

Model Preserving Strategy for BPM & SOA

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The Problem:

**The Benefits of BPM & SOA
Are Put at Risk by the
Traditional SDLC, Project
and Procurement Models
Used by the U.S. Government.**

Is Government Really Different?

	Industry	Gov't
Overhead (Admin) Ratio	1:93	1:40
Product Development Lifecycle	4 years	10-20 years
IT Spend as a % of Revenue	3%	6%
Average Inventory Turns	10	3
Average Time to Hire Employee	45 days	200 days

Source: Fmr. Deputy Under Secretary of Defense for Financial Management Thomas Modly

Complex Requirements Set Projects Up for Failure

Project Function Points	Projects Completed Early	Project Completed On Time	Projects Completed Late	Projects Cancelled
10	8%	89%	2%	1%
100	7%	80%	8%	5%
1,000	6%	60%	17%	17%
10,000	3%	23%	35%	39%
100,000	1%	15%	36%	48%

Source: Capers Jones

What Means for Your Projects:

The Inherent Benefits of Agility,
Reuse, Transparency, and
Role-Balancing Can be Lost
in Waterfall Approach.

Projects More Likely to Fail.

Development Lifecycle – 3 Key Roles



Business Process Analyst and Subject Matter Experts (SMEs) have the business insight and skills needed to model the process.



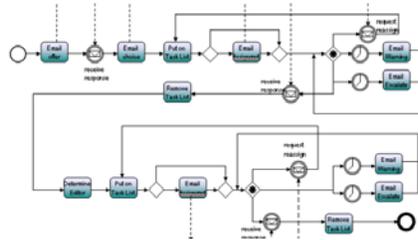
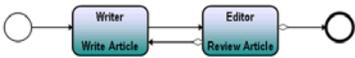
A **Systems Engineer** performs the work of integrating the process with the other systems in the organization.



In the enactment environment are **Administrators** and **Users** who interact with the running processes.

MODEL → MODEL → MODEL

Model Transforming Strategy



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At each domain model is transform to be better optimized for the current environment

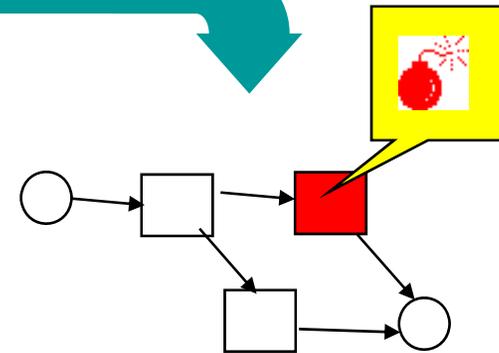
Works okay if you got everything right the first time

Error Resolution

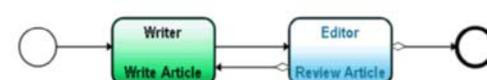
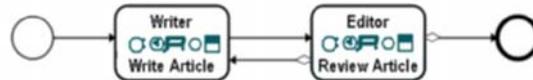
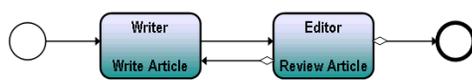


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What happens with a business problem that was not anticipated by the process?



Model Preserving Strategy



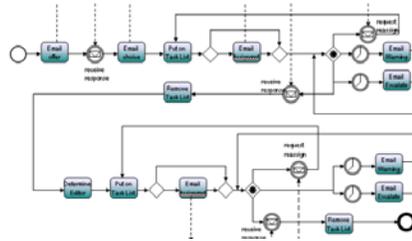
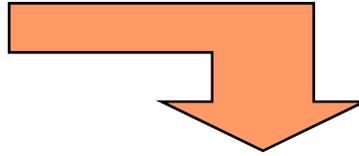
Preserving means that the model remains substantially the same in all domains

WYDIWYE = What You Draw Is What You Execute

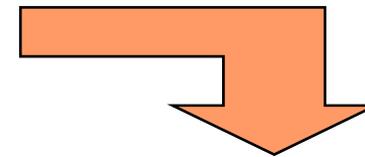
Waterfall vs Agile



Get 100% of business domain work done then...



Get 100% of system domain work done.

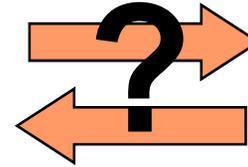
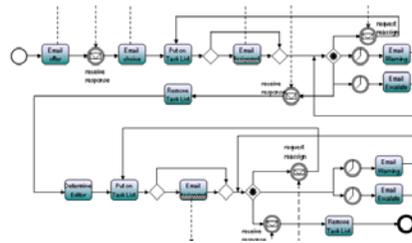
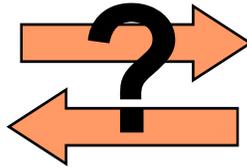
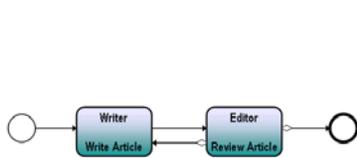


Forces a “waterfalls” approach.



