



••• The Model-Driven, Service-Oriented Enterprise

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EDS Technology Strategy and Architecture

••• The Changing Business Landscape

- The marketplace is global and evolving
- Business transformations occur with increasing frequency (re-engineering, acquisitions, divestitures)
- Business functions may be outsourced or operate in a remote country
- Increased concerns about government regulation
- Business changes must be deployed throughout the enterprise quickly and efficiently
- The enterprise must be event-driven for optimal performance

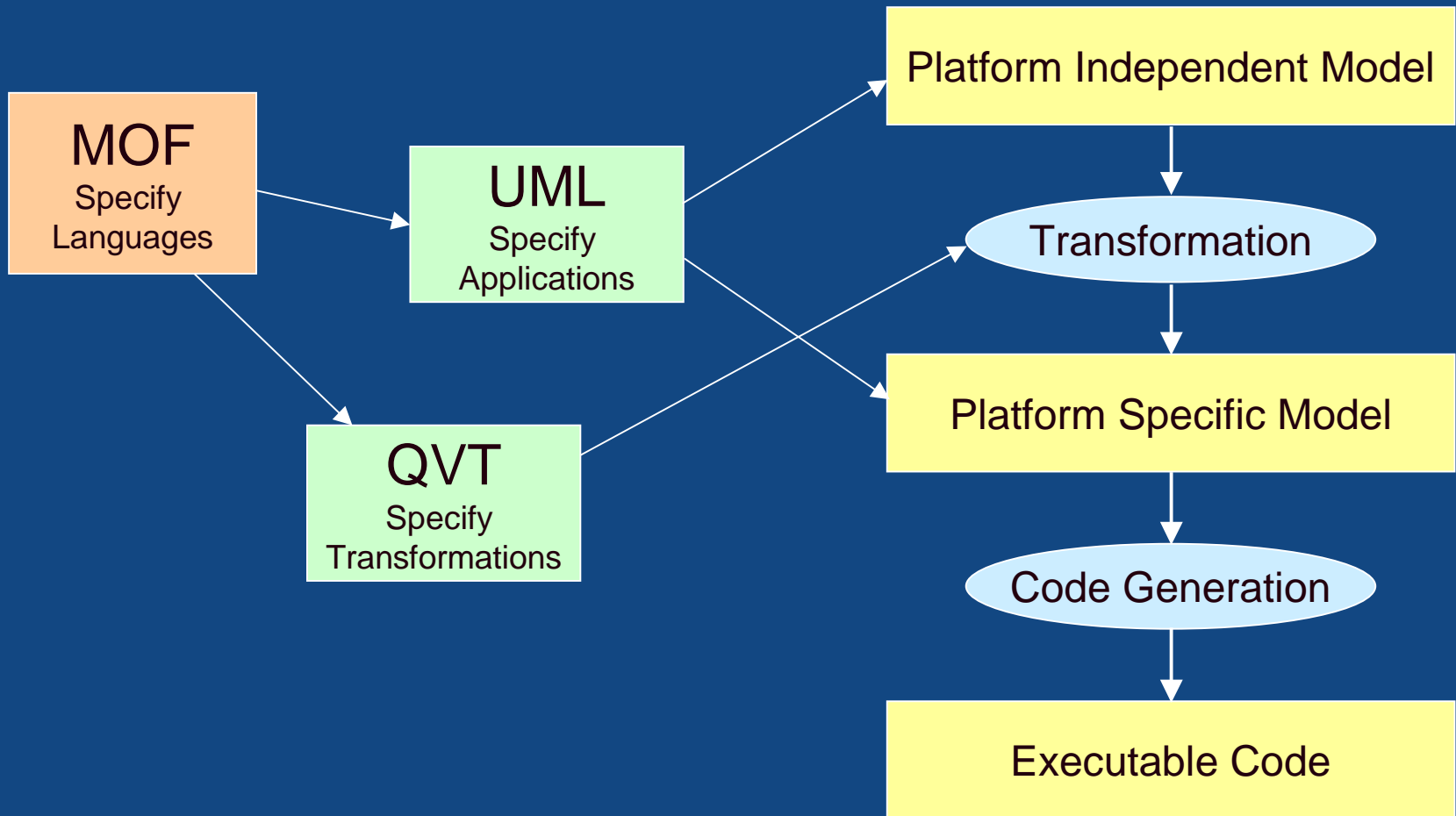
••• Agenda

Continuous enterprise transformation is essential

- Model Driven Architecture
- Service Oriented Architecture
- Architecture Driven Modernization
- Enterprise-Scale Transformation
- Enterprise Modeling
- Status

