

Applications of REA

**Conceptual Schemas and
Value Process Graphs**



Scenario

A catering company has a number of offices around the country that offer meal services to its customers. The customers can choose from a wide variety of dishes. A customer orders one meal that may consist of several dishes. The dishes are procured from suppliers.

Some information requirements are:

- ❑ Which customers have not paid for all the deliveries they have got?
- ❑ Which customers have ordered a meal that has not yet been delivered?
- ❑ Which customers have ordered meals containing a dish from supplier XXX?
- ❑ Which is the most popular dish?
- ❑ Which suppliers can deliver YYY dishes?



Utilising the REA ontology

- ❑ What economic agents are there?
- ❑ What economic resources are there?
Which agents control them?
- ❑ What economic events are there?
- ❑ Which economic events are dual?
- ❑ What commitments are made?
- ❑ What contracts are made?
- ❑ What is needed on the knowledge level?



What Economic Agents are there?

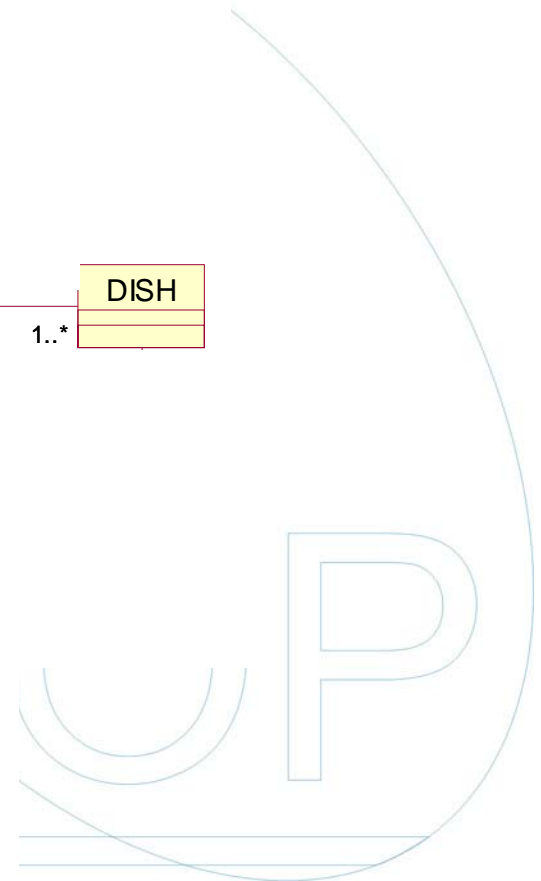
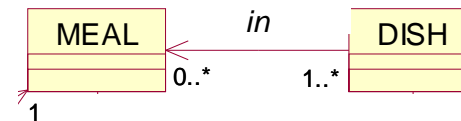
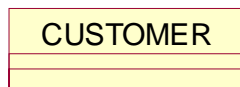
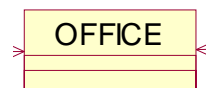
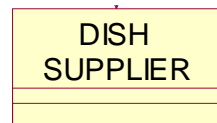
DISH
SUPPLIER

