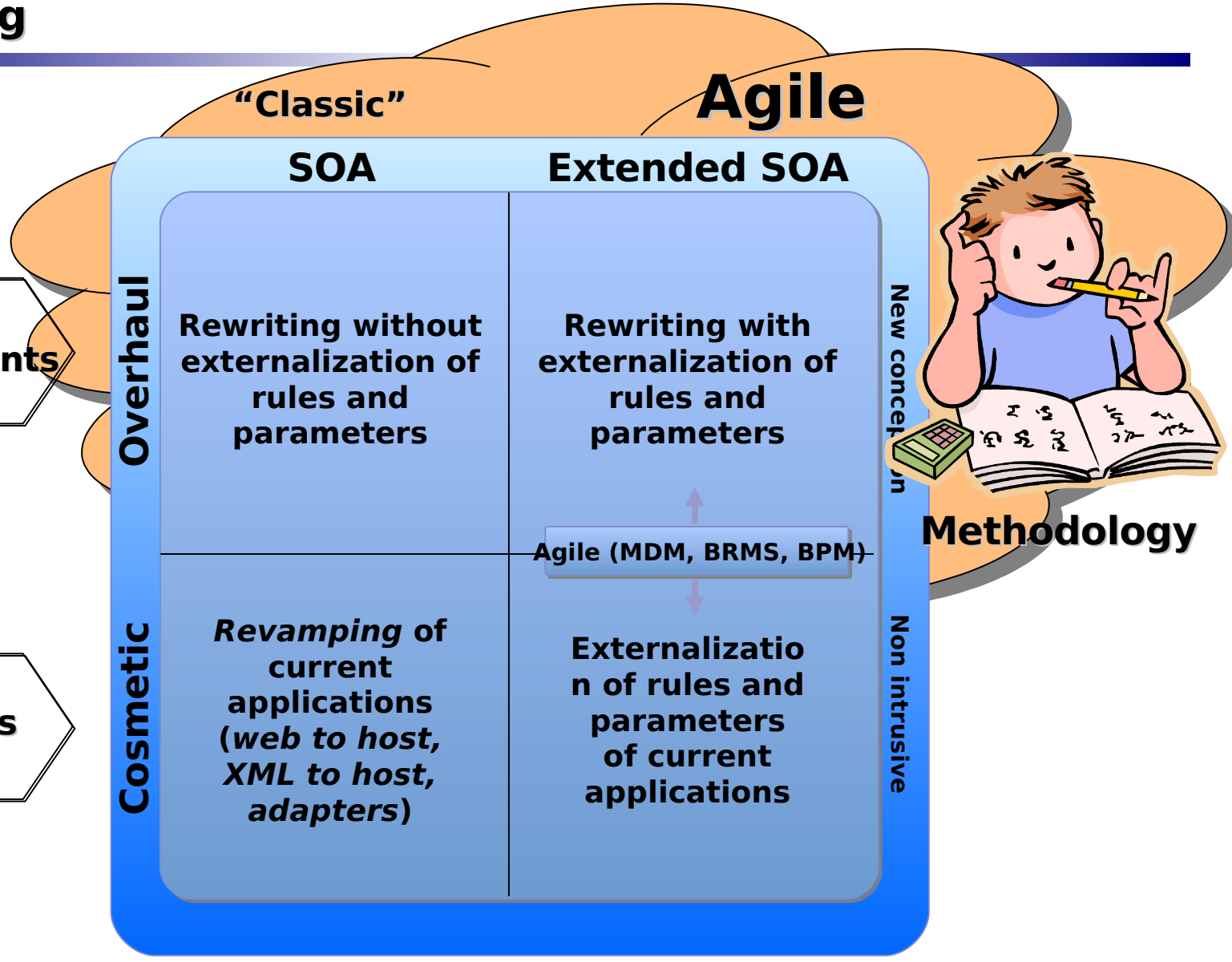
- **The business rules use the parameters of the MDMS**
- **The highly variables rules are pulled out of the service and put in the Business rules management**

- **The processes use BPM and rules to conduct the flow of data thru the different steps**
- **The context differences are managed in the MDM et le BRMS**

Methodology - Architecture

Infrastructure

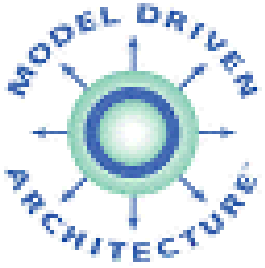
The methodology helps to create agility from the beginning



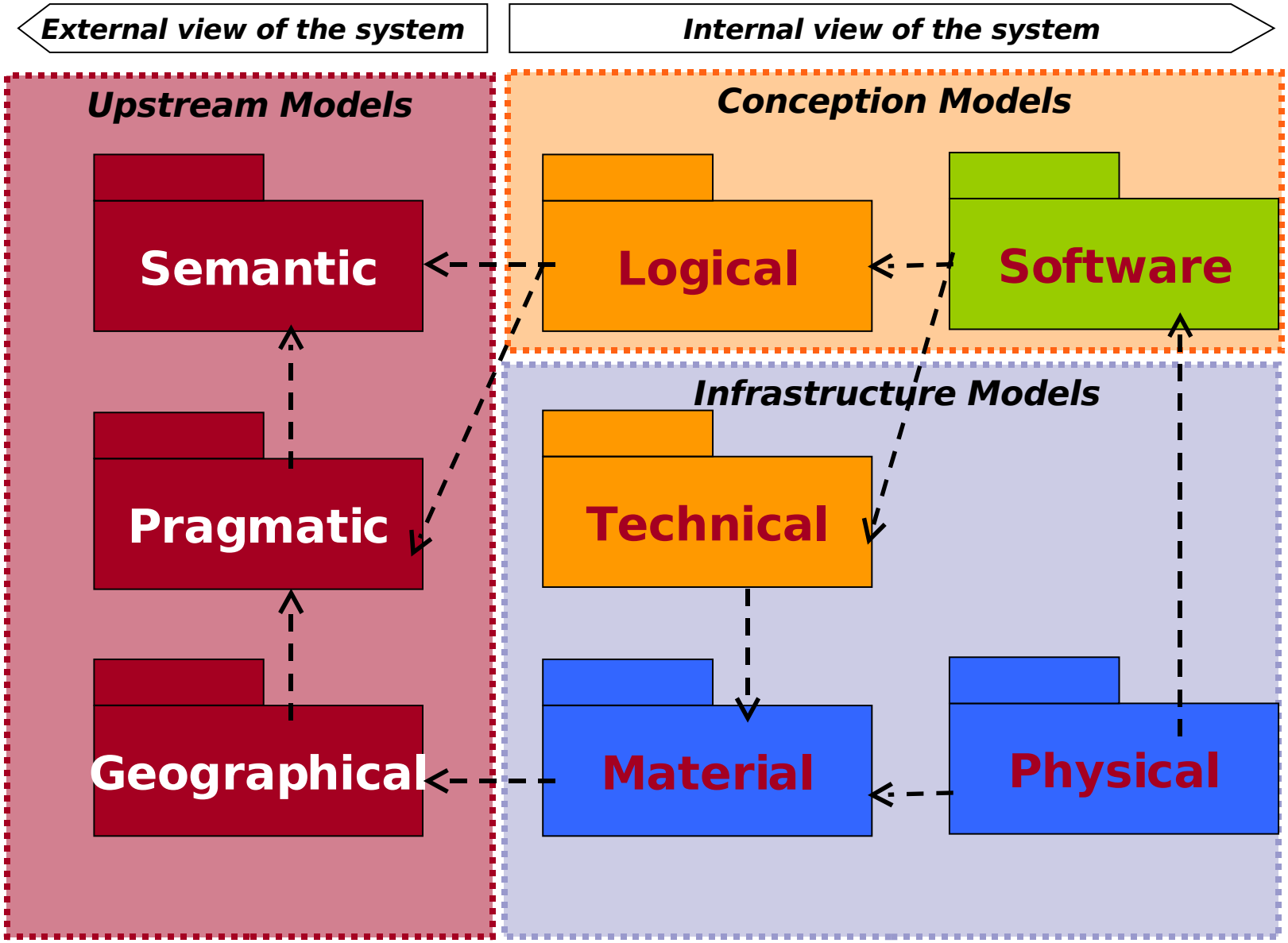
MDM : ***Master Data Management***
BPM: ***Business Process Management***

