

PSLX-2 Specification progress report

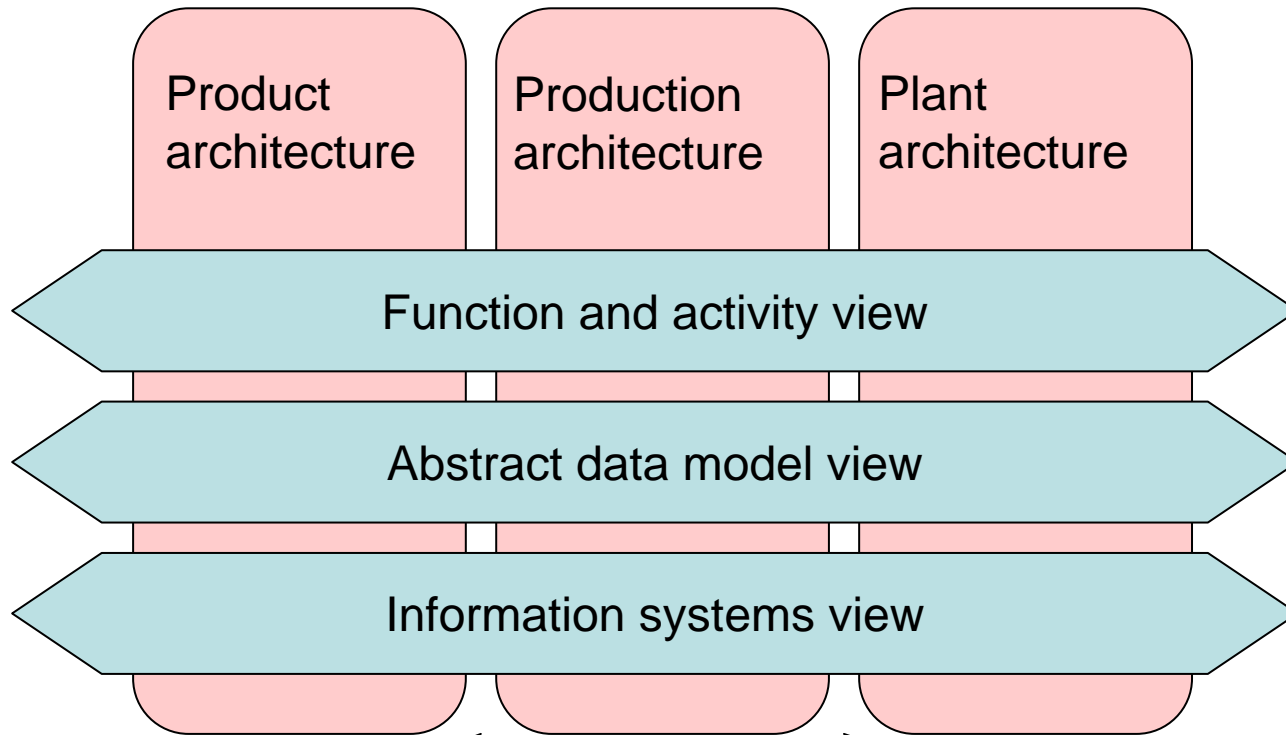
Dec 14th, 2005

PSLX Consortium

Organization of PSLX-2

- Part 1: Enterprise Model (WD 3)
 - Enterprise architecture and decision hierarchy of APS
- Part 2: Management Activities (WD3)
 - Functional model, Activities and information flows
- Part 3: Domain Objects (WD3)
 - Object model definition for manufacturing enterprises
- Part 4: Domain Ontology (WD1)
 - Ontology of production management and control
- Part 5: Common XML Schema (WD1)
 - XML schema for communication between functions
- Part 6: Common RDB Schema (WD2)
 - RDB schema objects for rapid implementation

