

ISA 95.01 Update CDV01
Enterprise/Control System Integration

Figures in the standard

Figure 1

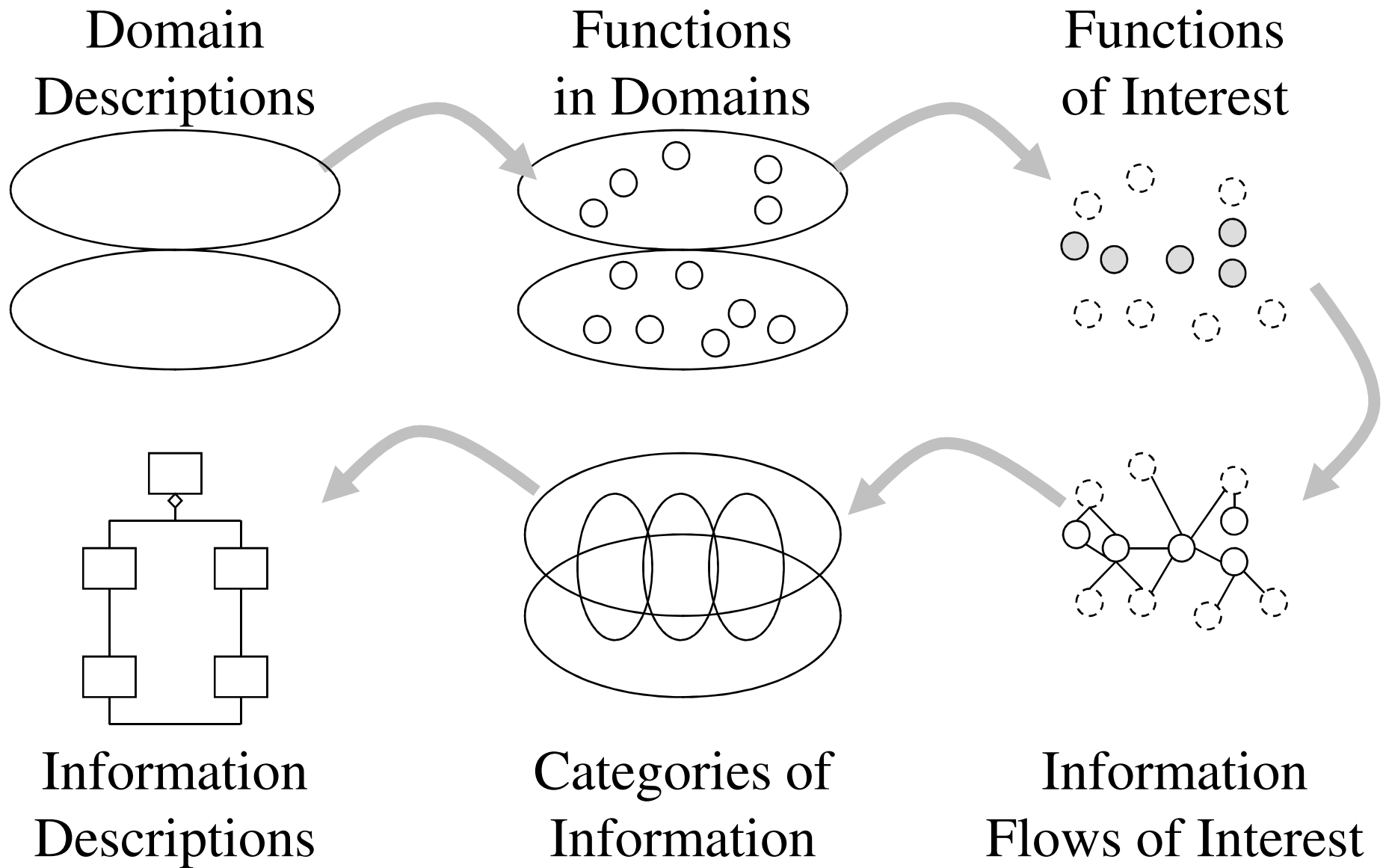


Figure 2

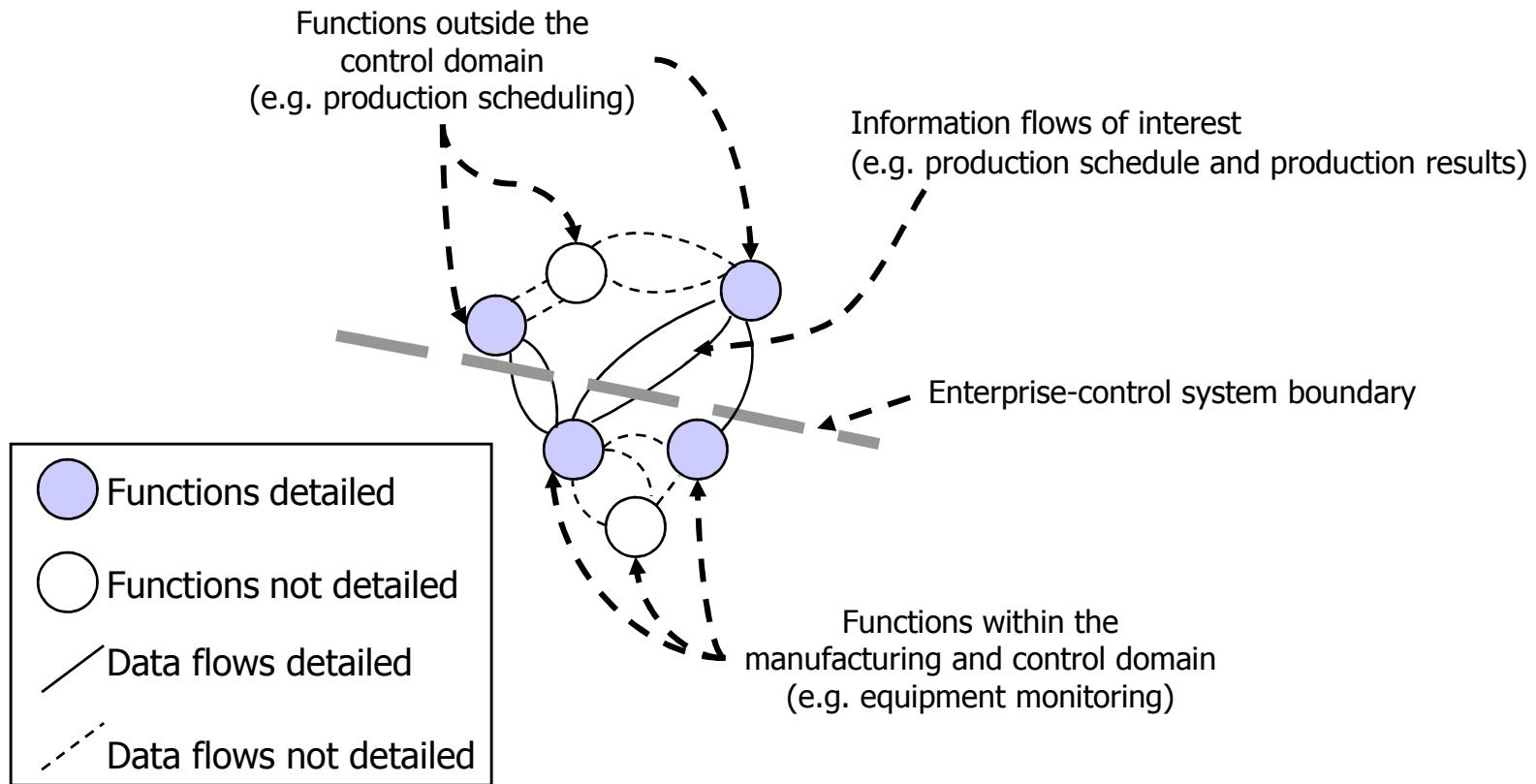
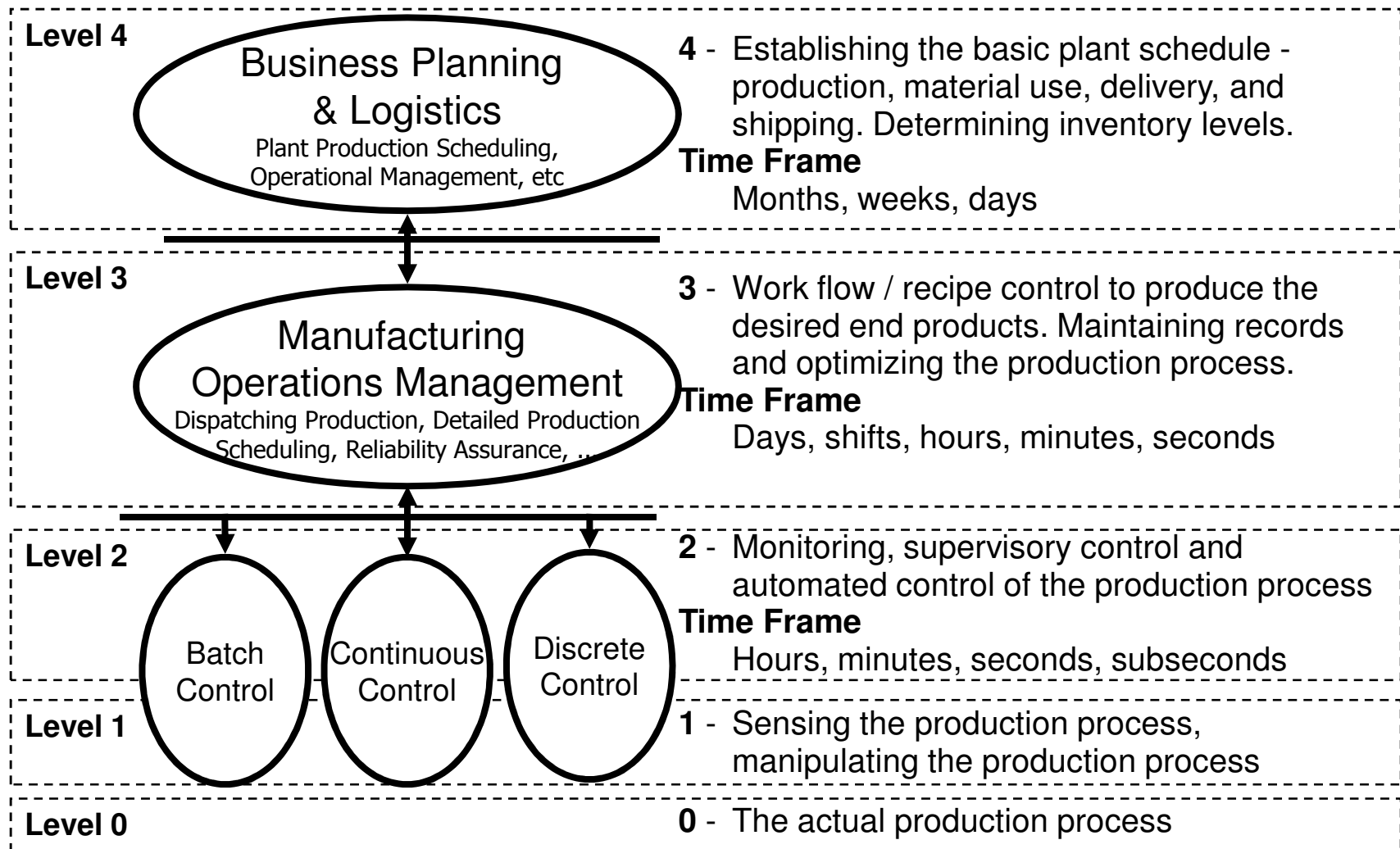


