

How to make use of enterprise and system models in healthcare: From requirements to implementation of HIS

Lecture

Health Information Systems, 21 June – 3 July, 2021
Stockholm university



Enterprise and systems models in healthcare

Enterprise and systems models can be used in healthcare in the following way:

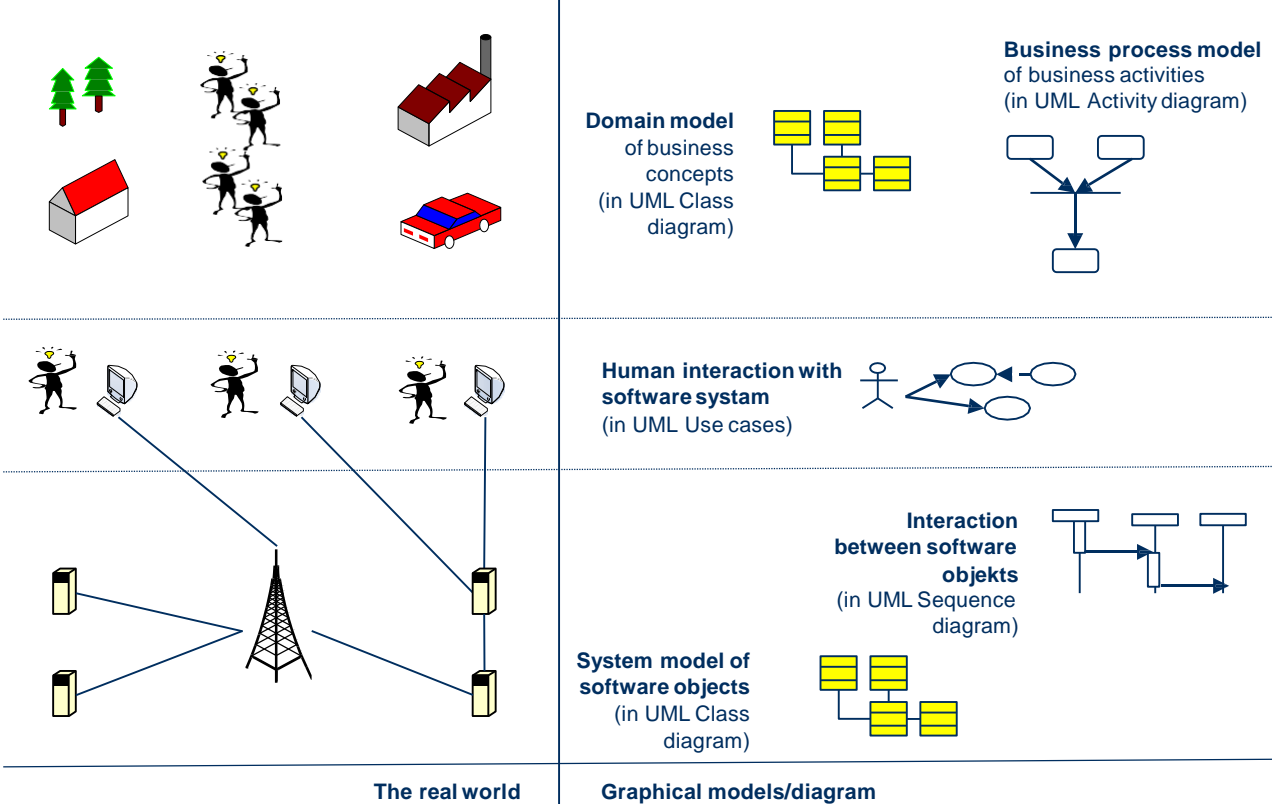
- Specifying and analysing health care processes (see