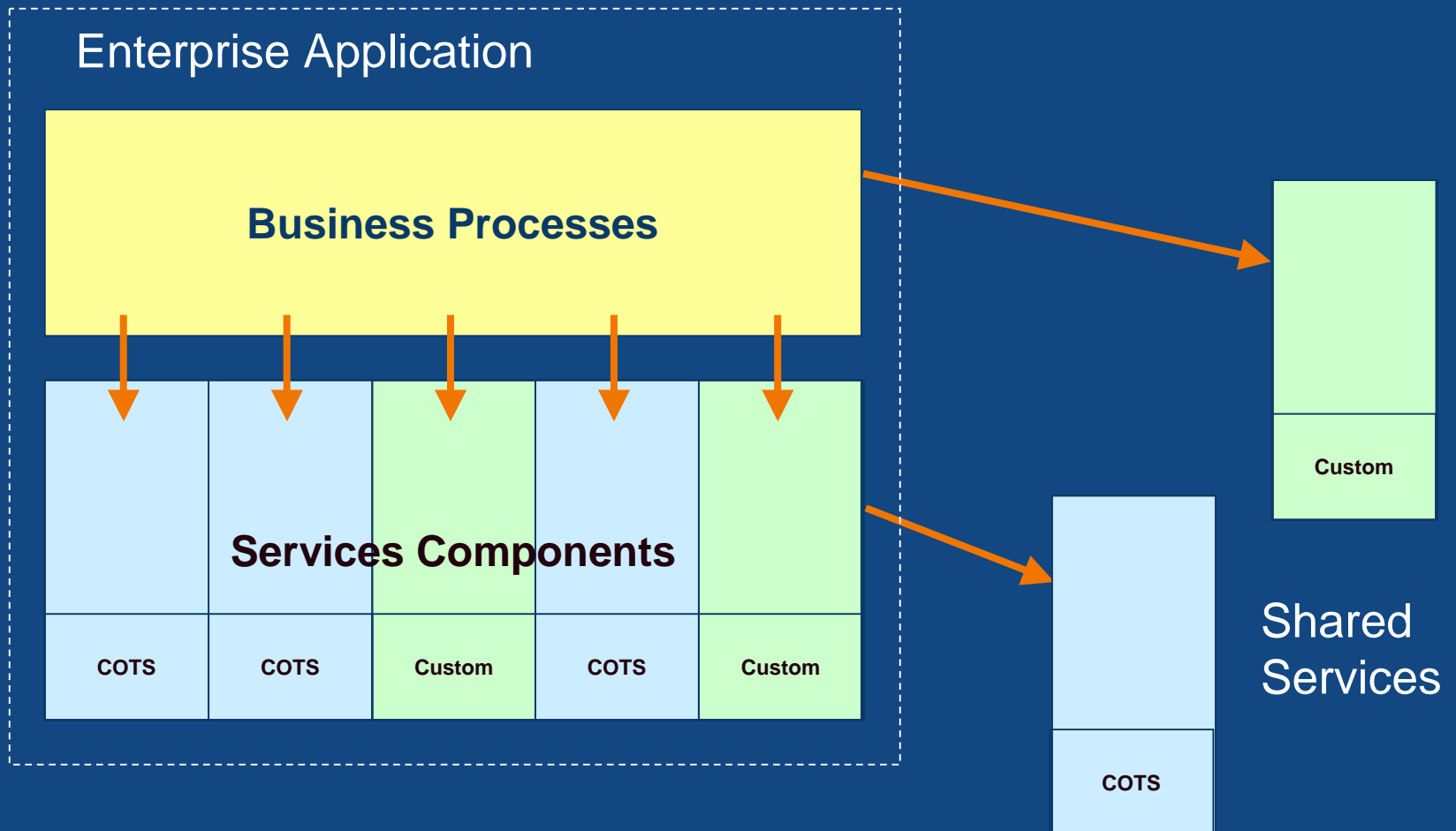
❖❖❖ OMG Model Driven Architecture (MDA)

Technology Independent Applications



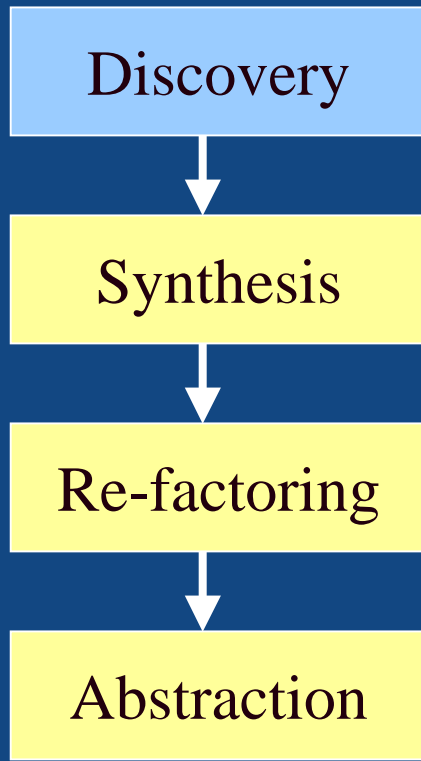
Service Oriented Architecture (SOA)

