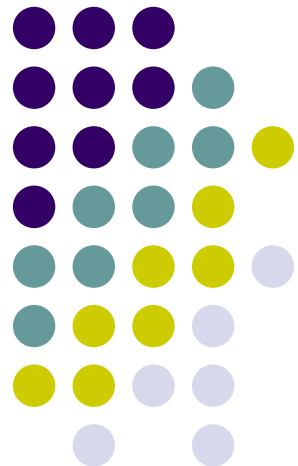
“Semantics of Business Vocabulary & Business Rules”



W3C Workshop on

Rule Languages for Interoperability

Washington, DC

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for the Business Rules Team

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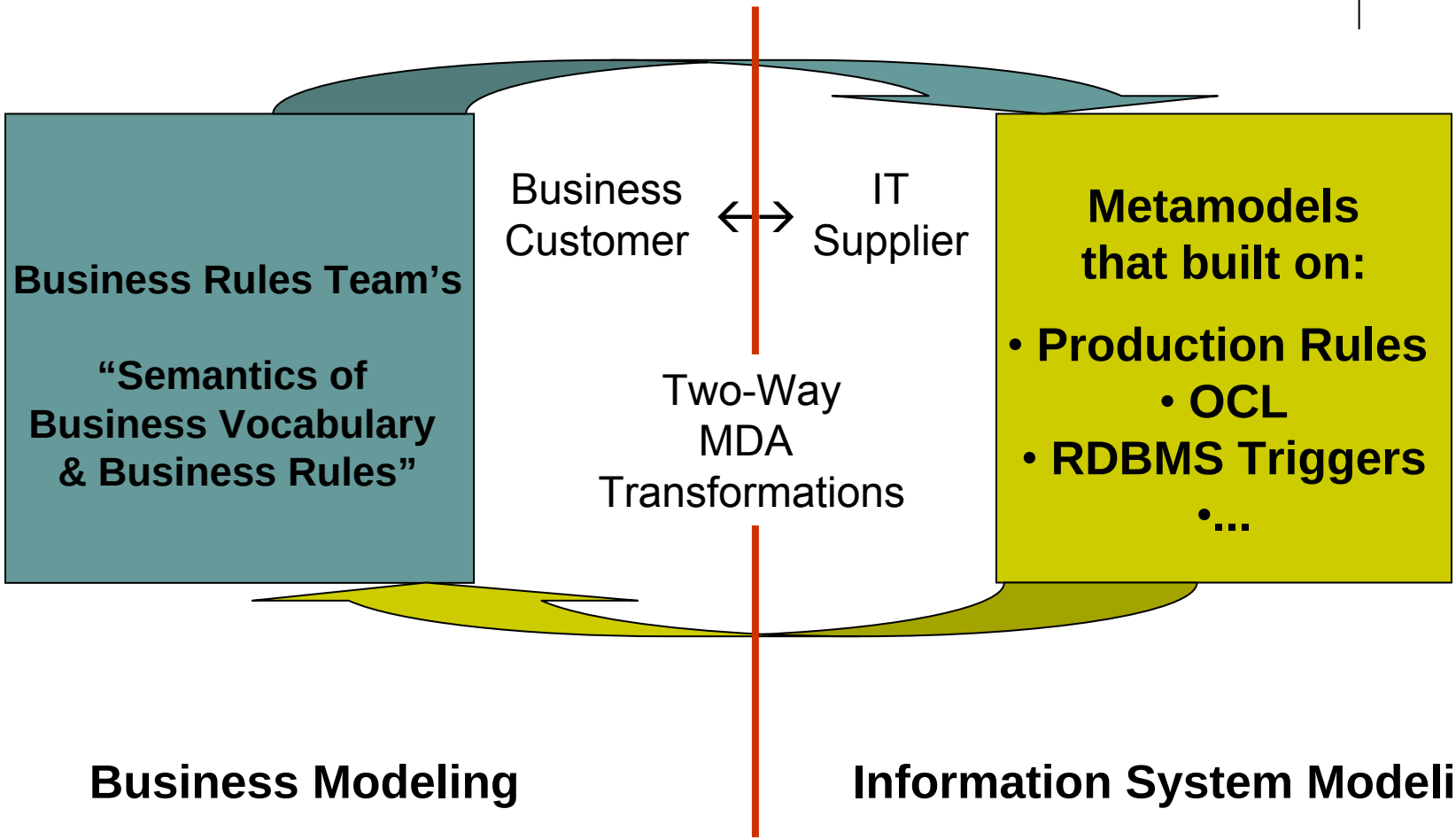
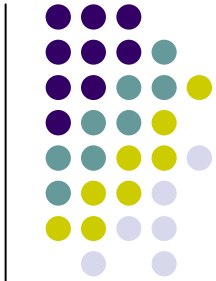
Rules Standards for Business & Information System Modeling