lecture about business processes)
- Specifying and analysing health care concepts (see lecture about conceptual models)
- Defining requirements (see lecture about requirements, plus slides in this presentations)
- Supporting model-driven implementation of IT systems (slides in this presentation)
- Specifying health information standards (slides in this presentation)



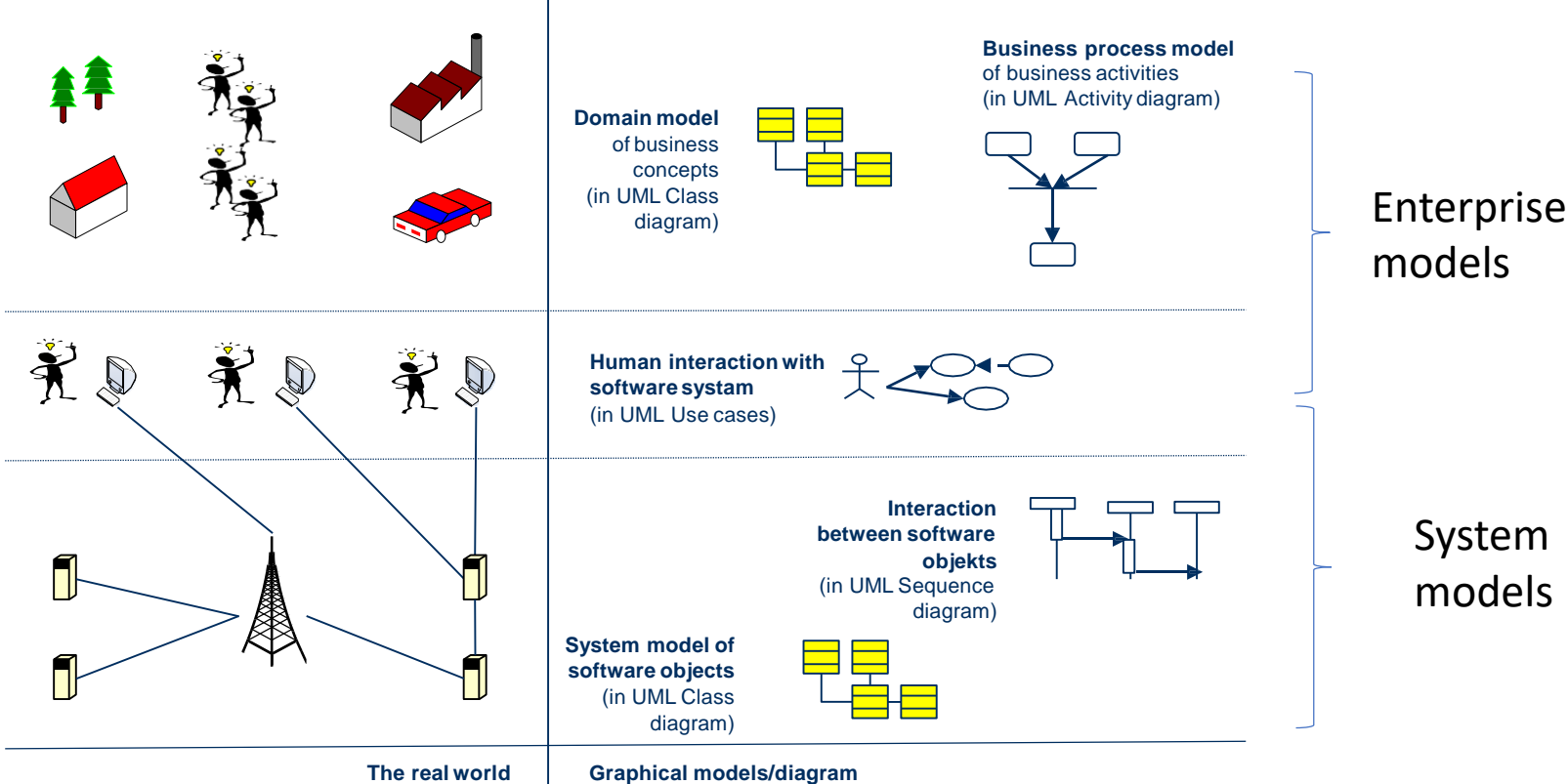