Approach chosen by SMABTP: the Praxeme methodology

- **Modeling methodological approach**
  - UML
  - MDA (Model Driven Architecture)
- **Analytical method built to ease the identification and the emergence of services for a better reusability**
- **Reconciliation between SOA and confinement of business rules in a BRMS**
- **Several technical ways to implement, the first one being in J2EE**
  - Implementation of part of Java code via Objecteering from models (MDA) and UML profiles
  - The JAMOS Framework (Java AMOS)



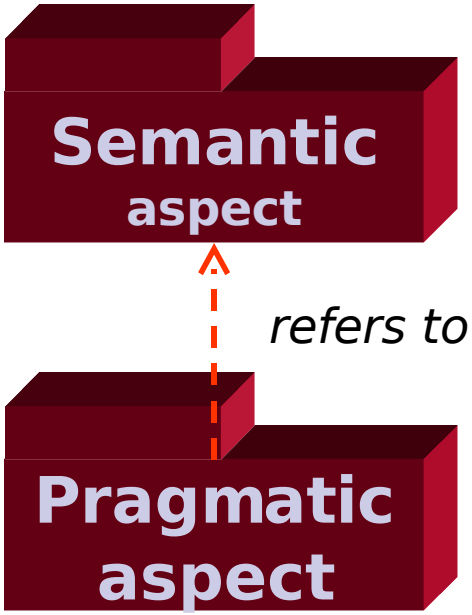
Praxeme: The Enterprise System Topology (EST)



The value-added of the EST

- **Integrate the many approaches and inheritance**
  - Object, function, process, component, SOA
    - Each one at the right place
- **Set an overall mindset addressing the whole Enterprise System**
  - A framework detailed in a real metamodel
    - Which pays a great attention to the links between all the categories
    - Which provides a clear specification to customize the tools
- **Theoretical foundation of the public method**
  - Providing many disciplines with procedures and guidelines
  - More details : WWW.PRAXEME.ORG

An upper level of abstraction: conclusion



- **Core business knowledge**
  - "Business objects"
  - ➔ largely sharable, quite universal
- **Organizational particularities**
  - Process, use-cases, role…
  - ➔ adaptation

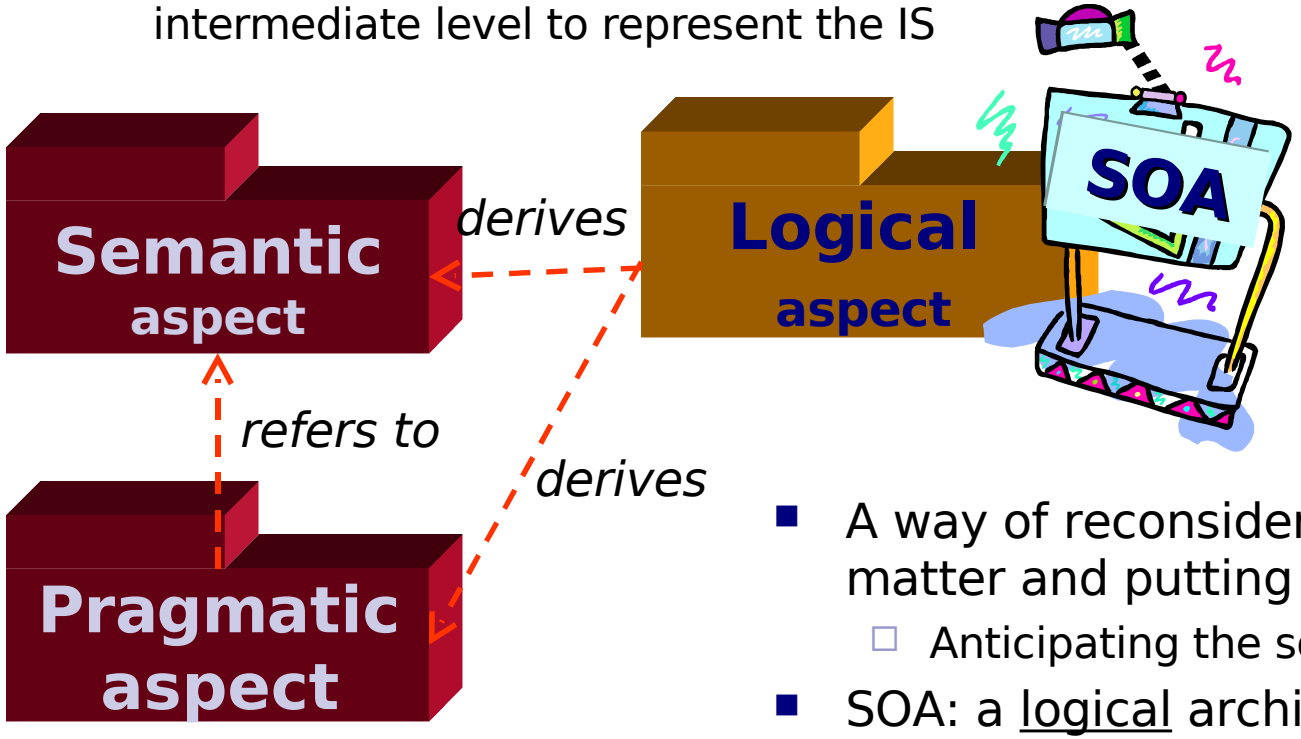
- "Pragmatic" aspect
  - Usual and classical approach based on action, process, use-case…
    - Nothing new except it be to refer to semantic model
- "Semantic" aspect
  - We have to get rid of the "data versus process" dichotomy…
  - …and adopt the object-oriented approach
    - This approach is more respectful to "real life"