Business and System work can be done at any time without any time gap. System engineer can suggest changes to business model. They work together on the same model because it is preserved.

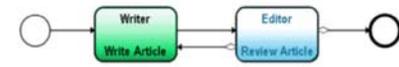
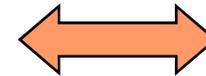
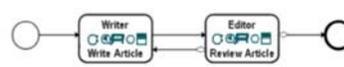
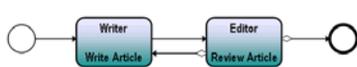
Round-Trip Development



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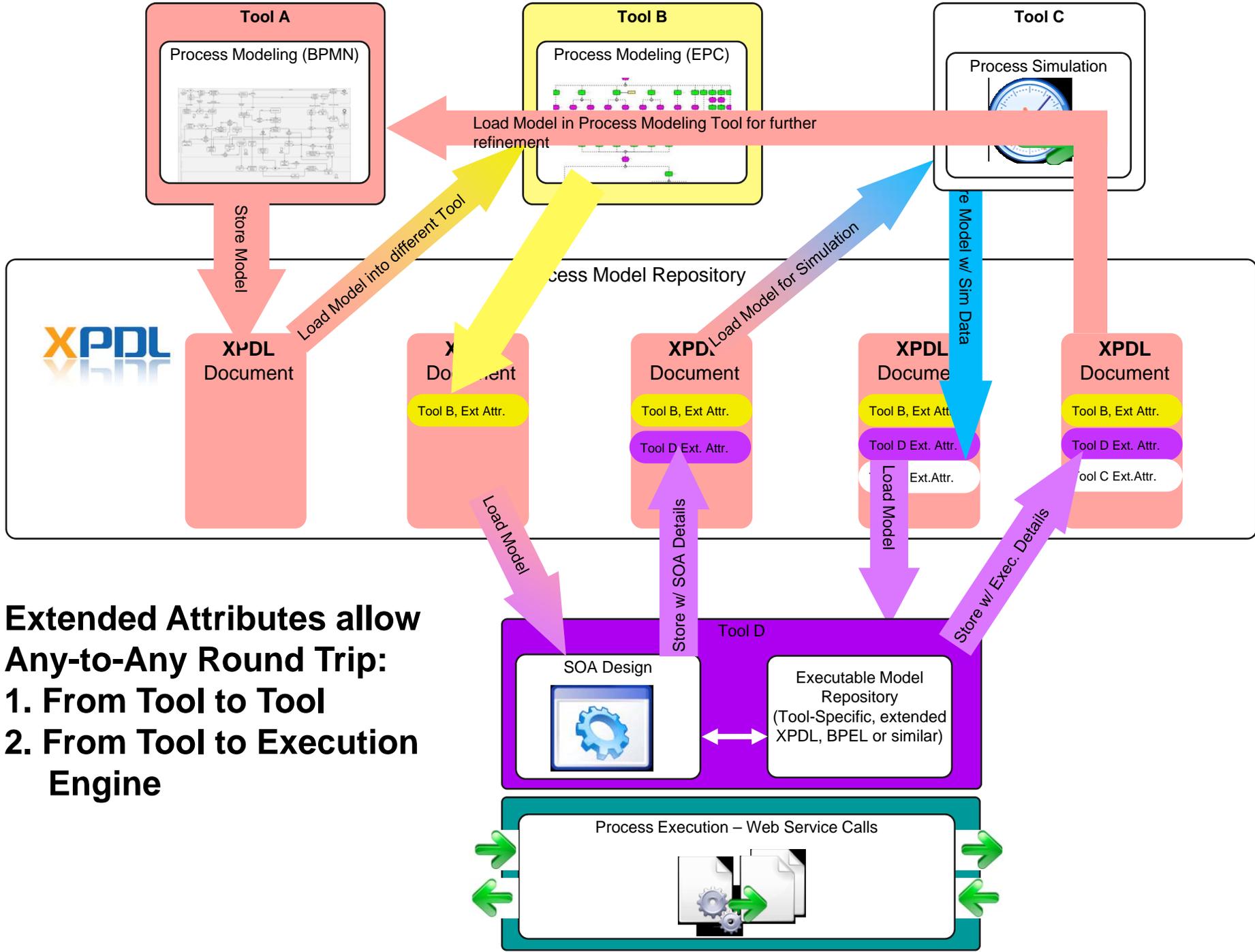
Ability to return to original model is very limited if not impossible

