

Stored Value Functions

Applications to operational
management

Context

- Stored-value functions compared with e3value modelling
- What is a stored-value function?

Determining SV-functions

- Domain modelling
- Experiment
- Postulated principles
- Management fiat
- Statistical derivation

Concepts and operators

- Composition
- Supersession
- Conservation

Operational management

- Benefits to management are from:
 - Knowing how value is added
 - Knowing who adds value
 - Knowing the factors of influence
 - Choosing variables which fit the levers

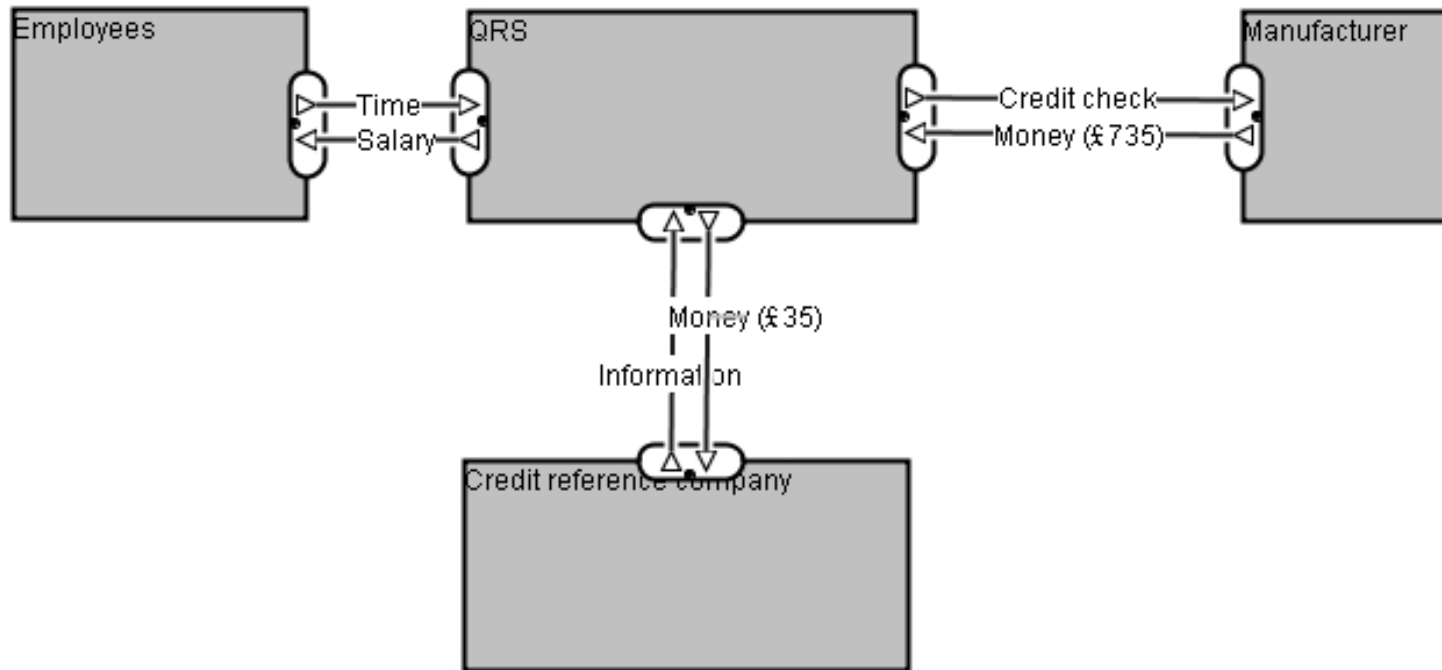
Value-add attribution

- Capturing changes in value is crucial
- At each change, we can record certain attributes of the value object
- This enables simple and powerful reporting on value added across the enterprise