Separation of concerns

1. **Separation of concerns as a inescapable principle**
   - An upper level of abstraction
   - An intermediate level
- **An upper level of abstraction**
  - Current state
    - The highest description which is given of the business is in terms of process, activities…
      - This aspect of the business is **prone to variation**
      - **Organization** remains a an adjustment parameter
      - So, it’s hard to ground convergence on this aspect
  - Next step
    - **There is an aspect above the organization and process**
    - We call it **semantic aspect**
      - Conceptual
      - We can model the core business knowledge
      - This model will be naturally share

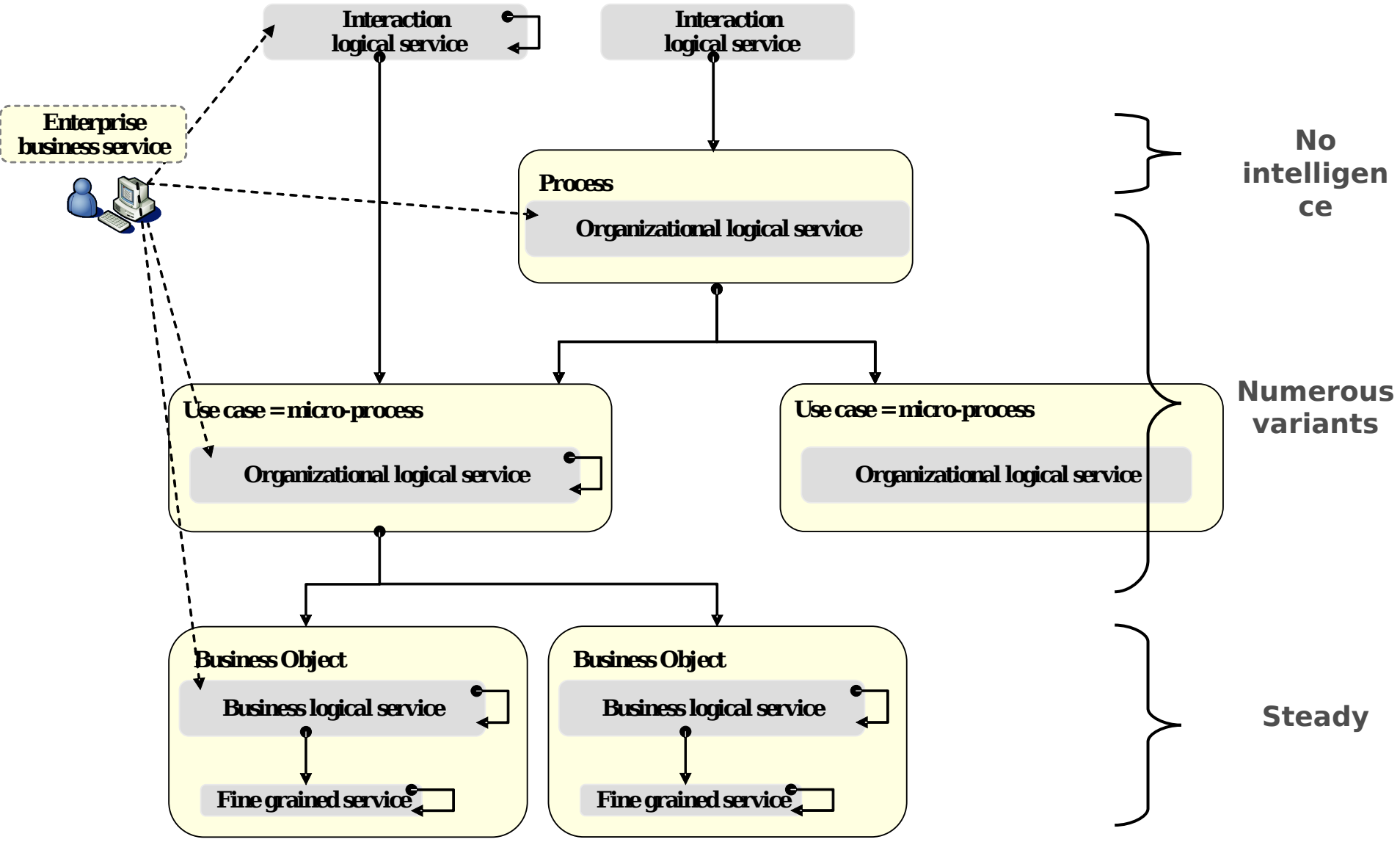
Separation of concerns

- **An intermediate level of abstraction**
  - We must be able to discuss the system structure also with business actors
    - In the context of governance, business needs to have a clear insight of what the software is and which road it follows
    - This insight cannot be given in terms of technology
  - The “logical” aspect provides all the actors – business & IT – with an intermediate level to represent the IS