Figure 3



Not included in standard, but used to clarify MOM & MO&C

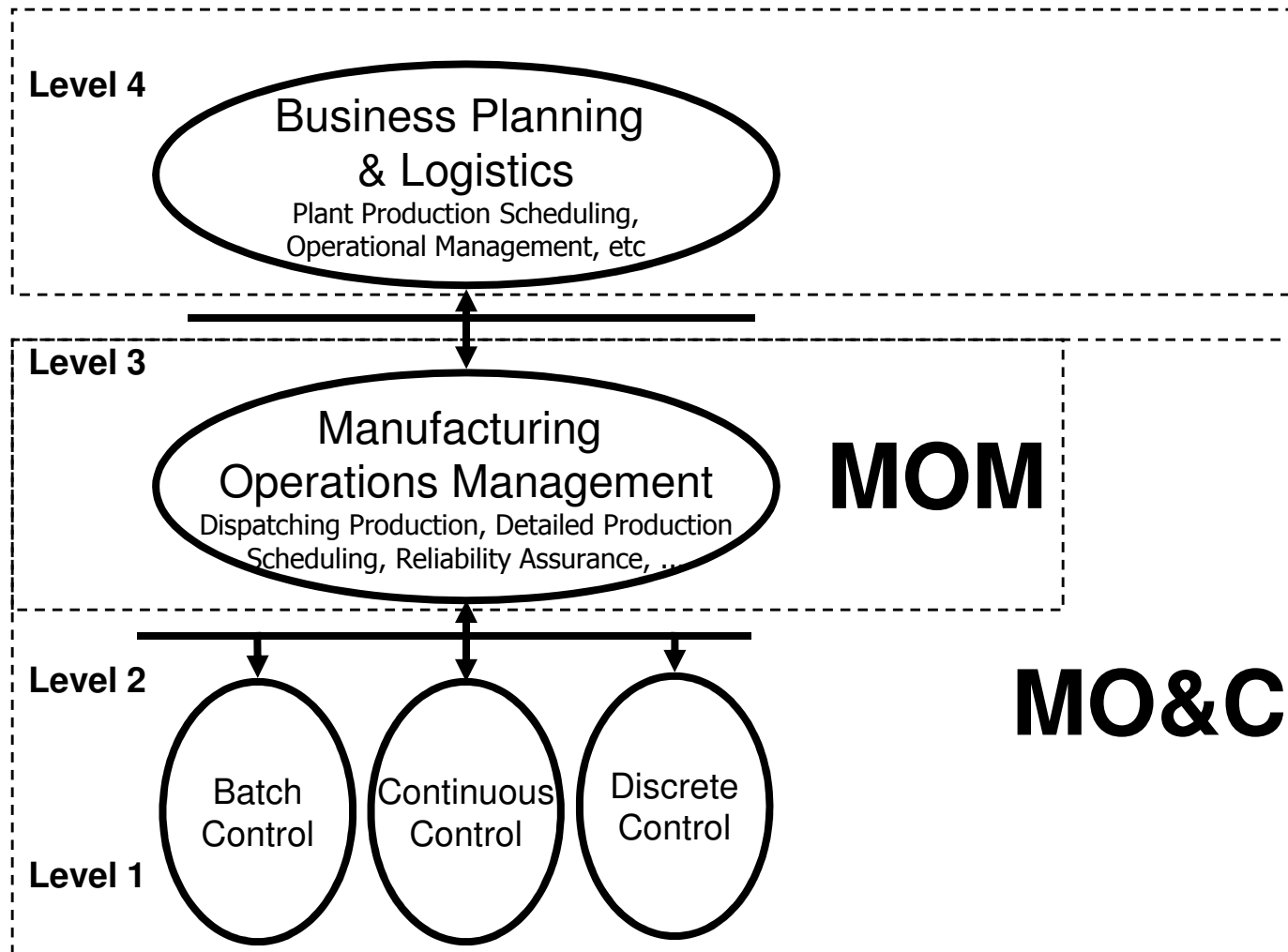


Figure 4

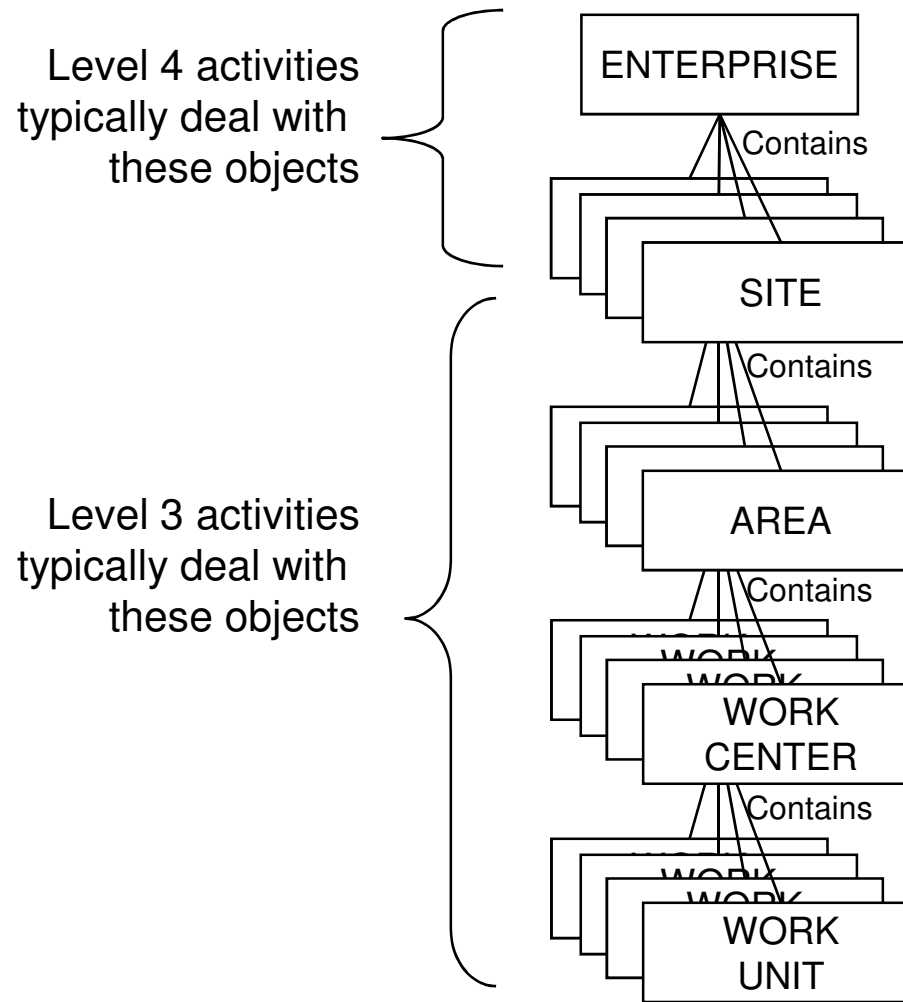


Figure 5

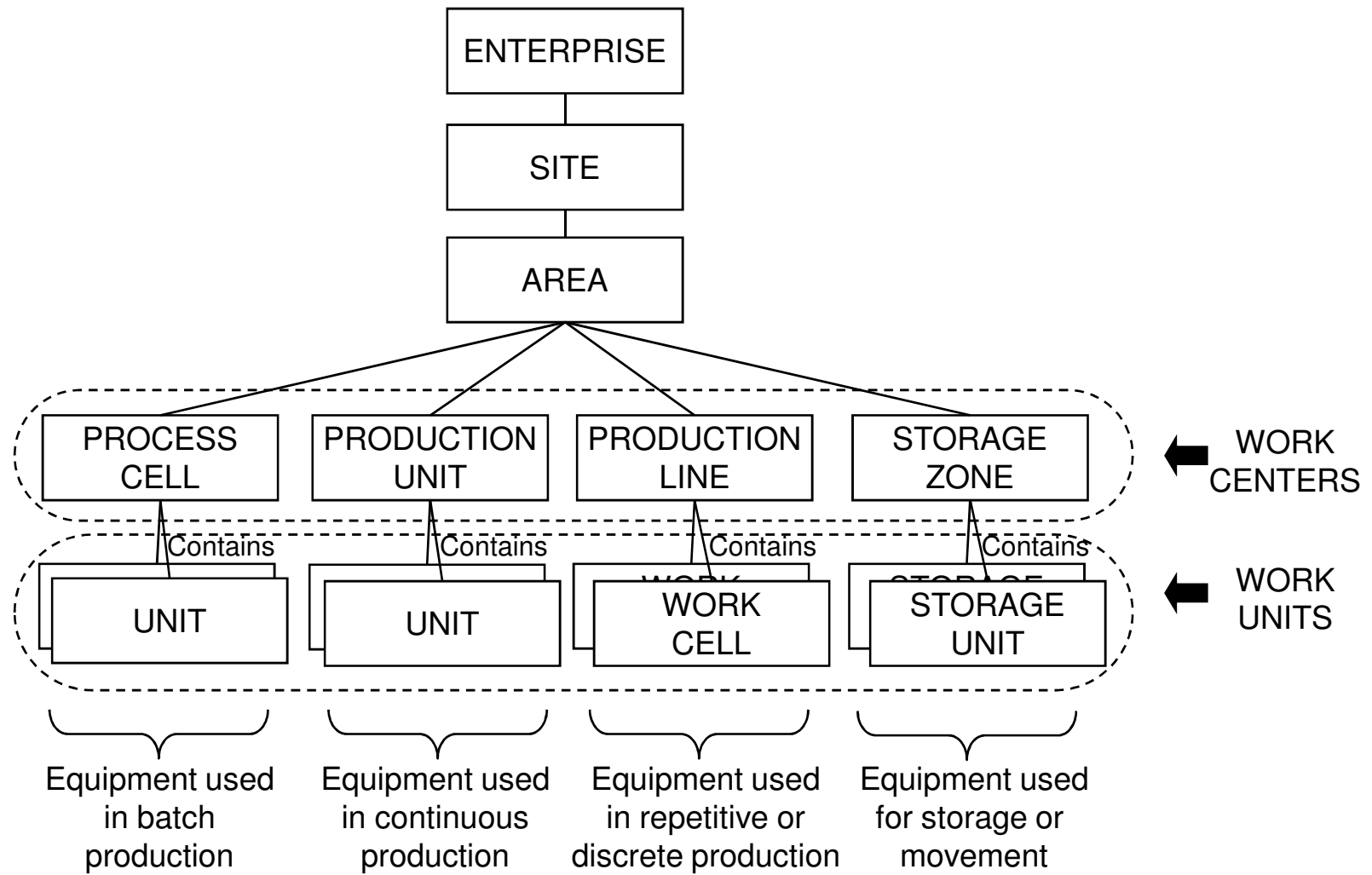


Figure 6

Role based equipment hierarchy

Physical asset equipment hierarchy

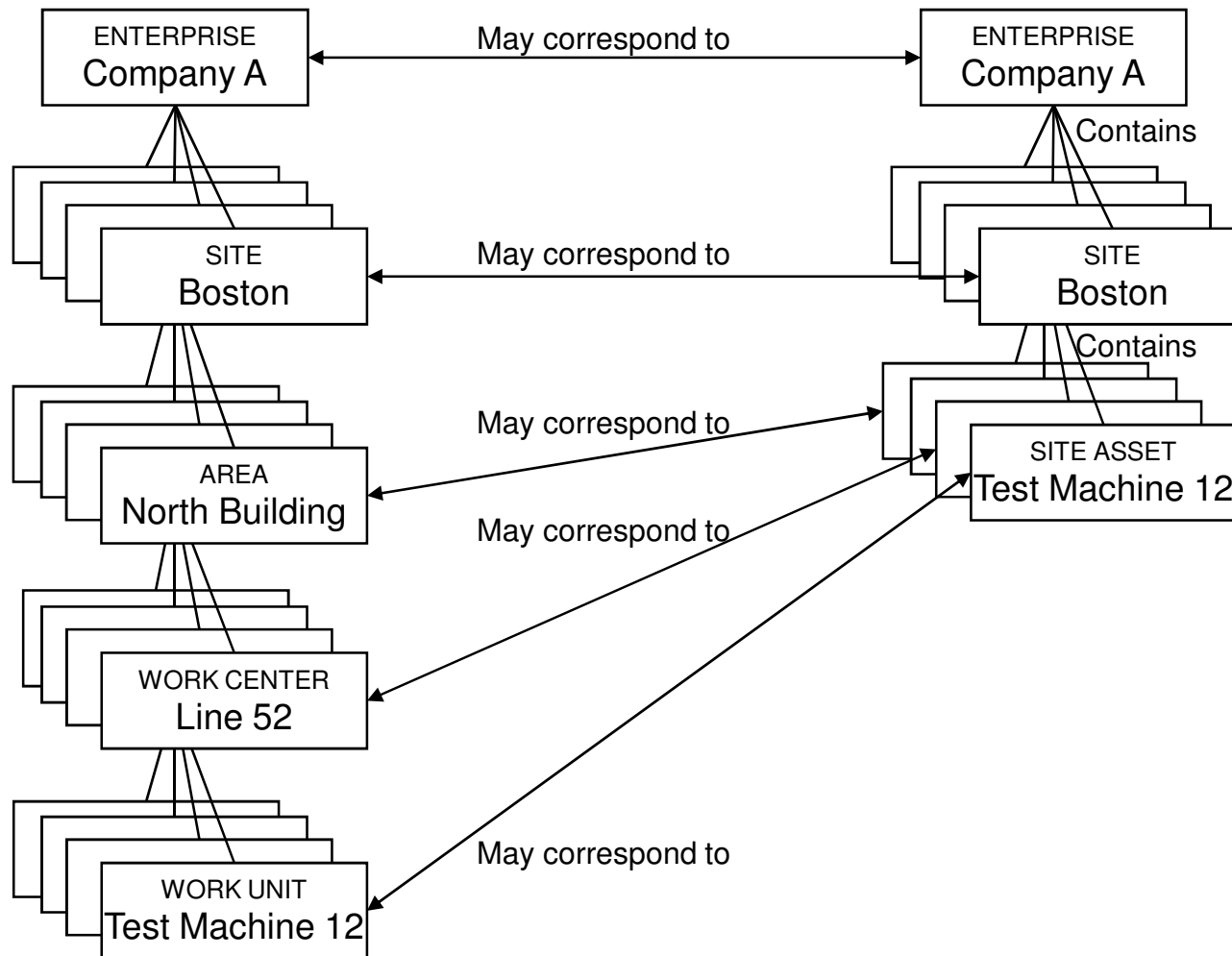


Table 2

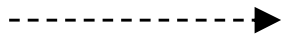
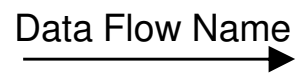
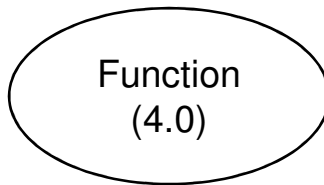
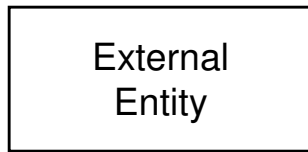