OFFICE

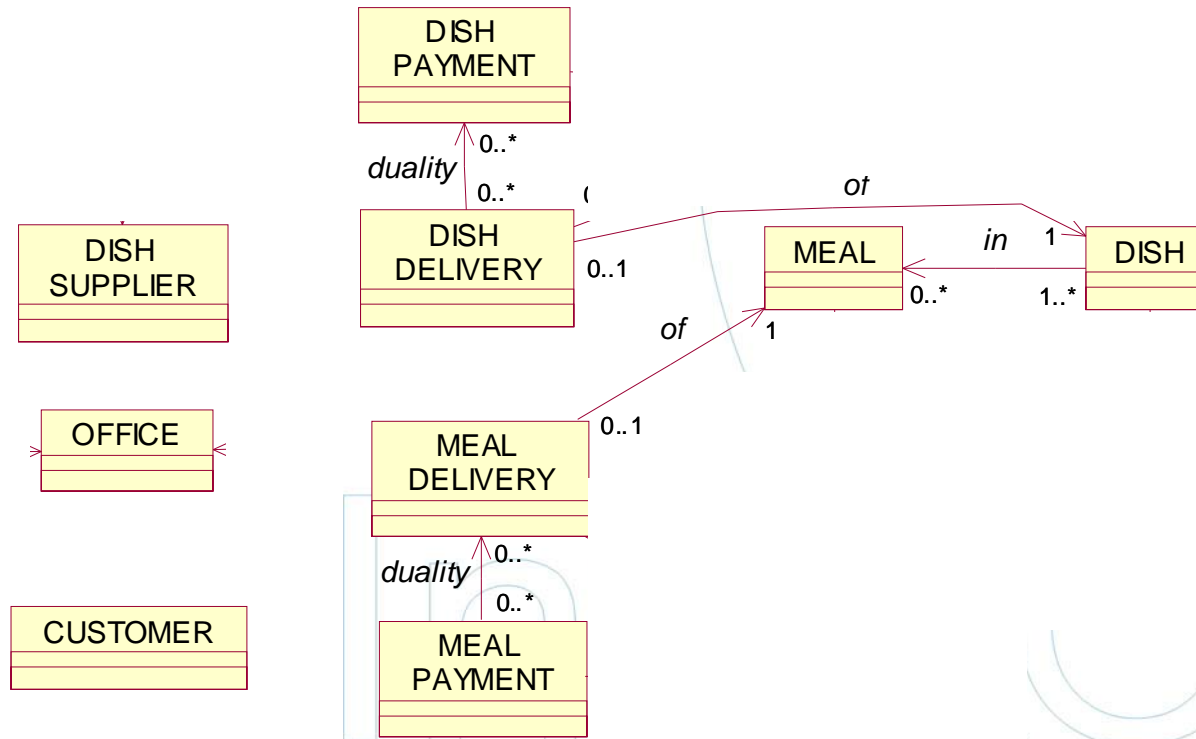
CUSTOMER