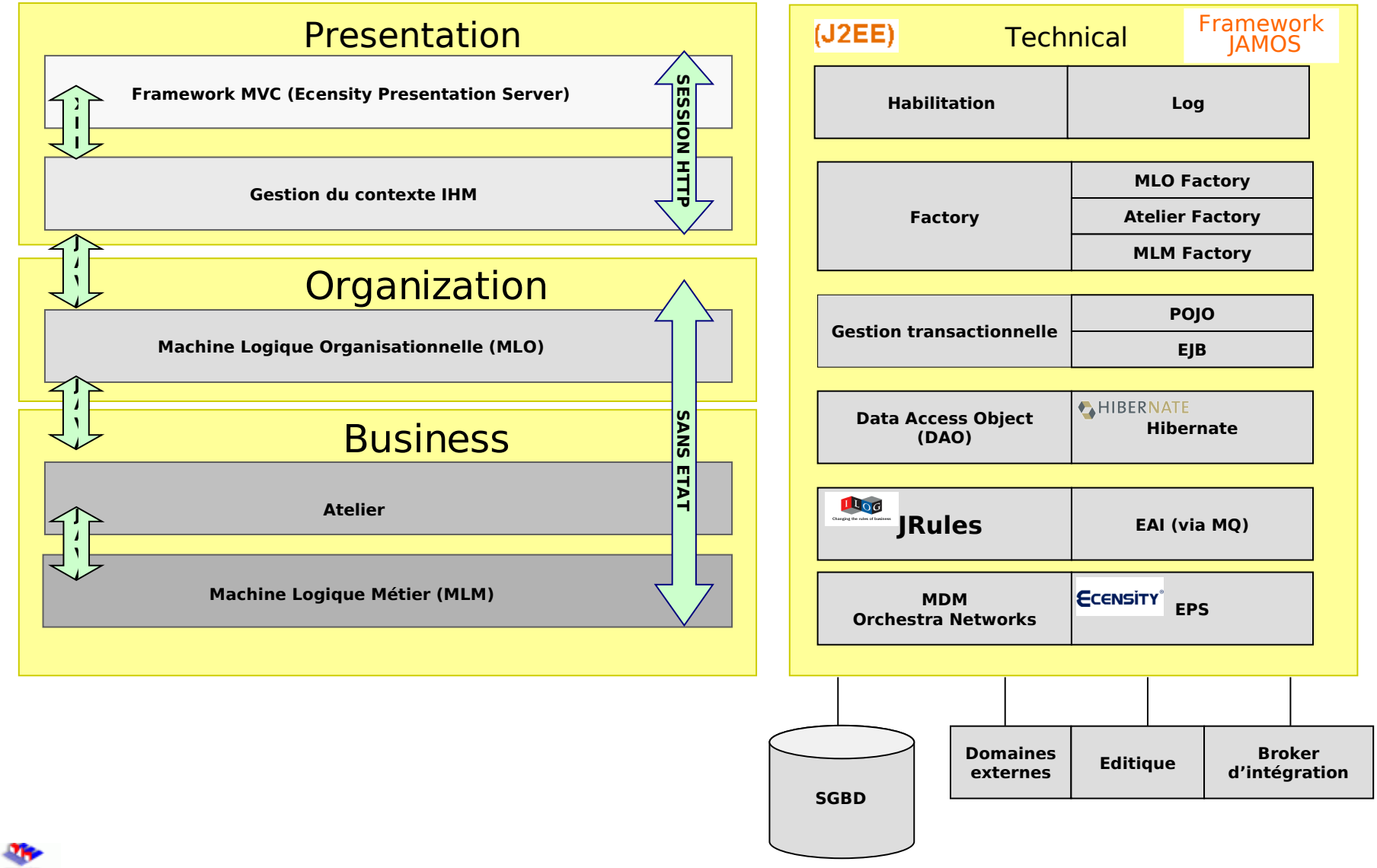


- A way of reconsidering the business matter and putting it in a structure
  - Anticipating the software
- SOA: a logical architecture based on the “service” metaphor

Separation of concerns in SOA



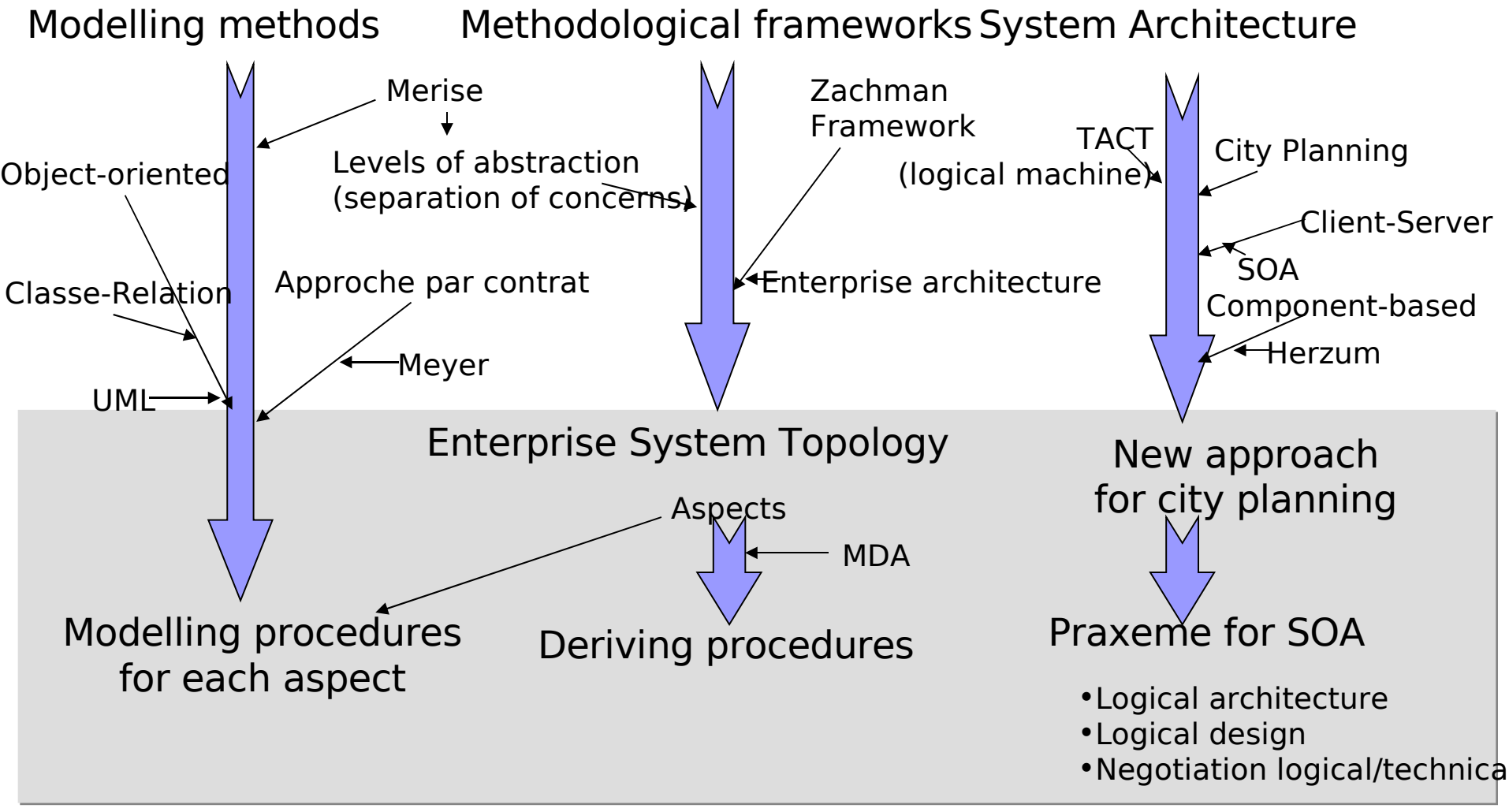
Applicative Architecture and JAMOS framework



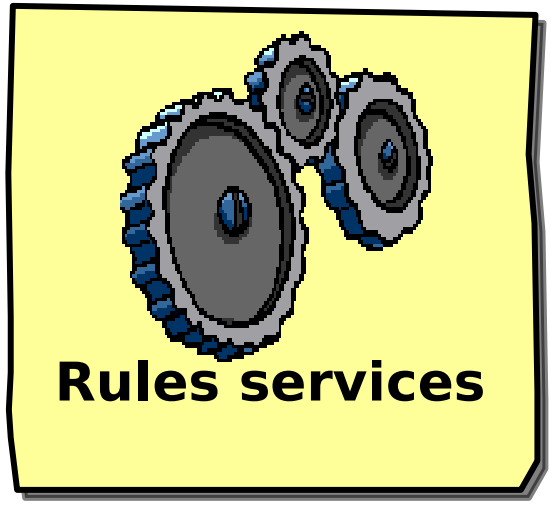
The Praxeme community

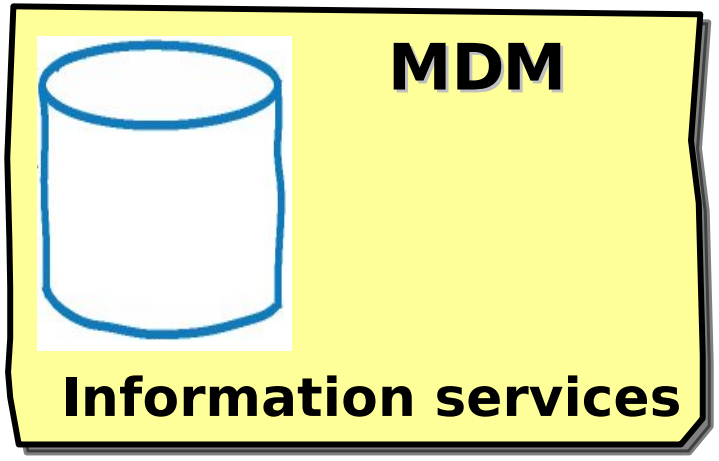
- **Praxeme Institute**
  - A non-profitable association
    - http://www.praxeme.org
- **Contributors and sponsors**
  - SAGEM, SMABTP, Armée de terre, Caisses d'allocations familiales, Unilog Management, AXA Group…
- **Colleges**
  - "Collège des architectes et concepteurs logiques (SOA)"
  - "Collège des instructeurs"
  - "Collège des modélisateurs sémantiques (référentiel métier, MDM)"
  - "Collège des médiateurs (MOA, pré-modélisation, objectifs, exigences…)
  - Etc.

