

Unisys Meta-modeling Maturity Model: A revolution in evolutionary times

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Agenda

➤ Introductions

➤ Unisys 3D-Visible Enterprise (3D-VE) Overview

- 3D-VE Descriptions and Definitions
- 3D-VE Origins and Roadmap
- 3D-VE Framework and Tools Overview

> 3D-VE Technical Overview / Discussion

- Model Driven Architecture Strategy
 - Modeling support from business to deployment including goals, business process modeling, etc.
 - Reverse-engineering models from models and data. Forward engineering from business to deployment. (Transformation framework)
- Unisys freeware tooling architecture
- SOA Linkage
- Tools already integrated with the Unisys integration framework

> Summary / Next Steps

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What is 3D-Visible Enterprise

The Unisys business and systems modeling architecture that integrates business vision and IT execution, to drive organizational agility.



Business Architecture

- > Industry Expertise
- > Future State Process Modeling
- > ROI modeling

Technology Architecture

- > Traceable Models
- > Service Oriented Architecture
- > Component Technologies

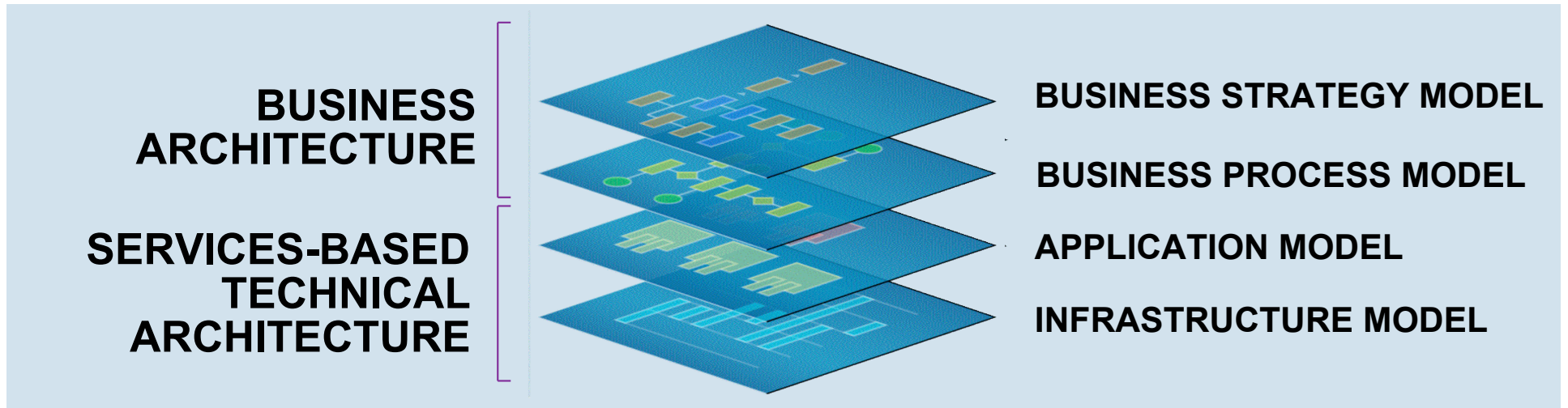
- A Completely Electronic, Integrated, Traceable Model
- Discover and understand cause-and-effect relationships

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What are the 3D-VE Modeling Layers

Different models at different layers allows Unisys to deliver a variety of services to our clients around each Solution !

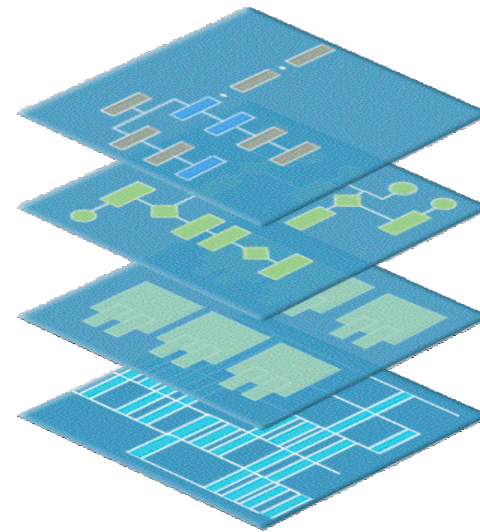
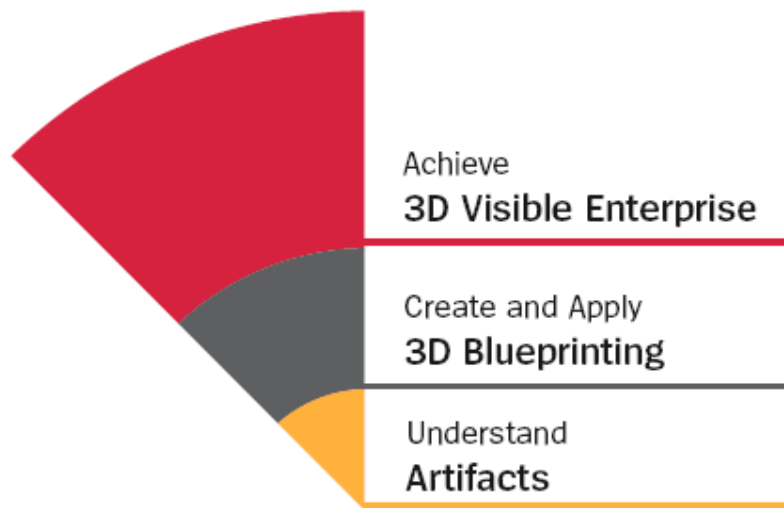


- Artifacts are organized into four distinct business layers
- Once blueprinted, these layers are digitally interconnected, tying the business architecture to the technology architecture
- The result is traceability across your entire enterprise

Every 3D-VE Solution leverages Models, Traceability, Simulation & Costing Tools, and Architecture to Deliver a consistent set of benefits to our Client Base

What are the Core Elements of 3D-VE

A **3D Blueprint** is a set of traceable and deployable models for domain-specific business processes and problems...