Figure 7

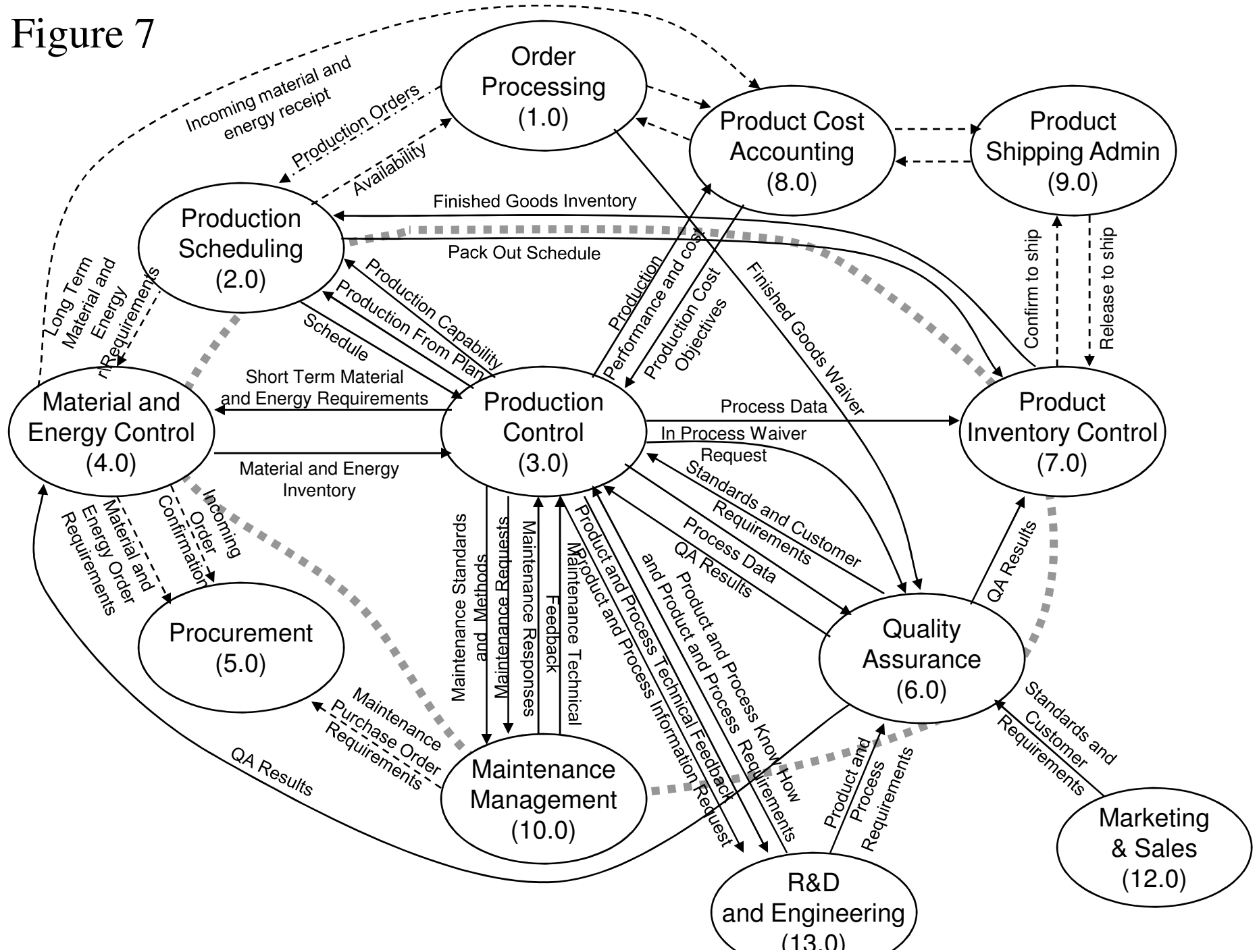


Figure 8

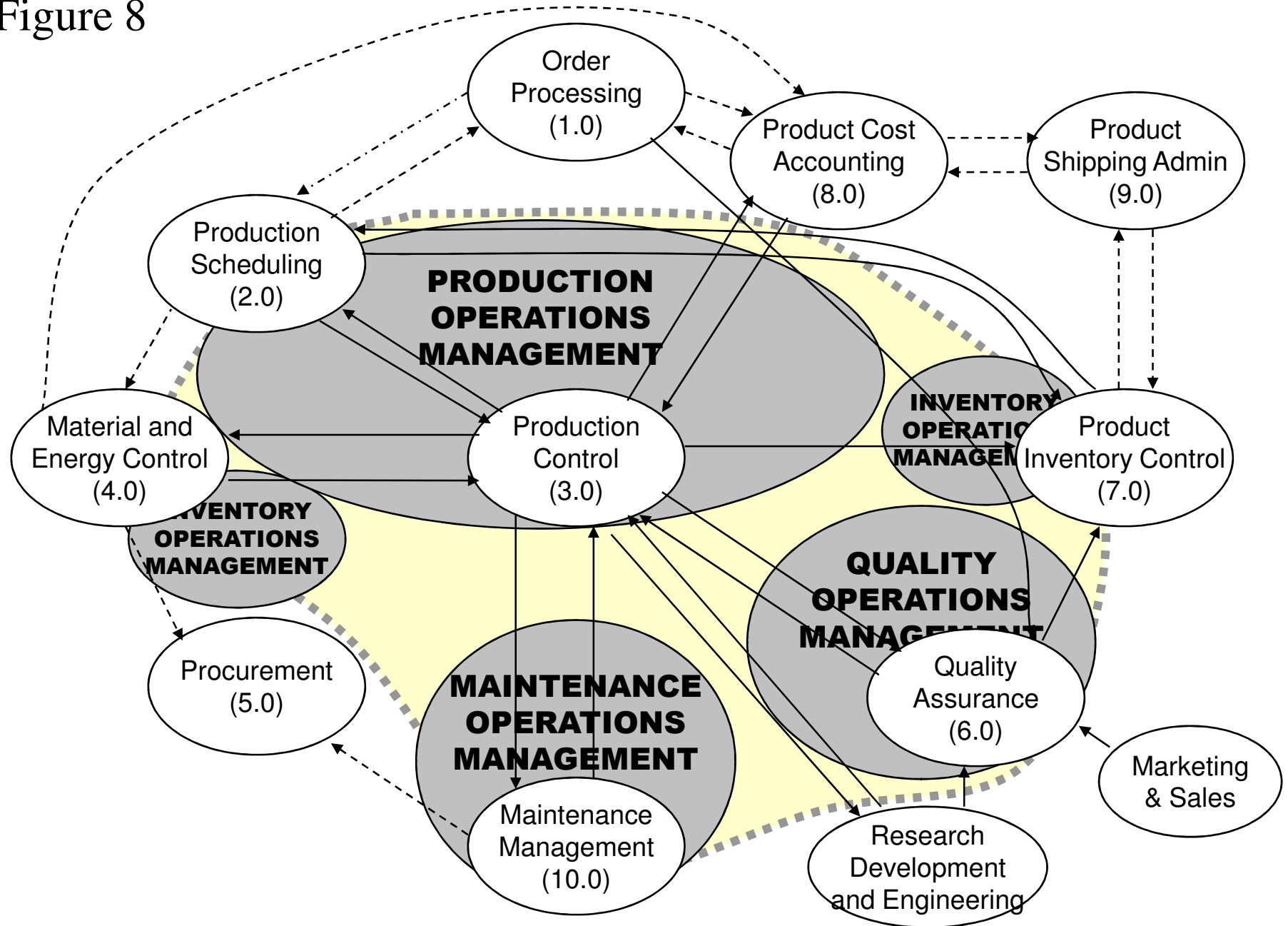
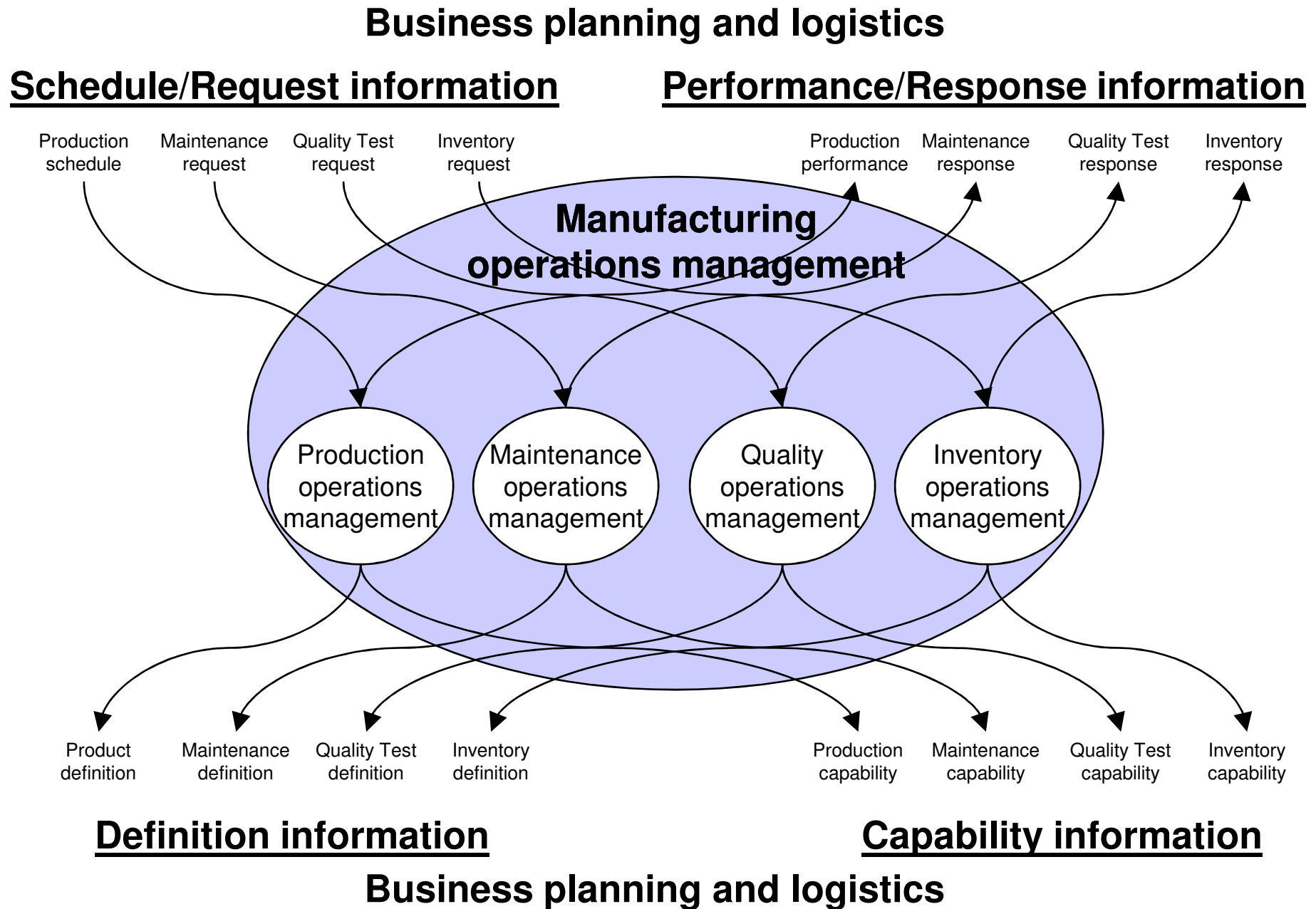
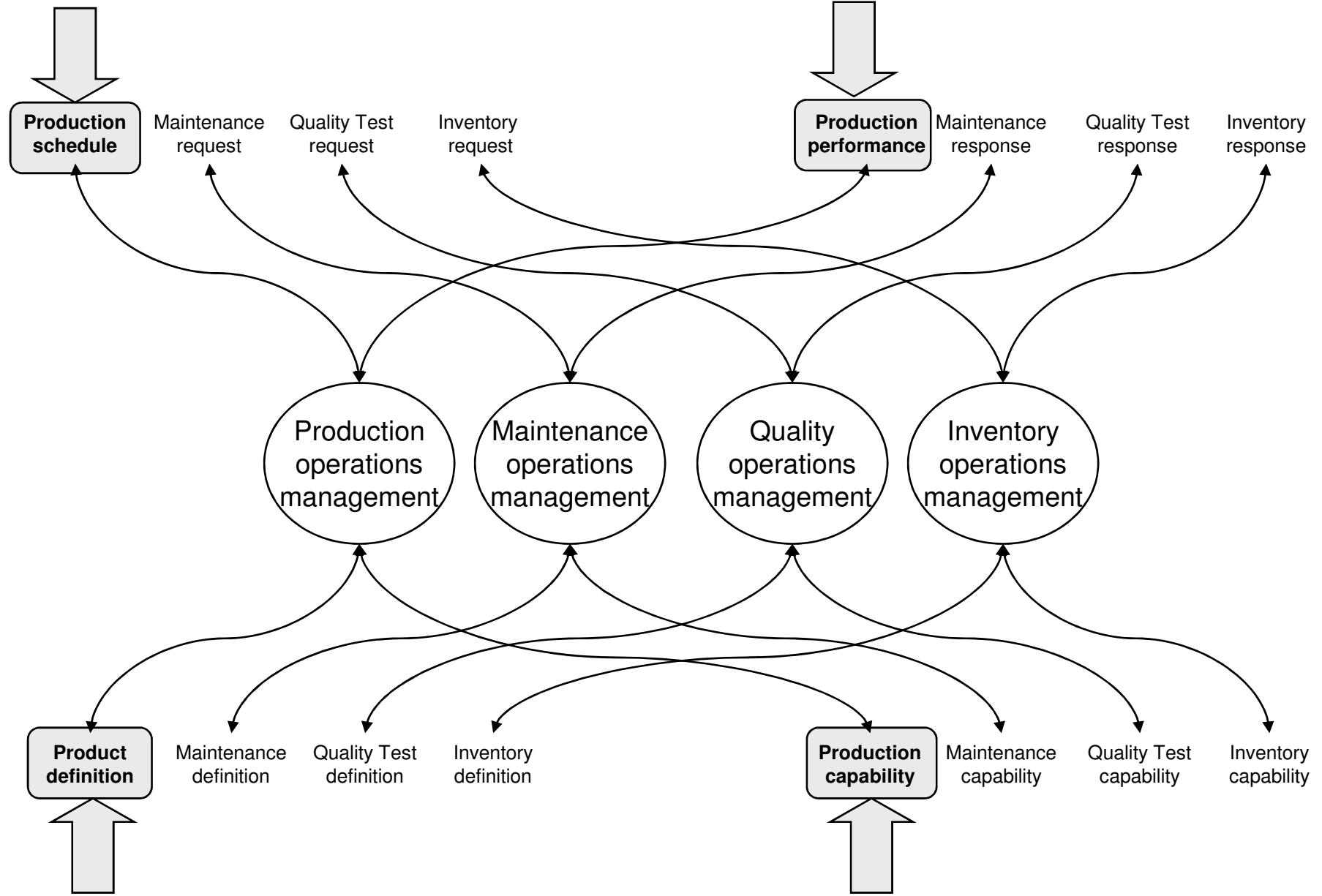


Figure 9



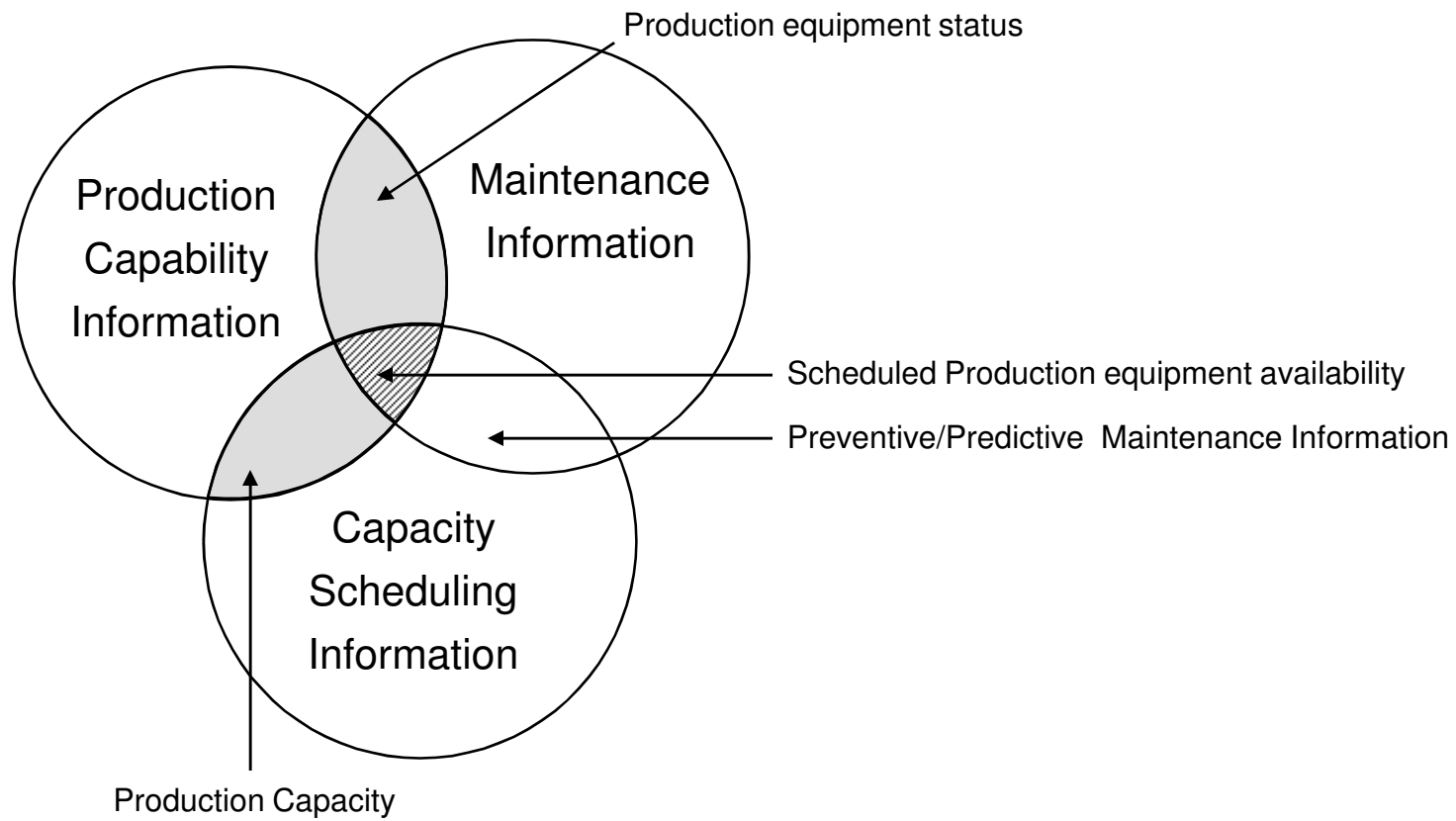
For Level 4-3 data exchanges
represented in the Production Schedule model