Configurable solutions



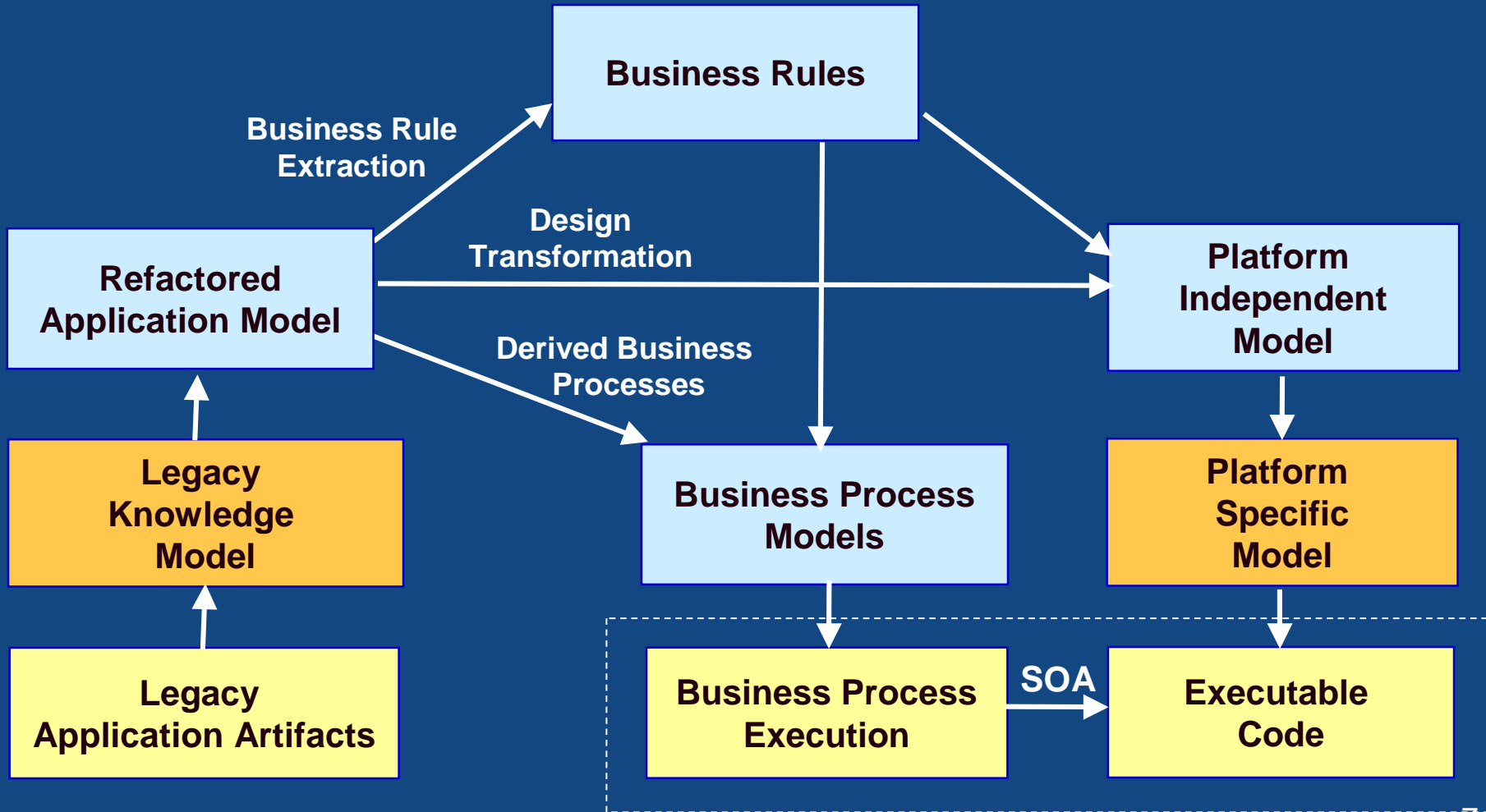
Architecture Driven Modernization

Exploit legacy system assets



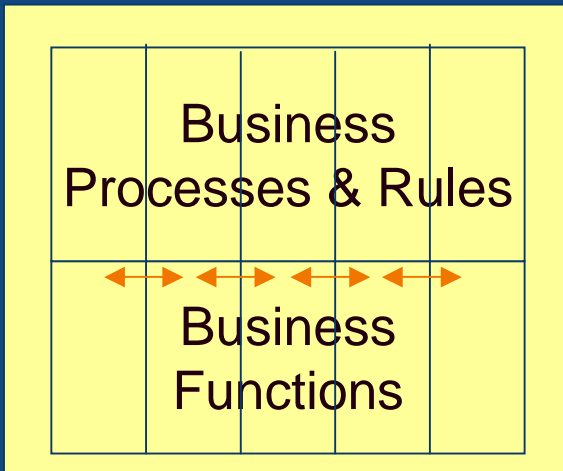
- Develop a model of the application from existing artifacts
- Resolve redundancies and inconsistencies, add semantics
- Re-structure code for re-use and to reduce complexity
- Remove technology-specific design--produce a PIM

