

Business Rules Classifications

**Position Paper to W3C Workshop on
Rule Languages
for Interoperability**

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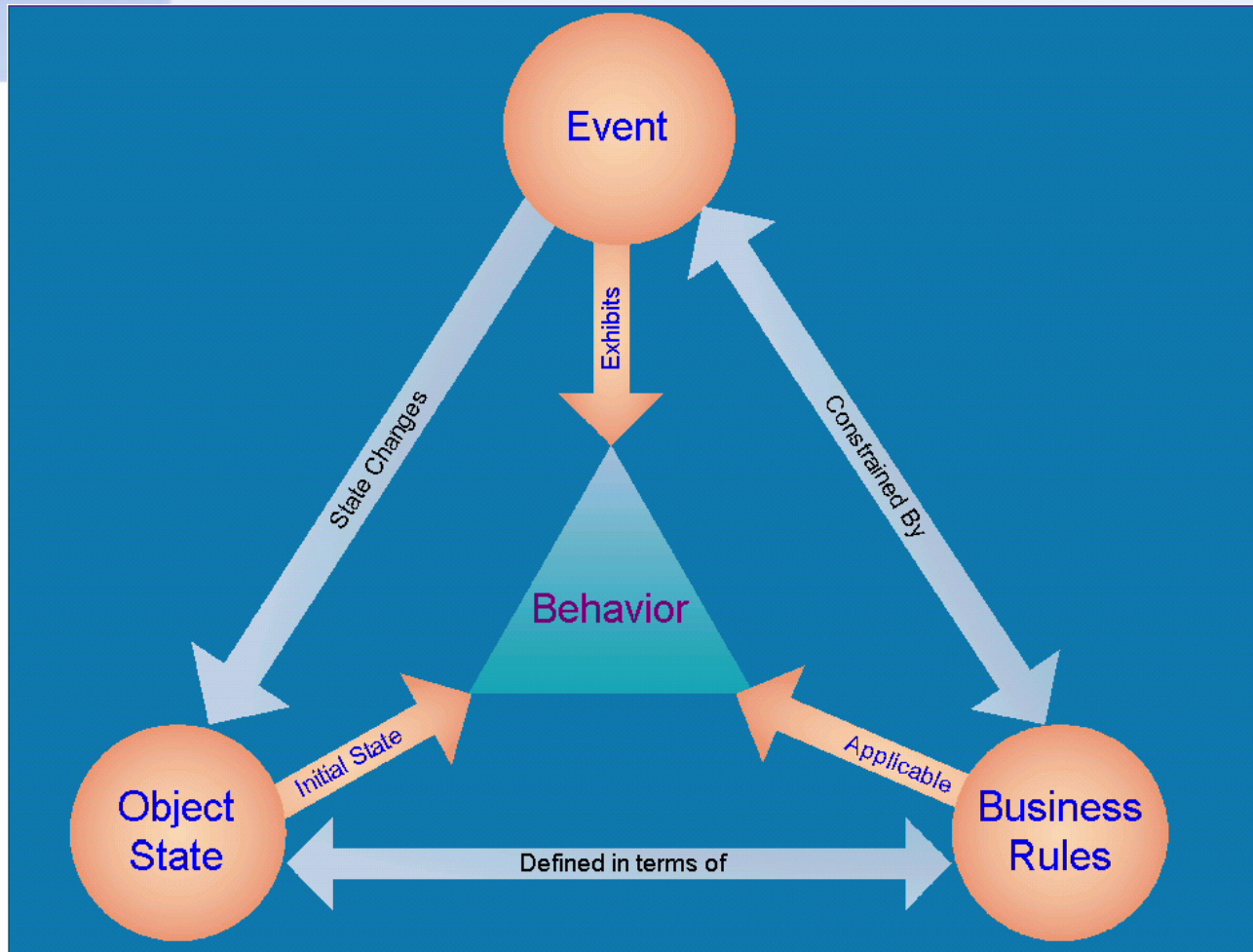
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Business Rules: Achieving Consistent Behavior