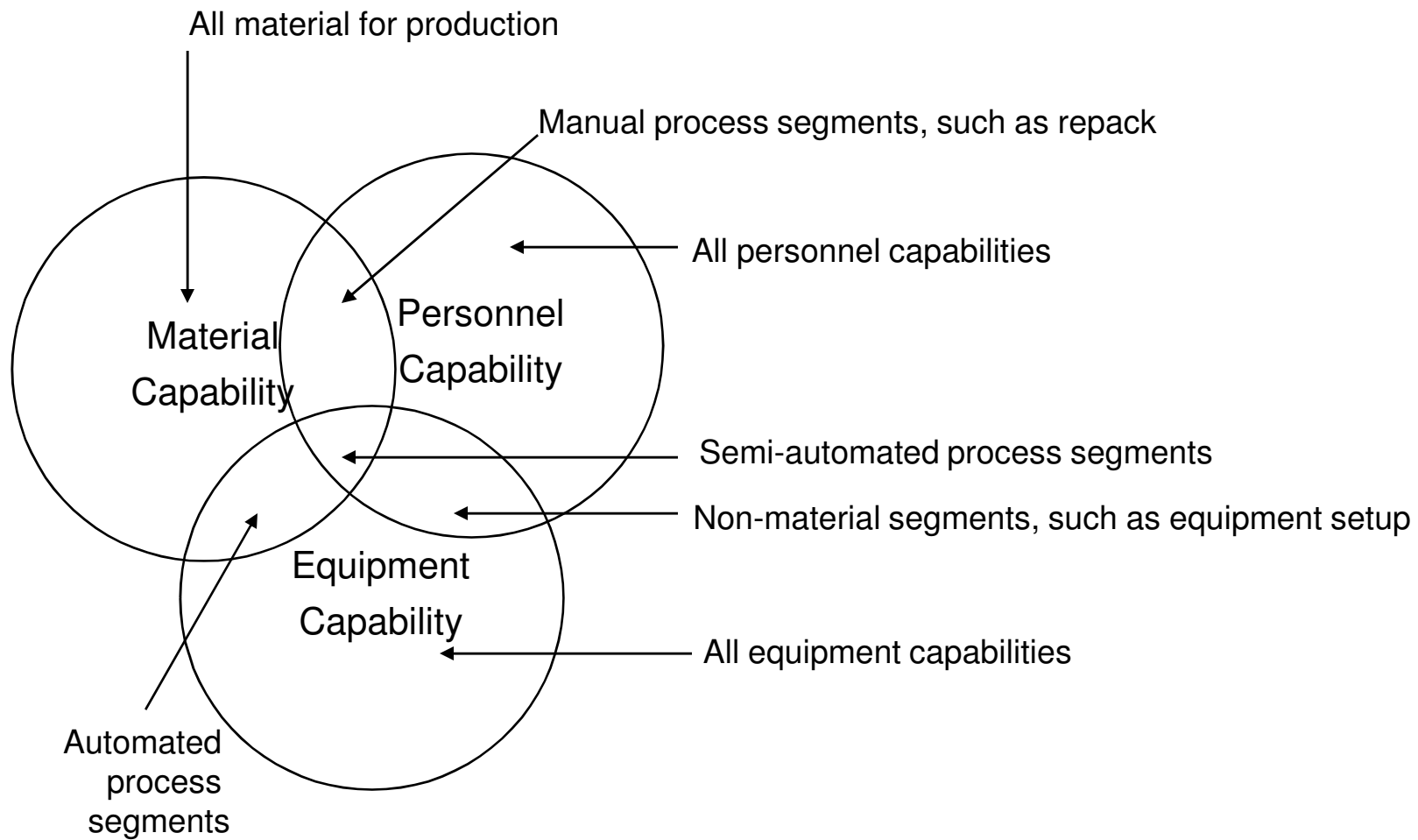
For Level 4-3 exchanges
represented in the Production Performance model

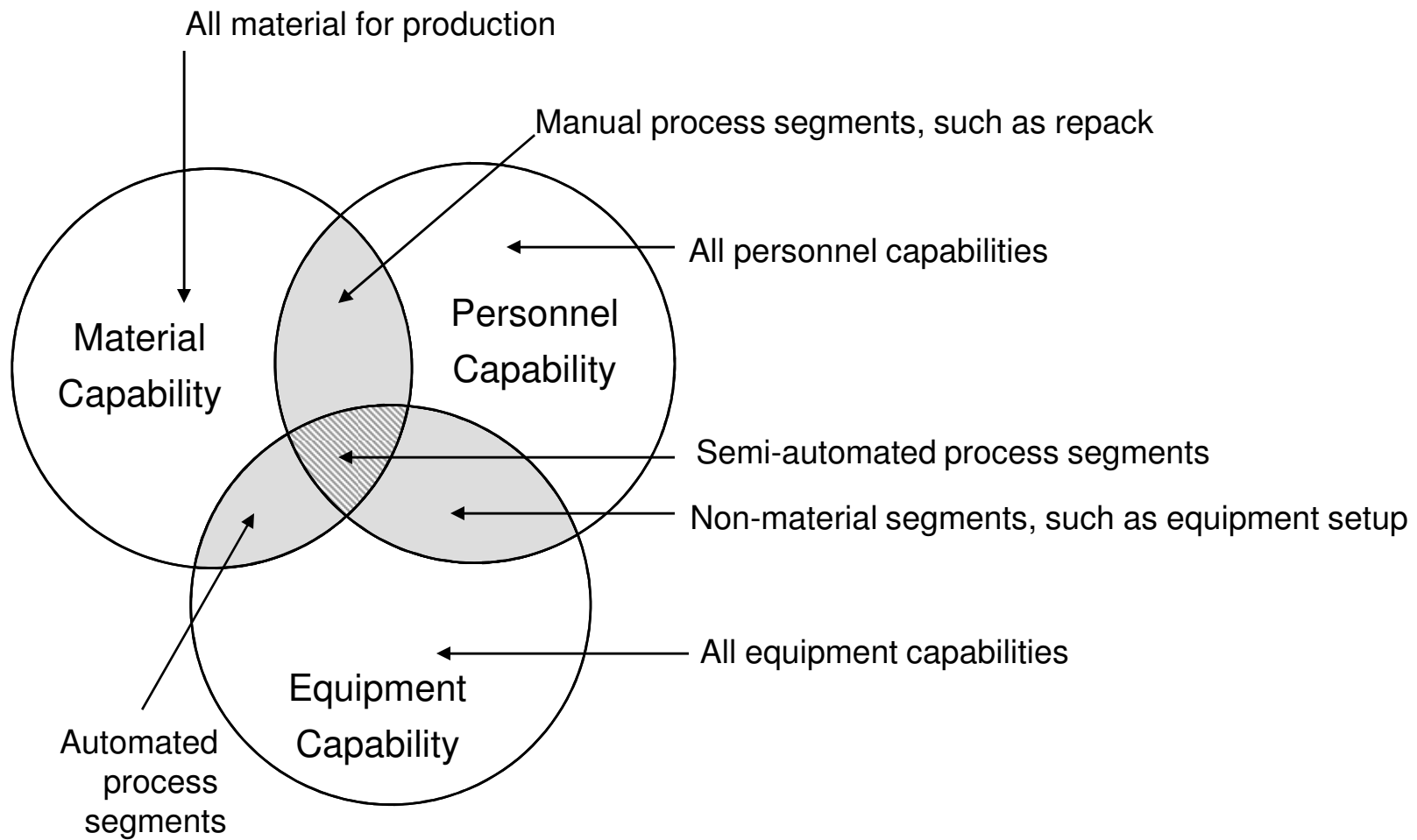


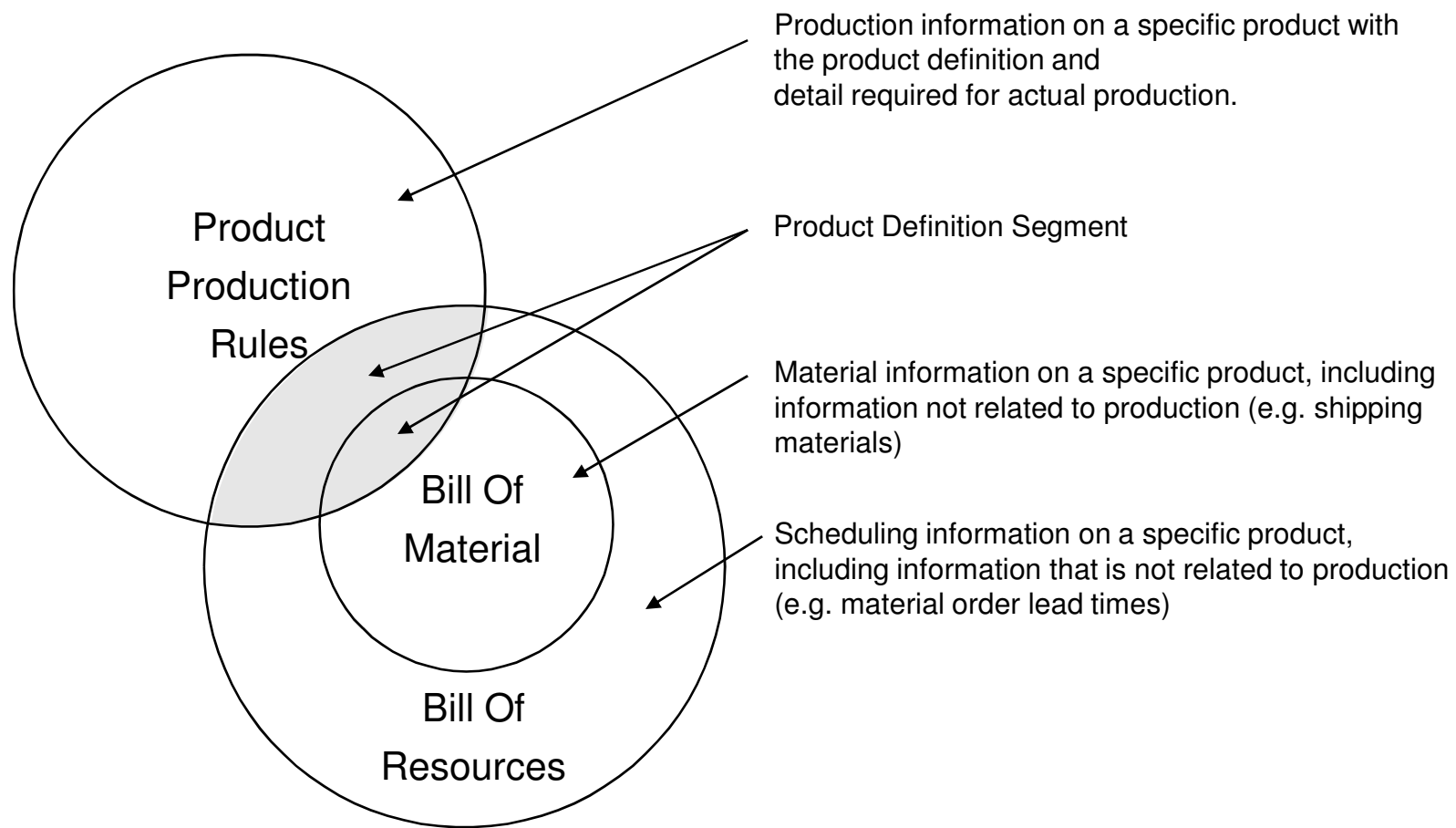
For Level 4-3 exchanges
represented in the Production Definition model

For Level 4-3 exchanges
represented in the Production Capability model

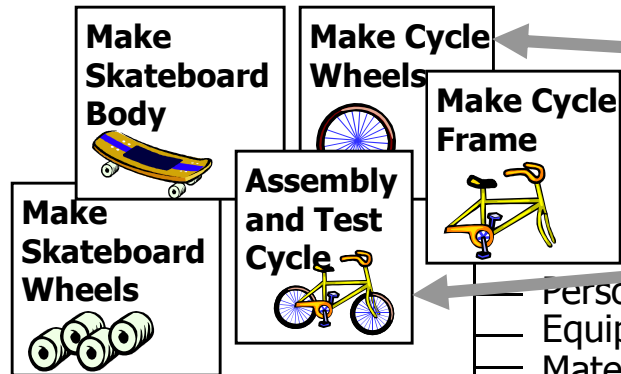




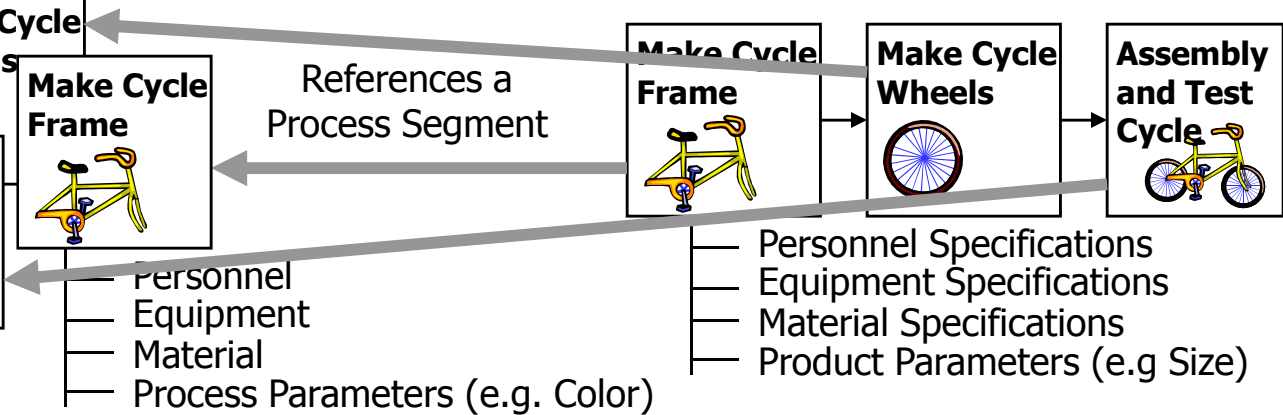




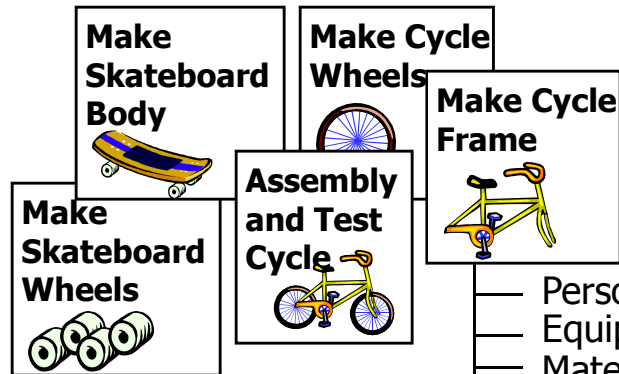
Collection of defined
Process Segments



Product Definition Segments
for a single product, with routing
(e.g. Product #2WTFM27)

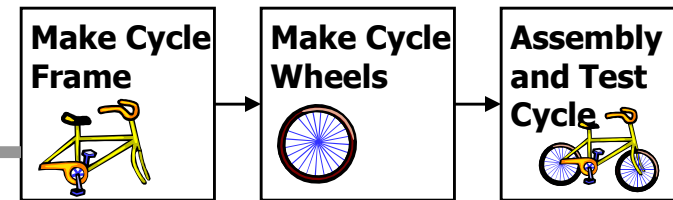


Collection of defined Process Segments



- Personnel
- Equipment
- Material
- Process Parameters (e.g. Color)

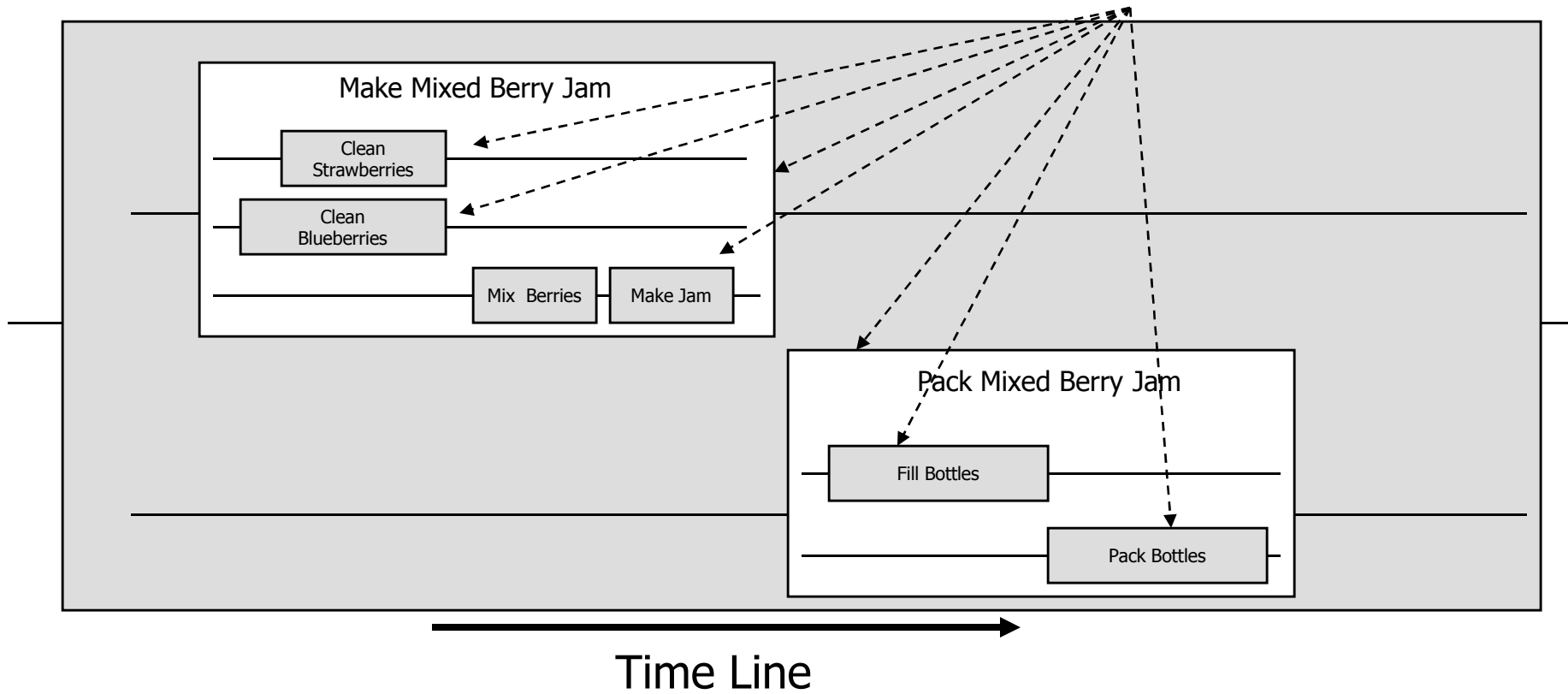
Product Definition Segments for a single product, with routing (e.g. Product #2WTFM27)