From enterprise and systems models to defining requirements on health information systems (HIS)



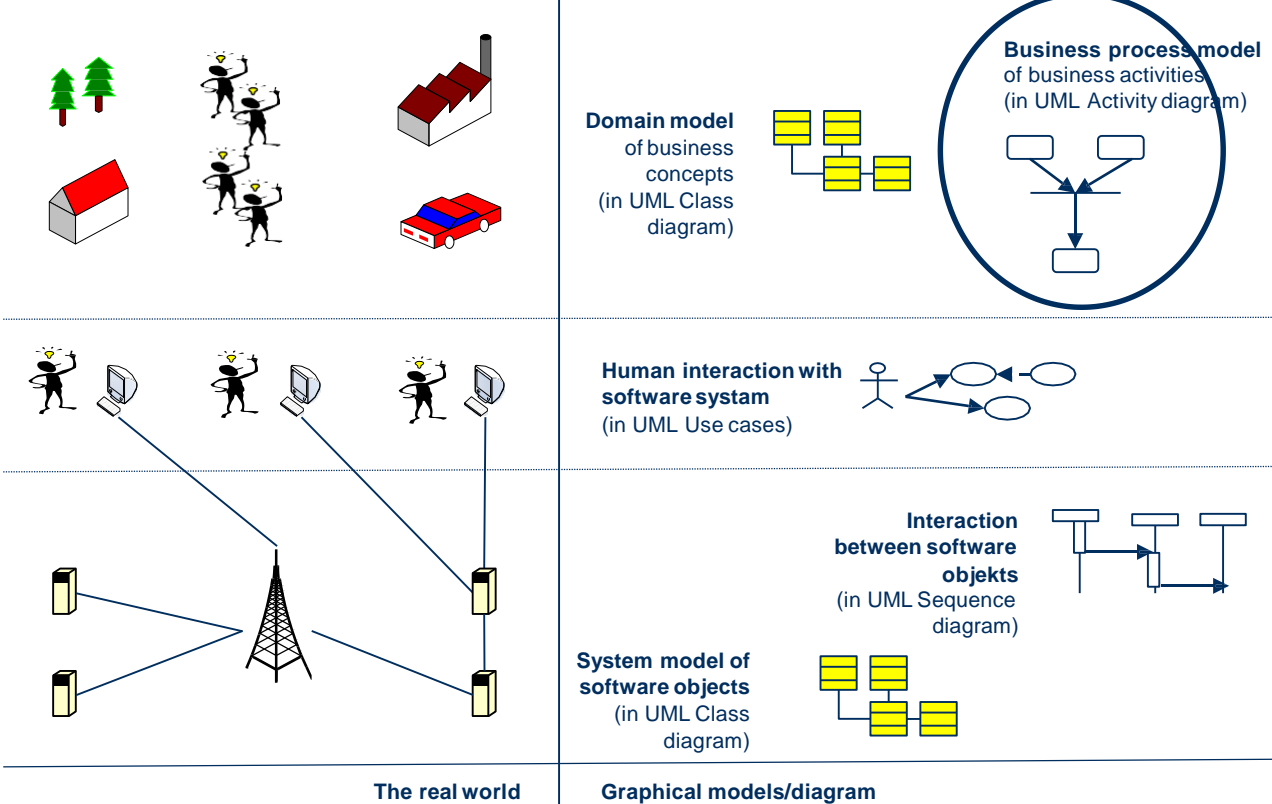
Towards a requirement specification



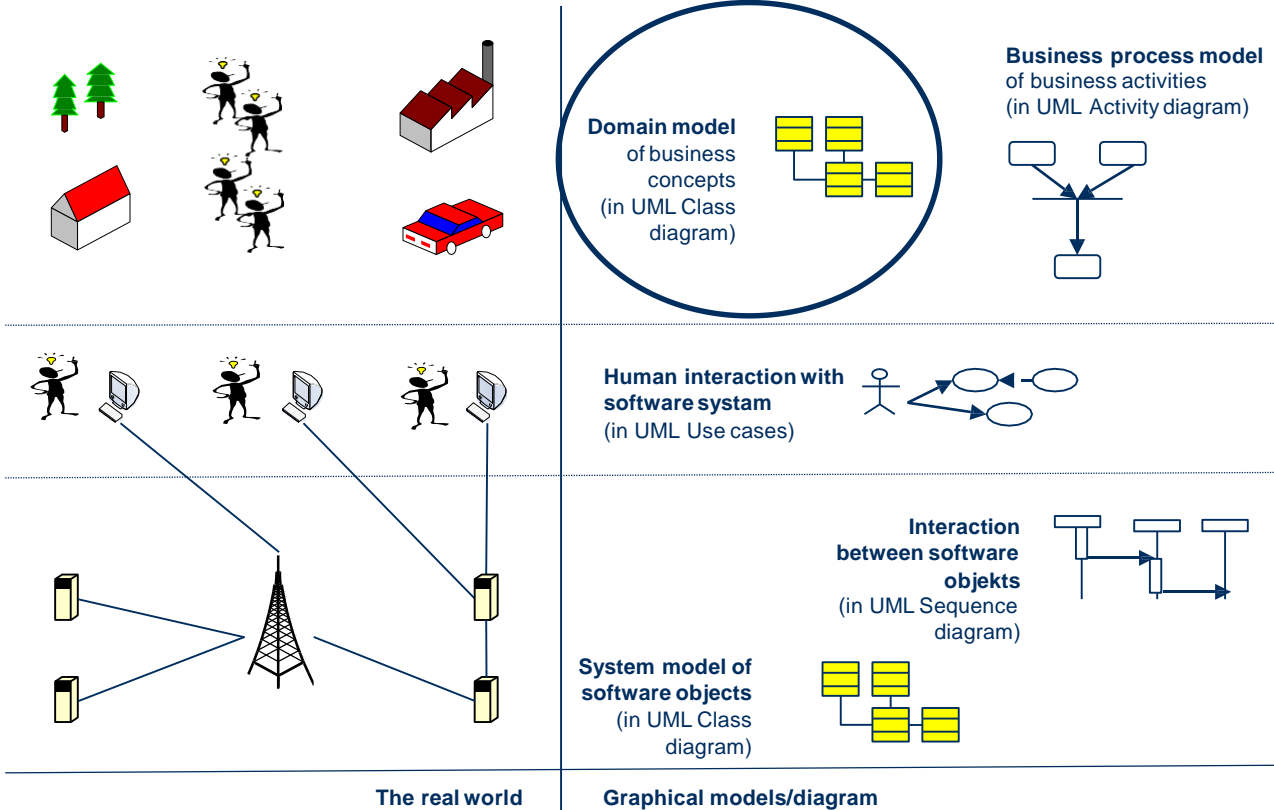