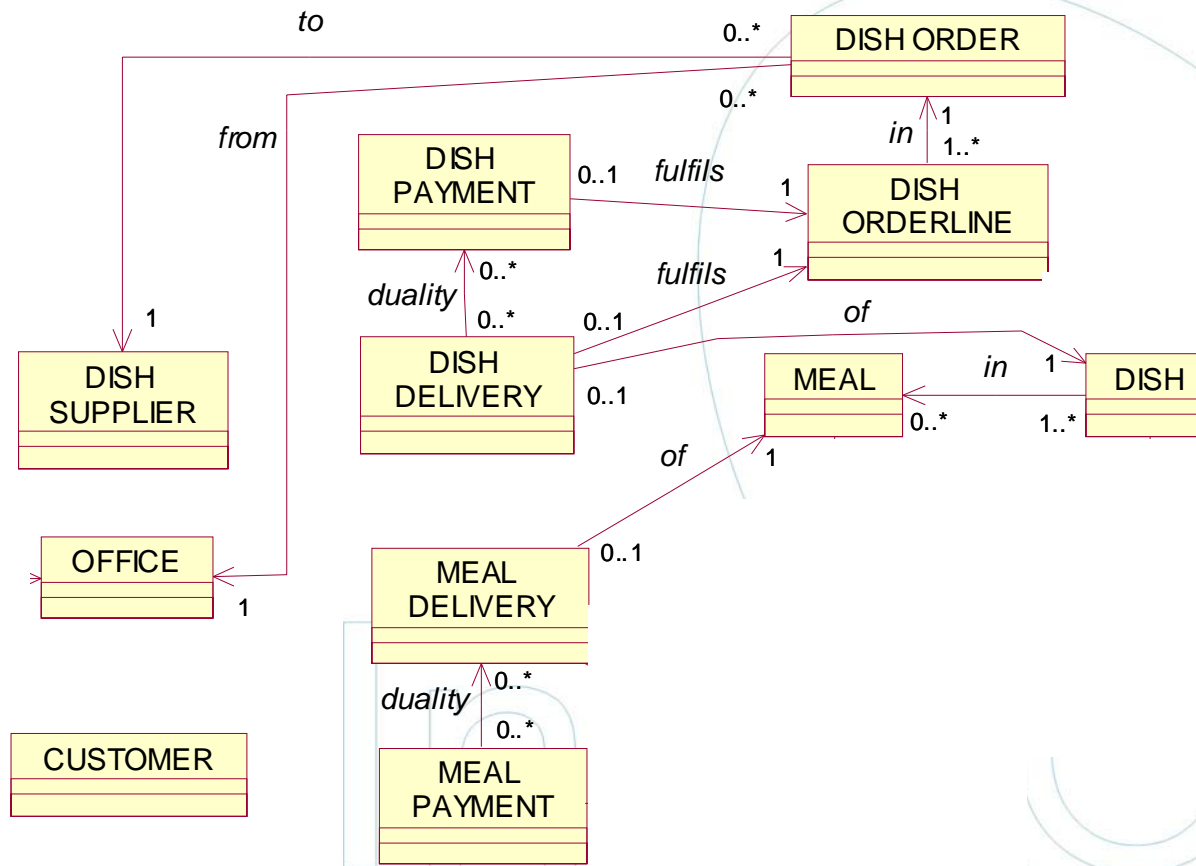
What Economic Resources are there?