⋮ Strategic Direction

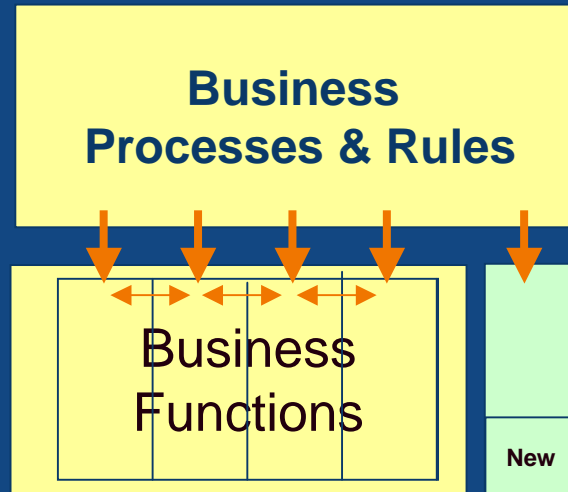


☼☼ Opportunity Driven Modernization

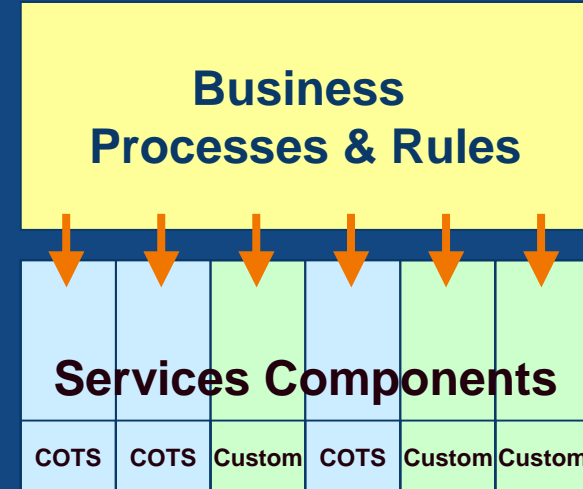
Monolithic Application



Transition Architecture

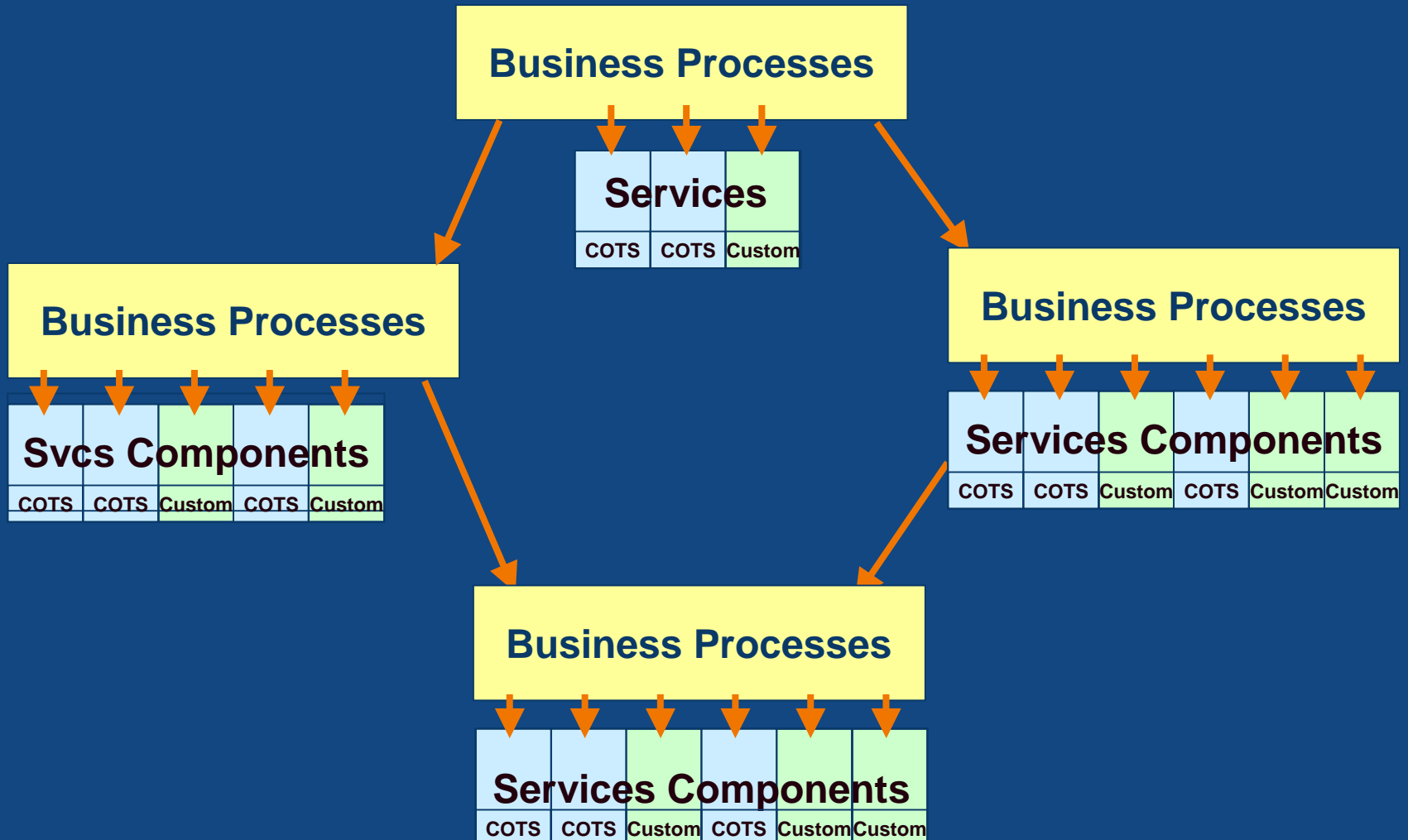


SOA



