Exploring risk-awareness in i* models

Constantinos Giannoulis, Jelena Zdravkovic

Information Systems Lab (SYSLAB),

http://syslab.dsv.su.se

Early requirements & risks

- Understand the Whys?
    - intentions & interests
    - viability & uncertainty?
- Risks: better late than never?
    - Perception: exposure & uncertainty
    - Threats, opportunities & options

Our Objectives

- Embed risks into the development of i* models

- Link risk-aware early requirements and intentions to risk management and consequent model transformations
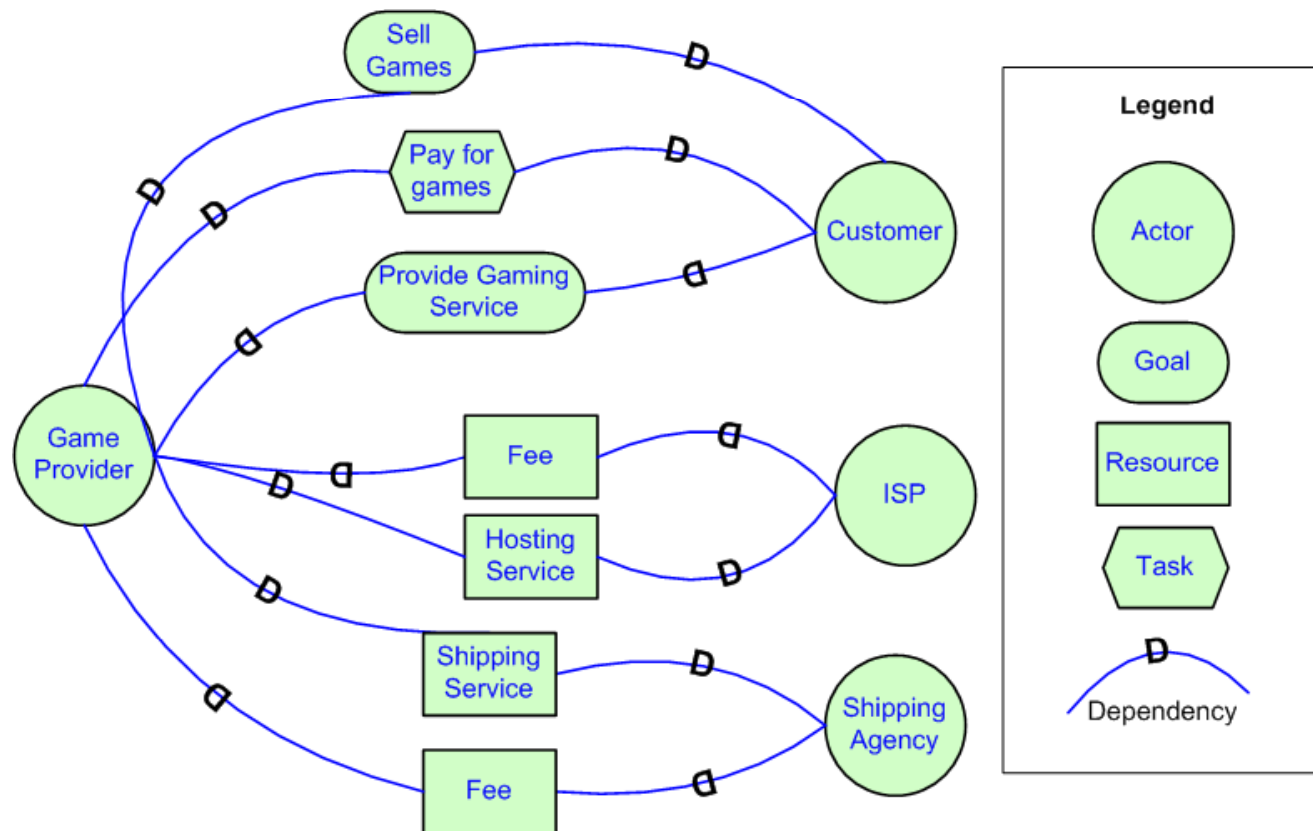
Our Guidelines

- Identify detailed dependencies: focus on the actor of interest and enrich the intentional relationship

- Identify risks: what if this relationship doesn't work out? any obstacles? do we care?