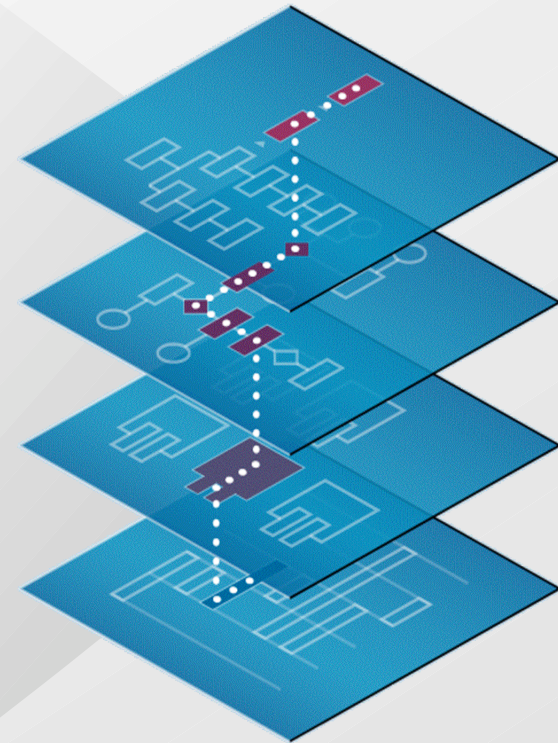
...**3D Blueprinting** is the use of standard methods, tools, and techniques to establish descriptive modeling and engineering best practices.

The Goal: Alignment and Agility

Intellectual Property that can be understood, modified, and easily manipulated, with clear linkage to the impacts on the underlying system implementation.

3D Visible Enterprise

- > See cause and effect of decisions – before you make them
- > Shows cost benefit and ROI – before you invest
- > Shows what is required for a new IT infrastructure integration – before you jump in



Traceability is the key.

3D-VE Key Differentiators and Benefits

- The key differentiator in Unisys 3D Visible Enterprise is **enterprise visibility** – linking holistically across all dimensions of the enterprise
- This is made possible by the **3D Blueprinting** process
- The true power lies in its **traceability**—which provides the ability to make informed business decisions by visualizing all the cause-effect relationships within your organization

**Increase Agility by
Assessing Impacts and
Reacting more quickly to
Change**

**Reduce Business
Process “Cycle Times”
For Competitive
Advantage**

**Reduce Cost by
Eliminating Application
& Infrastructure
Redundancy**

- 3D-VE Enables:
 - *Business and IT Alignment*
 - *Scenario, Simulation, and Impact Analysis*
 - *Service Oriented Architecture*
 - *Composite Application Support*
 - *Key Performance Indicator Measurement*
 - *Business Activity Monitoring / Business Process Management*

Unisys Meta-Modeling Maturity Roadmap

“Robust Modeling”
June 2003

“Traceability”
August 2004

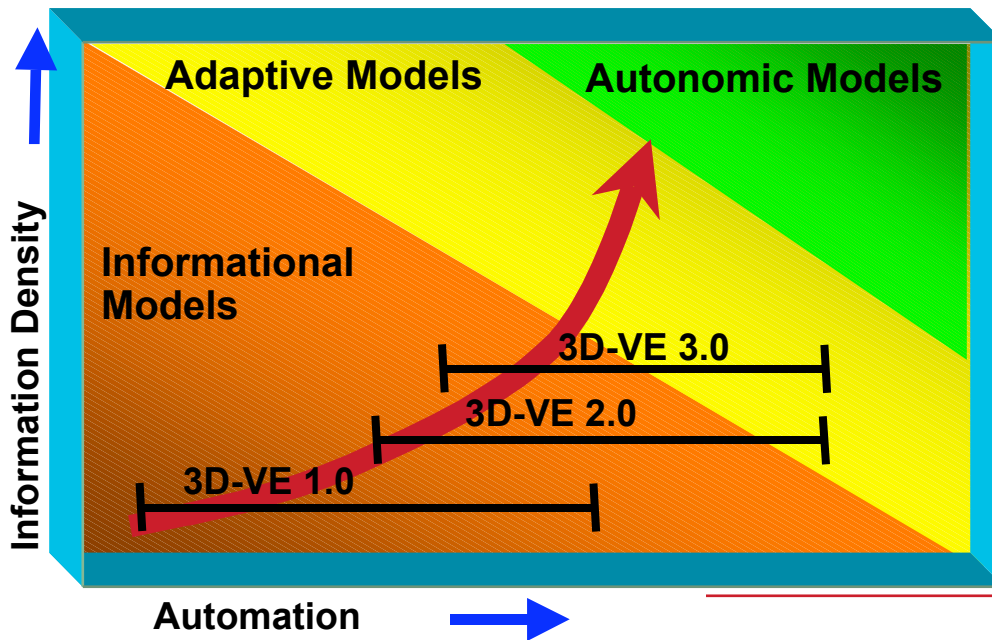
“BAM and MDA Capabilities”
November 2005



