Disposition: Closed, No Change

OMG Issue No: SBVR 15-18

*Legacy Issue Number:* 15963

Title: 'reality' and 'in-practice' models

Source:

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Summary:

In recognizing that an organization is not necessarily interested in recording all information about the real world, the SBVR proposes that there be two models of the world: a ‘reality model’ (of the real world) and an ‘in-practice model’ (of the organization’s view of the real world), which leads to some bizarre rule statements, listed below. Surely there is only 1 model in which both real-world objects and representations of them exist. The relevant quote from the SBVR is “Suppose the following two fact types are of interest: Employee was born on Date; Employee has Phone Number. In the real world, each employee is born, and may have more than one phone number. Hence the reality model includes the constraint ‘Each Employee was born on at least one Date’ (sic) and allows that ‘It is possible that the same Employee has more than one Phone Number.’ [If] the business decides to make it optional whether it knows an employee’s date of birth, [and] is interested in knowing at most one phone number for any given employee, the in-practice model excludes the reality constraint ‘Each Employee was born on at least one Date’, but it includes the following constraint that does not apply in the reality model: ‘Each Employee has at most one Phone Number’. ”

I believe there should be one model (not two), in which for each fact type there may be multiple rules reflecting specific requirements. Considering just dates of birth, the assertion “Each Employee was born on at least one Date” (which might be better worded as “Each Employee was born on exactly one Date”, “Each person has exactly one date of birth” or perhaps “Each person has a date of birth”) is a statement about the real world.

Consider an insurance business that decides that it must collect the date of birth of each customer purchasing personal life insurance but does not need it for those purchasing only home insurance. Following the logic expressed in the SBVR (as quoted above) the ‘in-practice model(s)’ contain a new constraint: “Each person purchasing personal life insurance has a date of birth” (or “Each person purchasing personal life insurance must have a date of birth”) and an advice: “Each person purchasing only home insurance may not have a date of birth”.

In fact the original assertion (“Each person has a date of birth”) still applies in the world view of the business, even to persons purchasing only home insurance. What is required is an additional constraint, which may be worded in one of the following forms “Each person who purchases personal life insurance must supply the date of birth of that person.” or “Each application for personal life insurance must specify the date of birth of the applicant.” and an advice “A person who purchases home insurance need not supply the date of birth of that person.”

Resolution:

The premise of this issue (that *"In recognizing that an organization is not necessarily interested in recording all information about the real world, the SBVR proposes that there be two models of the world…"*) reflects a mis-understanding of the clause in which these two terms are used.

Clause 24 begins with this explanation:

This clause lists and explains foundational concepts taken from respected works on formal logics and mathematics.

In other words, the material sub clause 24.1 (the only place where "reality model" and "in-practice model" are found in SBVR) is from other works and is presented as found in those works. It would be inappropriate to re-write/revise this material.

Revised Text:

None.

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