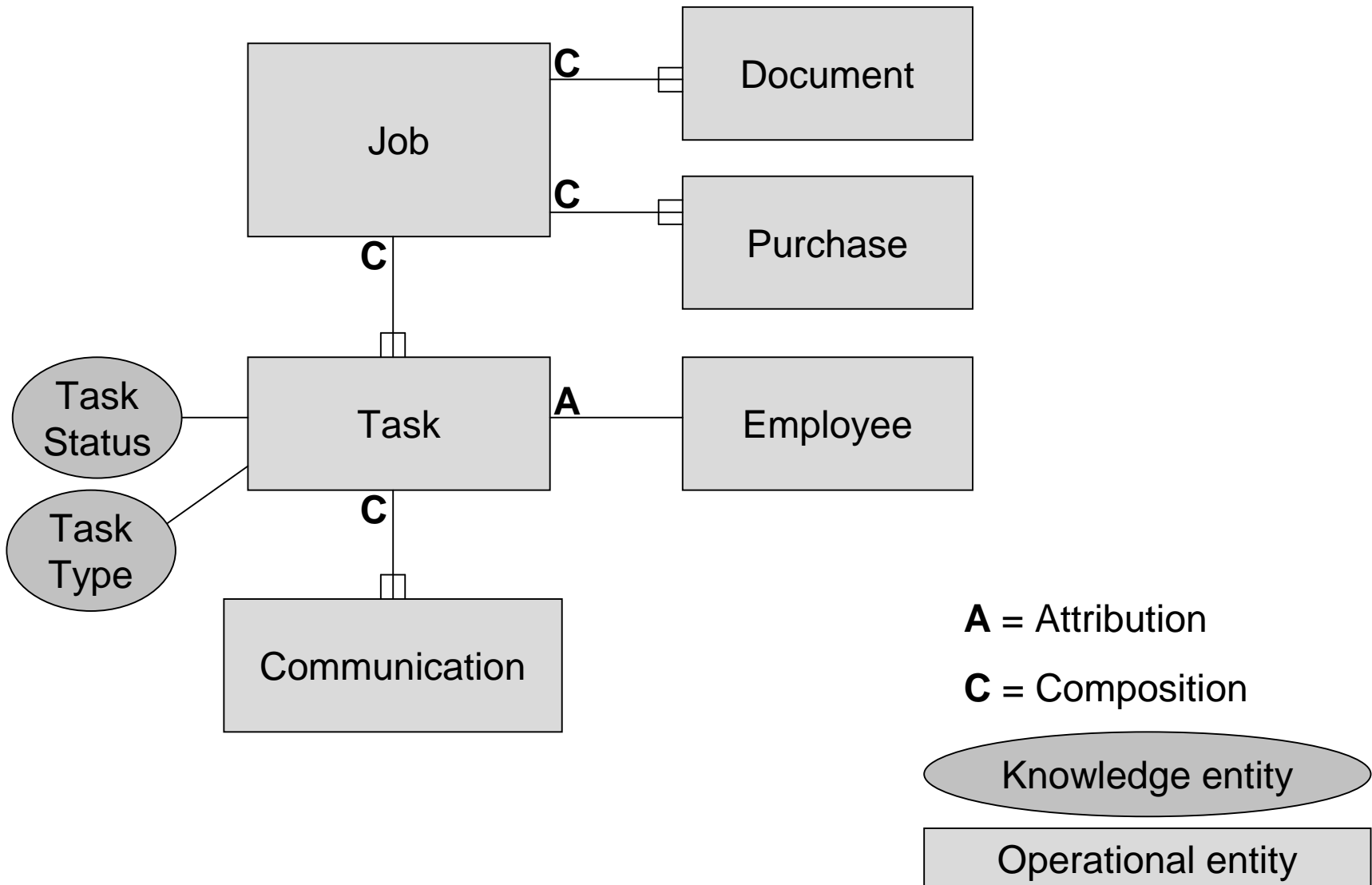
Case study

- QRS is a supplier of services to the financial industry
- It provides several standard services
- Each service can be decomposed into tasks and other products