- Modeling Framework
- Methodology & Standardized Artifacts

- Traceability
- Impact Analysis
- Infrastructure Mappings

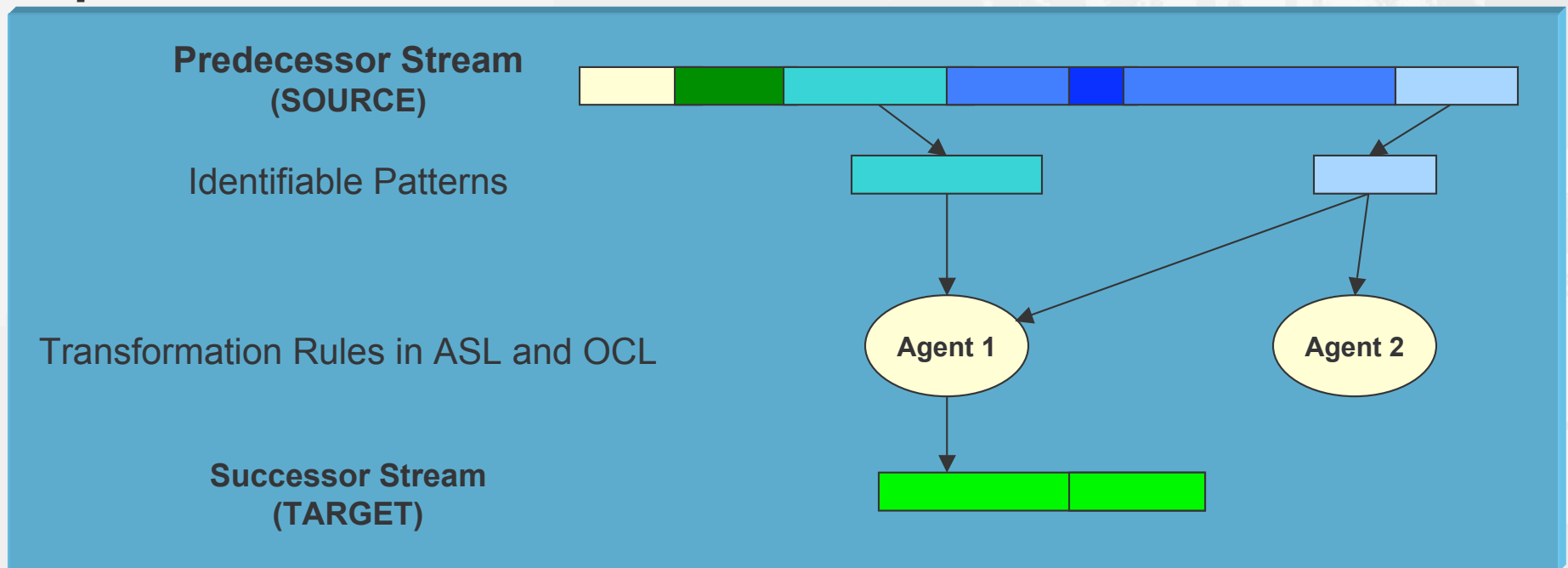
- Business Activity Monitoring
- Model-Driven Architecture Enabled
- Shareholder Value Dashboard
- Six Sigma Lean Support
- Early Application Modernization
- Enterprise Visualization Publisher



- 3D-VE 1.0 established the modeling framework foundation
- 3D-VE 2.0 enhanced framework capabilities (increased model information density) and added impact analysis
- 3D-VE 3.0 advances model construction via MDA and adaptive modeling with Business Activity Modeling

What is traceability? – Its all about “Patterns”

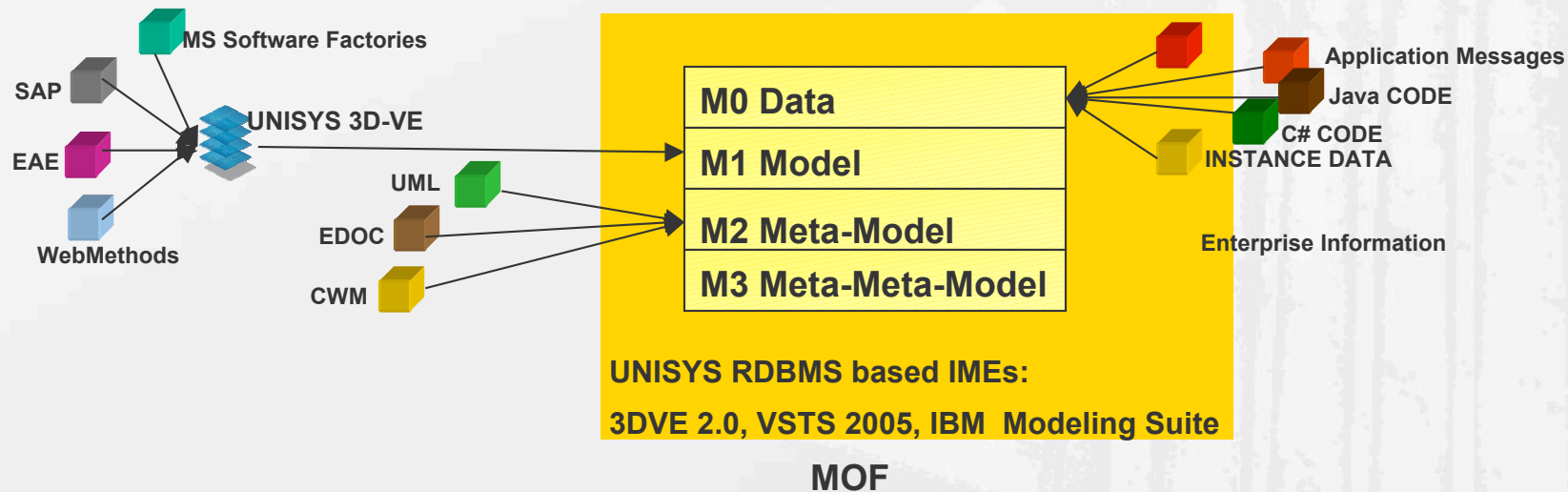
- > Seven types of traceability identified by the OMG as an industry standard approach.
- > Each type has different “source patterns”, “target patterns” and “transformation mechanisms”