Praxeme Filiations

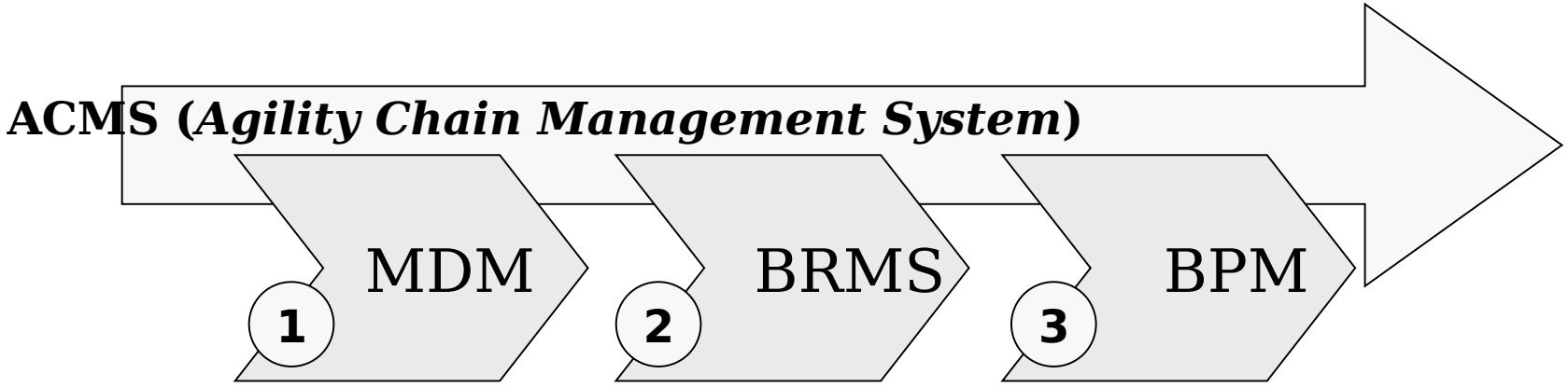


BRMS and BPM : agility in action





Agility chain for SOA



- **Rationalize the reference data and parameters management**
- **Create independence for the services execution with**

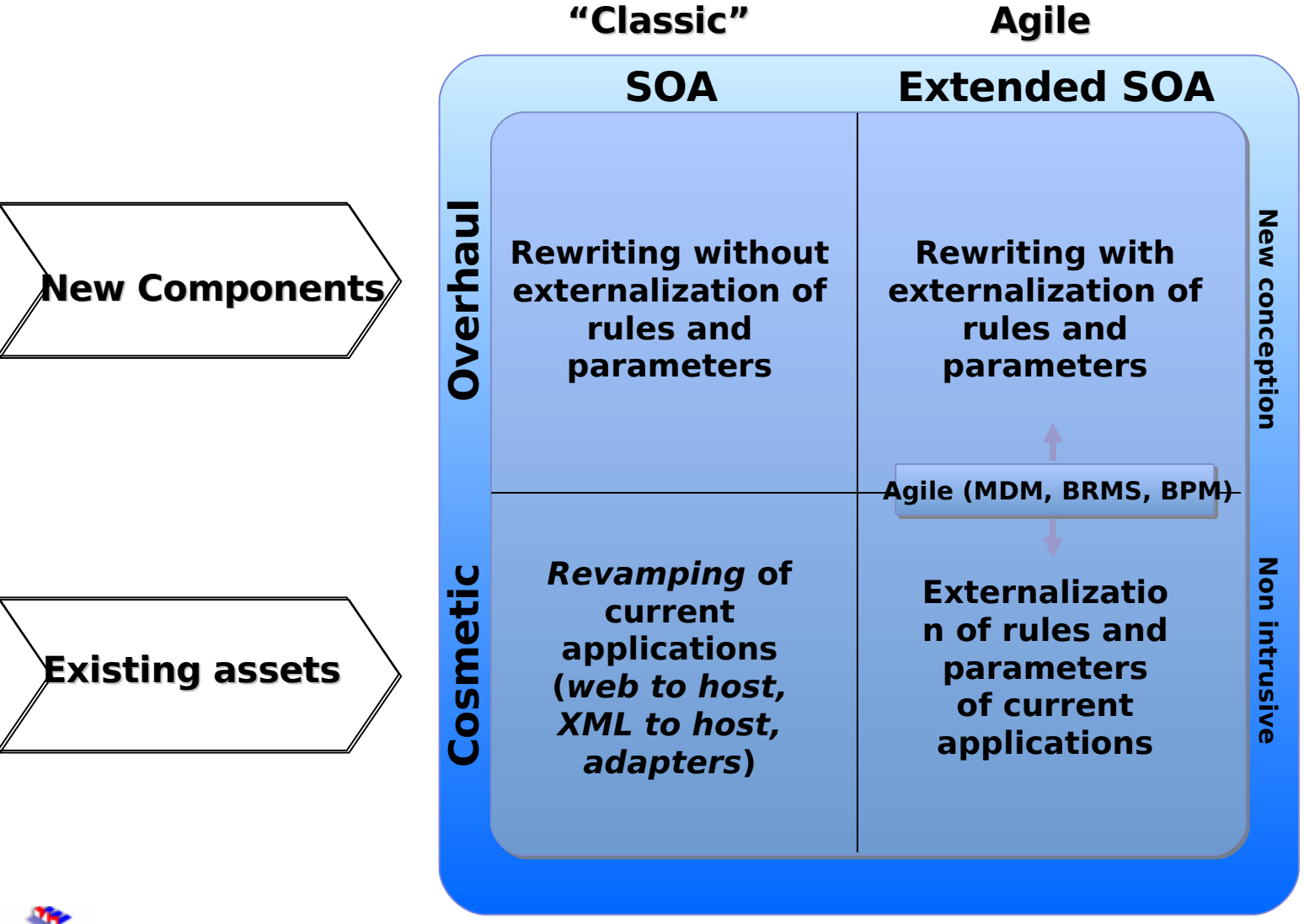
- **The business rules use the parameters of the MDMS**
- **The highly variables rules are pulled out of the service and put in the Business rules management**

