

SBVR in a Nutshell...

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What is SBVR...

SBVR :

‘Semantics of Business requirements Vocabulary and Business Rules’

SBVR is an OMG Specification (Dec 2007)

- for expressing business models for business requirements
- in the language that is understandable to the business domain users

SBVR...

- defines a structured sub-set of English vocabulary for defining business vocabularies and business rules
- defined with the aim that business people can understand “models” without needing IT skills

SBVR...

- Based on fact-orientation models like ORM/NIAM
- Builds strongly on the foundation of ISO terminology science standards ISO 704: 2000 and ISO 1087-1: 2000 [3] and Linguistics
- Underpinned with formal (first-order) logic

The Building Blocks of SBVR Models...

- Applied within the general notion of OMG's model-driven architecture (MDA)
- Targeted at
 - business rules,
 - business concepts and
 - business vocabulariesthat describe businesses rather than the possible IT system that might support the business

5 most important aspects of SBVR

1. Formal (first-order predicate) logic
2. recognition of the existences of user sub-communities having their own languages and specialized vocabularies
3. A body of shared meanings, represented in concepts, fact types, and business rules for these sub-communities underpinned by formal logic,

5 most important aspects of SBVR

4. logical formulation, for capturing the semantics of a body of shared meanings, that supports multiple forms of representation and is underpinned by formal logic.
5. A business representation for the logical formulation of semantics using vocabularies acceptable to the (speech) sub-community

SBVR refers to semantics...

The main building blocks for semantics in SBVR are the following:

- Vocabularies and terminology dictionaries,
- Noun- and verb concepts, and,
- Definitional and operational business rules.

Verb concepts in SBVR

- A concept that is the meaning of a verb phrase that involves one or more noun concepts and whose instances are all actualities
- An example of an expression of a verb-concept or fact type expressed in SBVR-structured english is the following:
“rental car *is stored at* branch”

Types of business rules in SBVR

- subset of the English Language
 - SBVR's structured english
 - RuleSpeak business rule notation
- There is no formal notation yet (out with RFP)
- example of a rule expression in SBVR
RuleSpeak is the following:
“each rental car *is stored at* at most one branch”

Main types of rule statements...

- The structural rule statement, and
- Operative business rule statement

- Structural rule statement is a claim of necessity
 - necessity business rule statement,
 - impossibility business rule statement, restricted
 - possibility rule statement.

Main types of rule statements...

- The structural rule statement, and
- Operative business rule statement

- Structural rule statement is a claim of necessity
 - necessity business rule statement,
‘It is necessary that each rental has exactly one requested car group.’

Main types of rule statements...

- The structural rule statement, and
- Operative business rule statement

- Structural rule statement is a claim of necessity
 - necessity business rule statement,
 - impossibility business rule statement, restricted
‘It is impossible that the pick-up branch of a one-way rental is the return branch of that rental.’

Main types of rule statements...

- The structural rule statement, and
- Operative business rule statement
- Structural rule statement is a claim of necessity
 - necessity business rule statement,
 - impossibility business rule statement, restricted
 - possibility rule statement

‘It is possible that a rental is an open rental only if the rental car of the rental has been picked up.’

Main types of rule statements...

- The structural rule statement, and
- Operative business rule statement
- Operative business rule statement is a claim of obligation
 - obligation statement,
 - prohibitive statement and
 - restricted permissive statement..

Main types of rule statements...

- The structural rule statement, and
- Operative business rule statement
- Operative business rule statement is a claim of obligation
 - obligation statement,
‘A rental must incur a location penalty charge if the drop-off location of the rental is not the EU-Rent site of the return branch of the rental.’

Main types of rule statements...

- The structural rule statement, and
- Operative business rule statement
- Operative business rule statement is a claim of obligation
 - obligation statement,
 - prohibitive statement
 - ‘A rental must not be open if a driver of the rental is a barred driver.’

Main types of rule statements...

- The structural rule statement, and
- Operative business rule statement

- Operative business rule statement is a claim of obligation
 - obligation statement
 - prohibitive statement
 - restricted permissive statement..
 - ‘ It is permitted that a rental is open only if an estimated rental charge is provisionally charged to the credit card of the renter of the rental.’

SBVR

- gives us the modeling concepts to define most, if not all business rules that can be encountered within organizations
- a major step forward in the process of making business domain knowledge explicit and transferable
- does not, however, give a procedure or methodology on how to arrive at complete and correct SBVR models