3D-VE Roadmap & Development Charter

> UNISYS IS THE GLUE !

- Everything in this heterogeneous world can be modeled and mapped into our MOF based (M0 through M3) standards based IME
- Model driven generation and automation will provide required cost savings

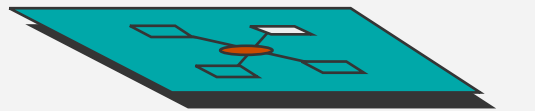


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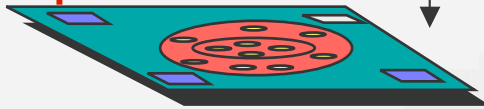
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MS Software Factories & OMG MDA Guide based 3D-VE Code Generation

Business Strategy Model
(Business Capability Model)



Business Rules & Requirements Model



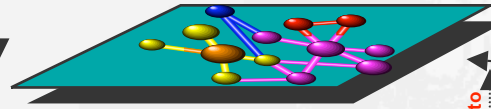
Business Swimlanes or Activity Models



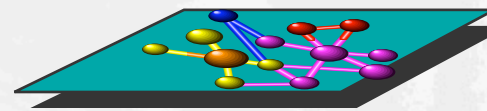
Business Entity Interactions \ Data Flow Diagrams



PIM Class Model \ Object Model



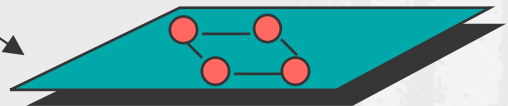
PIM Activity Diagram \ Seq Diagram \ Collaboration Diagram



Software Architecture Patterns

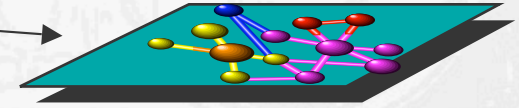


Re-usable Features Model

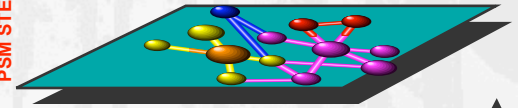


UIP (Application Blocks)