Business rules are the controls an organization puts in place to ensure the:

- consistent behavior of its business processes across all channels
- validity of its knowledgebase

Business Rules Management Observations

Business Perspectives

- Business rules are expressed using the vocabulary of the business.
- Business rules need to be directly associated with the business processes they control.
- Business rules are supported by the organization's information technology.
- Business rules need to be expressed in a grammar that structures rule statements in a manner that allow them to be analysis and reporting on as a set, whether or not they are enforced through information technology.
- Business rules need to be shared across the organization and with its partners, customers and regulating authorities.

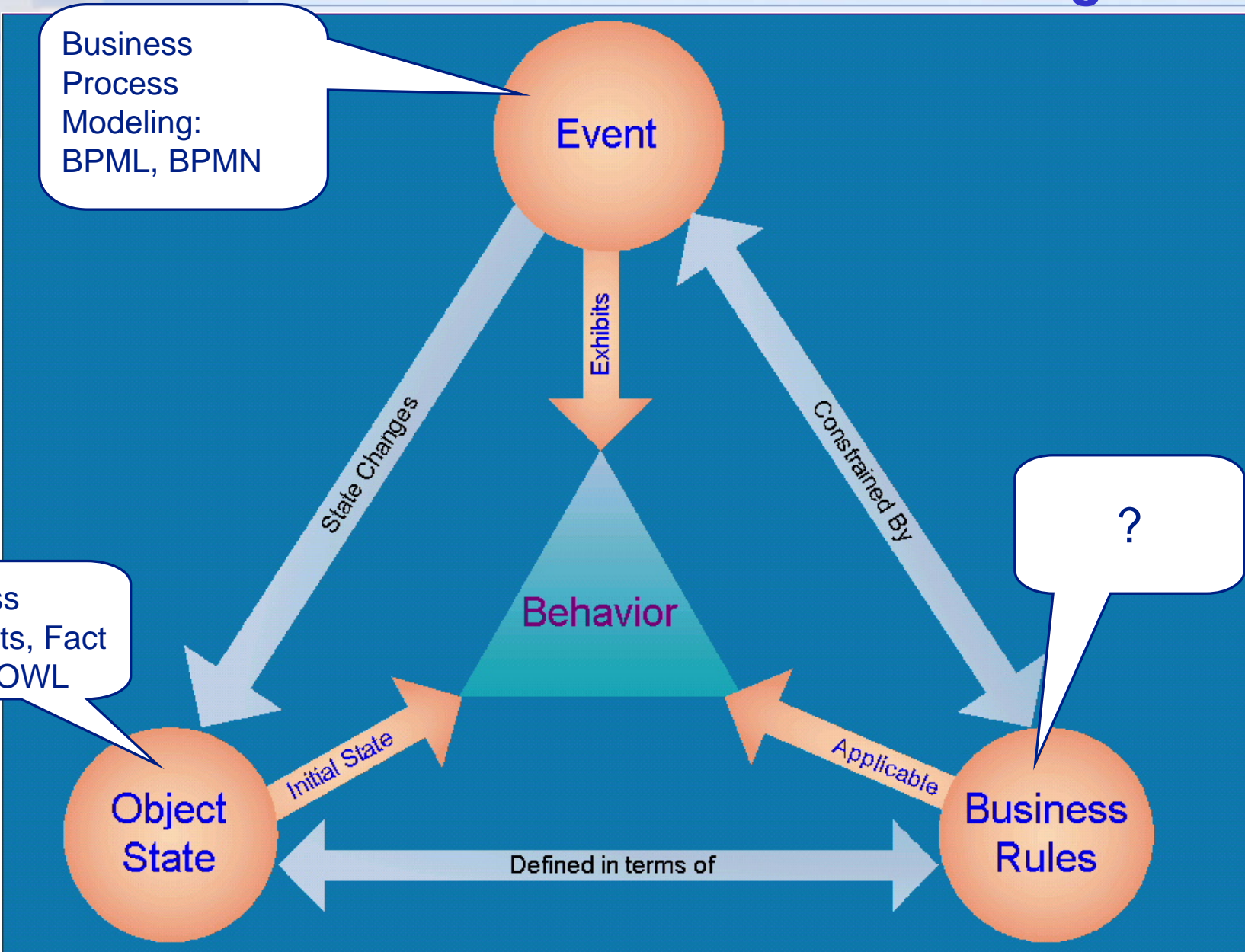
Technical Perspectives

- Technical rules (the expressions of how business rules are supported within the information technology) need to be shared across the organization's application portfolio and with its partners, customers and regulating authorities.
- Business rules need to be managed through its own suite of information systems.