- **The processes use BPM and rules to conduct the flow of data thru the different steps**
- **The context differences are managed in the MDM et le BRMS**

Methodology - Architecture

Infrastructure

SOA quadrant - *Definition*



MDM : ***Master Data Management***

BPM: ***Business Process Management***

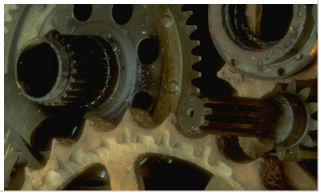
The creation of the sustainable IT system with SOA

- **Creation of a flexible structure that will turn IT software assets into reusable, loosely coupled services, linked together with messages**
  - Package the existing assets or new components
- **Services orchestration to create processes more easily**
  - Use BPM tools to reach this goal
- **Make more agile the services using MDM and BRMS tools**
  - Exposing parameters and rules in systems directly accessible by users
- **Use of industry standards to link these software together**
  - Allowing evolutions of systems
- **Need of a methodology to accompany the step**

GROUPE SMABTP
CONSTRUIRE EN CONFIANCE

The agility road for the SOA journey

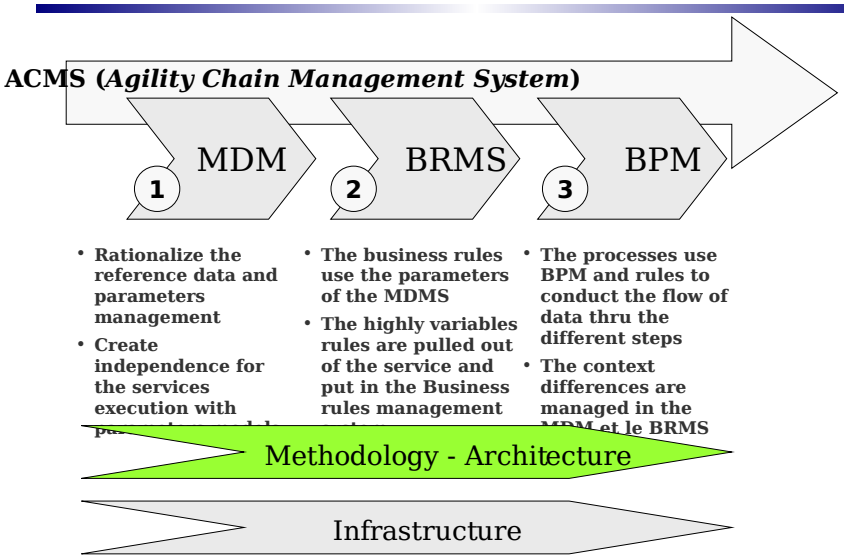
JM Detavernier, Deputy CIO SMABTP



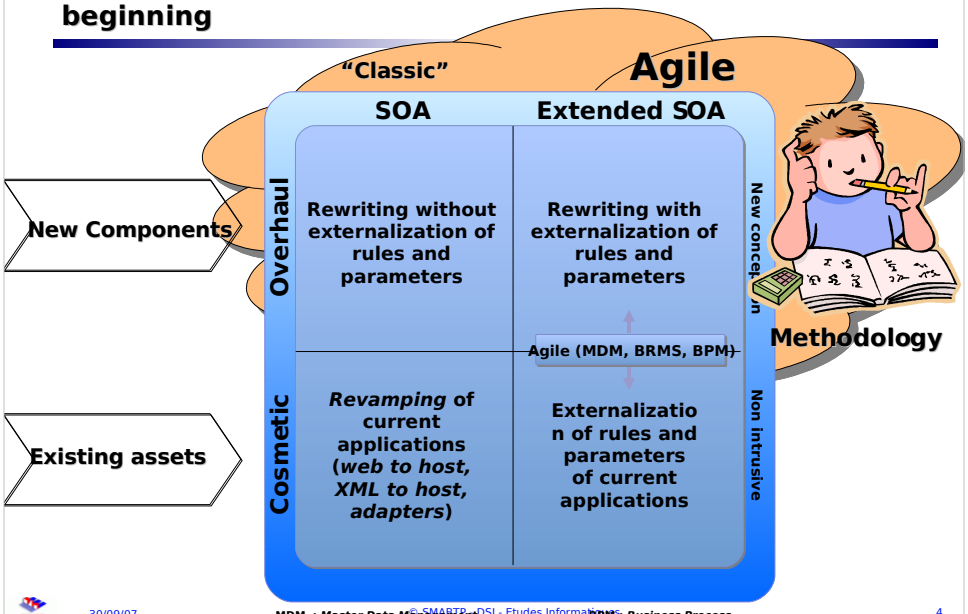
The creation of the sustainable IT system with SOA

- **Creation of a flexible structure that will turn IT software assets into reusable, loosely coupled services, linked together with messages**
  - Package the existing assets or new components
- **Services orchestration to create processes more easily**
  - Use BPM tools to reach this goal
- **Make more agile the services using MDM and BRMS tools**
  - Exposing parameters and rules in systems directly accessible by users
- **Use of industry standards to link these software together**
  - Allowing evolutions of systems
- **Need of a methodology to accompany the step**

Agility chain for SOA – Need of a methodology



The methodology helps to create agility from the beginning

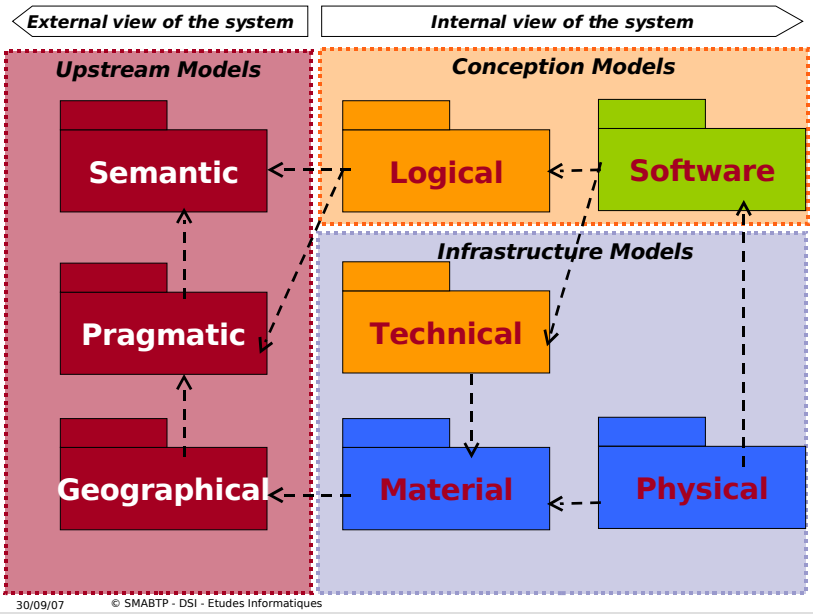


MDM : *Master Data Management*
BPM : *Business Process Management*

Approach chosen by SMABTP: the Praxeme methodology

- **Modeling methodological approach**
  - UML
  - MDA (Model Driven Architecture)
- **Analytical method built to ease the identification and the emergence of services for a better reusability**
- **Reconciliation between SOA and confinement of business rules in a BRMS**
- **Several technical ways to implement, the first one being in J2EE**
  - Implementation of part of Java code via Objecteering from models (MDA) and UML profiles
  - The JAMOS Framework (Java AMOS)