PSM Class Model \ Object Model



PSM Activity Diagram \ Seq Diagram \ Collaboration Diagram



PSM Deployment Model



CONFIGURATOR for TYPE OF PIM to PSM STEREOTYPING

Code

Tests



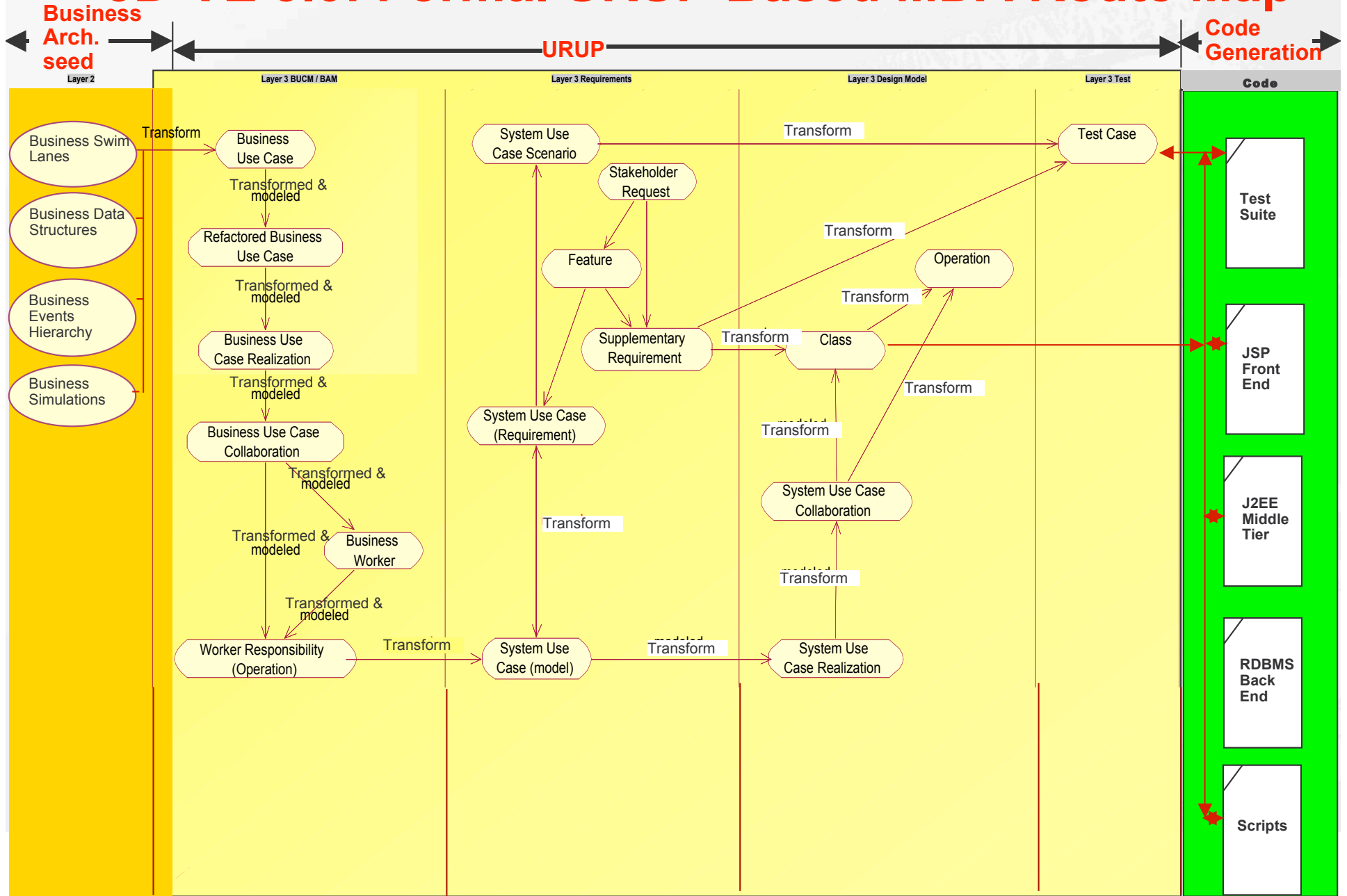
Build Scripts

COTS Configurators

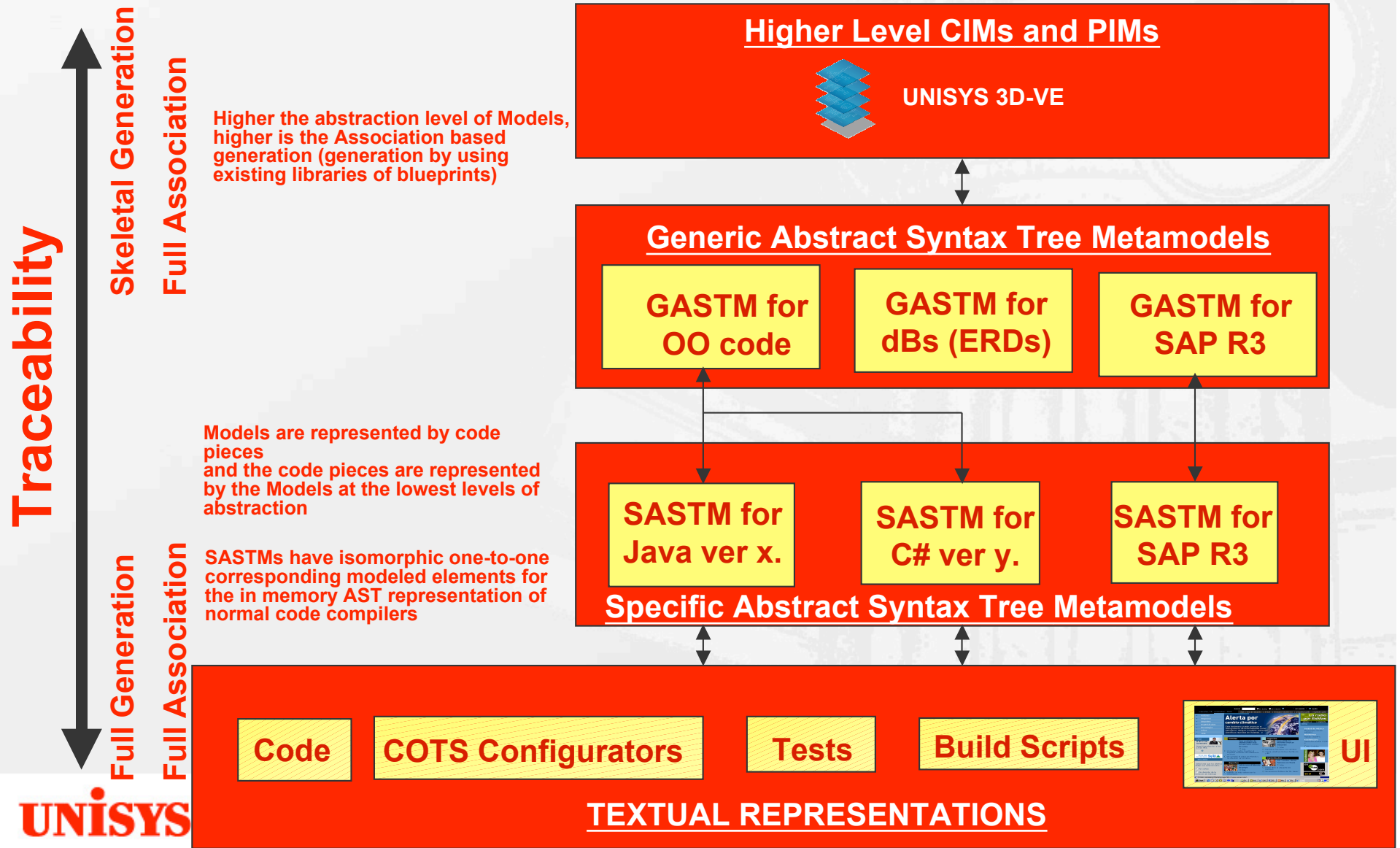
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3D-VE 3.0: Formal URUP Based MDA Route Map