Part 1: Enterprise Model



Operation : Flow / Intermittent / Project

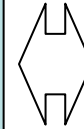
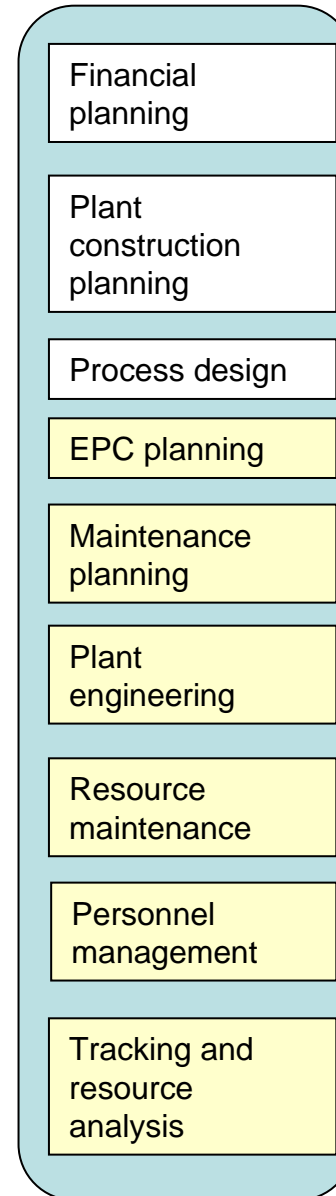
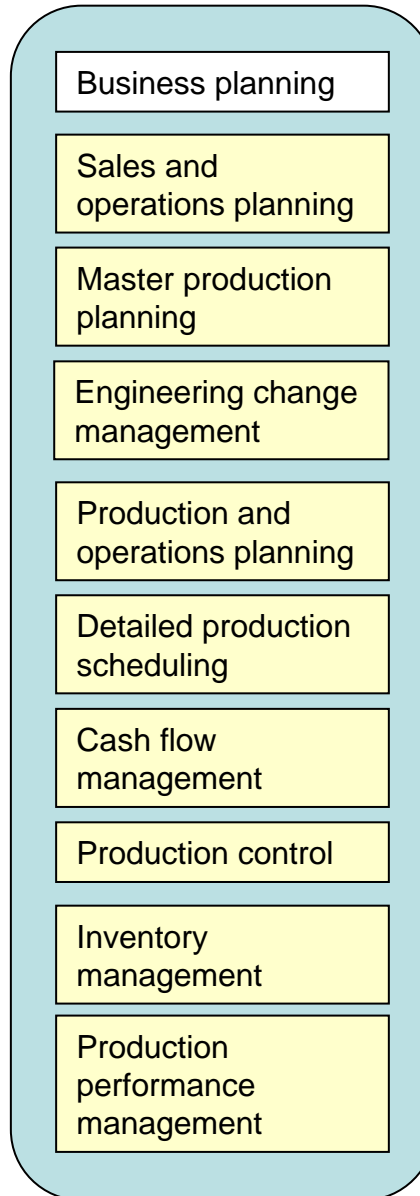
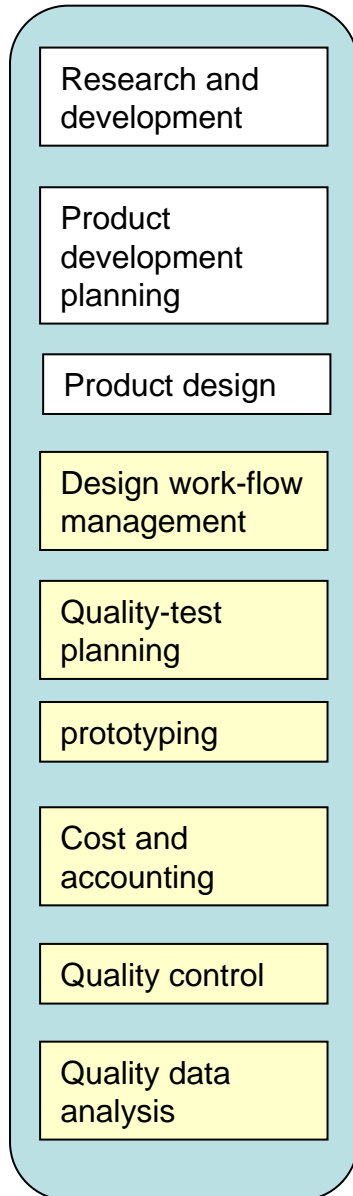
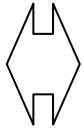
Control : Push / Pull / Adaptive