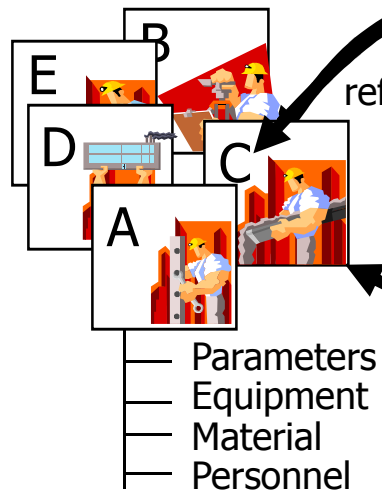
- Personnel Specifications
- Equipment Specifications
- Material Specifications
- Product Parameters (e.g Size)

References a
Process Segment

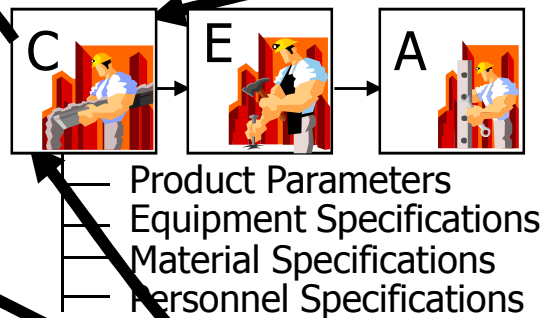
Nested Product Definition Segments
in a Product Definition for Packed Mixed Berry Jam



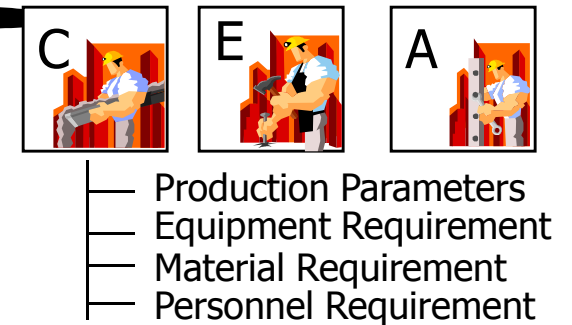
Collection of
**Process
Segments**



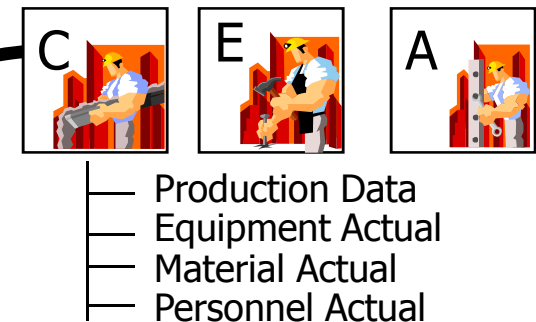
Product Segments
for a single product definition,
with routing
(e.g. Product YYY)



Segment Requirements
for a specific production request
(e.g. Lot 123 of Product YYY)



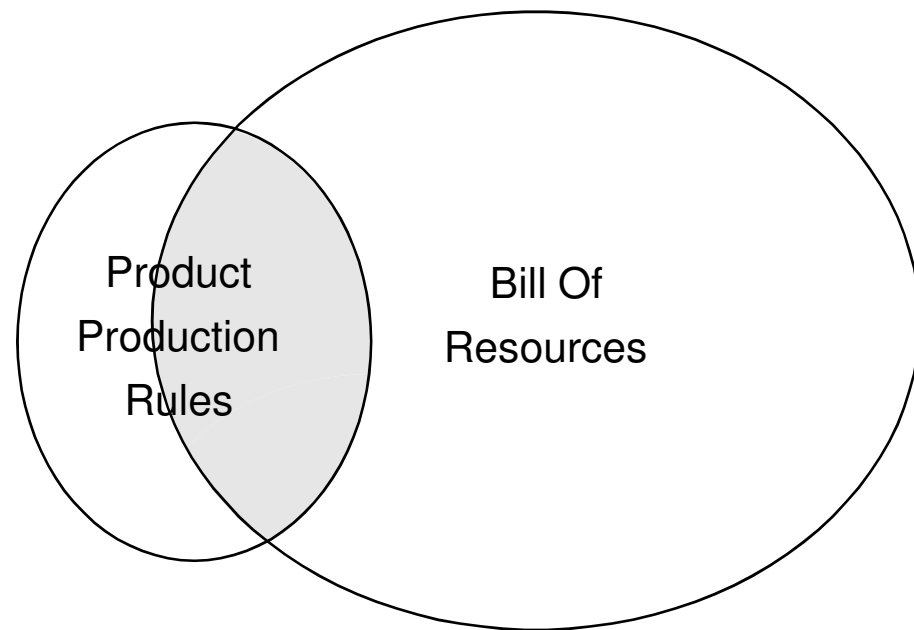
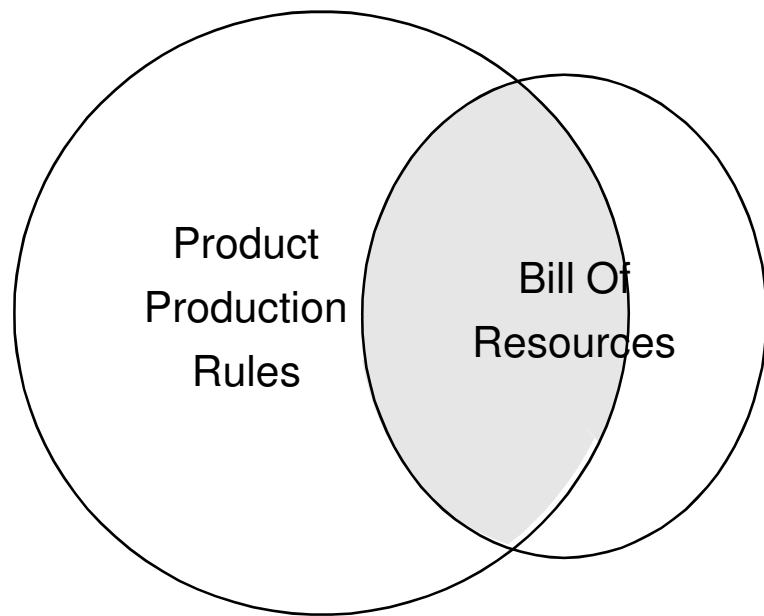
Segment Response

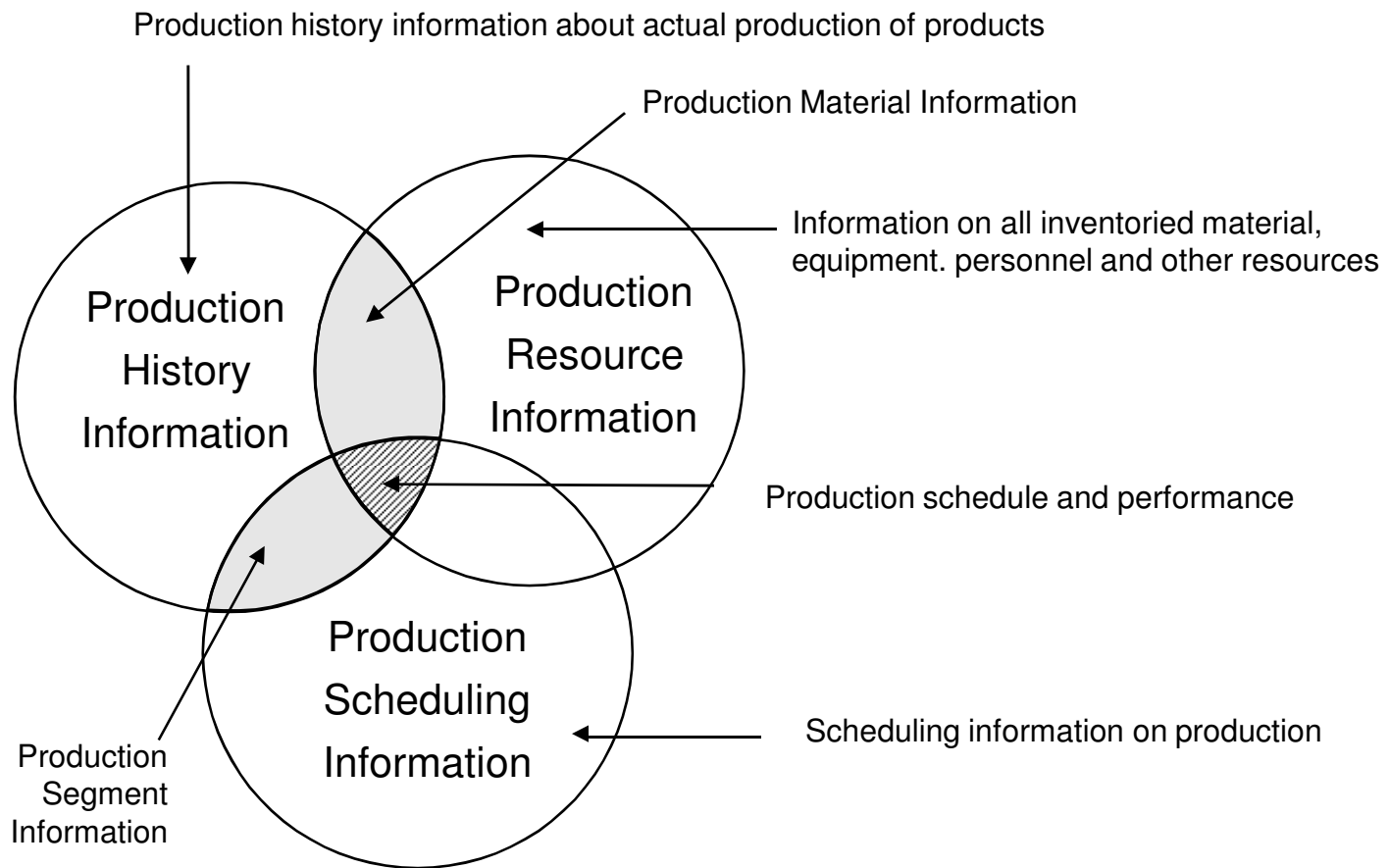


references

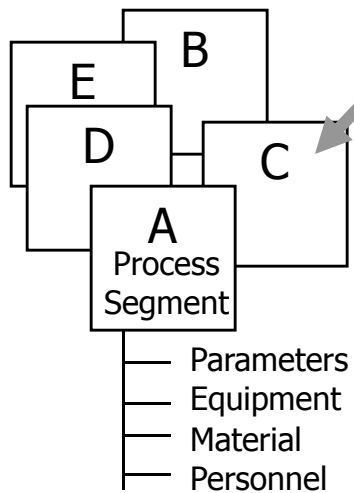
references

reference

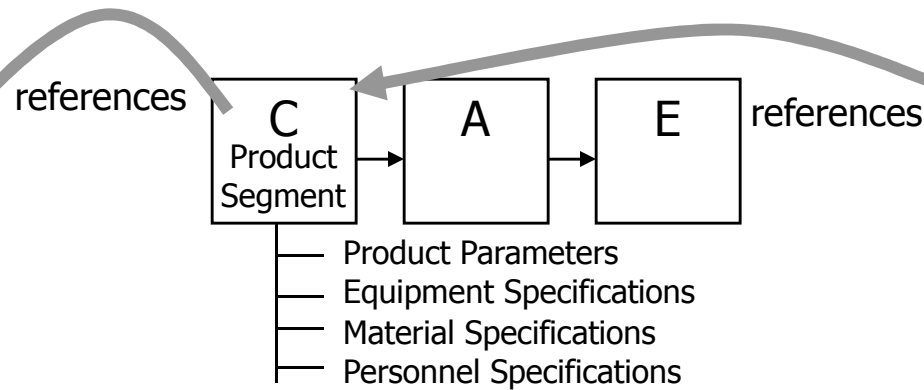




Collection of Process Segments



Product Segments for a single product definition, with routing (e.g. Product YYY)



Segment Requirements for a specific production request (e.g. Lot 123 of Product YYY)