Towards a requirement specification



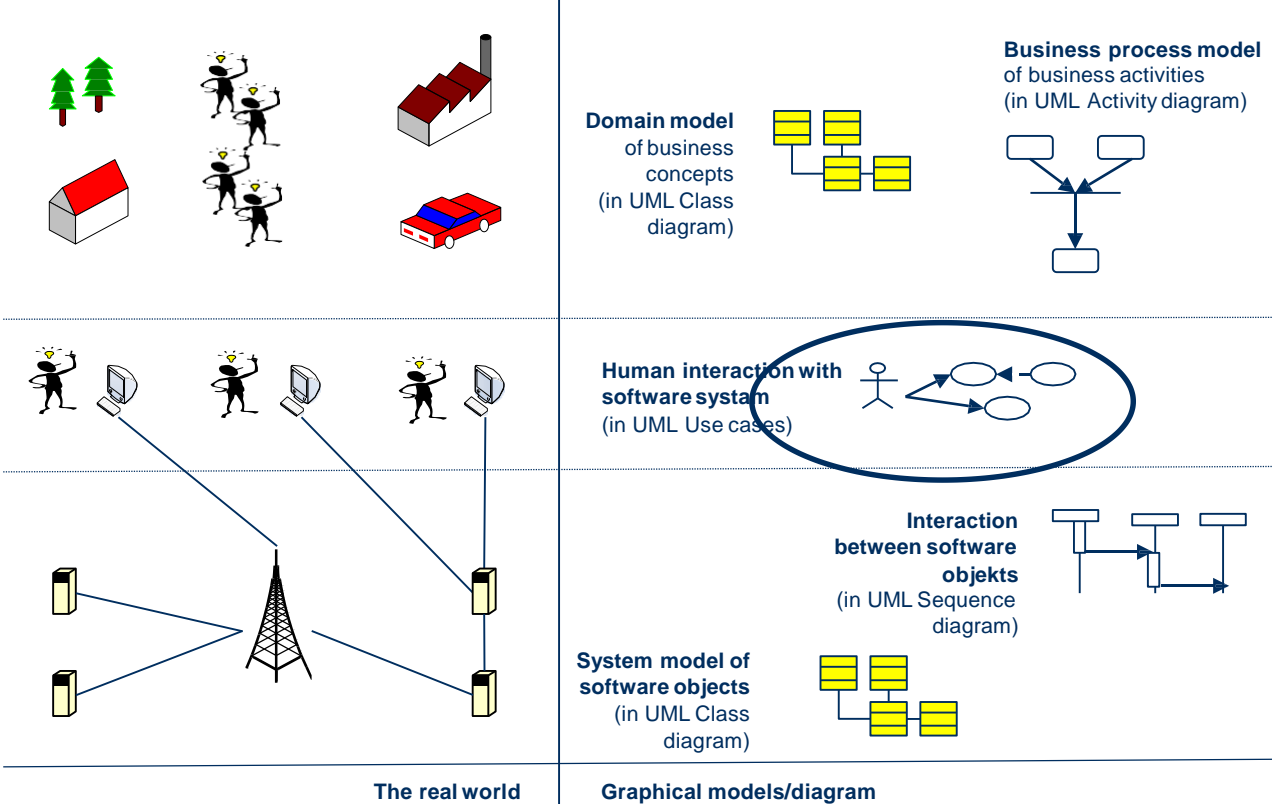
Towards a requirement specification



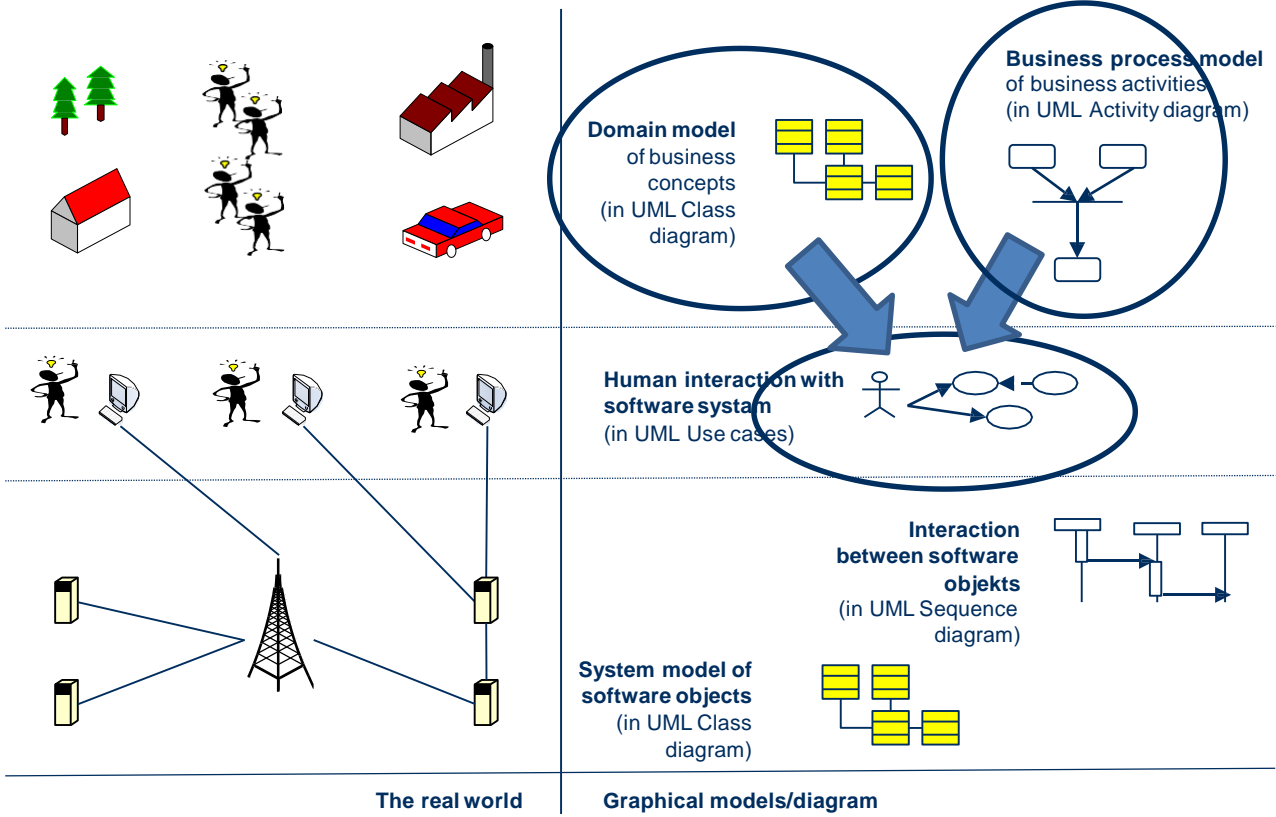
Towards a requirement specification