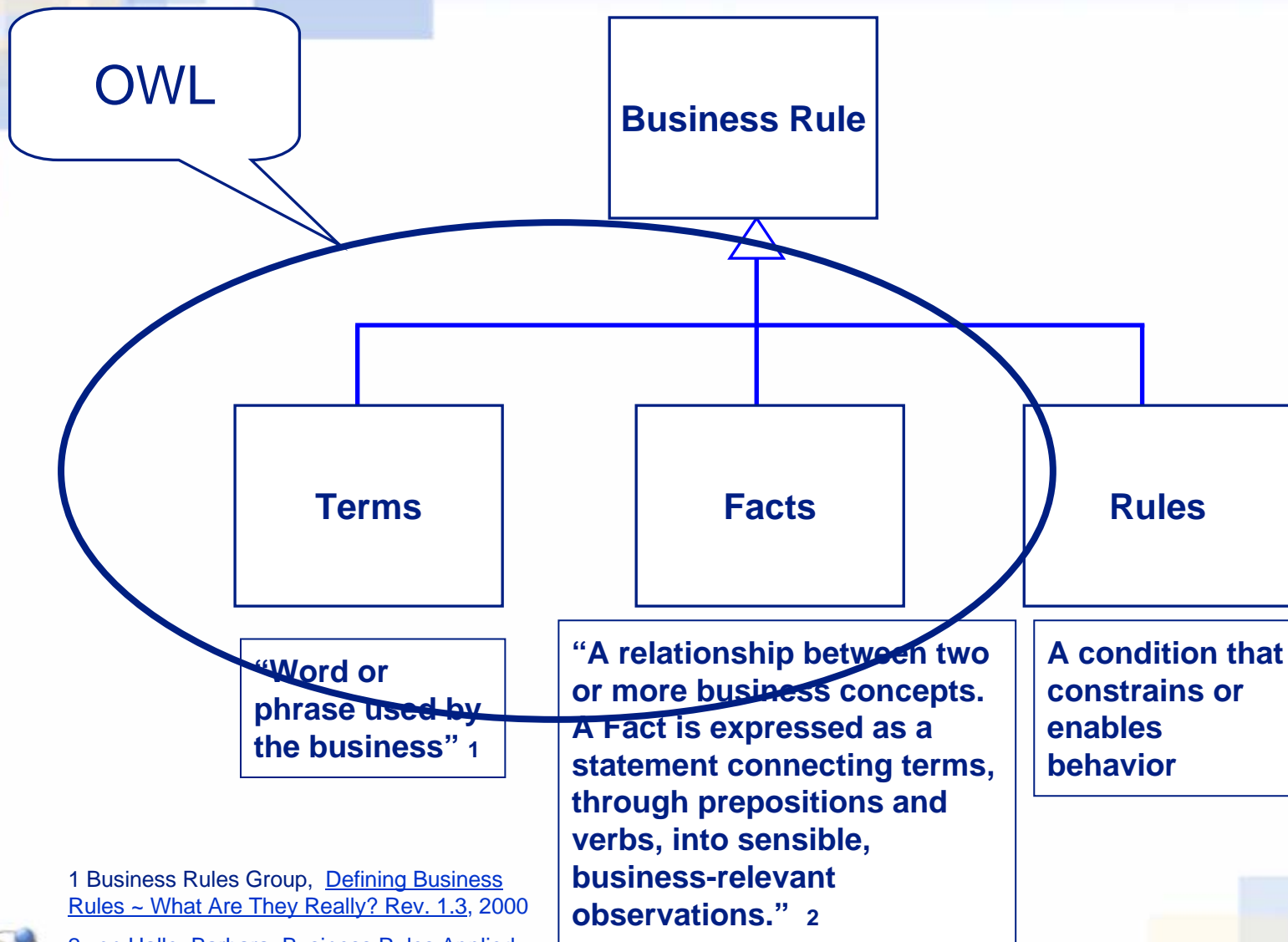


- **A standard for expressing business rules from both the business and information technology perspective will be an important component of solutions that address both needs:**
 - a consistent grammar.
 - ability to share business rules at the business and technical level.
 - Ability to interoperate between tools across the business rule life cycle:
 - Harvesting
 - Manual
 - Rules Mining
 - Structuring and Analysis
 - Transformation into Technical Rules
 - Execution
 - Rules Engines
 - Process Engines
 - Reasoning Engines (Ontologies)
 - A consistent notation (e.g. business concept/fact/ontologies diagrams)

Standards Integration



Generally Accepted Business Rule Taxonomy



¹ Business Rules Group, [Defining Business Rules ~ What Are They Really?](#) Rev. 1.3, 2000

² von Halle, Barbara, [Business Rules Applied](#), 2002

Inastrol's Rule Classification Scheme

Inastrol Category	Business Rule Type	Examples	Alternate Terms
Eligibility	Integrity	<ul style="list-style-type: none"> What am I considered to be? What Business State am I in? Customer; Preferred Customer; in the US Western Market; on Risk Watch; Late Payment What do I qualify for? Products; Pricing Plans; Tax Rates; Marketing Programs 	Inference
Validation	Integrity	<ul style="list-style-type: none"> Am I in a valid State? Complete, Accurate, Consistent, Correct Bill of Materials; "Part Of" Domain Constraints ("Data Rules") 	Constraint
Computation	Behavior	<ul style="list-style-type: none"> Compute Me; Configure Me. Set values to ensure that the enterprise's knowledgebase is always rational, in a valid business state Pricing; Discounts; Taxes; Metrics; Product Configurations 	Calculation
