

1. Conceptual Modelling Methodology

A conceptual modelling methodology requires a modelling language and a procedure to follow. Like any modelling technique, we should have ways to evaluate the modelling. A conceptual model should make you think about all the concepts and their relations, clearly develop semantics, and help you construct syntactically and semantically correct models. It should also provide a simple transformation of models to implementation.

Criteria for Evaluating a Conceptual Modelling Language

The criteria we would use to evaluate a conceptual modelling language includes:

- ◆ Expressibility
- ◆ Clarity
- ◆ Semantic stability
- ◆ Semantic relevance
- ◆ Validation mechanisms
- ◆ Abstraction mechanisms
- ◆ Formal foundation

Developing an Information System

When developing an information system, the first step is to determine the requirements. These requirements are documented in the form of a specification, often after consulting domain experts. It's important that the specifications are measurable, leading to good specifications. The acronym SMART can be used as a guide:

- ◆ Specific
- ◆ Measurable
- ◆ Achievable
- ◆ Reasonable
- ◆ Timely

Object Role Modelling (ORM)

Object Role Modelling (ORM) allows us to describe the universe of discourse in formal terms of the conceptual schema. ORM fulfils all the requirements of a conceptual modelling language,

unlike other techniques such as Entity Relationship Diagram (ERD).

See Also

[2. Conceptual Scheme Design Procedure](#)