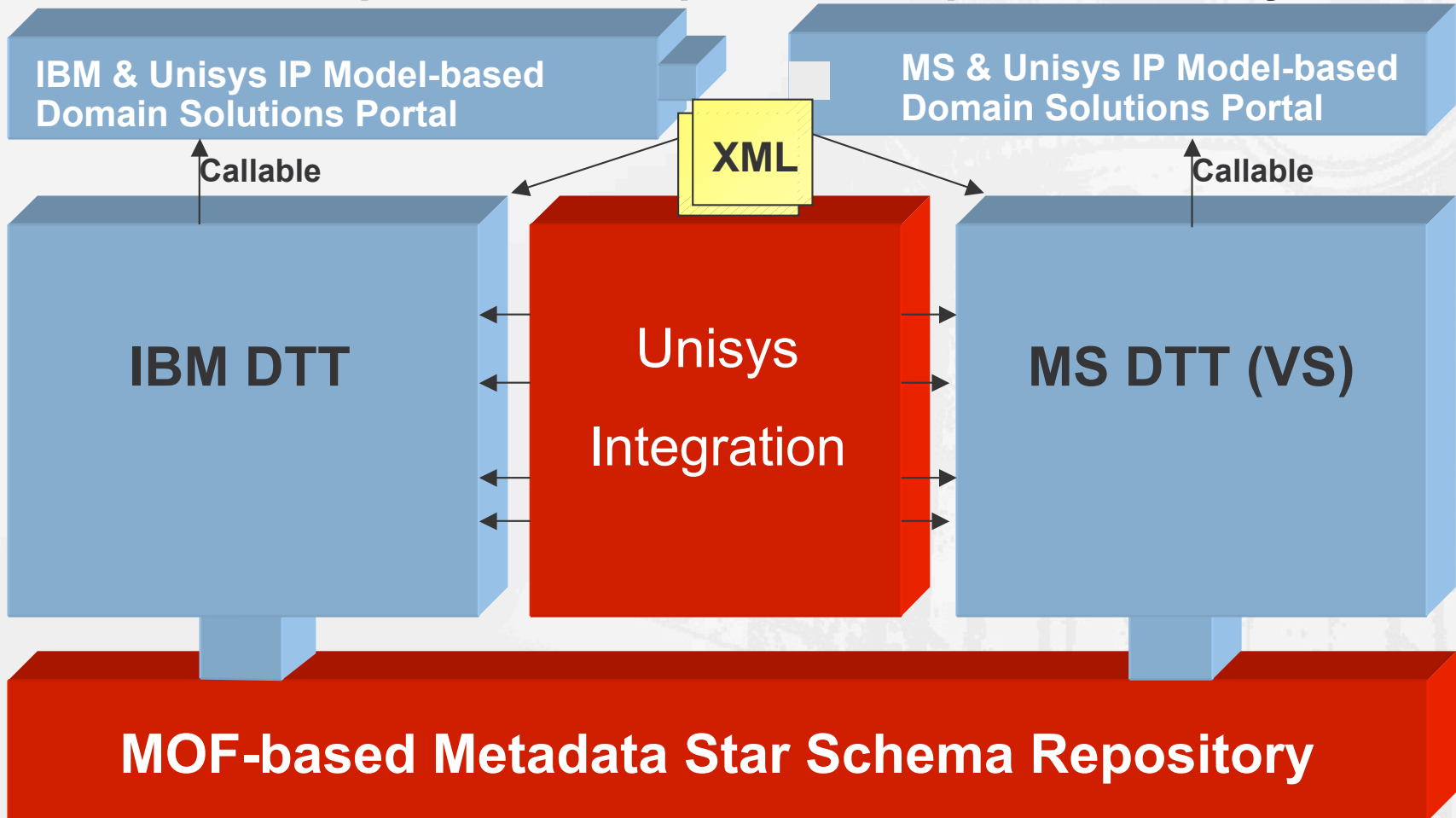


Seamless Integration: Forward and Reverse Traceable Engineering



Vendor-independent Meta Modeling.

File-based platform-independent importable Unisys IP



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End-to-end model based Contextual framework to connect Office documents to related Enterprise Information

1. Expose Enterprise Applications as "Interactive" Web services that expose prescribed metadata to Office

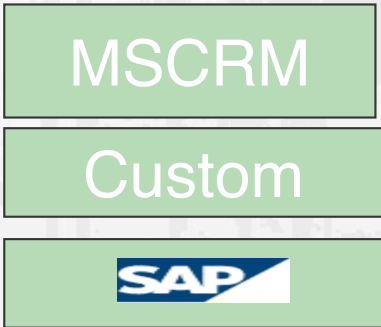
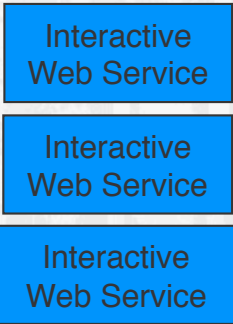
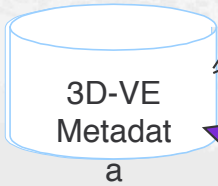
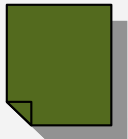
5. Click on SmartTags in your documents and GO!