Service Oriented Enterprise

Organization units supply and consume services



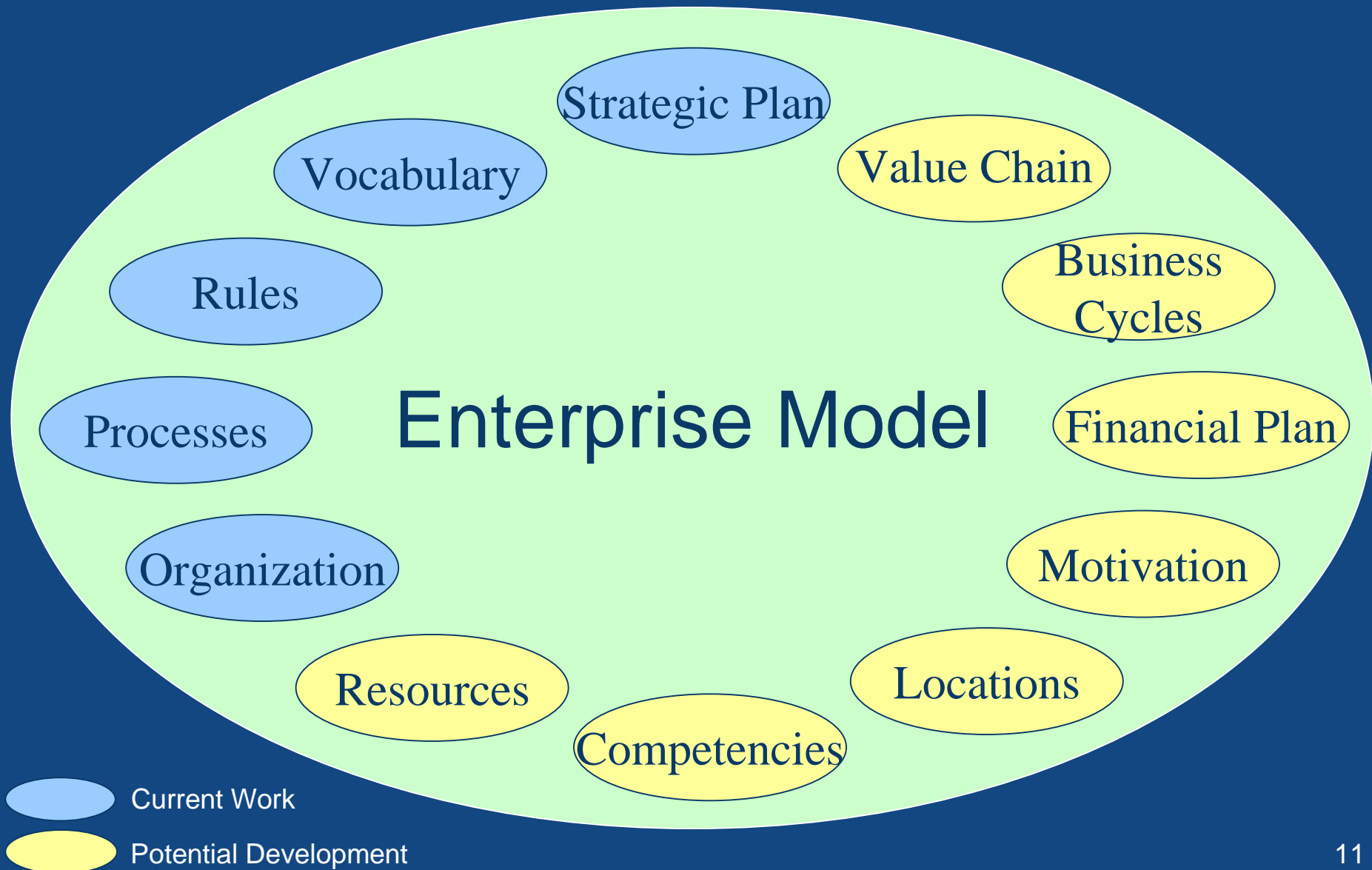
••• Enterprise-Scale Transformation

Enterprise optimization is more than process improvement

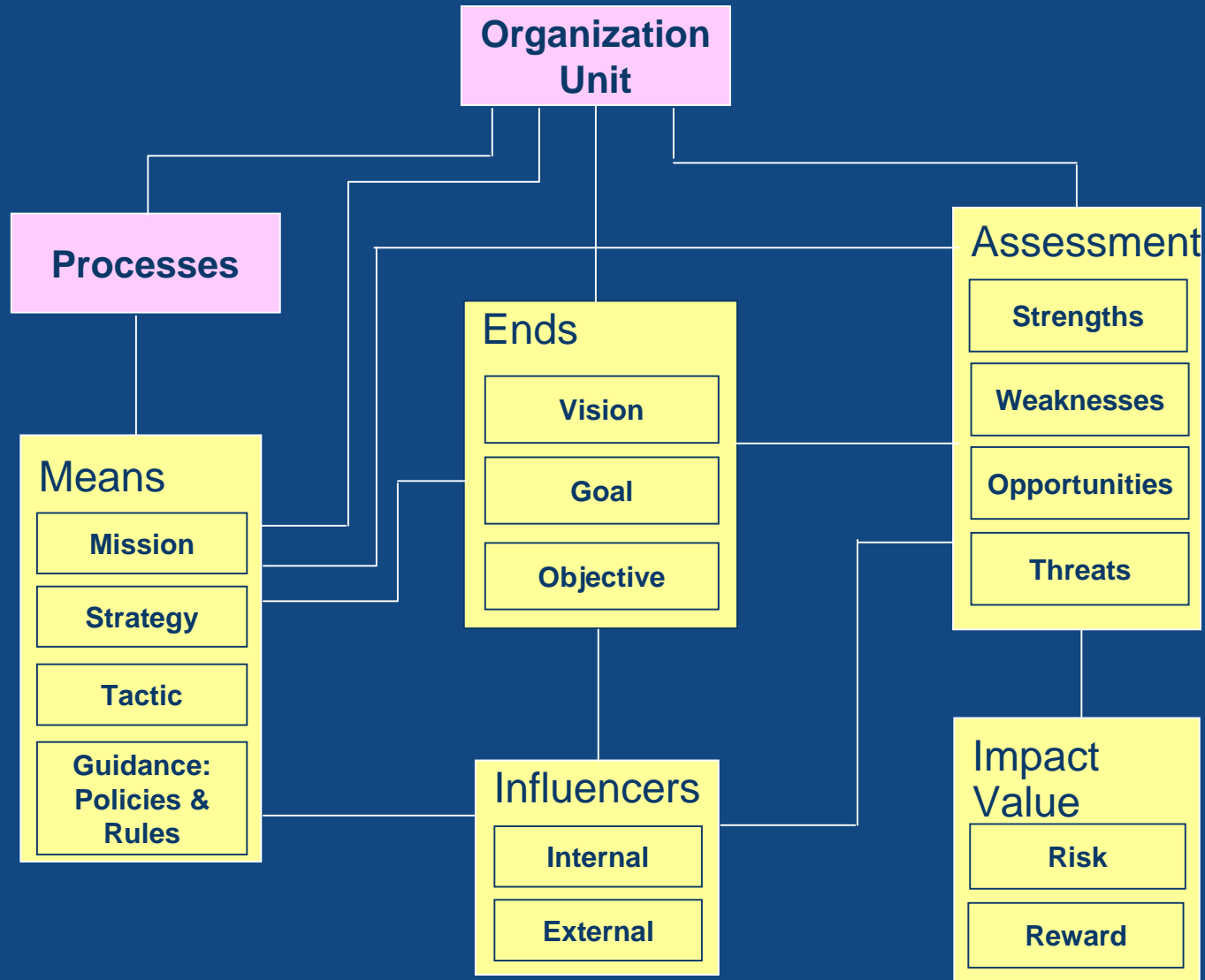
For example

- Positioning in the marketplace
- Economies of scale
- Organization structure and responsibilities
- Global locations and diversity
- Flexible allocation of resources
- Product production and costs
- Accountability and regulatory compliance