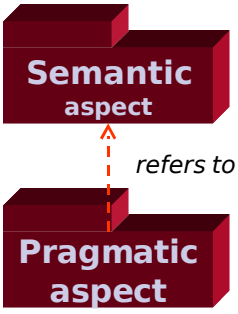
Praxeme: The Enterprise System Topology (EST)



The value-added of the EST

- **Integrate the many approaches and inheritance**
  - Object, function, process, component, SOA
    - Each one at the right place
- **Set an overall mindset addressing the whole Enterprise System**
  - A framework detailed in a real metamodel
    - Which pays a great attention to the links between all the categories
    - Which provides a clear specification to customize the tools
- **Theoretical foundation of the public method**
  - Providing many disciplines with procedures and guidelines
  - More details : WWW.PRAXEME.ORG

An upper level of abstraction: conclusion



- **Core business knowledge**
  - "Business objects"
  - ➔ largely sharable, quite universal
- **Organizational particularities**
  - Process, use-cases, role…
  - ➔ adaptation

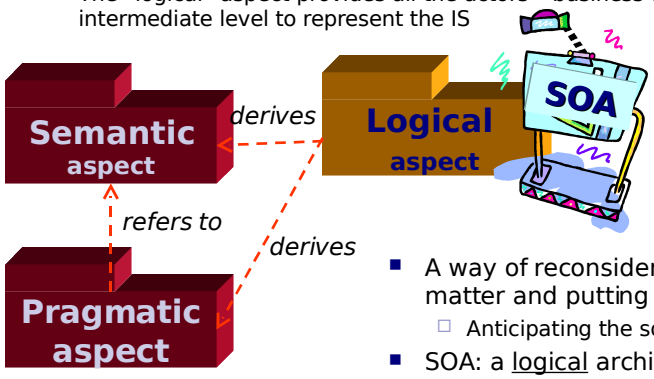
- "Pragmatic" aspect
  - Usual and classical approach based on action, process, use-case…
    - Nothing new except it be to refer to semantic model
- "Semantic" aspect
  - We have to get rid of the "data versus process" dichotomy…
  - …and adopt the object-oriented approach
    - This approach is more respectful to "real life"

Separation of concerns

1. **Separation of concerns as a inescapable principle**
   - An upper level of abstraction
   - An intermediate level
- **An upper level of abstraction**
  - Current state
    - The highest description which is given of the business is in terms of process, activities…
      - This aspect of the business is **prone to variation**
      - **Organization** remains a an adjustment parameter
      - So, it's hard to ground convergence on this aspect
  - Next step
    - **There is an aspect above the organization and process**
    - We call it **semantic aspect**
      - Conceptual
      - We can model the core business knowledge
      - This model will be naturally share

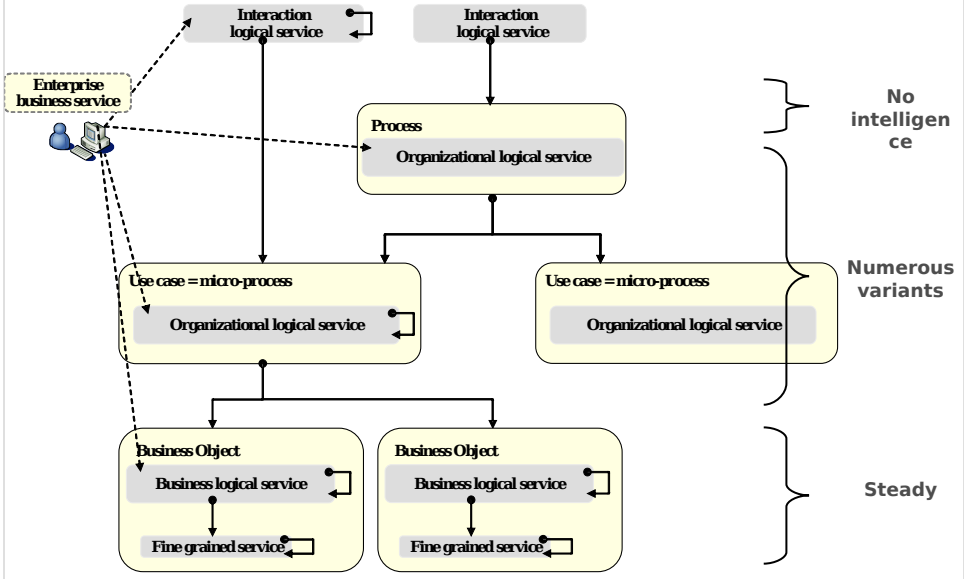
Separation of concerns

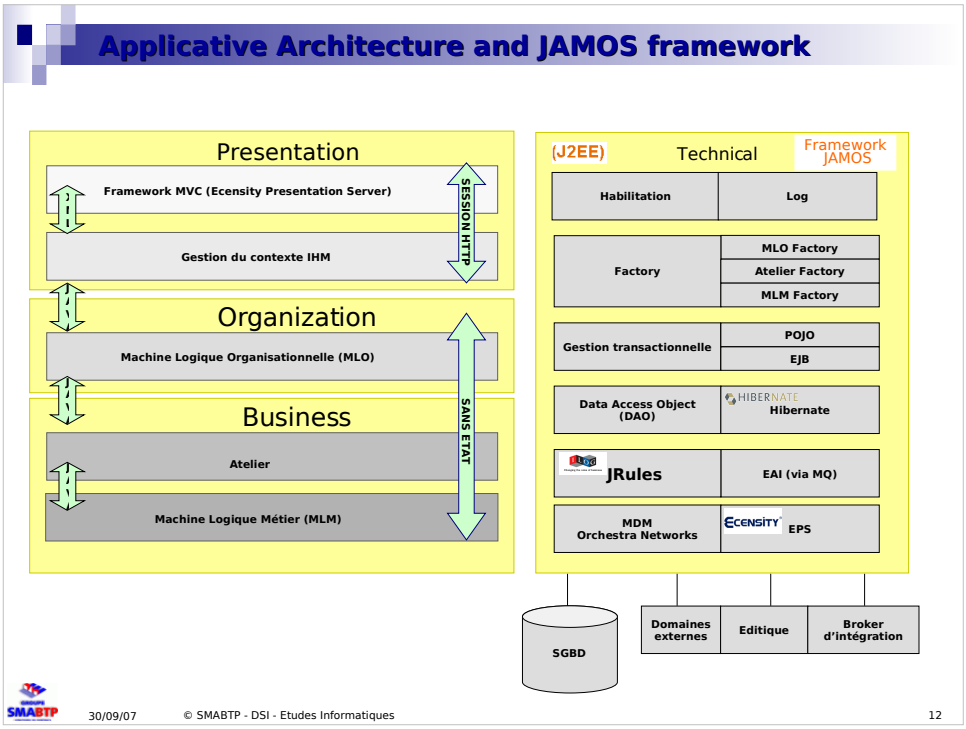
- **An intermediate level of abstraction**
  - We must be able to discuss the system structure also with business actors
    - In the context of governance, business needs to have a clear insight of what the software is and which road it follows
    - This insight cannot be given in terms of technology
  - The “logical” aspect provides all the actors – business & IT – with an intermediate level to represent the IS