4. Create Actionable Documents in Office

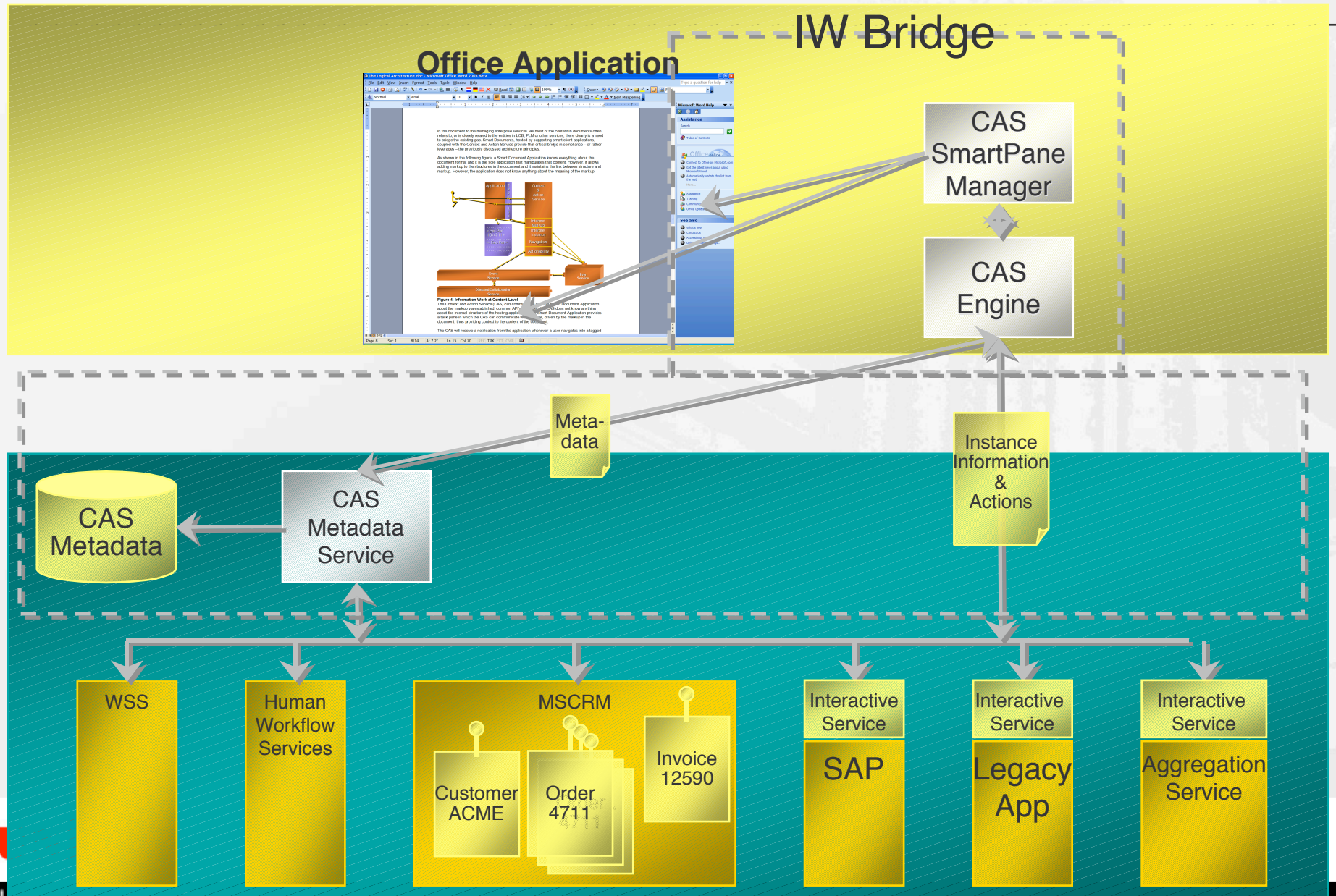
2. Build Solution Schemas

- Make relationships between business entities across Web services
- Define access and binding to Office UI (default experience)