- Assess risks: how vulnerable are we? how likely is it? And then what? e.g. the matrix

- Mitigate Risks: How much do we care? Modify existing relationships, add new ones or add dependencies.
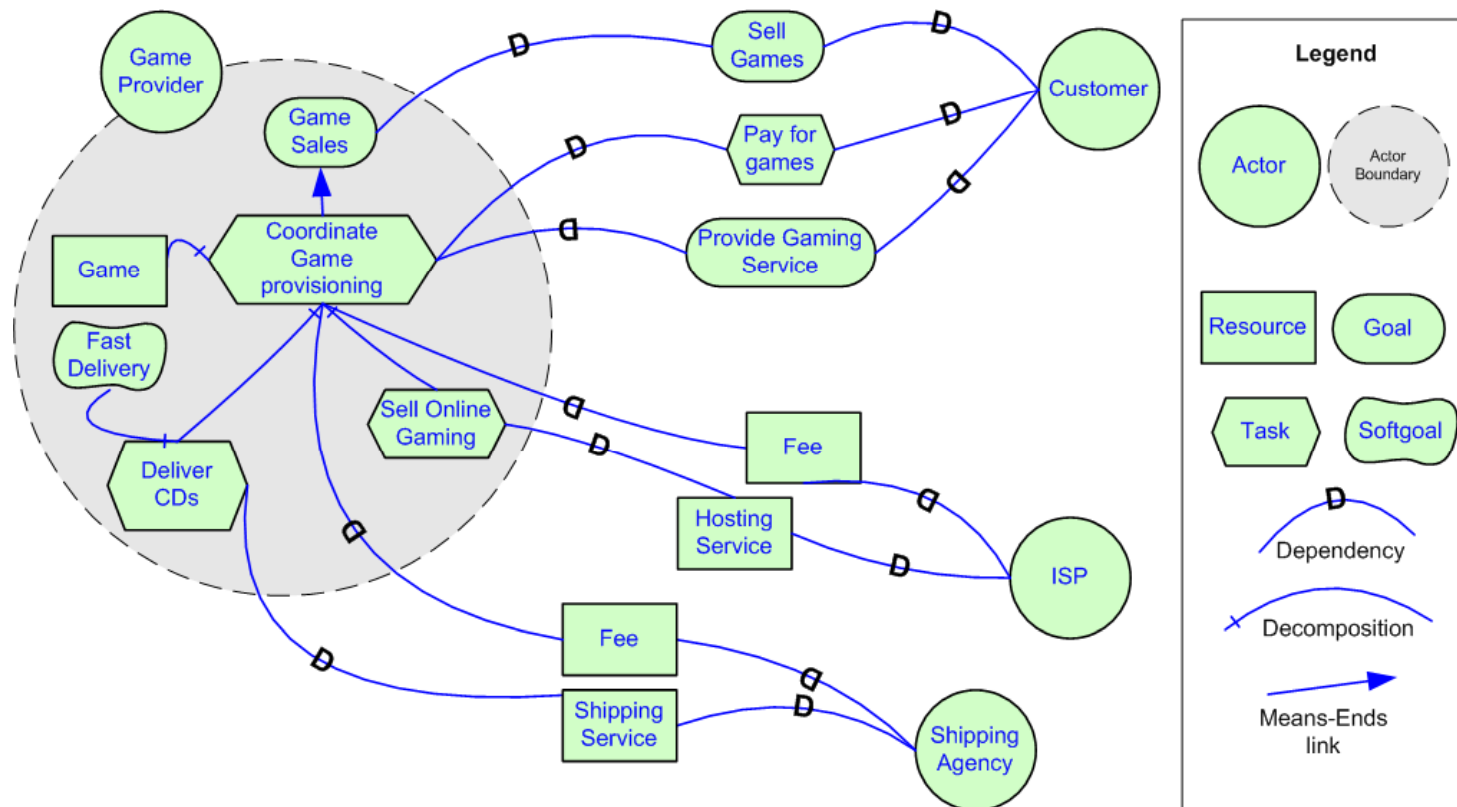
MMOG (step 1)

- Identify detailed dependencies: from the SDM

■ Identify detailed dependencies: to the SRM

MMOG (step 2)