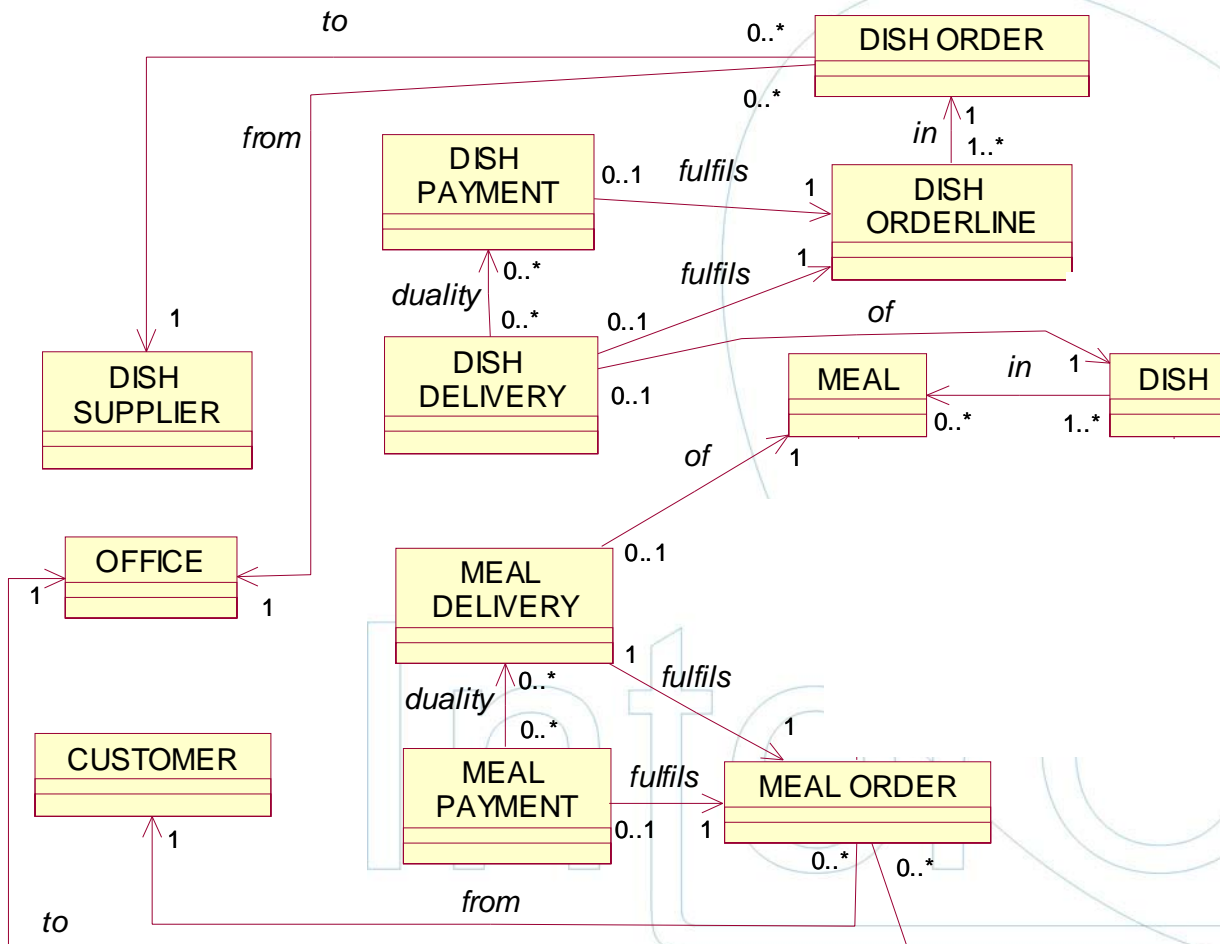
What Economic Events are there?