The transformed model loses information from each previous domain

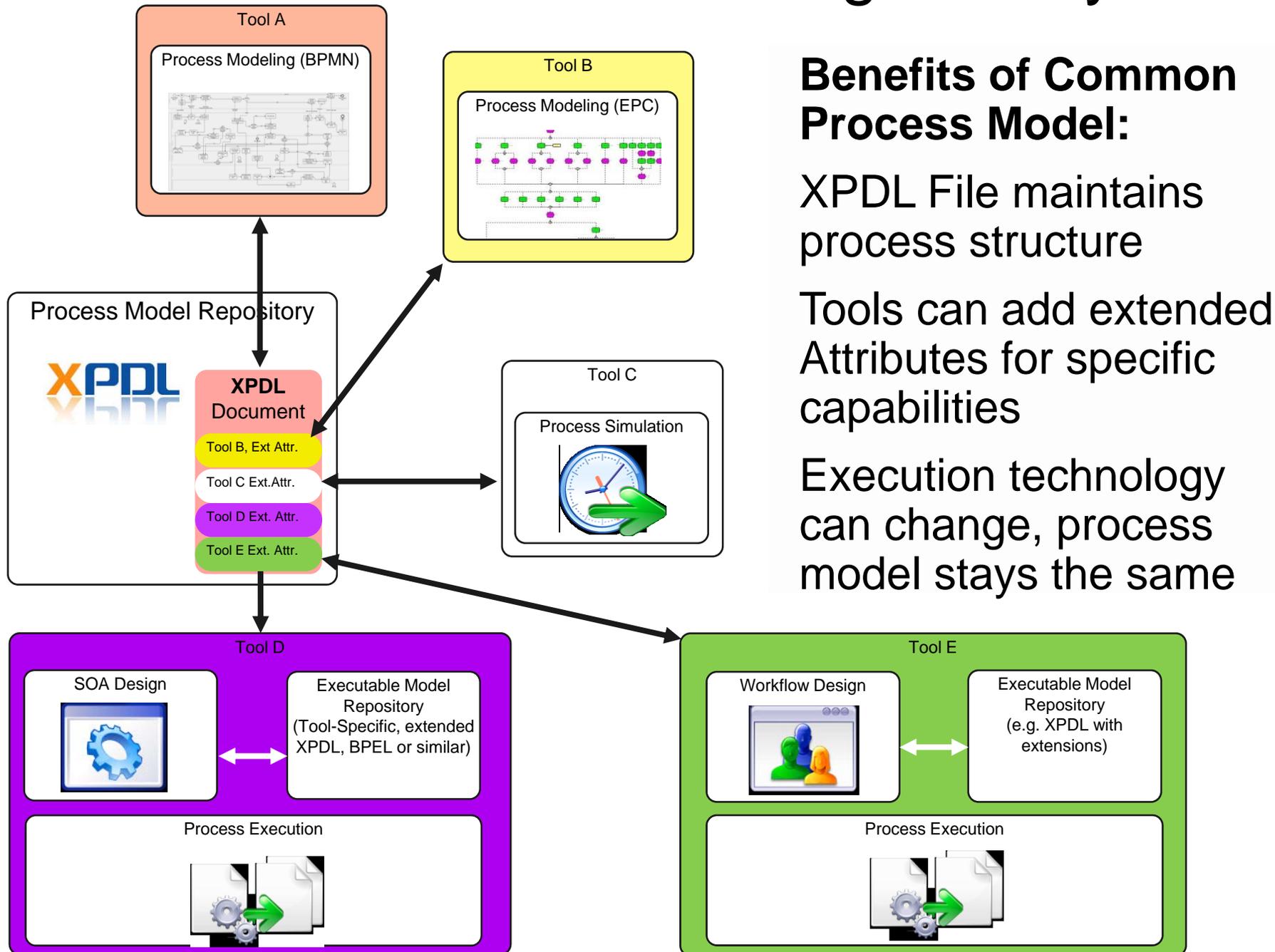


With Model Preserving Strategy
round-trip is a given

How This Works in Practice



How XPDL Enables Design Ecosystem



Standards Enable Design Ecosystem

User Needs

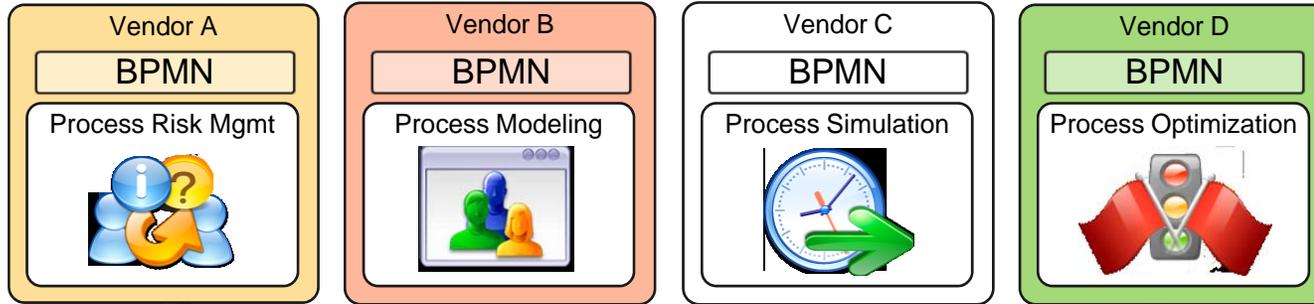
Risk/Control

Ownership/Issue

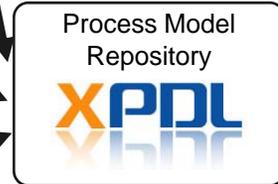
Resources/Time

Goals/Strategies

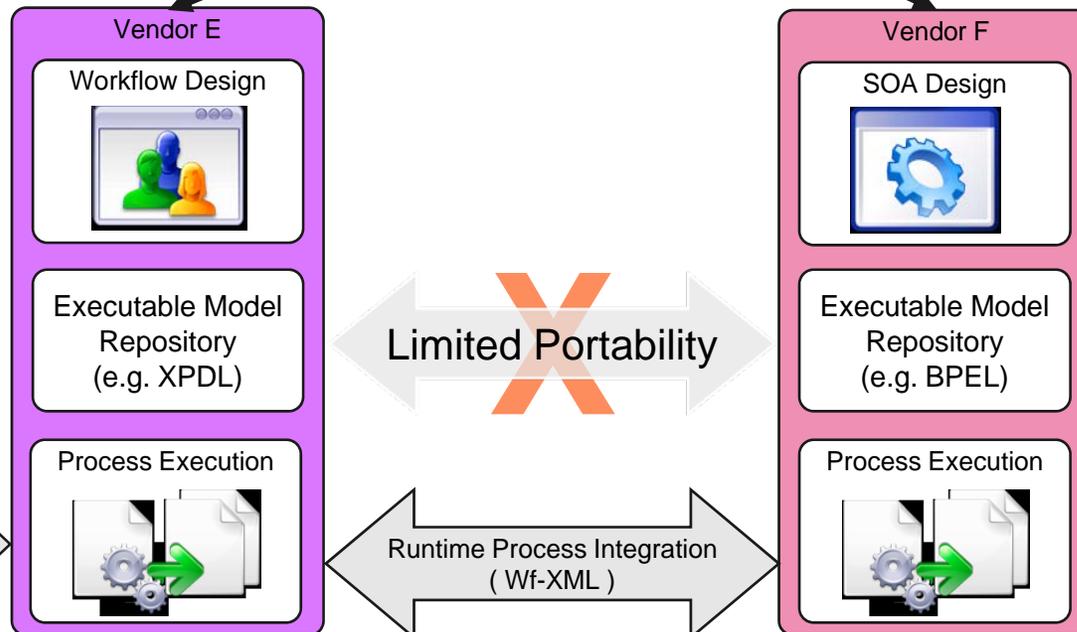
Tool- specific Capabilities



Process Structure is shared by all tools



Execution environments have different strengths, no model exchange at this level



Process Deployment (typically one-way)



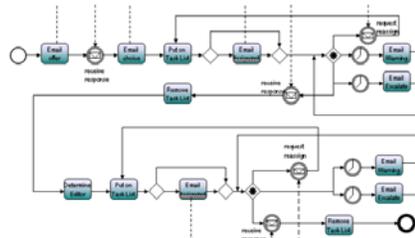
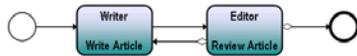
Optimization & Performance



Model leverages business person skills.

Model leverages engineering and programming skills.

Model can use special execution optimizations



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Prioritizing

- **Model Transforming Strategy**

- Useful for high performance execution

- Tuning to hardware optimization

- High-Transaction Volume

- Straight-Through Processing

- **Model Preserving Strategy**

- Crucial For Human Workflows

- Enables business control of the processes

- IT retains control of systems

- Necessary for round trip and agile development

- Bridges the IT/Business Divide