Components of Enterprise Modeling

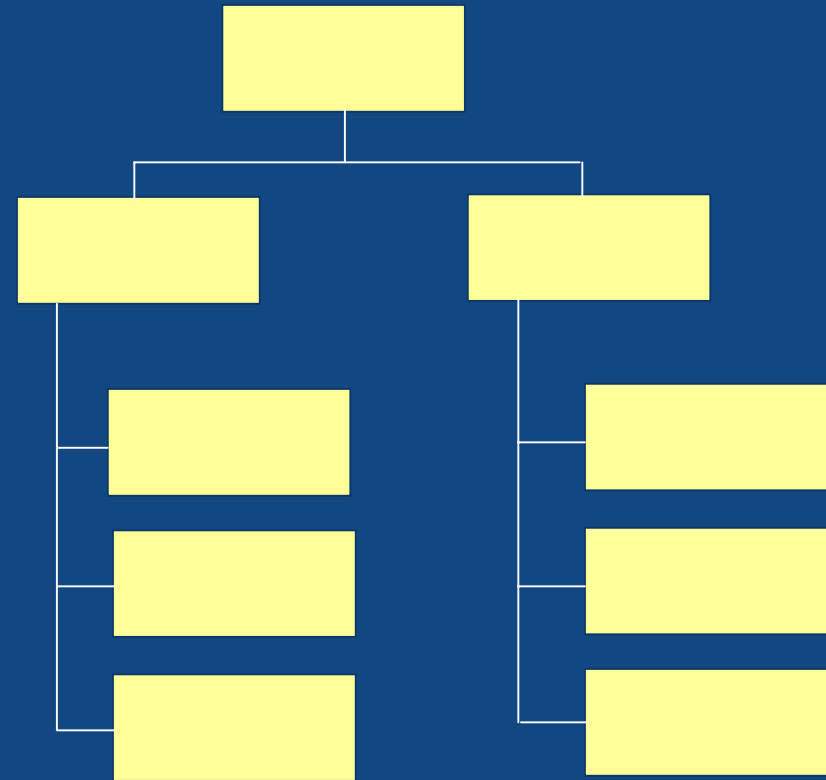


Business Motivation Model

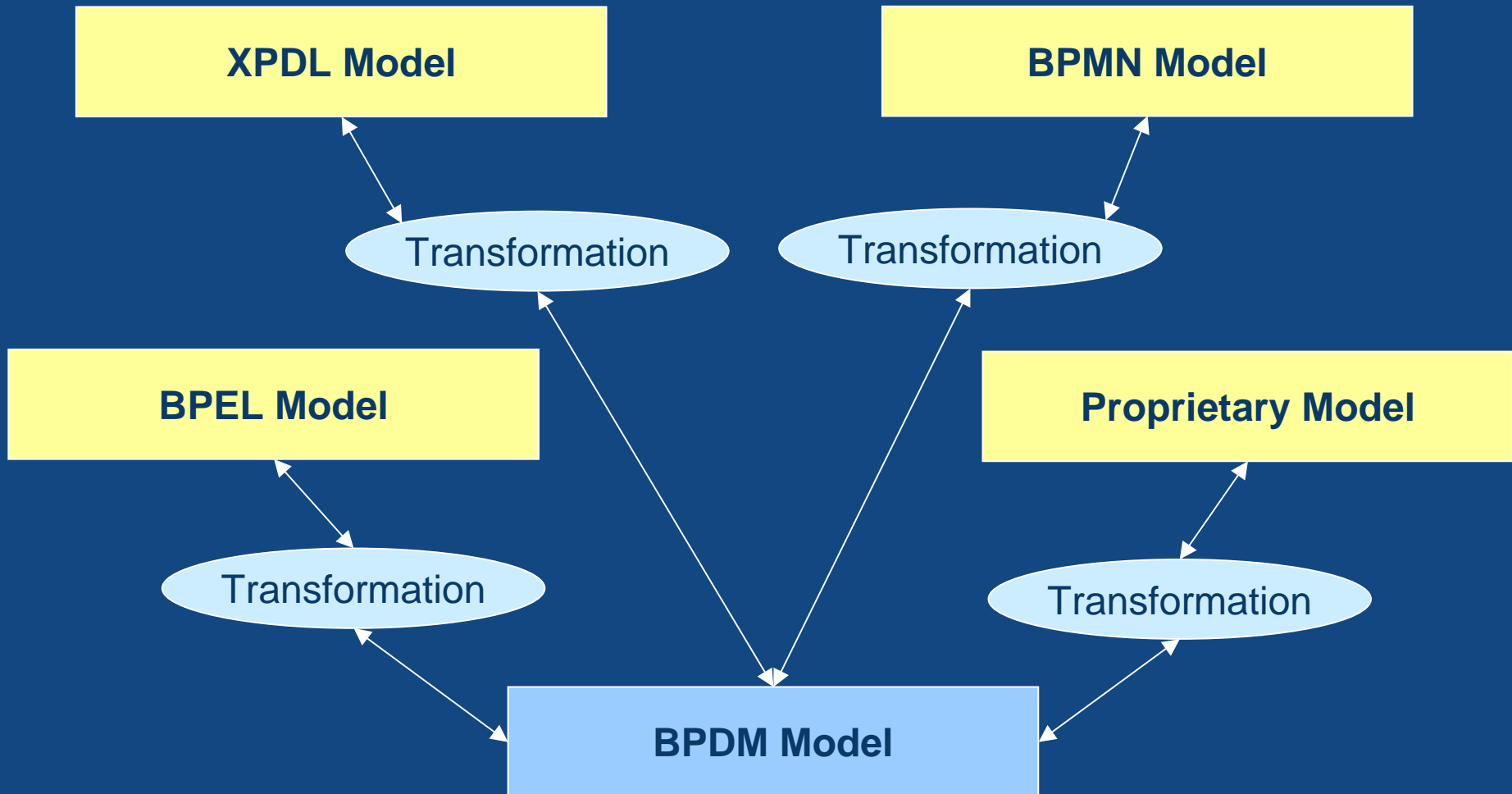


Organization Structure Metamodel

- Organization unit
- Position
- Authority
- Responsibility
- Relationships
- Locations
- Resource ownership
- Organization rules
- Modeling and runtime