An SBVR "Business Vocabulary+Rules" is Owned by the Business *(and NOT IT)*:

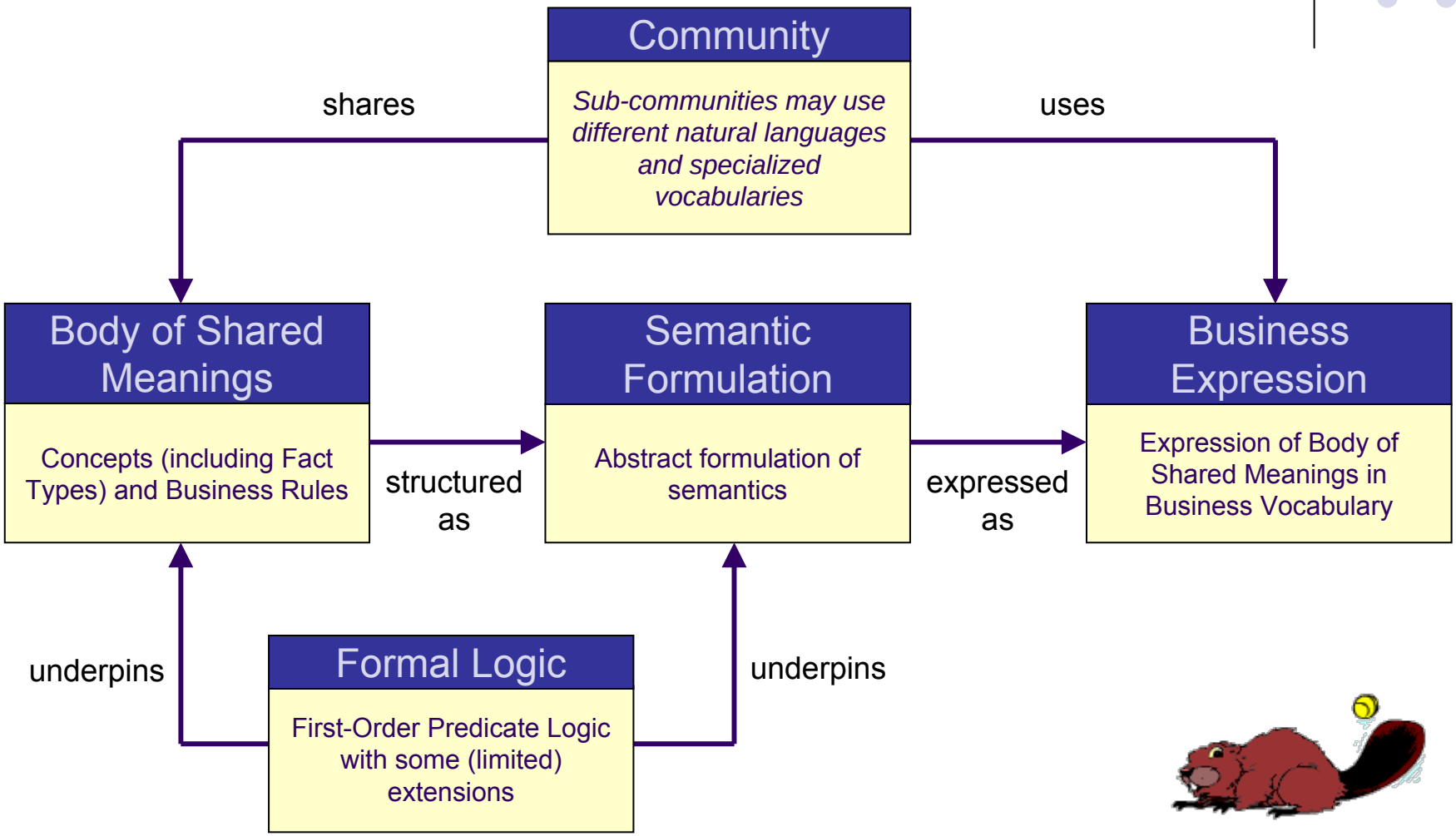
- ABOUT the Business
  - **NOT** the *Information System* or *Recordkeeping System* – manual or automated
- FOR Business purposes – the capability to run the business
  - **NOT** directly for *Information System* building purposes
- FROM a Business perspective – the perspective of Business stakeholders
  - **NOT** from an *IT / Information System* perspective
- IN the actual language used by Business staff – to talk to each other
  - **NO** reference to any *Information System* construct – independent of any implicit or explicit information system consideration or design decision
- BY the Business – created & maintained by Business staff
  - Contents **NOT** the responsibility of *Information Systems* staff – not owned by IT