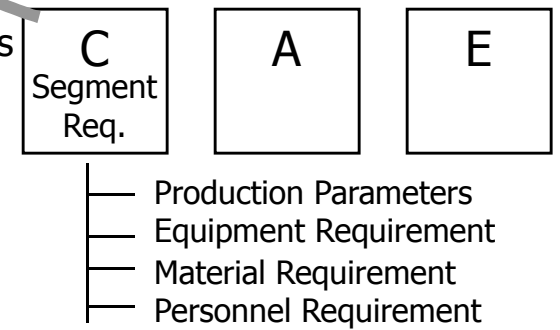


Figure 12

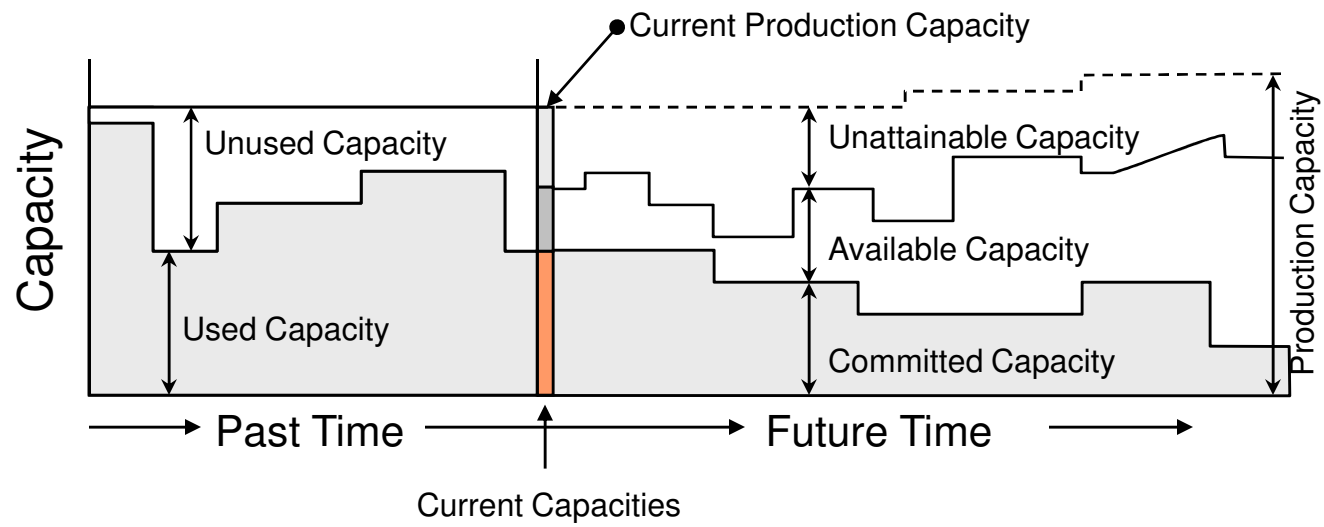


Figure 13

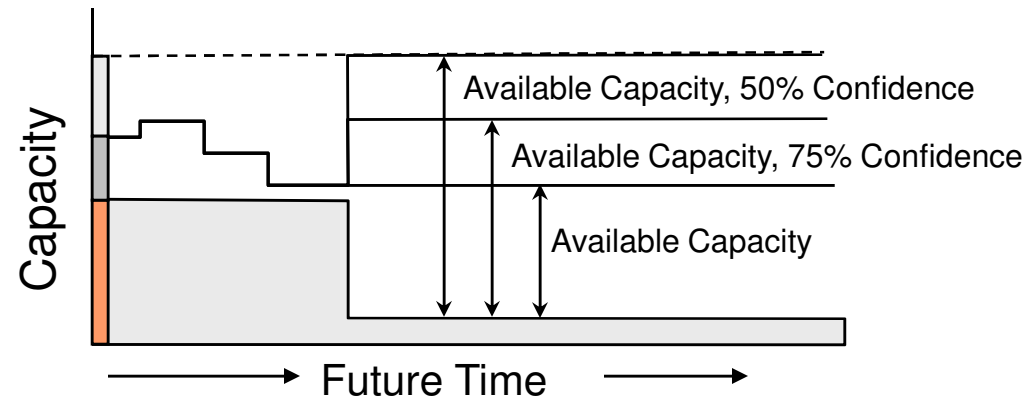
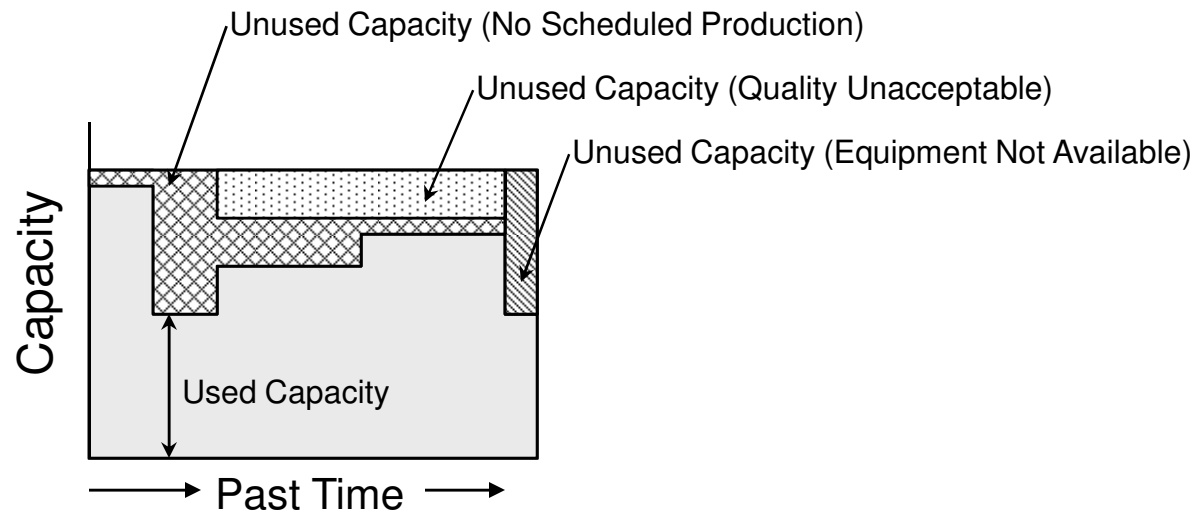


Figure 14



Extras

Figure 4

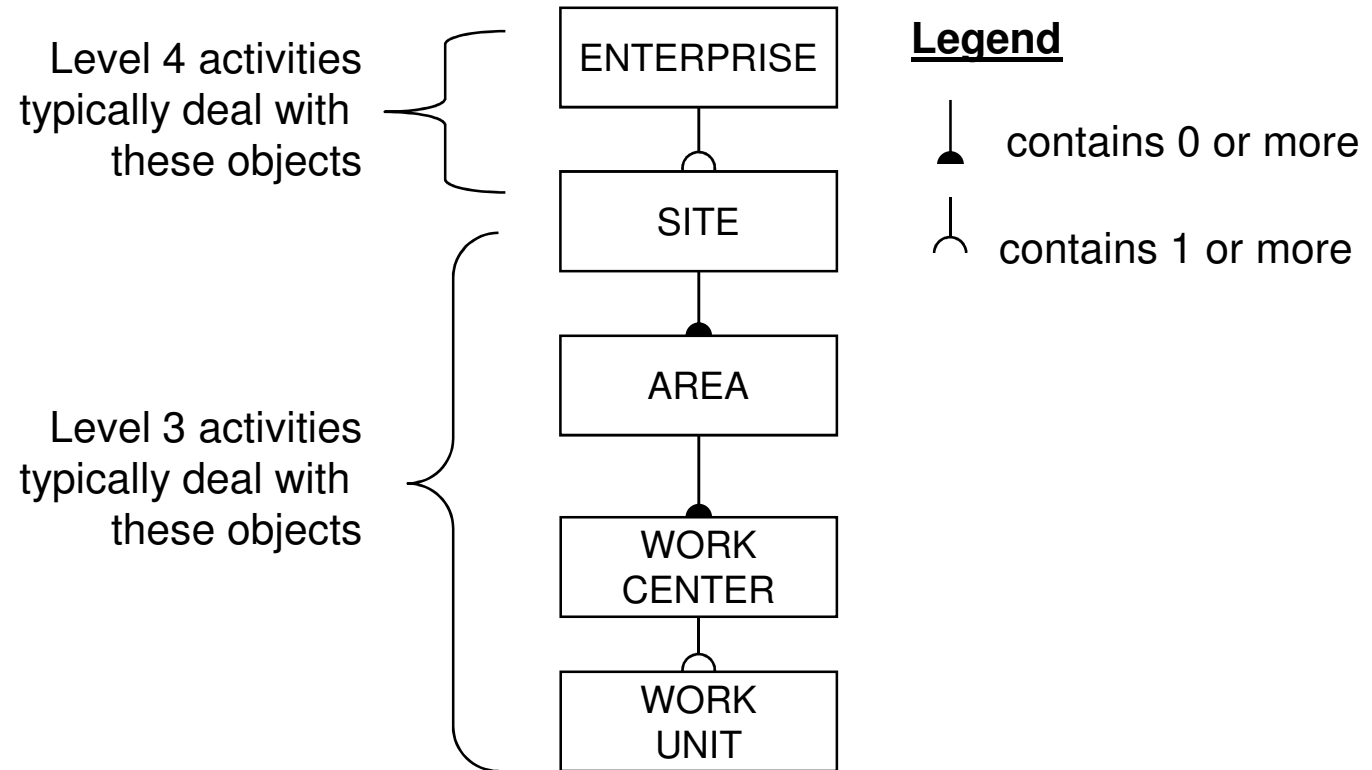


Figure 5

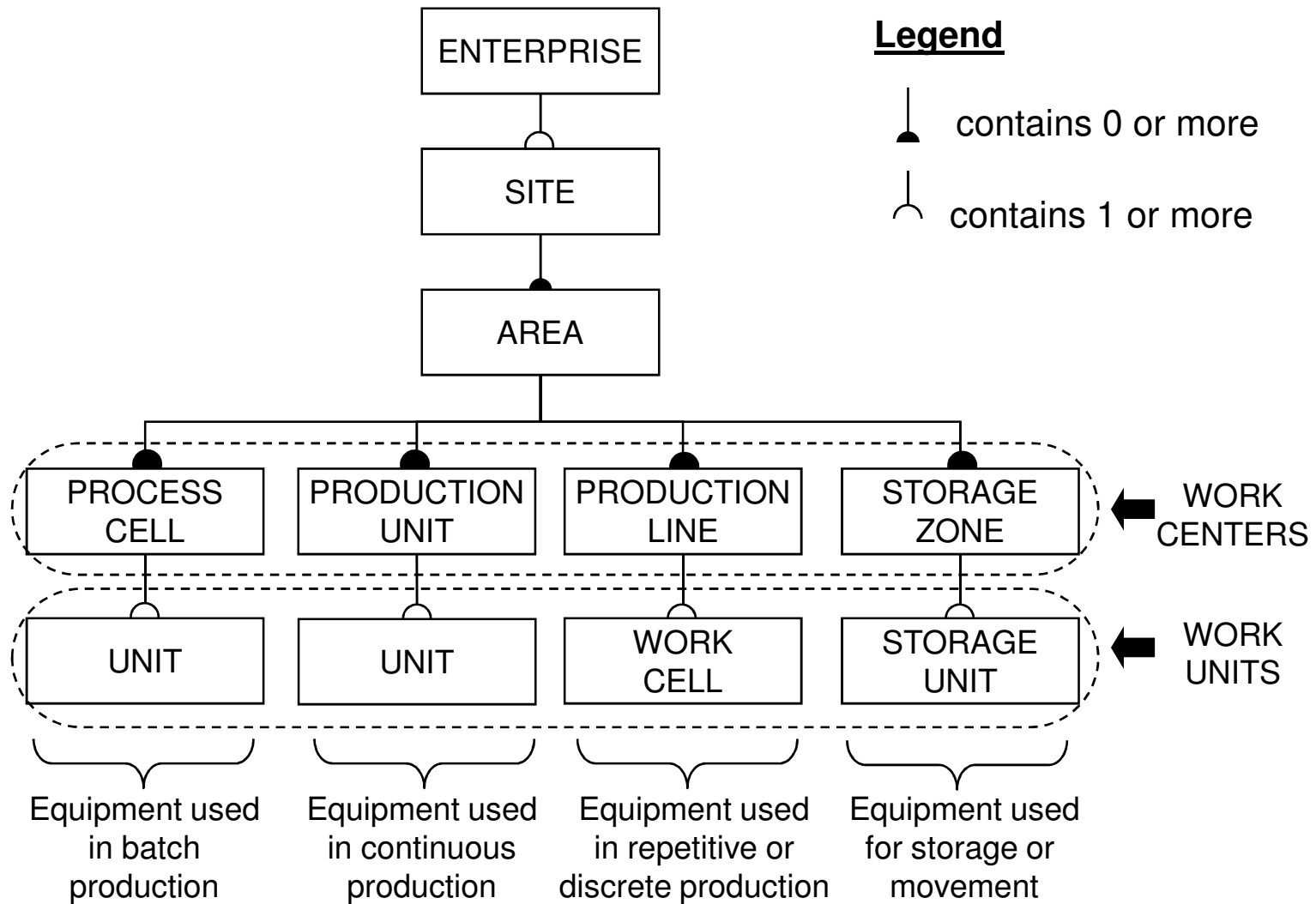


Figure 6

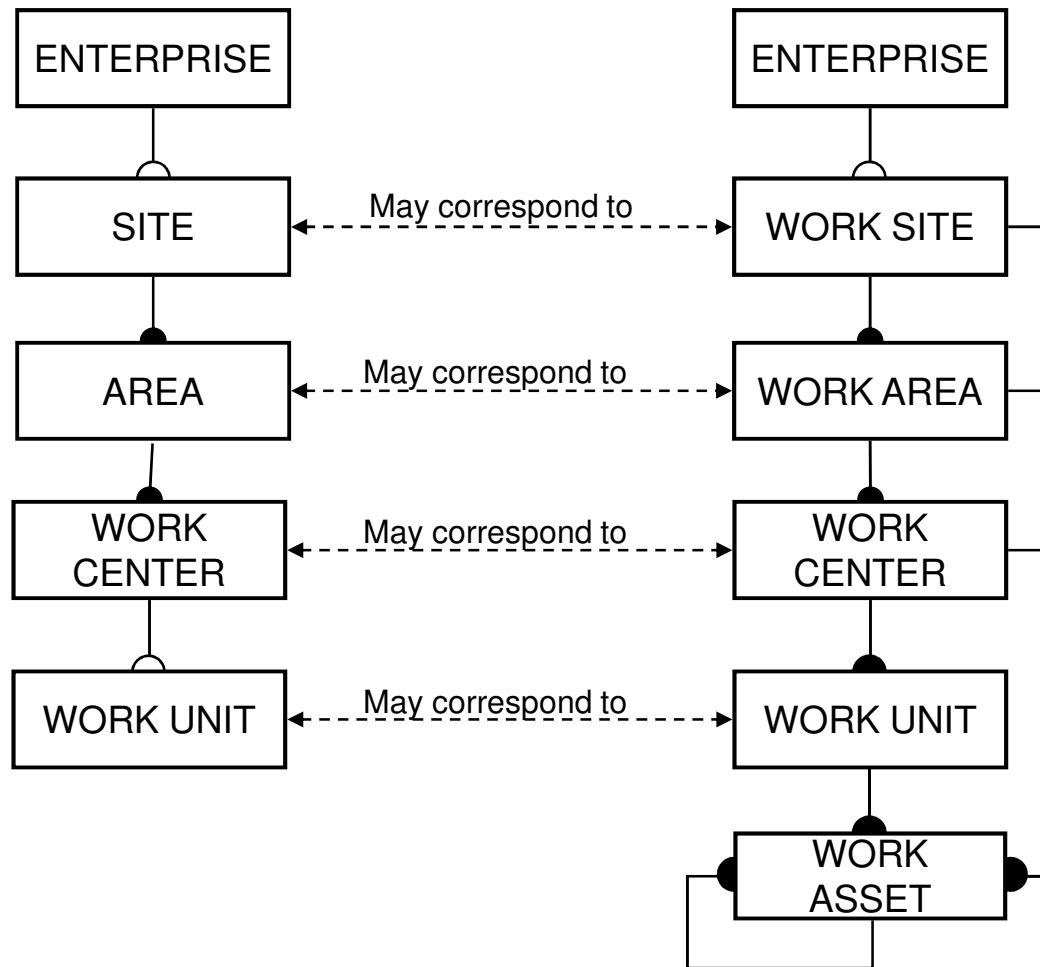


Figure ?