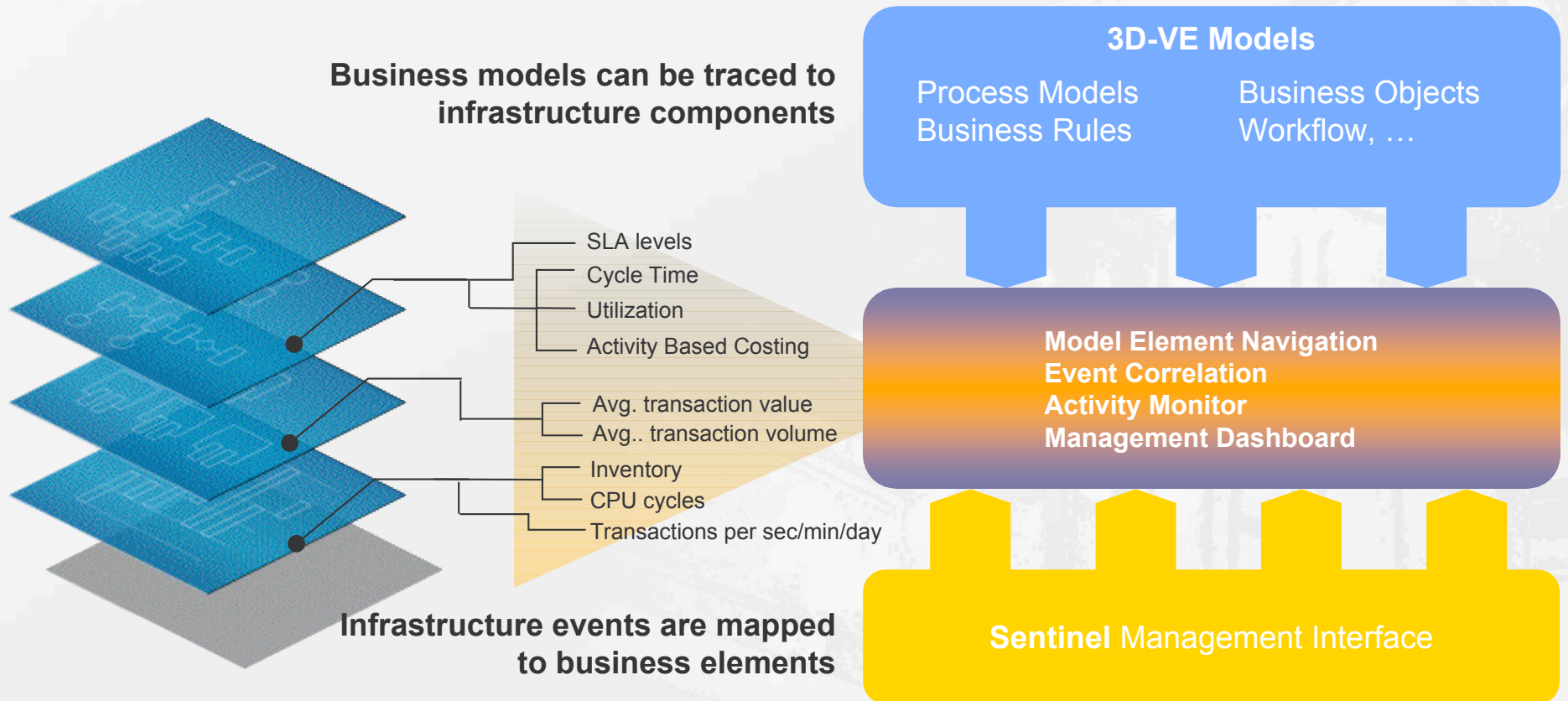
3. Deploy Office 2003 Professional with IW Bridge client add-in



3D-VE Interactive Services Architecture Overview



Monitoring 3D-VE KPIs across Service Layers



The power of blueprinting emerges when KPIs can be tracked against IT systems

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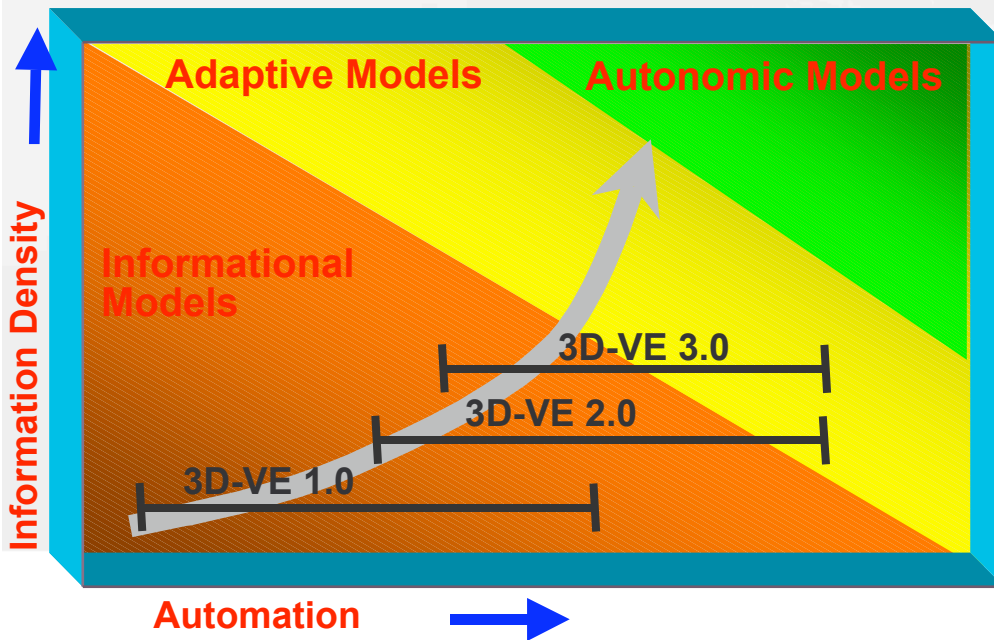
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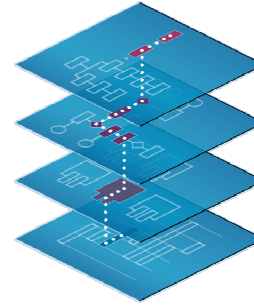


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What We Do.

- > Consulting.
- > Systems Integration.
- > Outsourcing.
- > Infrastructure.
- > Server Technology.

How We Do It.



3D
Blueprinting

What We Deliver.



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