SBVR: A Synthesis of Four Established Disciplines



1. VOCABULARY STANDARD:
   - ISO 1087-1 “Terminology work - Vocabulary – Part 1: Theory and Application”
2. BUSINESS PRACTICE:
   - BRG’s “Structuring Business Vocabularies for Business Rules”
3. FORMAL LOGICS:
   - Halpin’s “Object Role Modeling (ORM) for the Business”
4. LINGUISTICS & COMMUNICATION:
   - Unisys’ “Linguistic Expression of Business Rules Based on Exchangeable Vocabularies”

Overview of SBVR

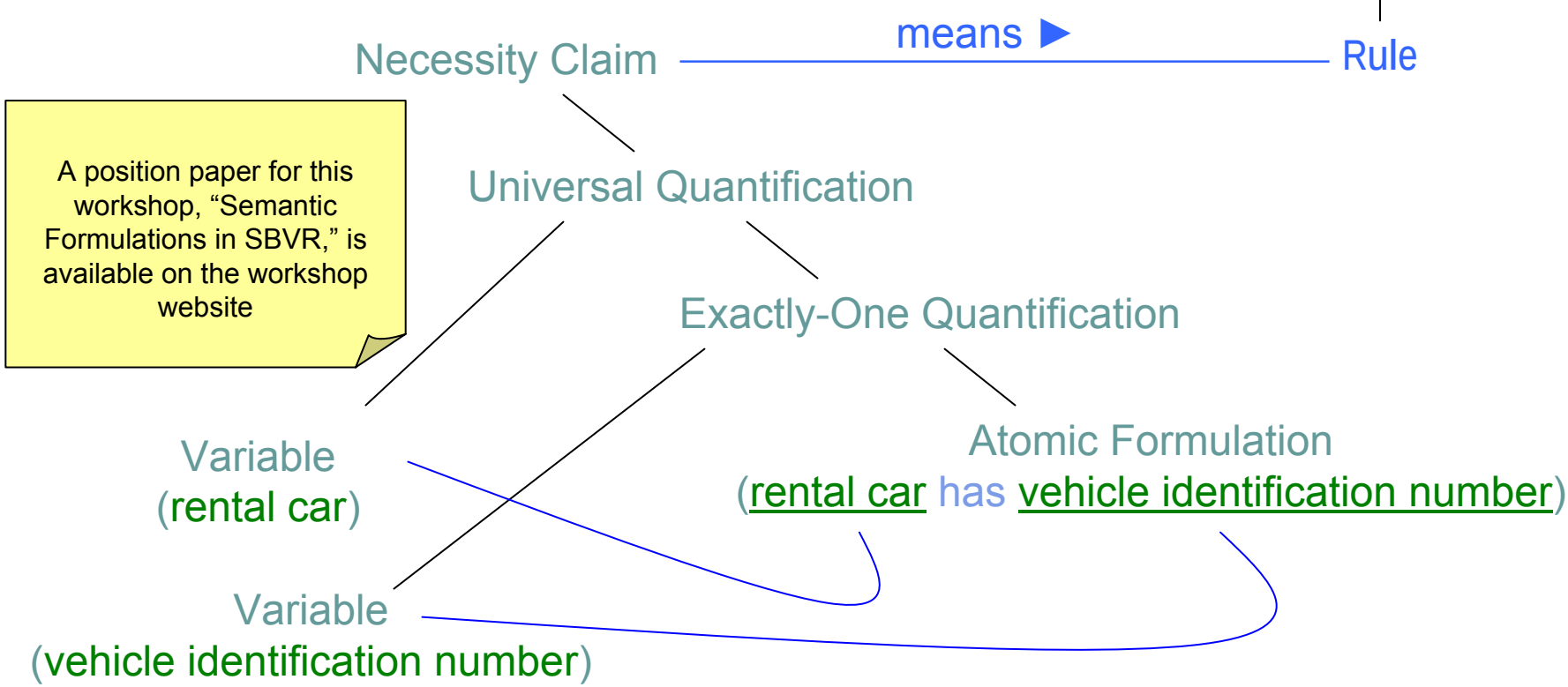


Key SBVR New Contribution -- Semantic Formulation

- What it's not
  - Not a language for stating business rules
  - Not a language for stating constraints
  - Not about software design
- What it is
  - Language for talking about meanings of concepts and rules
    - regardless of the languages or notations used to state them
  - A way of ***structuring*** the ***meaning*** of:
    - Definitions
    - Rules that govern the operation of an organization
    - Questions (Queries)
  - ***Optimized for people and natural language*** – not for machine processing
  - Interpretable in formal logics: 1st order and restricted higher order
  - Recursive
- Scope: Whatever business people mean by the vocabularies they use and the rules they make

Semantic Formulation of a Simple Rule

Each rental car always has exactly one vehicle identification number.