- A way of reconsidering the business matter and putting it in a structure
  - Anticipating the software
- SOA: a logical architecture based on the “service” metaphor

Separation of concerns in SOA





SOA

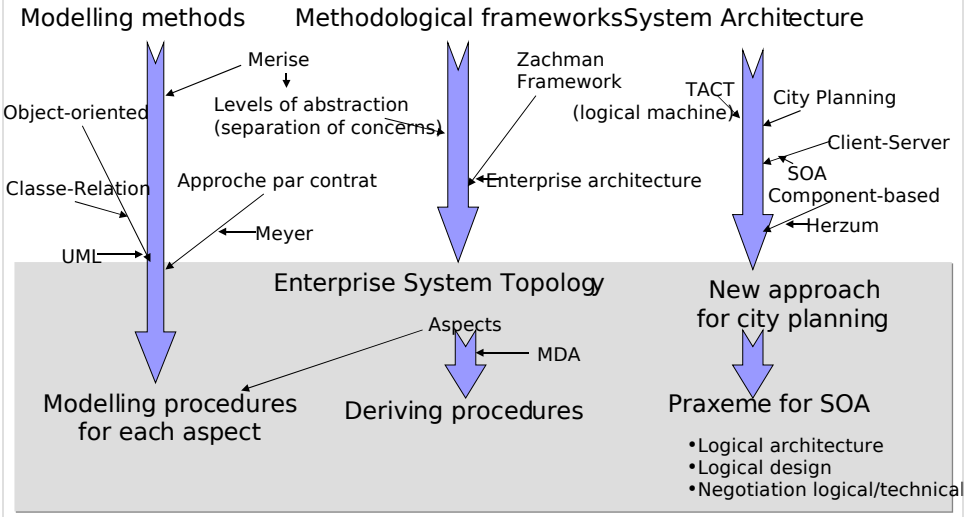
Isolation des couches

Chaque couche a un rôle bien défini

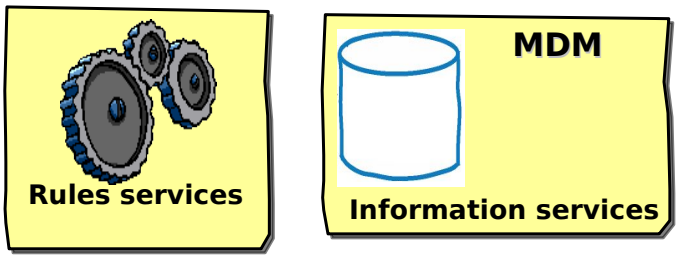
The Praxeme community

- **Praxeme Institute**
  - A non-profitable association
    - http://www.praxeme.org
- **Contributors and sponsors**
    - SAGEM, SMABTP, Armée de terre, Caisses d'allocations familiales, Unilog Management, AXA Group…
- **Colleges**
  - "Collège des architectes et concepteurs logiques (SOA)"
  - "Collège des instructeurs"
  - "Collège des modélisateurs sémantiques (référentiel métier, MDM)"
  - "Collège des médiateurs (MOA, pré-modélisation, objectifs, exigences…)
  - Etc.

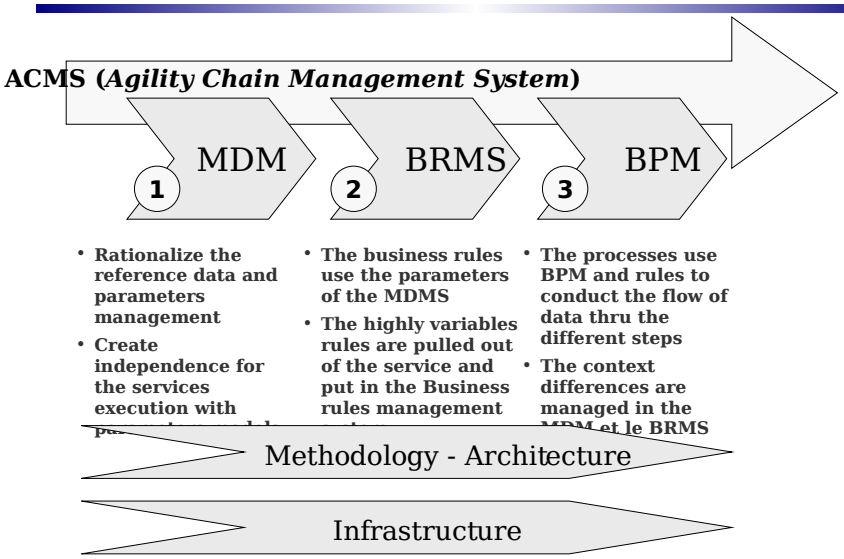
Praxeme Filiations



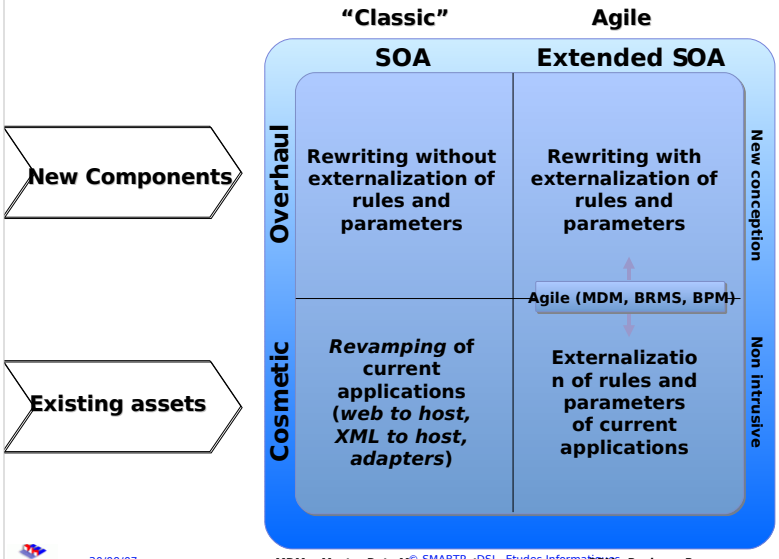
BRMS and BPM : agility in action



Agility chain for SOA



SOA quadrant - *Definition*



MDM : *Master Data Management*
BPM : *Business Process Management*

The creation of the sustainable IT system with SOA

- **Creation of a flexible structure that will turn IT software assets into reusable, loosely coupled services, linked together with messages**
  - Package the existing assets or new components
- **Services orchestration to create processes more easily**
  - Use BPM tools to reach this goal
- **Make more agile the services using MDM and BRMS tools**
  - Exposing parameters and rules in systems directly accessible by users
- **Use of industry standards to link these software together**
  - Allowing evolutions of systems
- **Need of a methodology to accompany the step**