- Identify risks
    - Customers don't buy the game (A)
    - Customers don't pay for the game (B)
    - The ISP will not provide adequate hosting service (C)
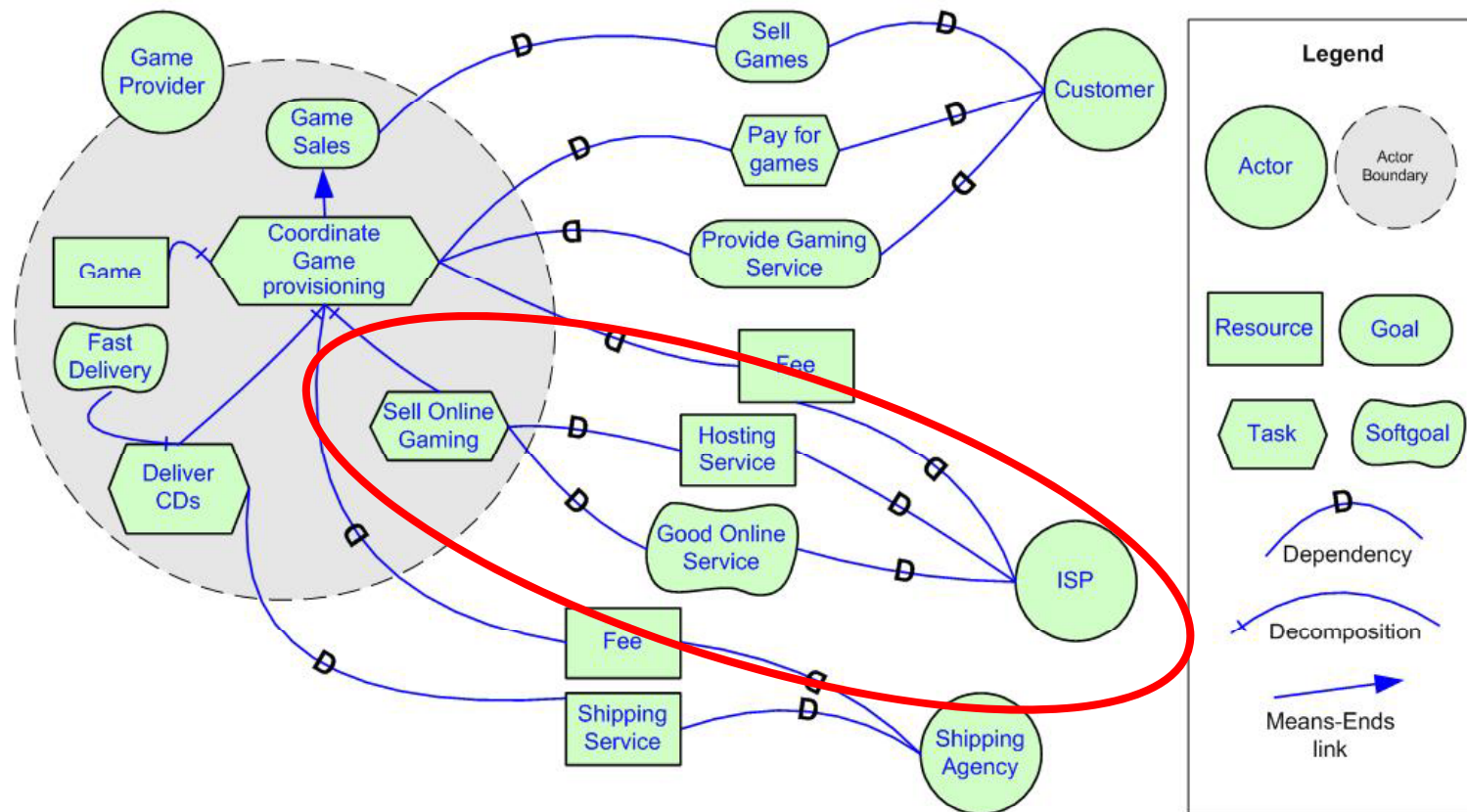   - The Shipping agency will provide bad service (D)
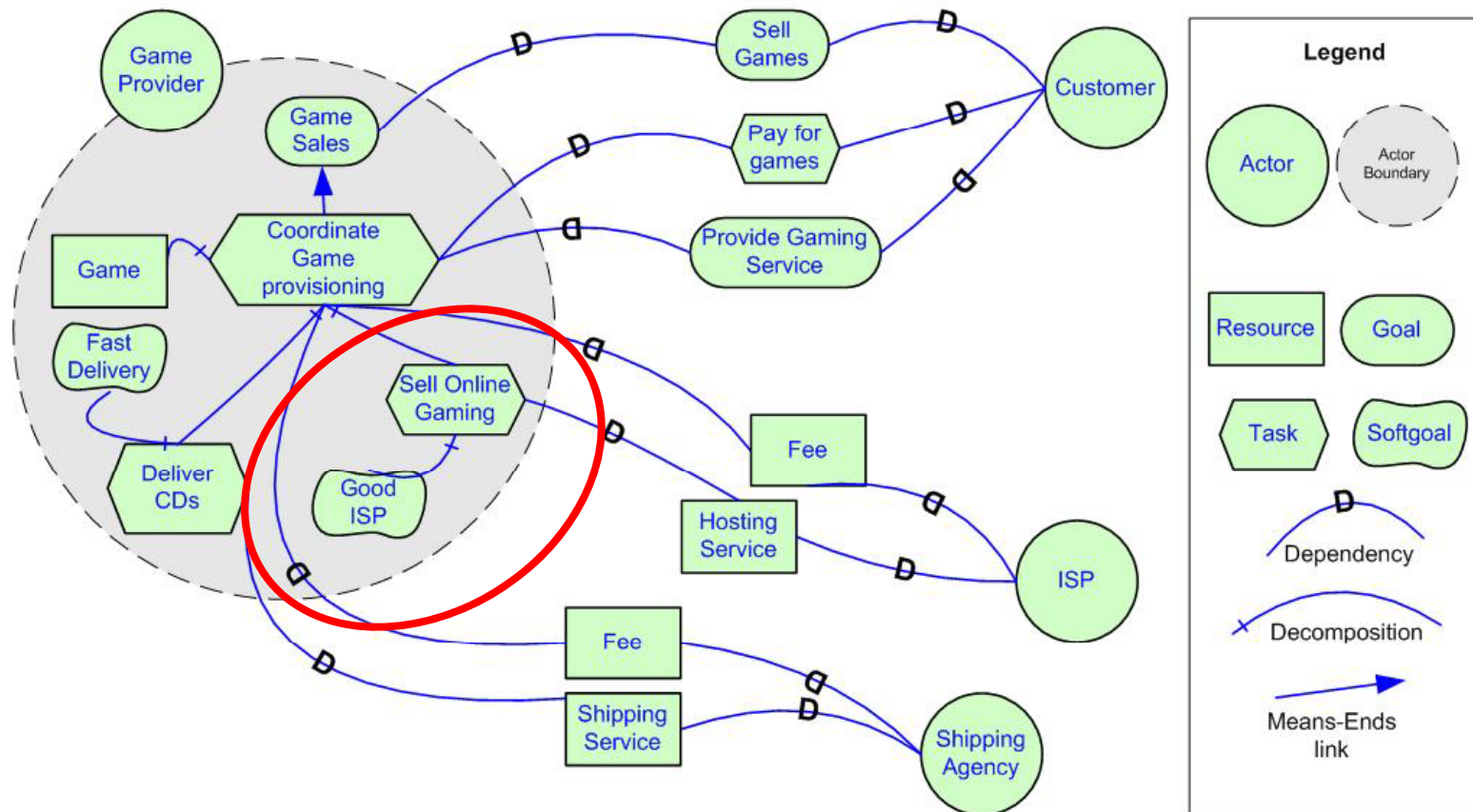
MMOG (step 3)

- Assess risks

MMOG (step 4)

- Mitigate risks

MMOG (step 4)

- Mitigate risks

Conclusions & Future

- Today

  - i* models developed considering risks (exposure & uncertainty)

  - Shatter stakeholders' dreams early, assessing goals with risks

- Tomorrow

  - Multi actor perspective of risks

  - Risk mitigation patterns to enrich model transformations

Questions?