XML for Logical Formulation

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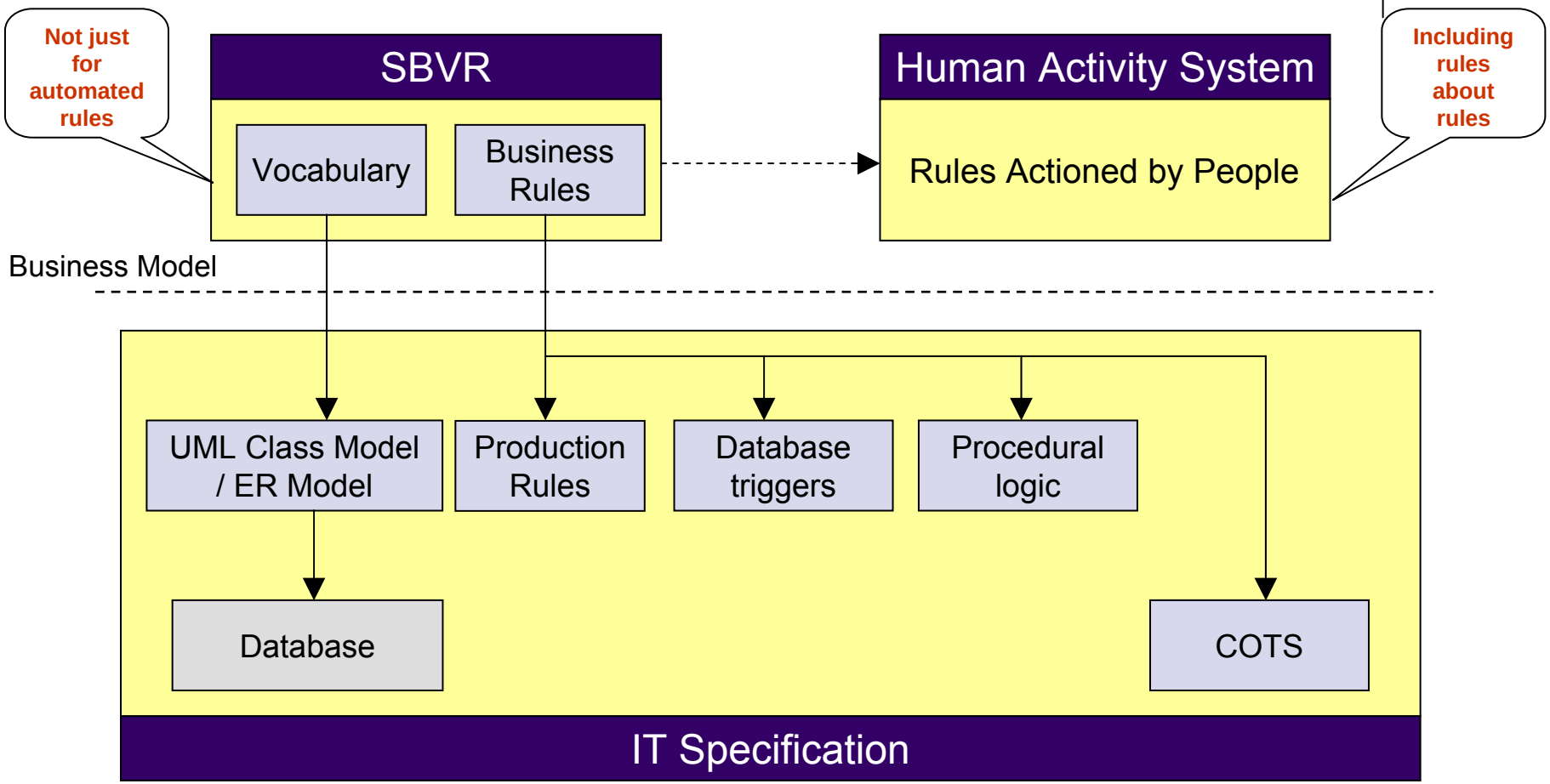
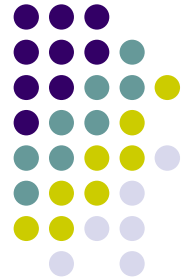
Relationship to Rule Exchange and Interoperability