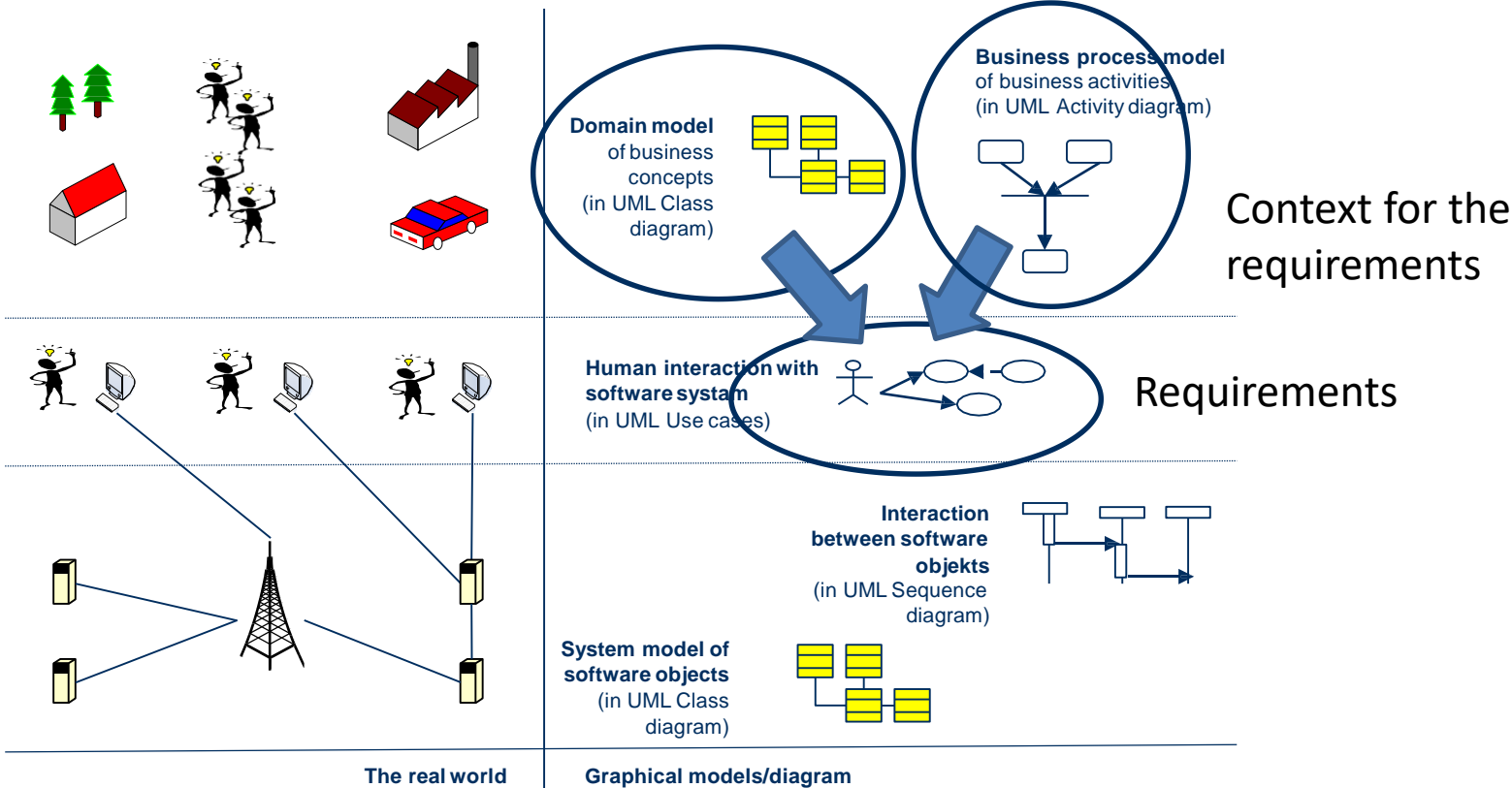
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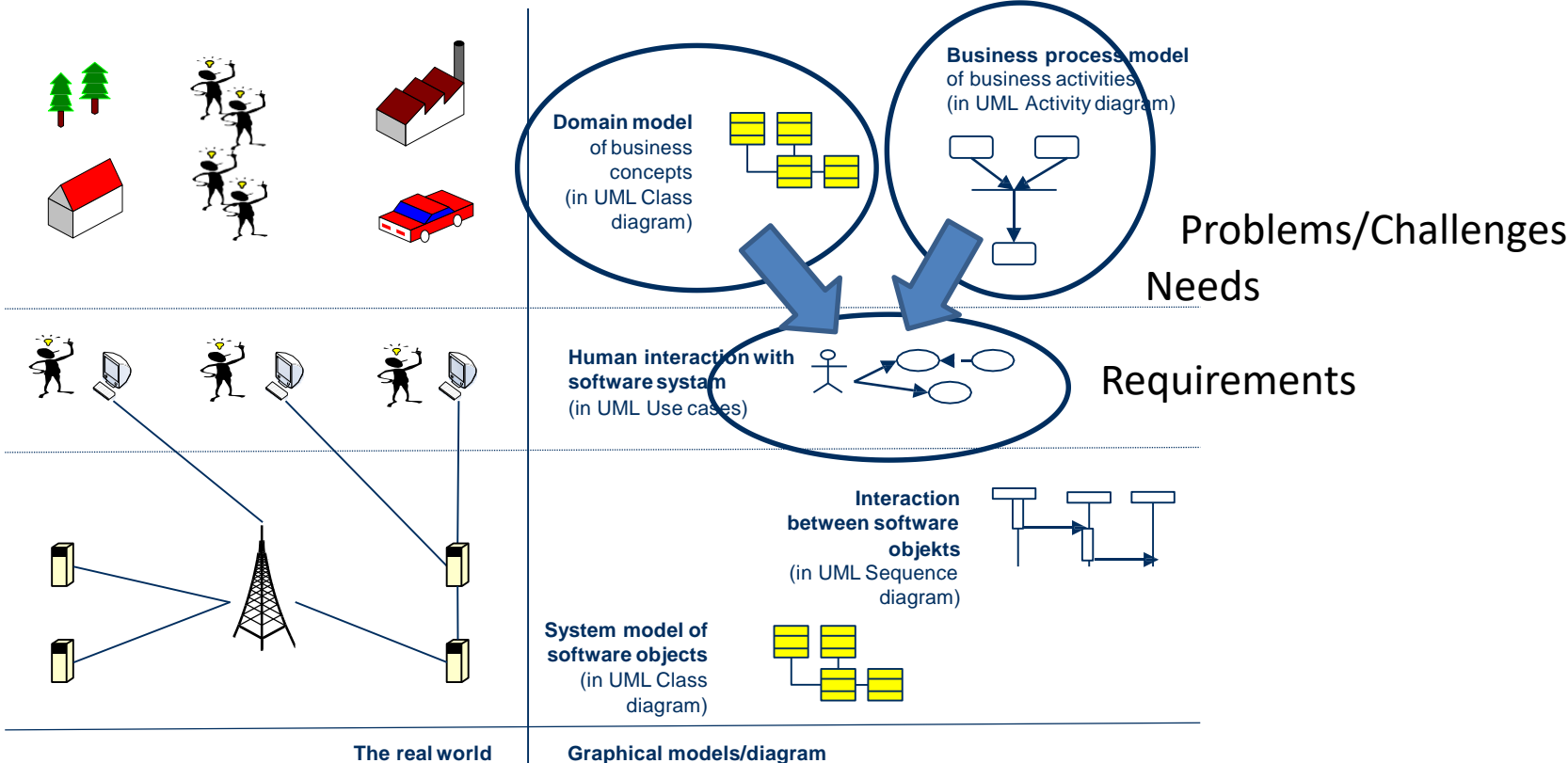
Towards a requirement specification



