

Custom Elaborations of the Standard:
*Implementing a language for Generic
Enterprise Modeling to give an enterprise
control of its architecture*



*Partners in
Language Development*

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- ◆ Excellent buy-in and participation by senior leadership:
 - A VP-level team trained in the Framework is leading business reengineering.
 - This team reads and owns the Row 2 models.
 - Their departments own the Row 3 models for domain-specific slivers.

- ◆ We quickly encountered a problem:
 - Entity-Relationship modeling worked in Column 1 to give visibility to the model up and down the rows so that we could maintain alignment in Rows 4 and 5.
 - With nothing comparable in the other 5 columns, only one-sixth of our architecture was under control.

Our solution

- ◆ Develop a language for enterprise modeling.
- ◆ The GEM (Generic Enterprise Modeling) language is an XML application for describing an enterprise.
- ◆ GEM is based directly on the Zachman Framework metamodel and the Enterprise Architecture Standards but is not identical.
- ◆ The metamodel is too generic to support detailed engineering; thus GEM adds detail and constraint to the generic standard.

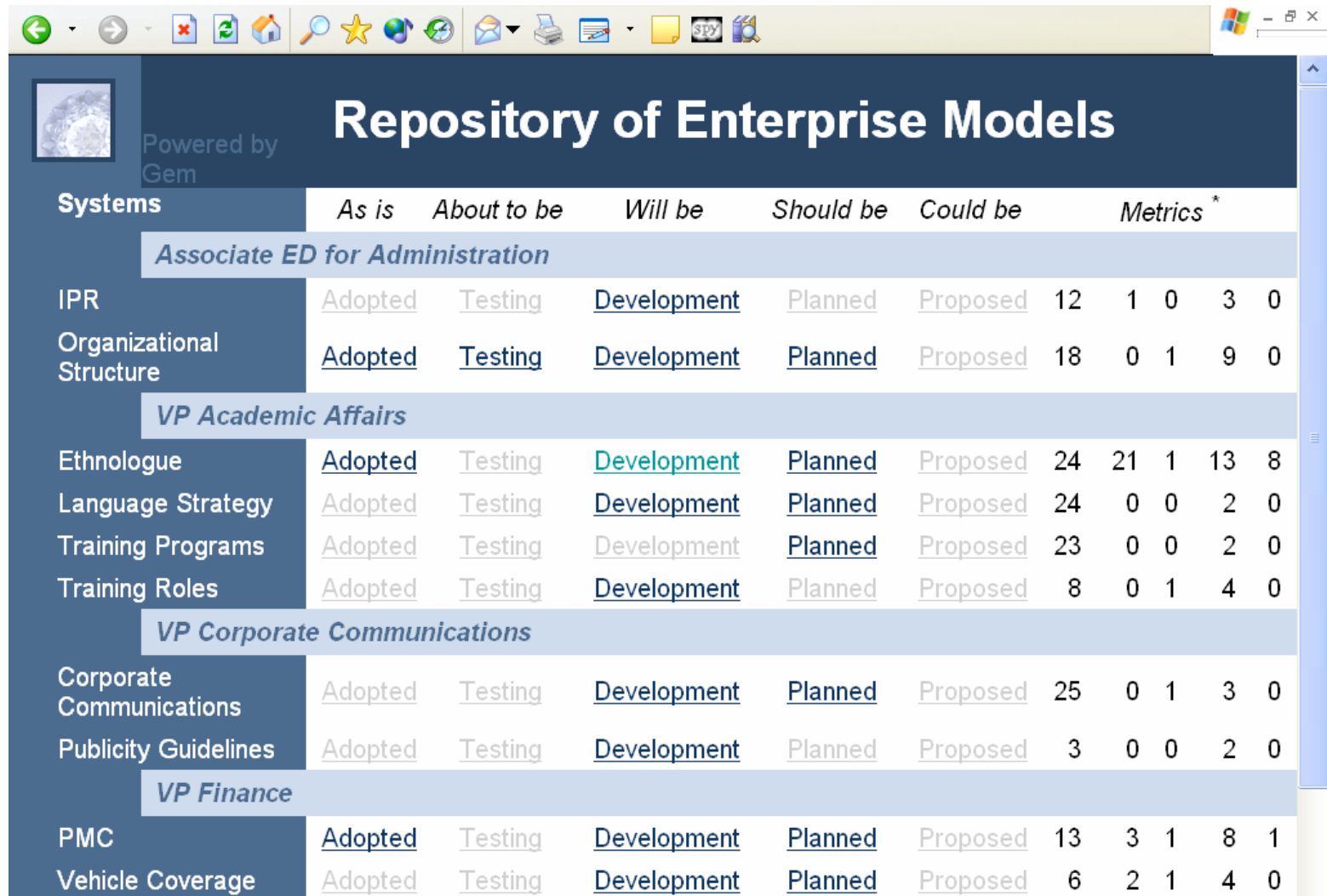
Elaborating the standard

- ◆ An enterprise makes the framework its own by translating the Enterprise Architecture Standards into its specific context. Allowed elaborations:
 - Introduce an alias for a standard thing or relationship.
 - Introduce named subtypes of standard things and relationships.
 - Add named attributes to a type of thing or relationship.
- ◆ Dumb-down rule: When these changes are reversed in an elaborated model, the result must be a model that conforms to the generic standard.

Key features

- ◆ A single repository allows participants representing all rows of the framework to see all the authoritative models.
- ◆ A single GEM XML source model handles slivers in a build sequence and manages layers of incremental change.
- ◆ HTML and graphical views of the models are automatically generated from the XML.
- ◆ The XML source model contains nothing redundant or predictable; these are added by automatic transformation.

Demonstration



Systems	As is	About to be	Will be	Should be	Could be	Metrics *				
Associate ED for Administration										
IPR	Adopted	Testing	Development	Planned	Proposed	12	1	0	3	0
Organizational Structure	Adopted	Testing	Development	Planned	Proposed	18	0	1	9	0
VP Academic Affairs										
Ethnologue	Adopted	Testing	Development	Planned	Proposed	24	21	1	13	8
Language Strategy	Adopted	Testing	Development	Planned	Proposed	24	0	0	2	0
Training Programs	Adopted	Testing	Development	Planned	Proposed	23	0	0	2	0
Training Roles	Adopted	Testing	Development	Planned	Proposed	8	0	1	4	0
VP Corporate Communications										
Corporate Communications	Adopted	Testing	Development	Planned	Proposed	25	0	1	3	0
Publicity Guidelines	Adopted	Testing	Development	Planned	Proposed	3	0	0	2	0
VP Finance										
PMC	Adopted	Testing	Development	Planned	Proposed	13	3	1	8	1
Vehicle Coverage	Adopted	Testing	Development	Planned	Proposed	6	2	1	4	0