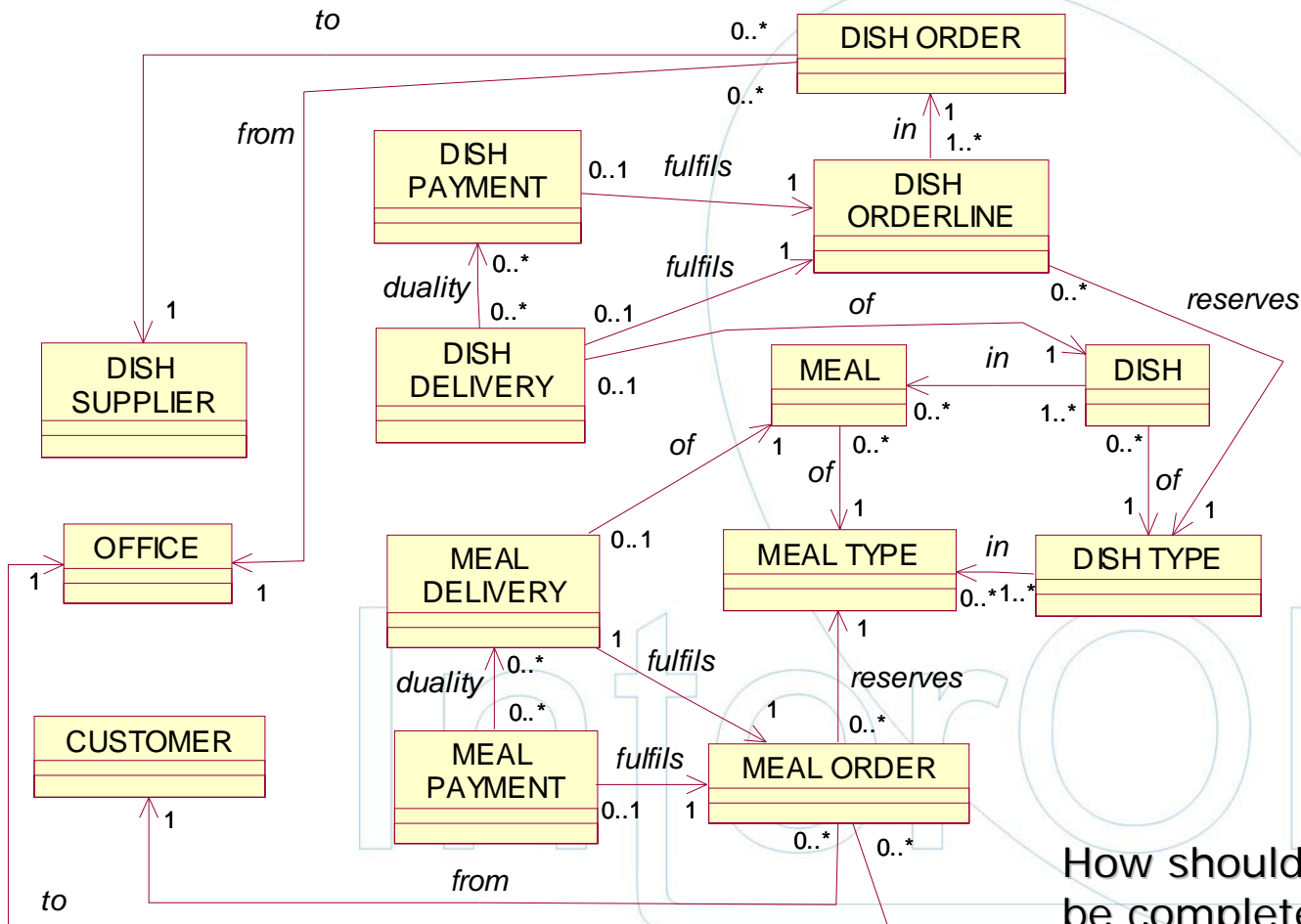
What Commitments and Contracts are there?