Business Process Definition Metamodel (BPDM)

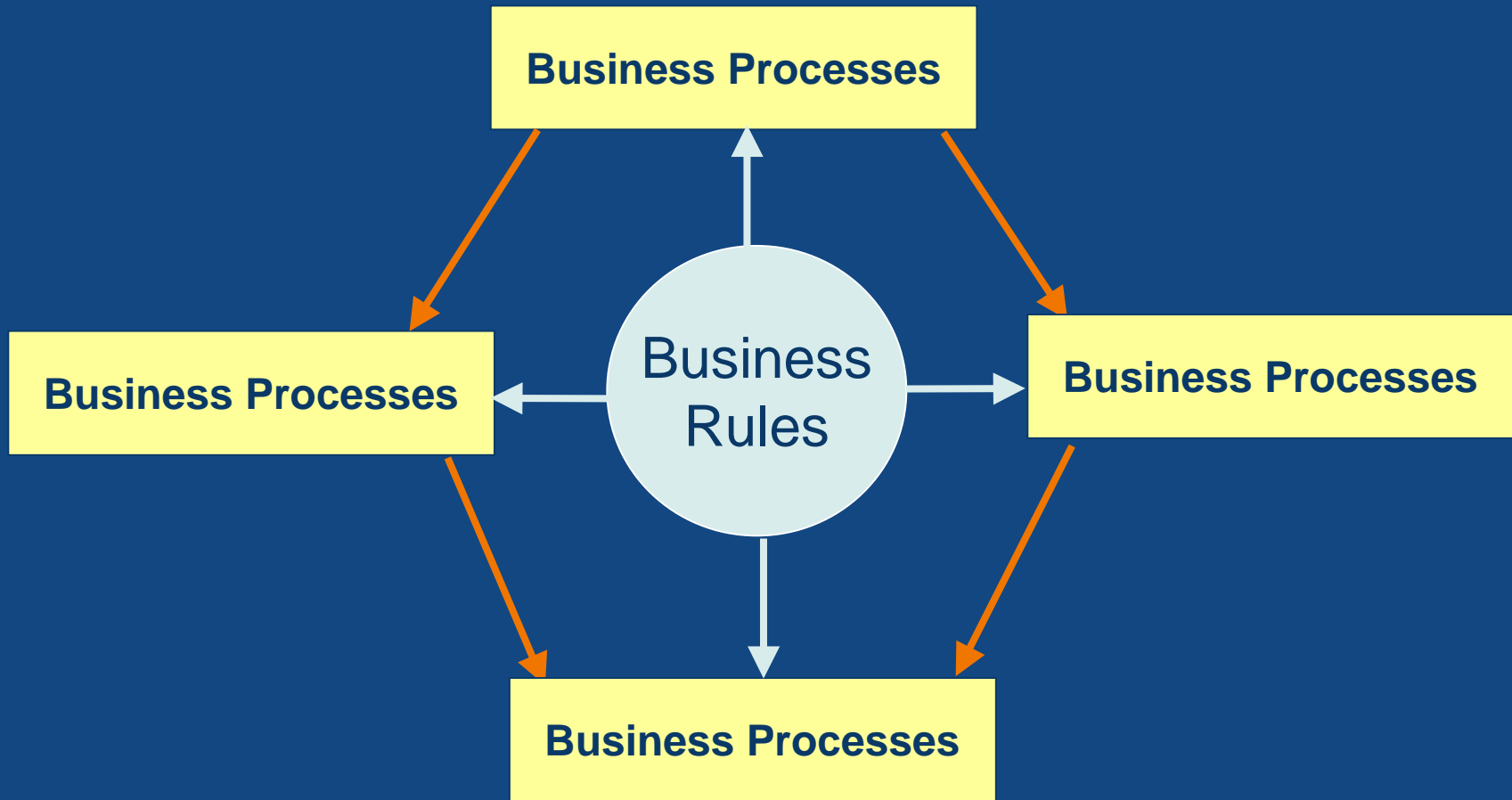


Business Semantics of Business Rules

Rule: It is obligatory that each driver of a rental is a qualified driver.

- Declarative expression of intent
- Provides for levels of enforcement
- Model represents concepts independent of business vocabulary
- Alternative vocabularies support different communities (e.g., English, German)
- Rules expressed as structured natural language
- Actions depend on context of application

Deployment of Business Rules



Production Rules Representation one form of deployment

••• Status

- MDA tools available
- Service Oriented Architectures implemented
- QVT approaching adoption
- Modernization tools available, standards in process
- Business rules standards in process
- BPM standards converging
- Organization Structure standard in process
- Business Motivation (strategic planning) model under consideration
- Moving toward multi-dimensional enterprise modeling



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