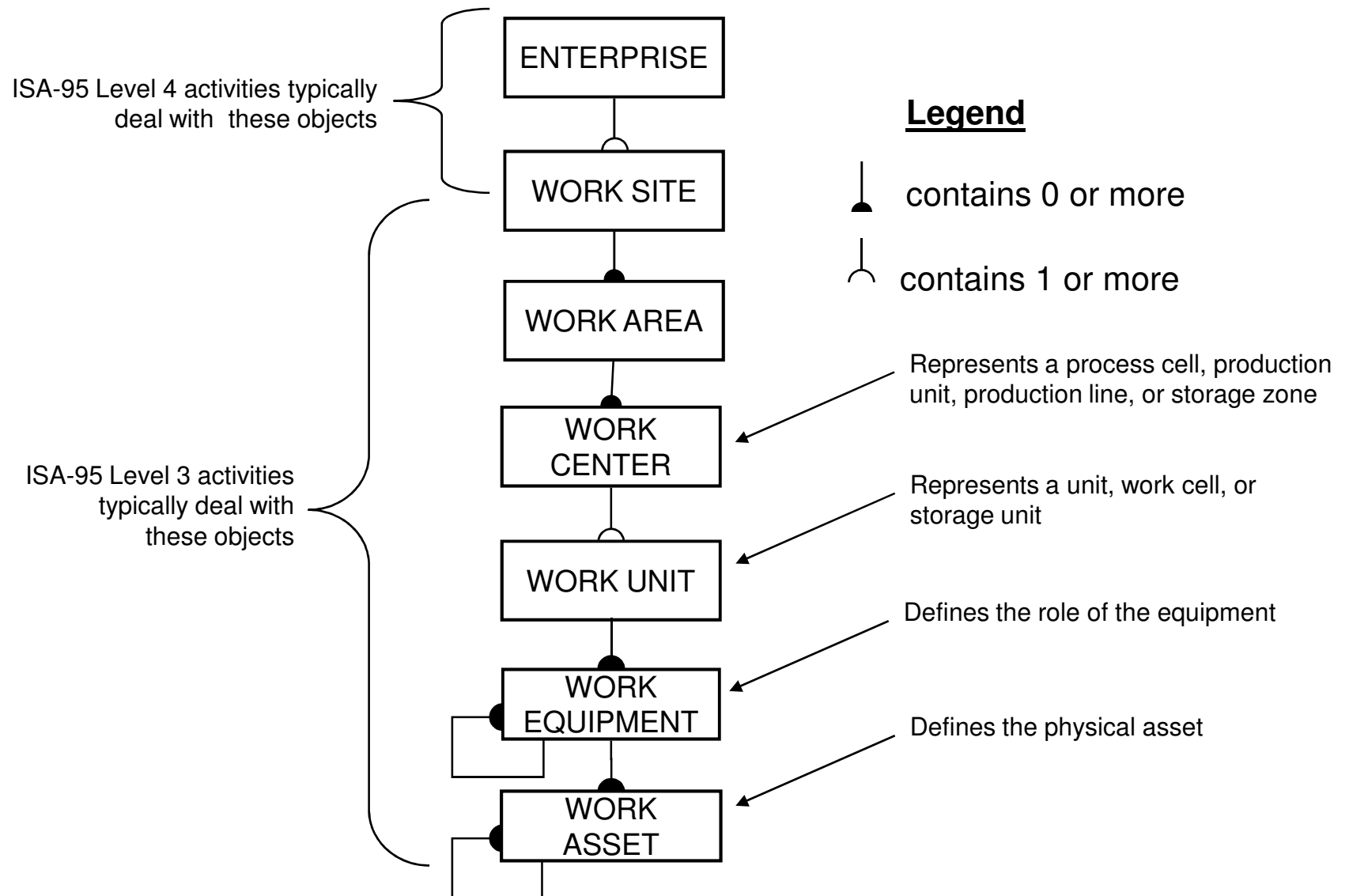
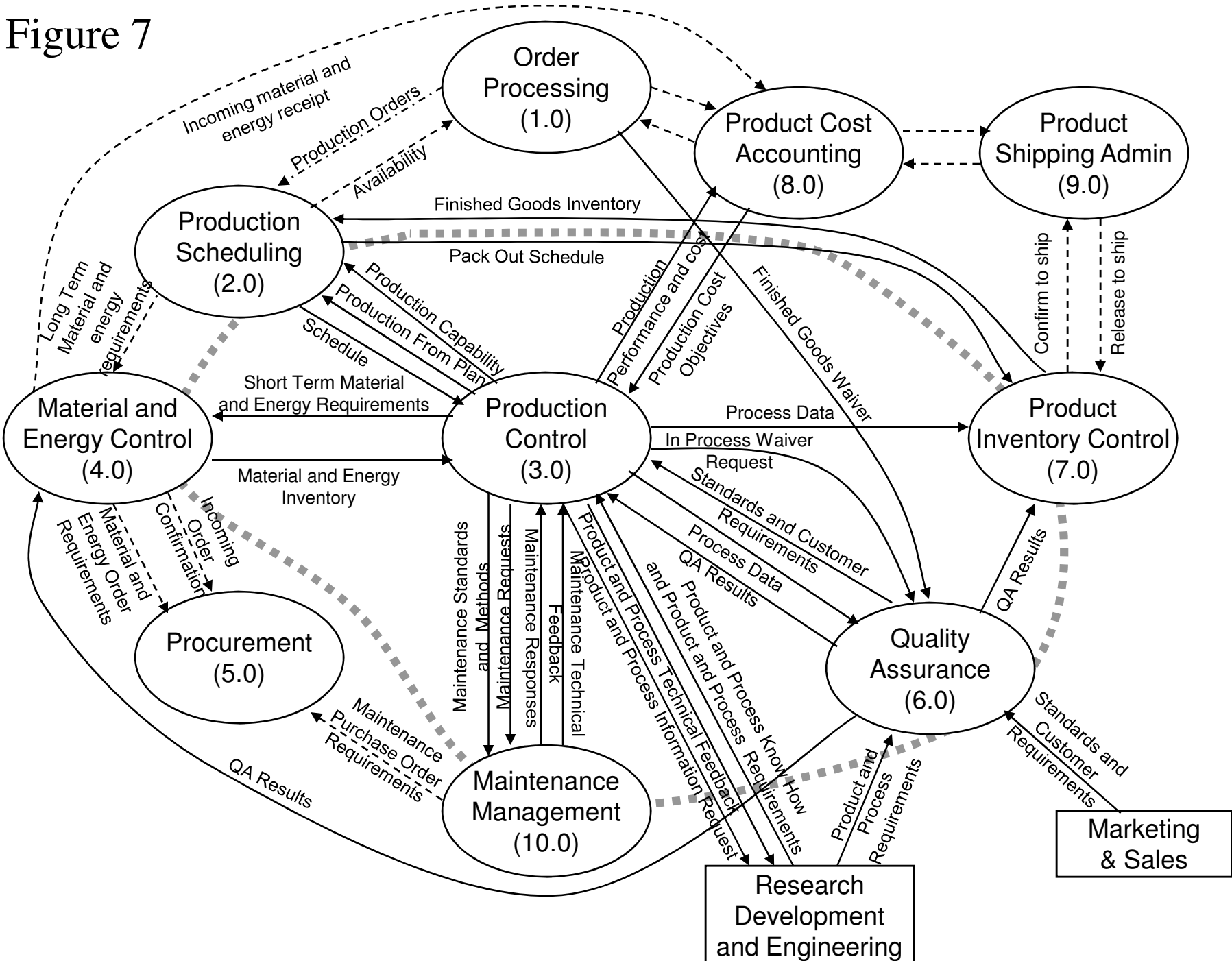
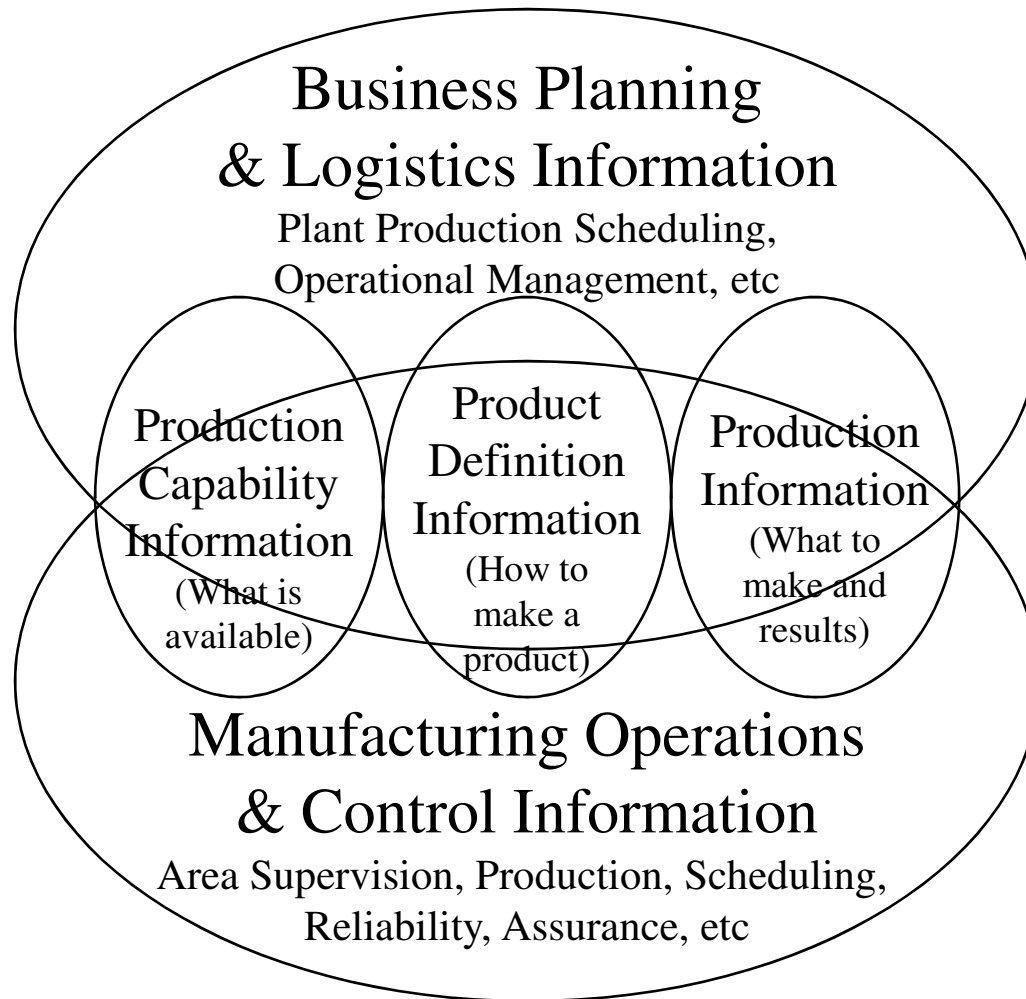


Figure 7





Business planning & logistics information

Plant production scheduling,
operational management, etc

Product definition information

(What must be defined to make a product)

Production capability information

(What resources are available)

Production schedule information

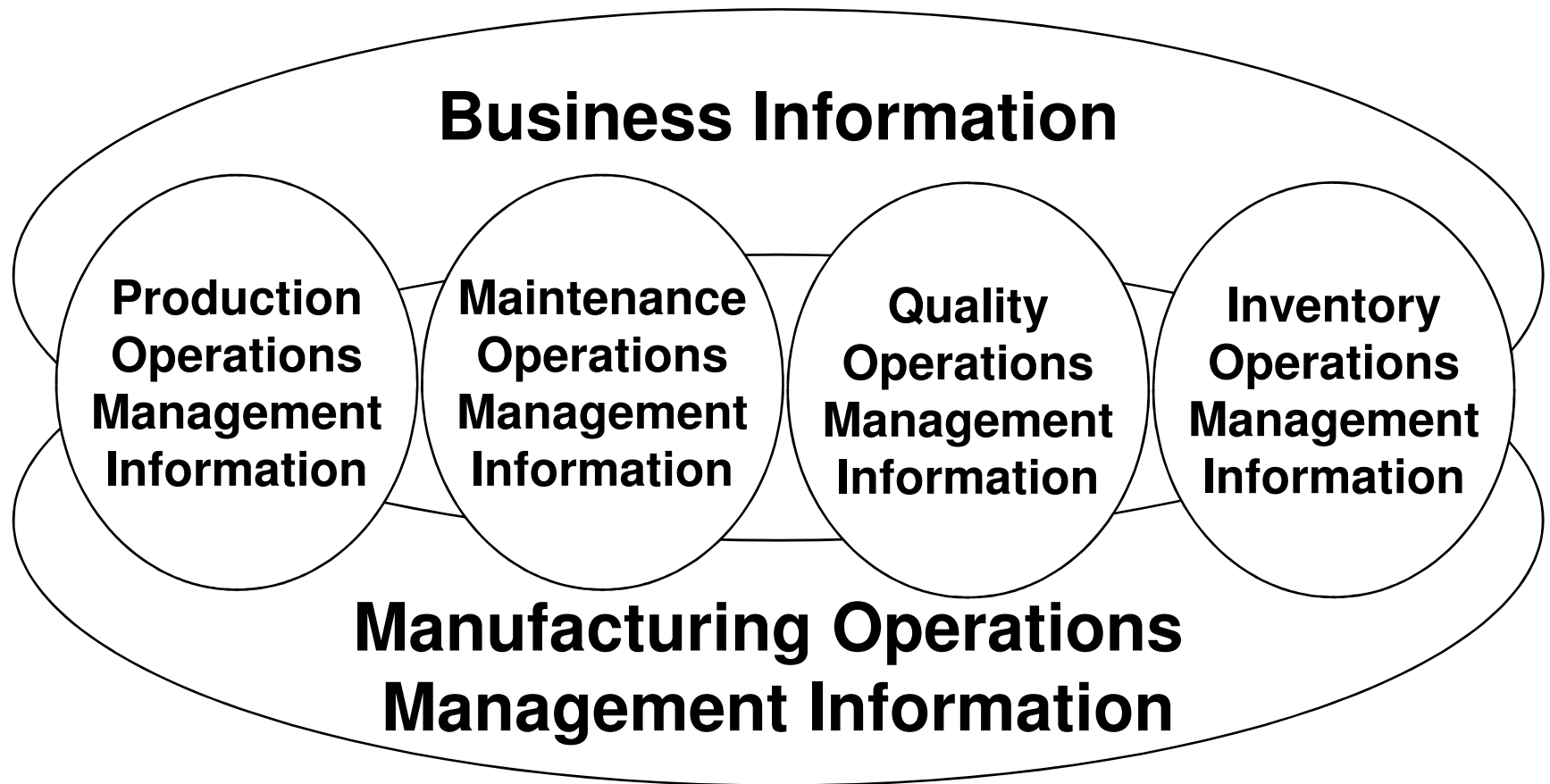
(What actual production will be executed)

