

Generating Applications from Models:
*Leveraging the Profession Framework
to achieve dramatic Improvement in
enterprise implementation*



*Partners in
Language Development*

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Problem Statement

The status of EA implementation at SIL Int'l:

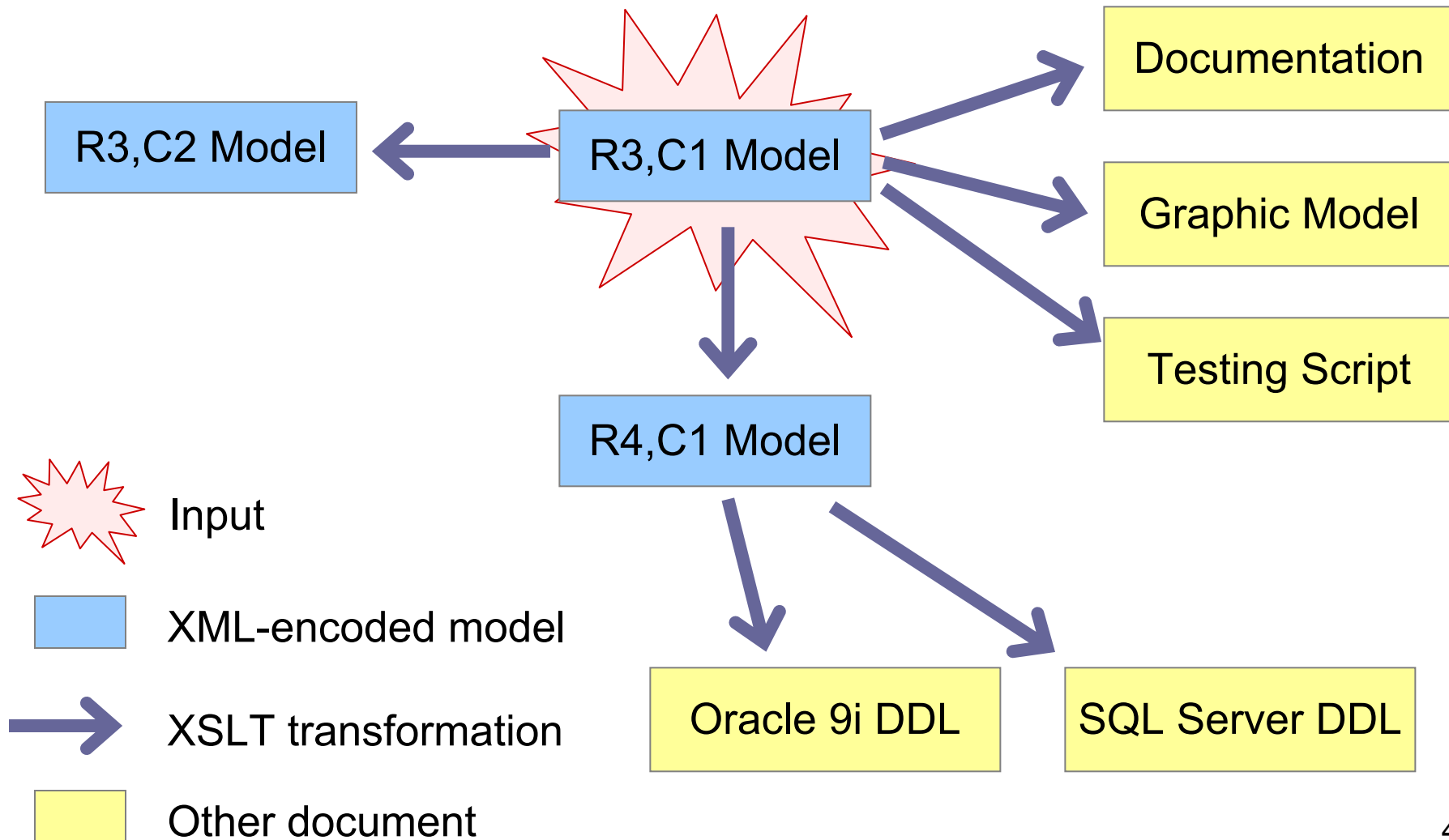
- ◆ We need an order-of-magnitude speed-up in “time to market.”
- ◆ We need to guarantee that the implementations in Rows 4, 5, and 6 are properly aligned with the business intent expressed in Row 2 and 3 models.
- ◆ We need to have all the blueprints in order to manage change and they must be up-to-date.
- ◆ We can't afford for the functioning system to get stuck in vendor-specific representations that are not portable, flexible, or reusable.

Our solution

- ◆ Working harder is not an option; we have to work smarter.
- ◆ How can we work smarter?
 - Turn blueprints and standards into actionable information by using XML technologies to express them.
 - Leverage the hierarchy of frameworks in Zachman's overall scheme to eliminate effort that is redundant or wasted.

Putting information into action

E.g., A single cell model in XML is transformed to seven other artifacts:



Working smarter

- ◆ “Someday, you are going to wish you had all those models, enterprise wide, horizontally and vertically integrated, at excruciating level of detail.” — *J Zachman*
- ◆ Don’t work in the Enterprise Framework to create “all those models” by hand.
- ◆ Instead, work in the Profession Framework to automate as much as possible.
- ◆ When a system engineering standard is automated, it:
 - Eliminates the cost of teaching it to staff
 - Eliminates the cost of applying it in work products
 - Eliminates the cost of auditing for conformance
 - Eliminates the cost of redo on failure to conform

Demonstration

- ◆ These ideas are implemented in the GEM (Generic Enterprise Modeling) Workbench.
- ◆ Results-to-date from GEM show that developing in the Profession Framework rather than the Enterprise Framework offers the leverage that can:
 - Speed time-to-market by an order-of-magnitude
 - While guaranteeing alignment, portability, reusability, and flexibility