What Commitments and Contracts are there?



What is needed on the Knowledge Level?



How should the schema be completed?



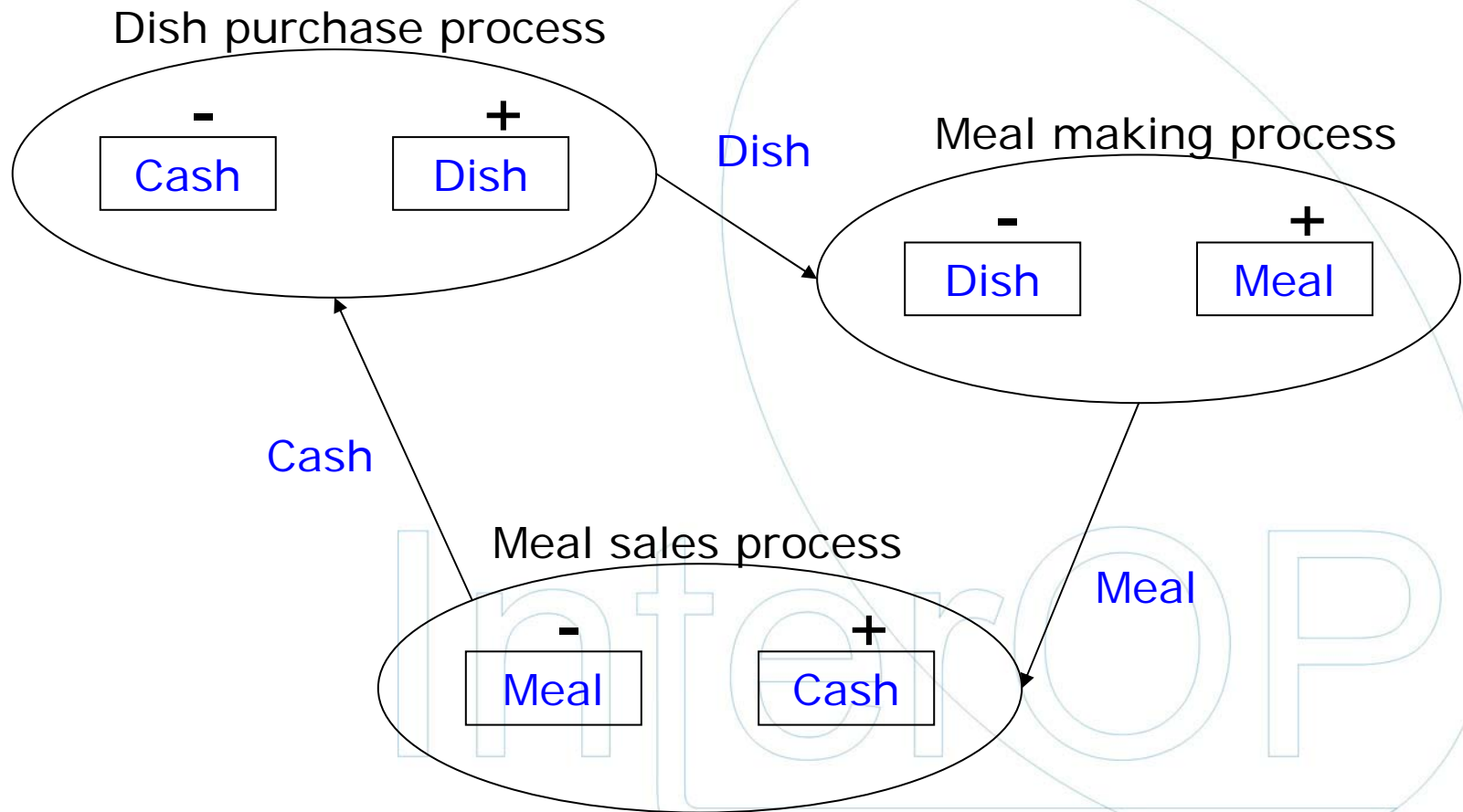
Value Process Graphs

A value process graph depicts the main processes within an organisation, what values they consume and produce, and how they are related to each other

- For each exchange (pair of dual economic events), introduce a process
- Look at each process from one agent's perspective (typically the organisation for which the model is constructed)
- Optionally, introduce production processes
- For each process, specify what resources are increased and decreased
- Connect the processes according to resources consumed and produced