Order : Mass production / one-of-a-kind / dynamic lot-size

Inventory : Make-to-order / Make-to-stock / Design-to-order / Finish-to-order

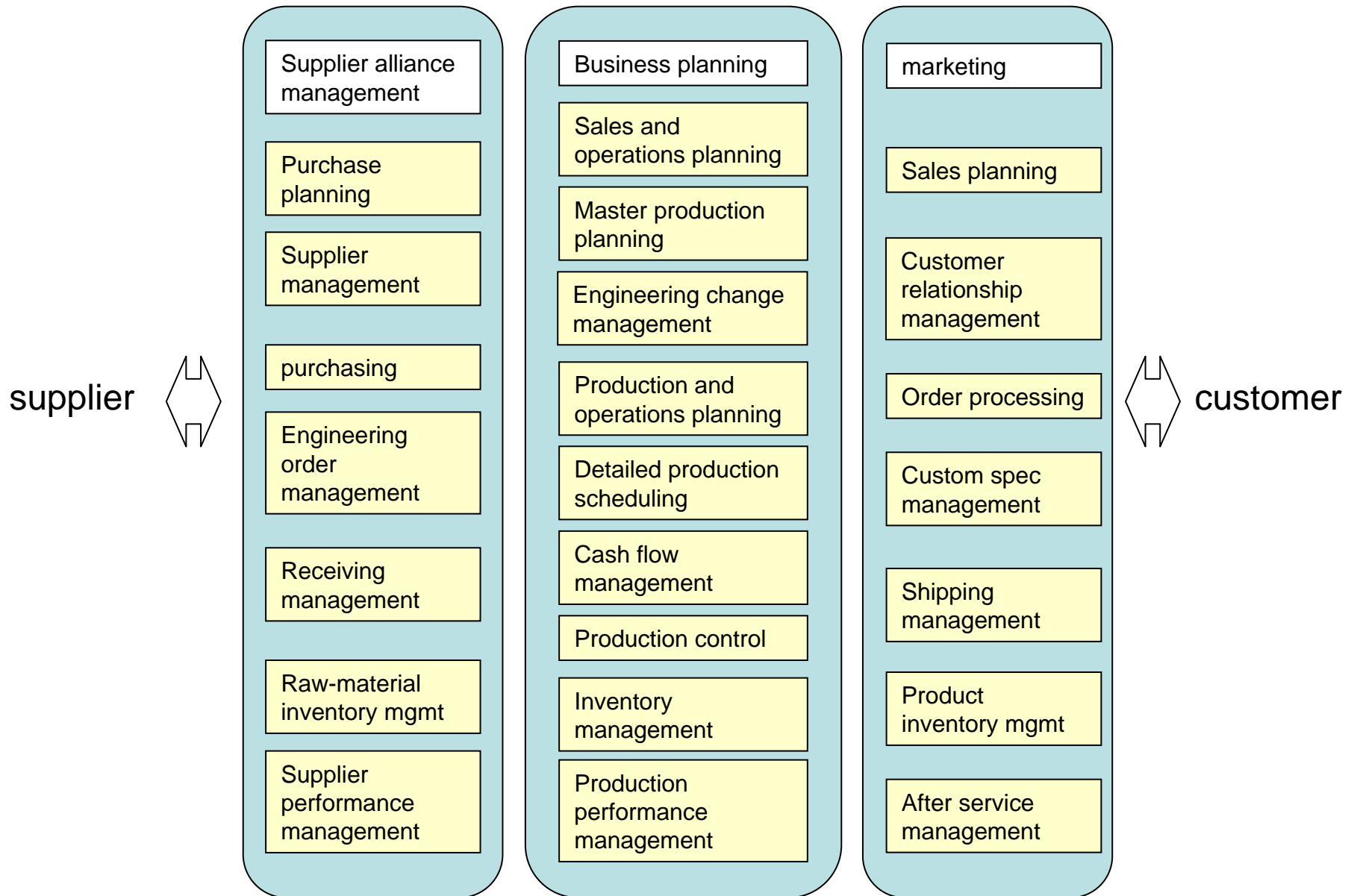
Part 2: Management Activities

Product /
material



Plant /
equipment

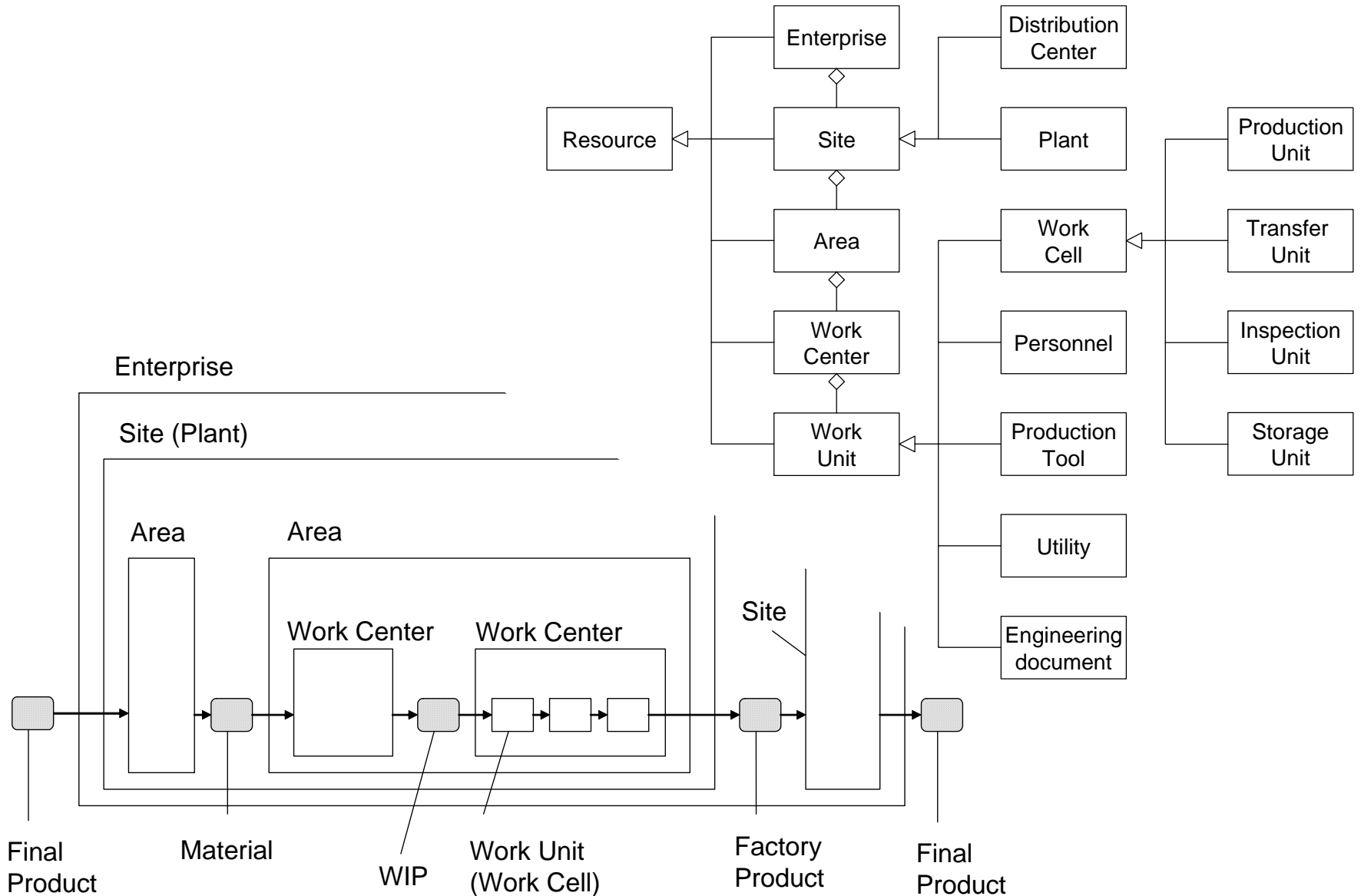
Part 2: Management Activities (Cont.)



Part 3: Domain Objects

Resources (IEC62264)	Products	Orders	Processes	Structures
Extended Enterprise	---	---	Outbound Supply Chain	Logistics
Enterprise	Final Product	Enterprise Order	Inbound Supply Chain	
Site	Factory Product	Site Order	Site Process	Site Routing
Area	Material	Area Order	Area Process	Area Routing
Work Center	Work-In-Process	Work Order	Elementary Process	Work Center Routing
Work Unit	---	Execution Order	Unit Process	Assignment Rule