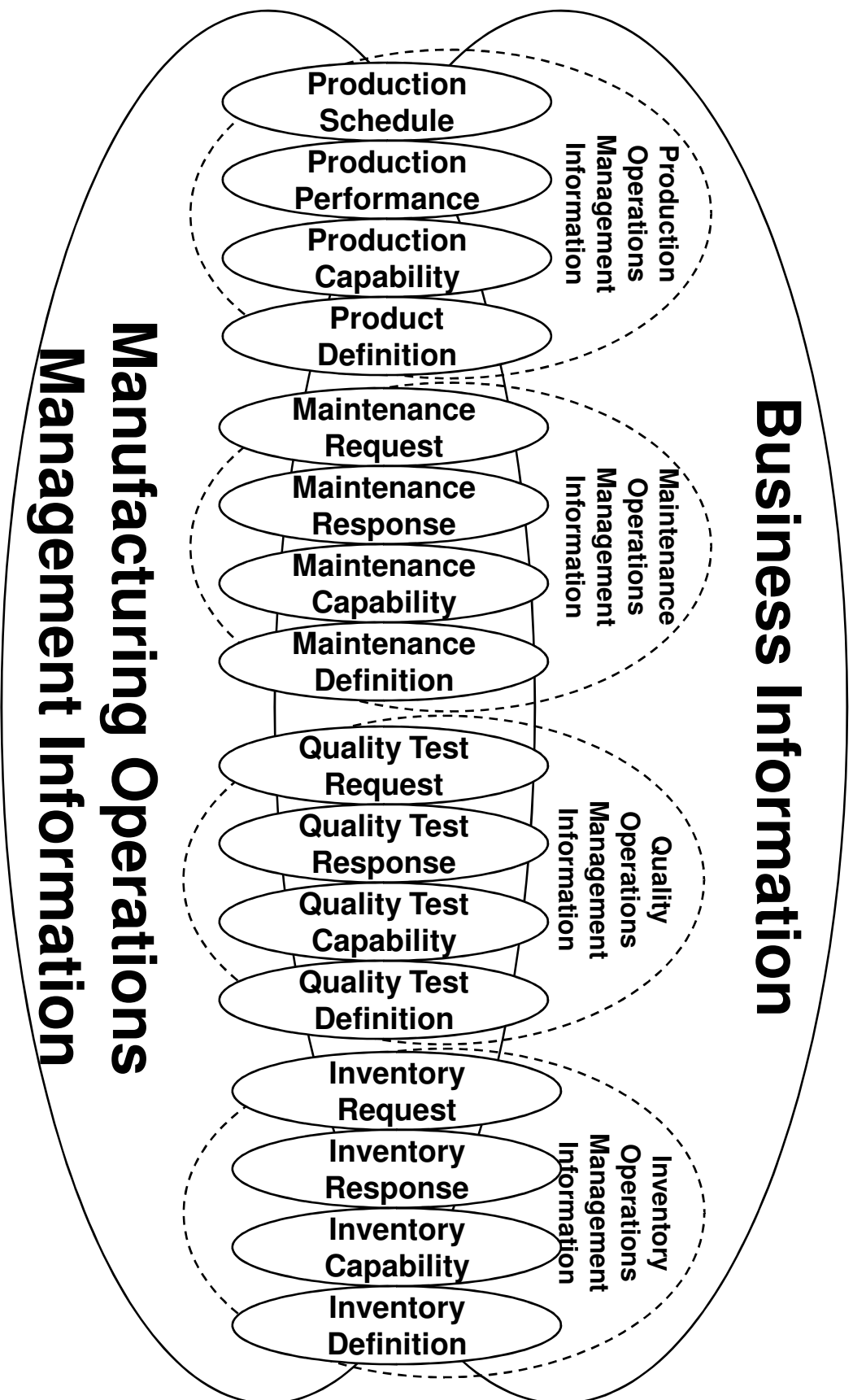
Production performance information

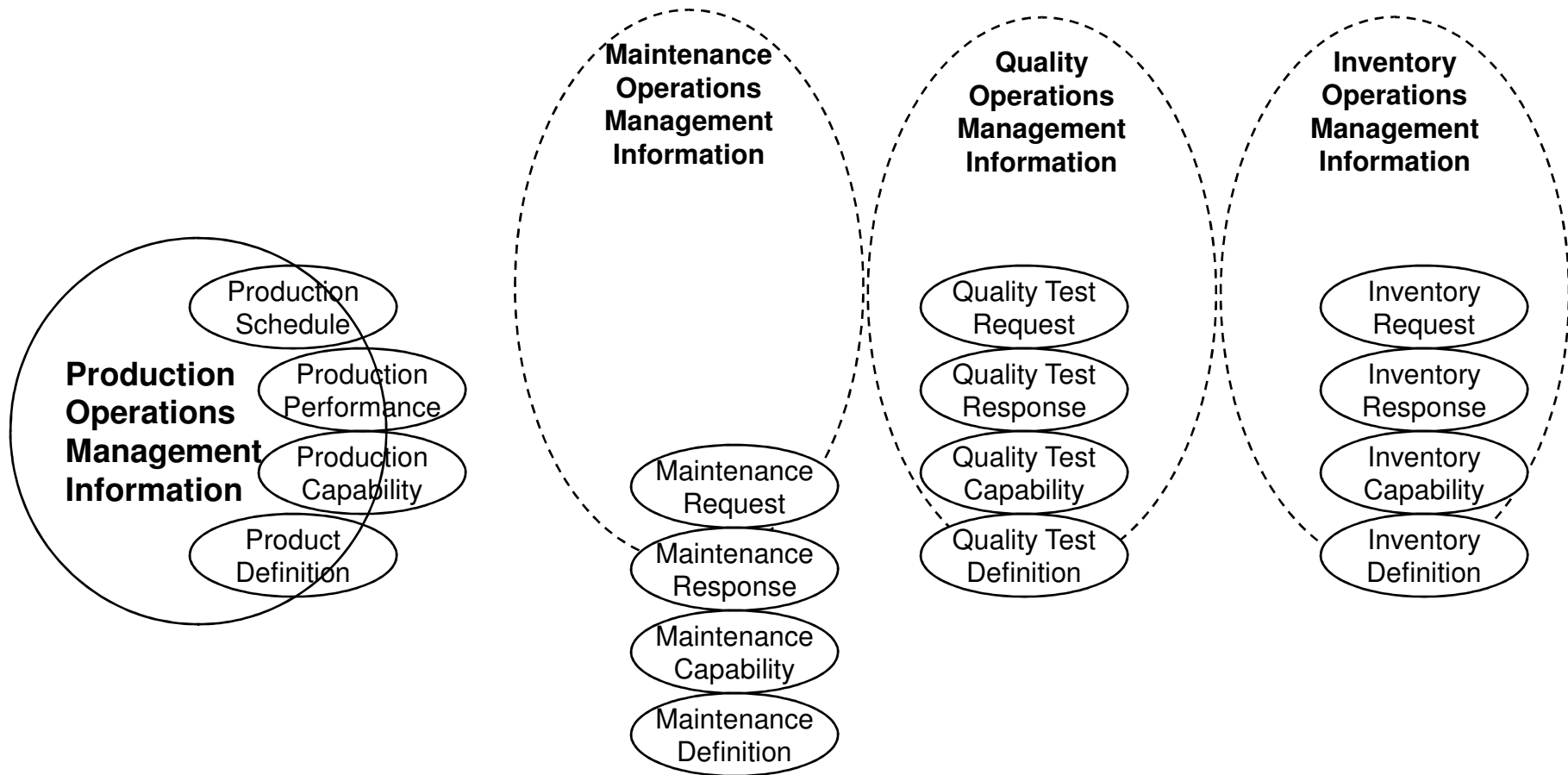
(What actual production was achieved)

Manufacturing operations management information

Production operations, maintenance operations, quality operations, etc







Business Planning and Logistics Information

**Product
definition
information**
(What must be
defined to make
a product)

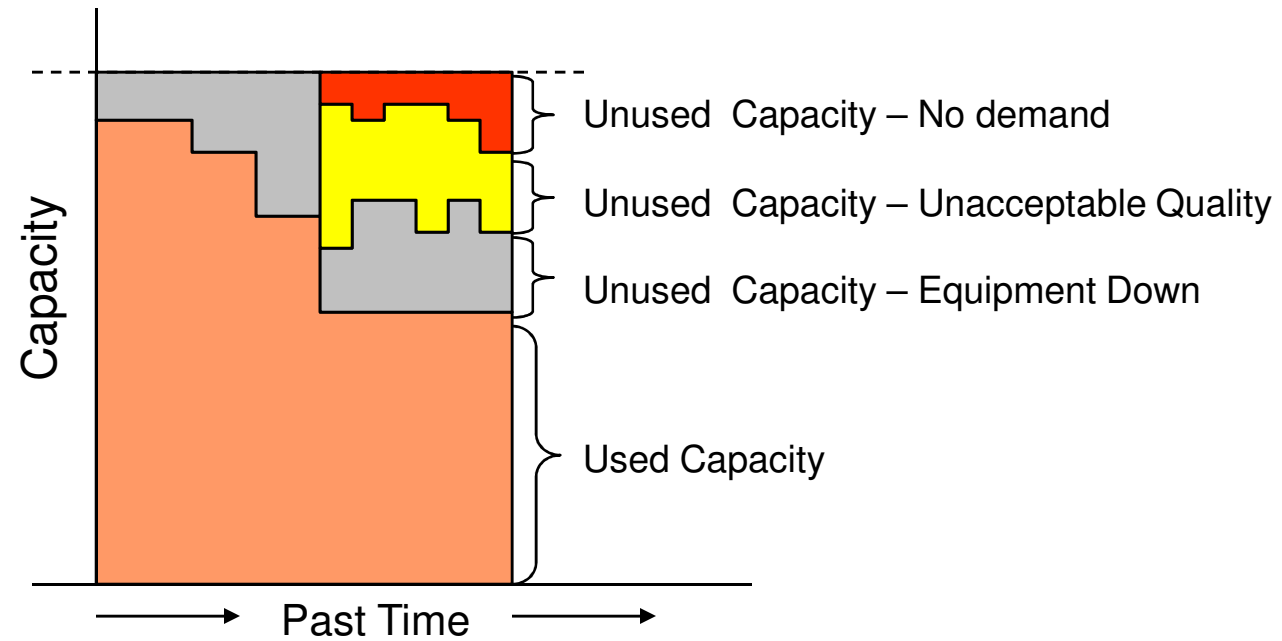
**Production
capability
information**
(What resources
are available)

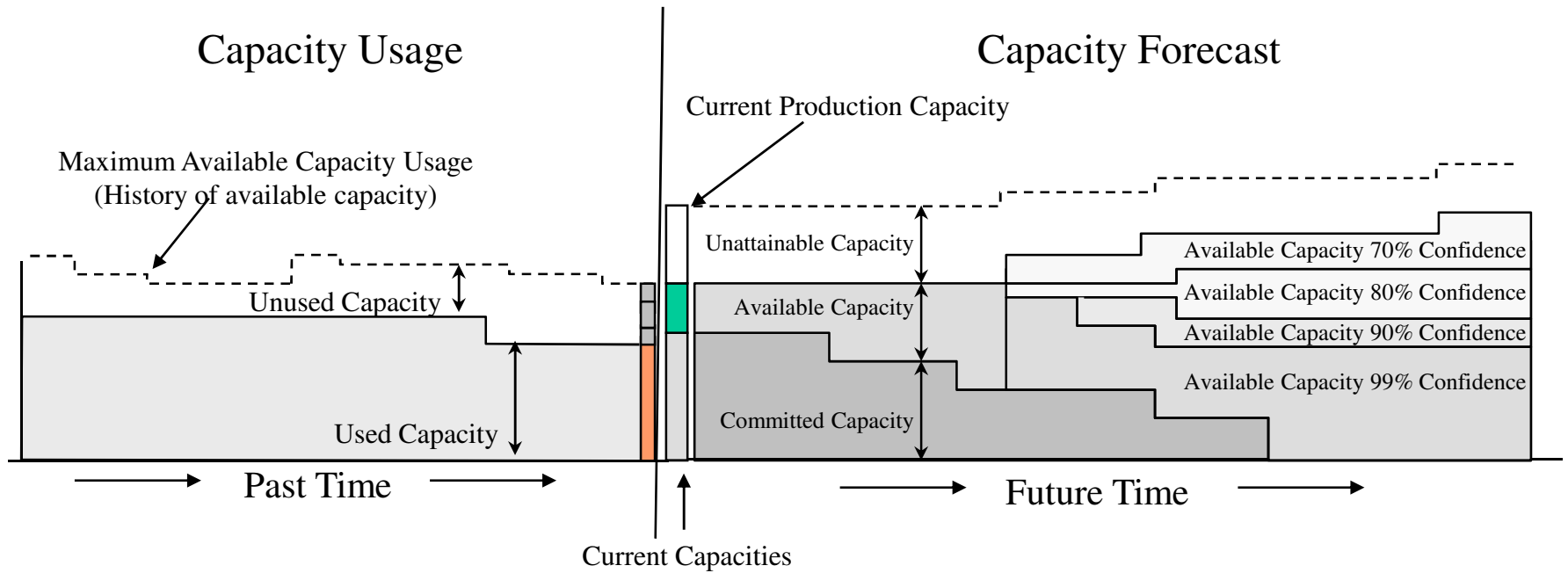
**Production
schedule
information**
(What actual
production will
be executed)

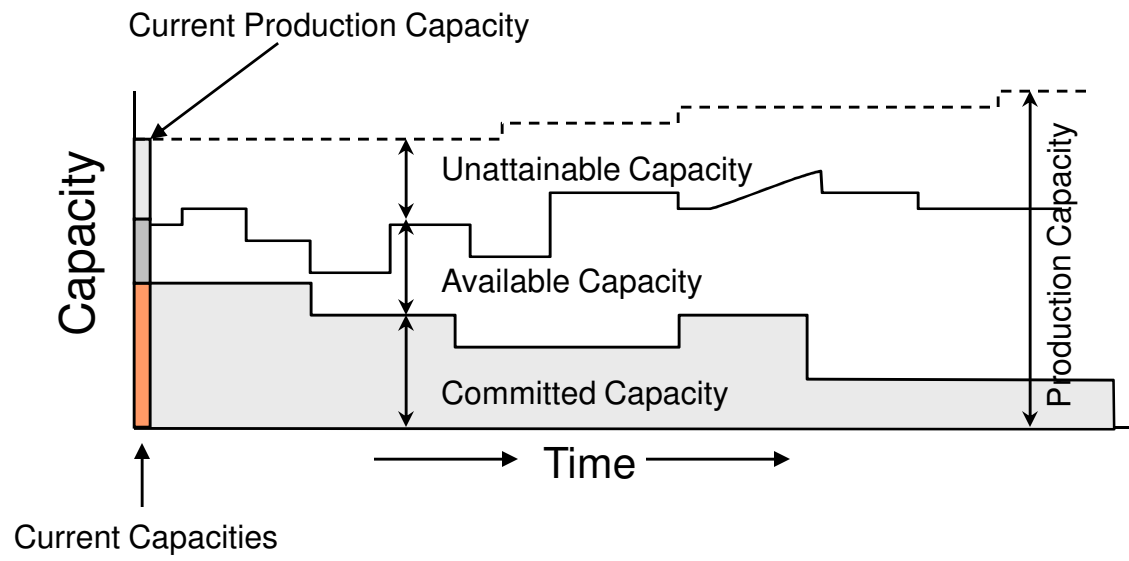
**Production
performance
information**
(What actual
production was
achieved)

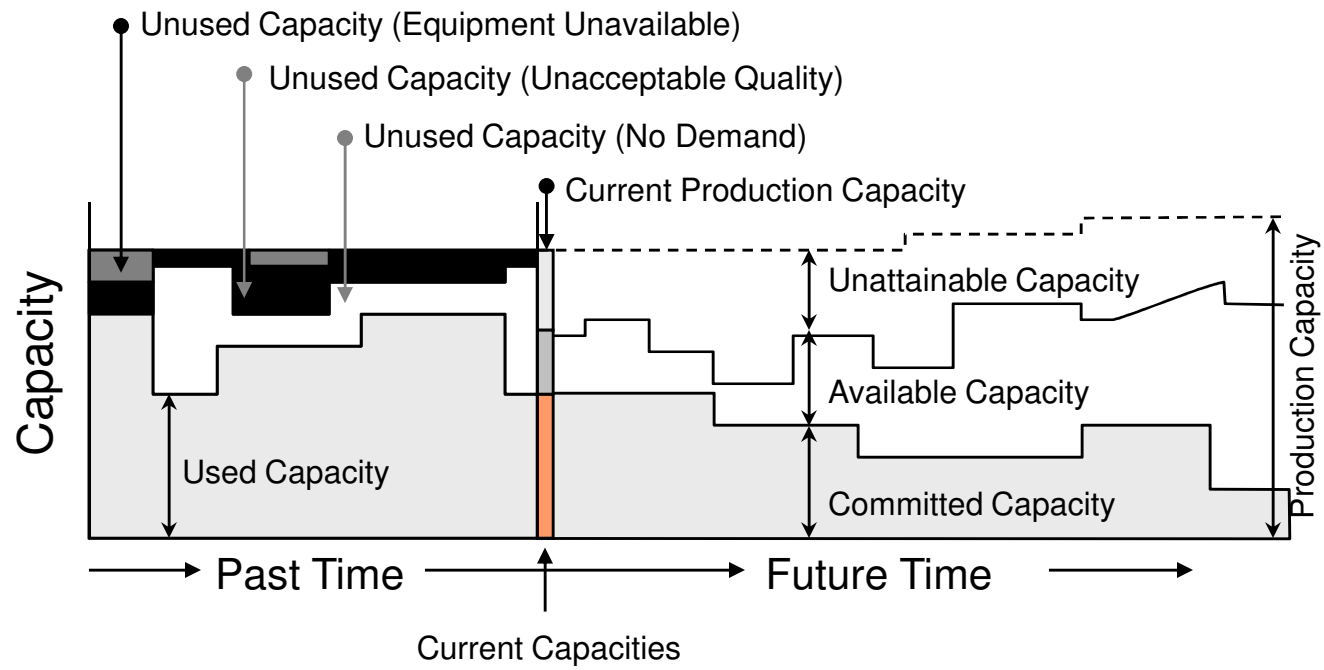
Production Operations Management Information

Part 4 ? Figure ?









Part 4 ? Figure ?