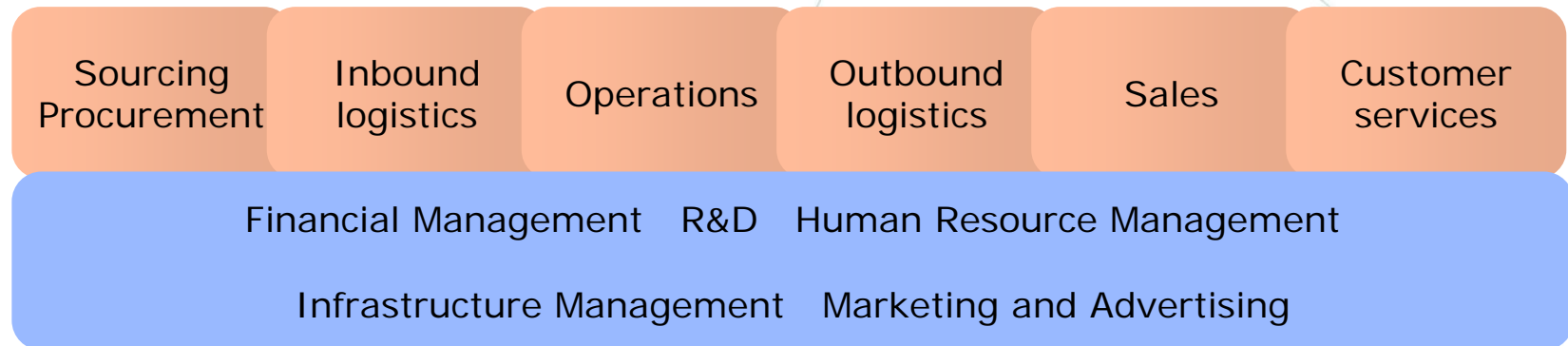
Value Process Graph - Example



Porter's Value Chain

Suppliers

Customers



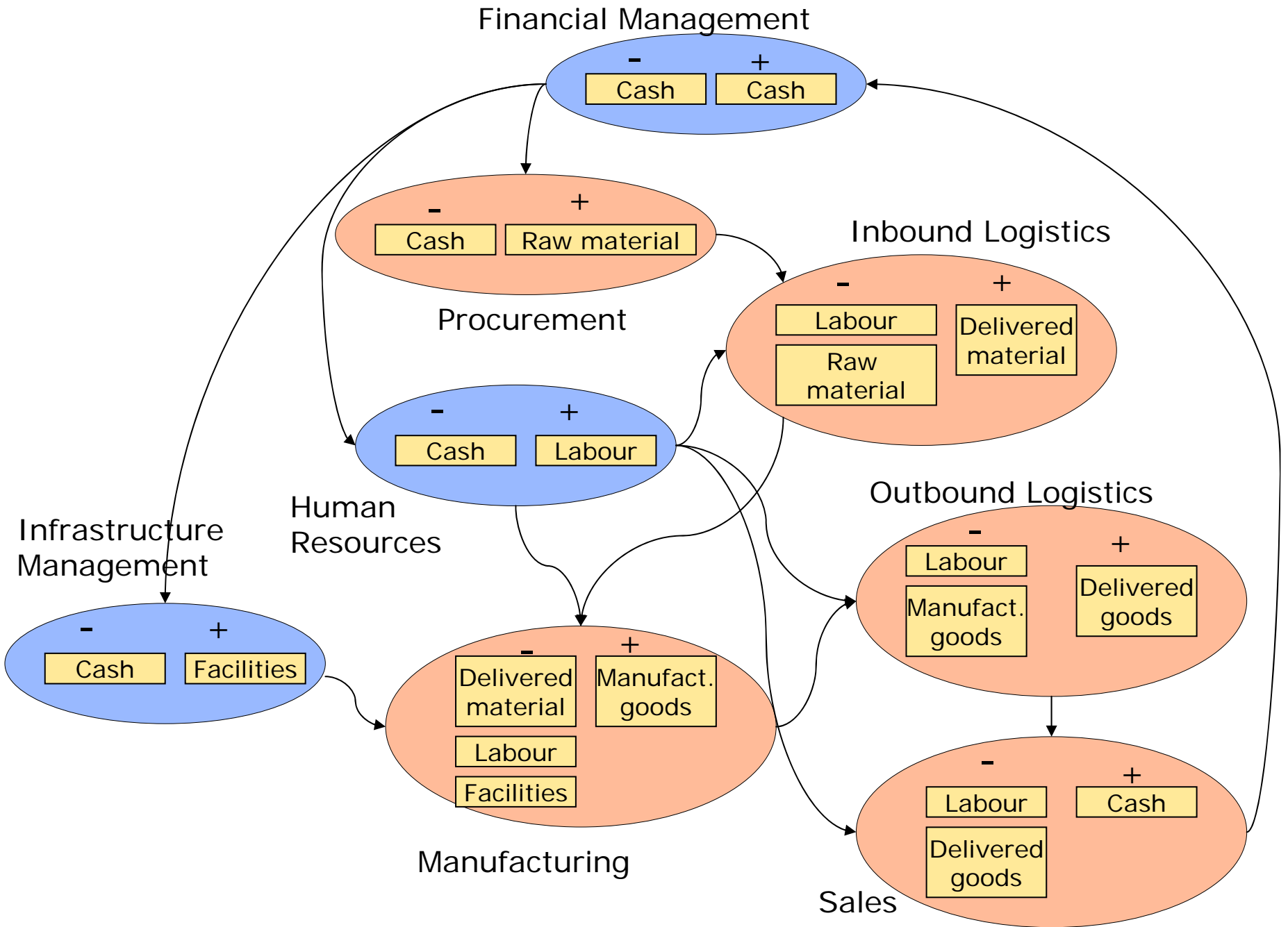
Primary activities: producing value for a customer by moving products closer to her

Support activities: supporting the primary activities by maintaining an infrastructure



Financial Management





Applications of REA

Developed by KTH
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www.interop-noe.org

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