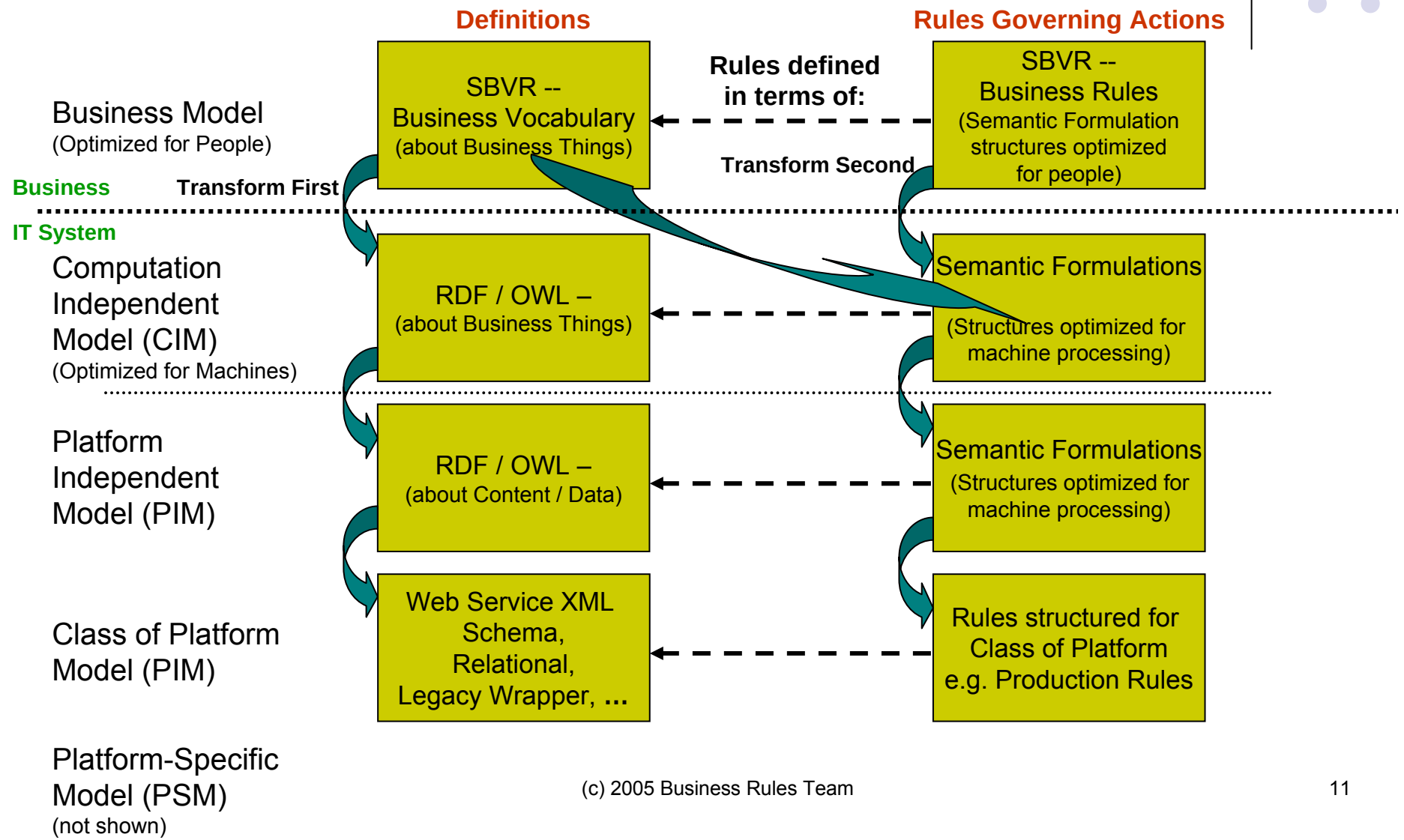


Contribute to / Require from Rule Language for Interoperability



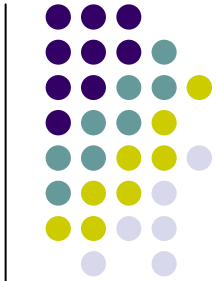
- Rules build on Vocabulary (Facts which Build on Concepts)
- No Rule Interoperability --
  - without Vocabulary Interoperability
  - Consistent vocabulary also applies to business process, organization roles and work flow, business geography and logistics **...**
- Meaning separate from Expression –
  - specialized vocabularies, multilingual
  - must support synonym & homonym terms
- Semantic Formulations – bridge people & computer
  - Structure the meaning of
    - Definitions -- CONTENT / DATA
    - Operational Rules -- SERVICES
    - Questions / Queries
- Use approach of Semantic Formulations with RDF and OWL
  - Optimized for machine processing

Vocabulary+Rules Framework for the Semantic Web

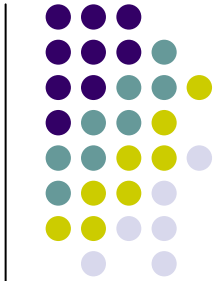


Questions?

Supplemental Slides



SBVR



- “Semantics of Business Vocabulary and Business Rules” - Business Rules Team (BRT) response to OMG RFP for BSBR
- Positioned in MDA as part of Business Model
  - Rules for people in real-world businesses
  - Vocabularies for expression of business rules
- Not IT system specification
  - Transformations will be needed
- Might provide vocabulary basis for whole business model (business process, organization …)

Business Rules Team (BRT)

- Consortium formed especially to respond to BSBR RFP
- 18 Organizations from 7 countries
- Three of the proposers are also proposers for OMG's Business Process Definition Metamodel (BPDM)