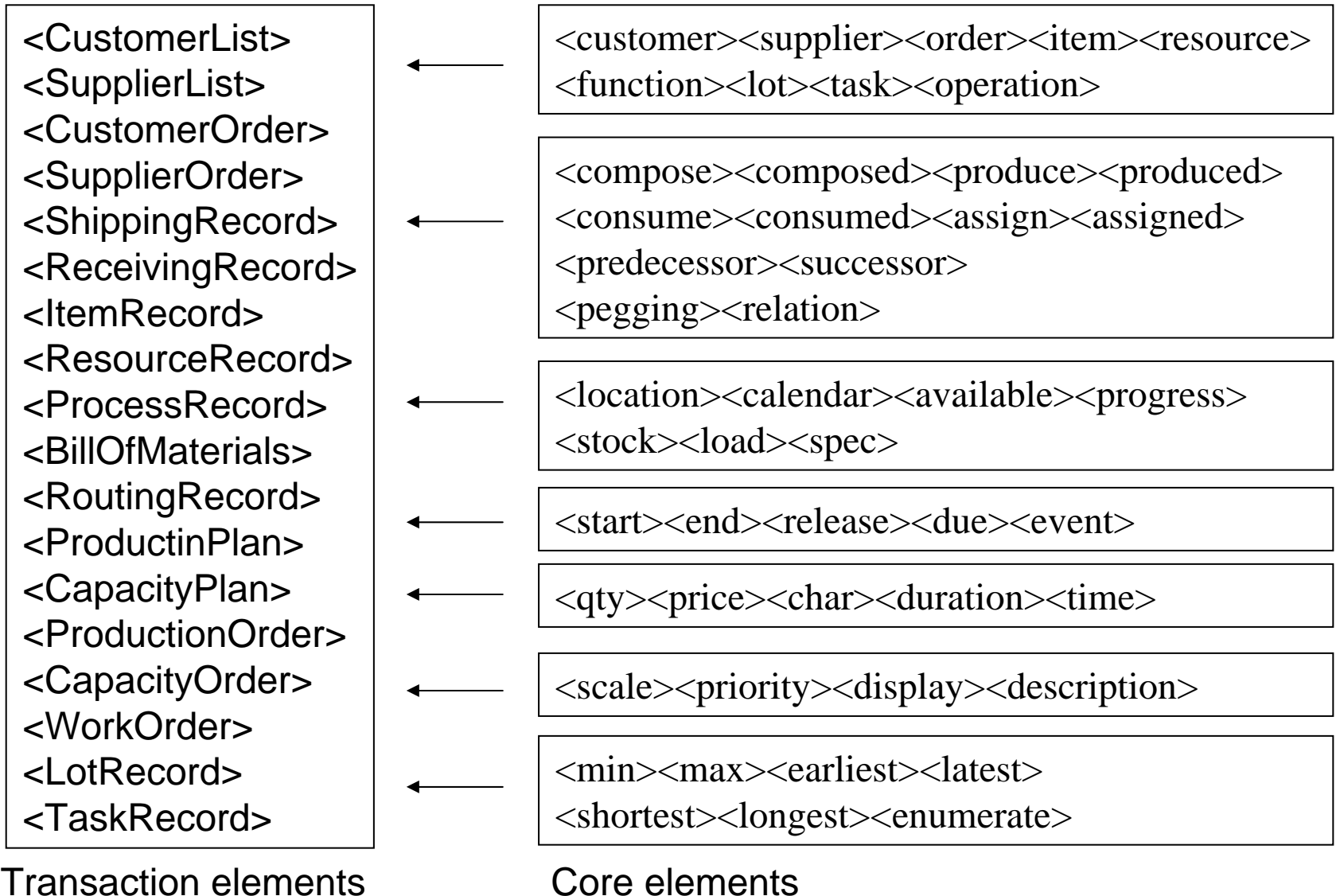
Part 3: Domain Objects (Cont.)



Part 4: Domain Ontology

- Design aspect
 - #Function, #Capability, #Item, #Event
- Scheduling aspect
 - #Operation, #Task, #Lot, #Action
- Behavioral aspect
 - #Capacity, #Inventory, #Change
- Substantial aspect
 - #Resource
- Order aspect
 - #WorkOrder, #TaskOrder , #LotOrder
- Planning aspect
 - #ProductionPlan, #CapacityPlan, #InventoryPlan
- Party aspect
 - #Supplier, #Maker, #Customer

Part 5: Common XML Schema



Part 6: Common RDB Schema

- Engineering Data Tables (9)
 - Item, Area, Personnel, Equipment, Warehouse, Process, Routing, Structure, Precedence
- Business Transaction Tables (7)
 - Invoice, Party, Customer Order, Purchase Order, Calendar, Production Plan, Capacity Plan
- Production Control Tables (6)
 - Production Order, Inventory, Work Order, Work Record, Lot, Pegging