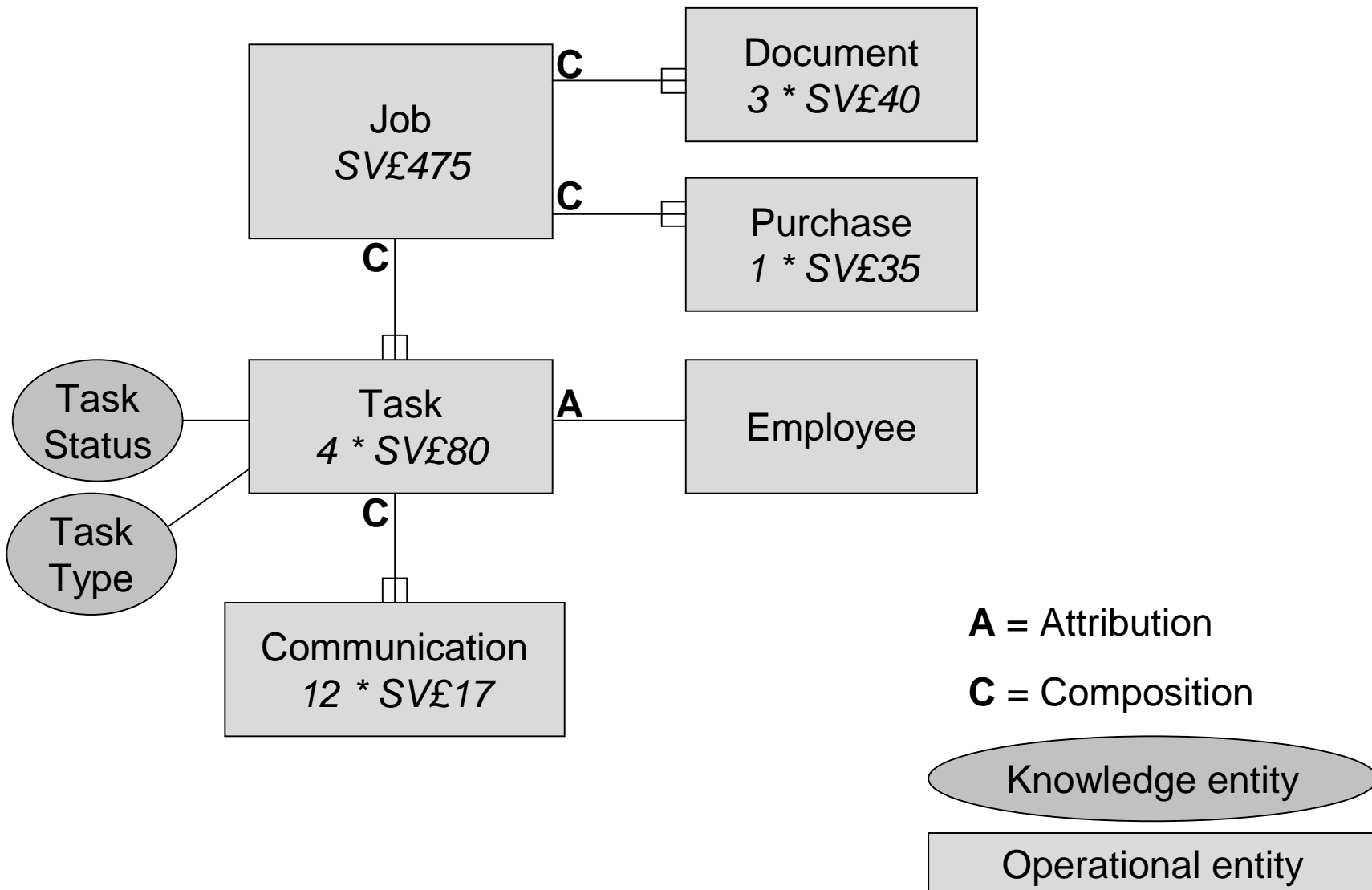
e³value model for QRS



Stored-value model for QRS



Instantiated SV-model



Task domain attributes

- status: TaskStatus
- completed: Date
- hours: Float
- planned: Date
- valuePotential: Float
- employee: Employee
- job: Job
- type: TaskType

Stored-value function for Task

$$SV_{\text{Task}} =$$

Task.valuePotential *

Task.status: {
completed: 1
planned: 0.2
new: 0
active: $0.2 + 0.6 * \frac{\text{size}(\text{communications})}{\text{Task.type.communications}}$

Benefits for QRS

- Clear performance measures for teams
- Empirical measurement of process bottlenecks
- Timeliness and accuracy of financial reporting
- Capital valuation model

Conclusions

- e3value modelling for business design
- Stored-value modelling for operational management
- Measurement of performance
- Feedback controls
- Stored entity value = capital