Process	Behavior	<ul style="list-style-type: none"> Here's the Business State I'm in. What Do I Do Next? Usually Event Specific 	Event-Condition-Action (ECA) Action Enablers/ Disablers
Authority	Behavior	<ul style="list-style-type: none"> Do I have access to this information? Am I allowed to perform this process? Are there limits on how often I can perform a process or on the what I can approve (e.g. monetary signing authority)? 	Policies

- OWL already provides coverage for most of the knowledgebase validity business rules. It should be used as the foundation for developing the standard for the business process behavioral business rules.

- **Duration-Oriented Rules**
 - If Loyalty Club Member has rented 30% less times in last 3 months than in the prior 3 months then include in win back campaign.
- **Comparisons of two Objects at the same time**
 - If this available car has a higher car group than that available car, assign this available car to rental reservation.
- **Operations over Sets**
 - Total income is the sum of all the income categories claimed on the form

1992	“Shifting Paradigms to Business Rules”, DAMA International
1993	“Next Paradigm”, Database Programming and Design
1993 on	Over 35 Business Rule Related Articles in <ul style="list-style-type: none">• Database Programming and Design• Intelligent Enterprise• TDAN.com
2000 on	Business Rules Forum Co-chairperson

- Developer
- Information Strategic Planning and Architecture
- Data Administration Manager
- Data Analysis and Modeling
- Data Integration Strategies
- Business Rule Methodologies, Metamodels and Tool Evaluation
- Customer/Partners Relationship Management