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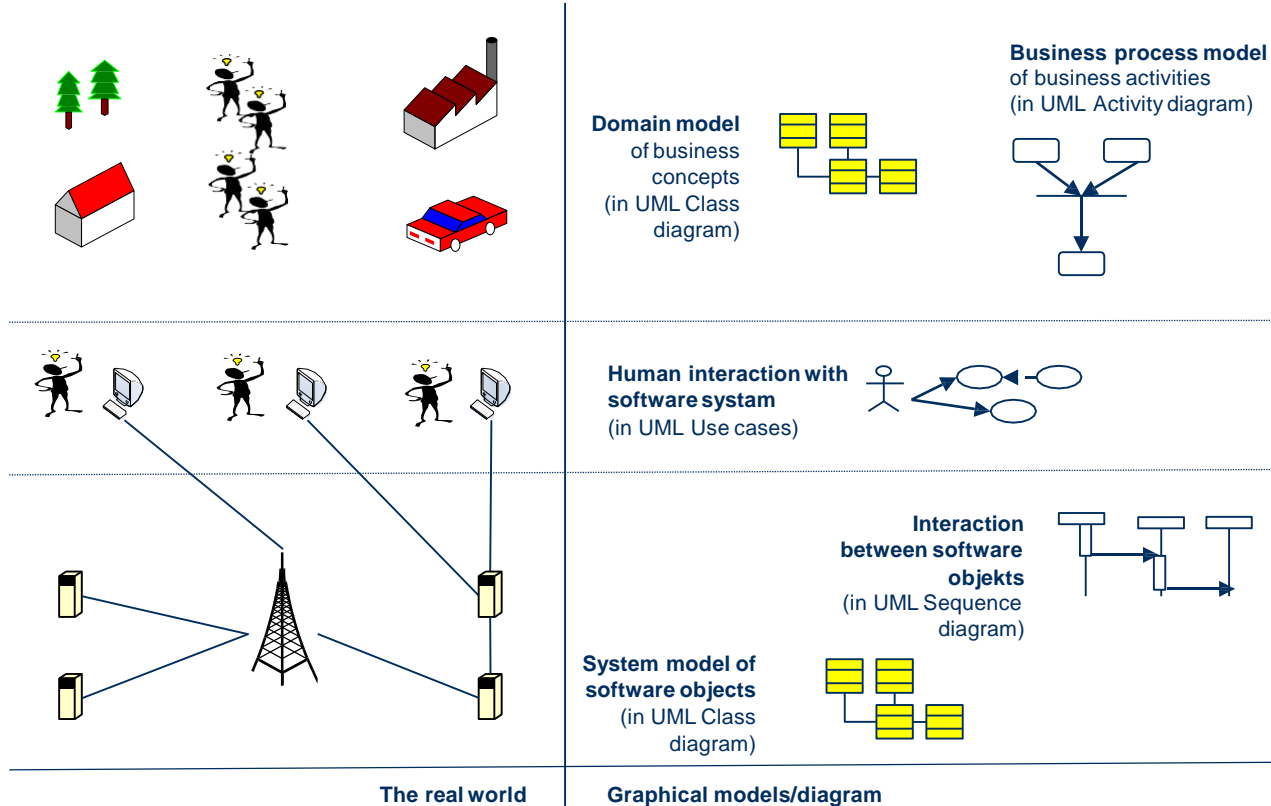
Towards a requirement specification



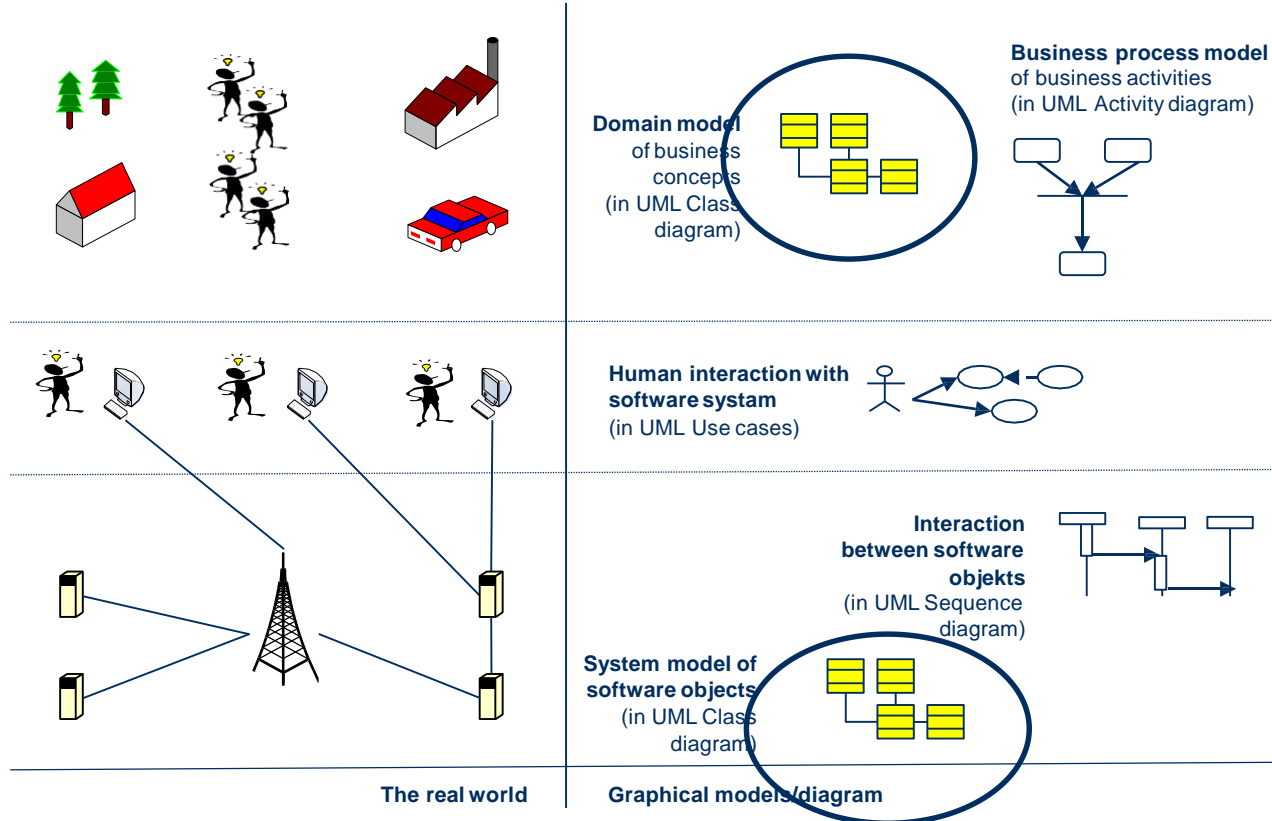
From enterprise and system models to implementation



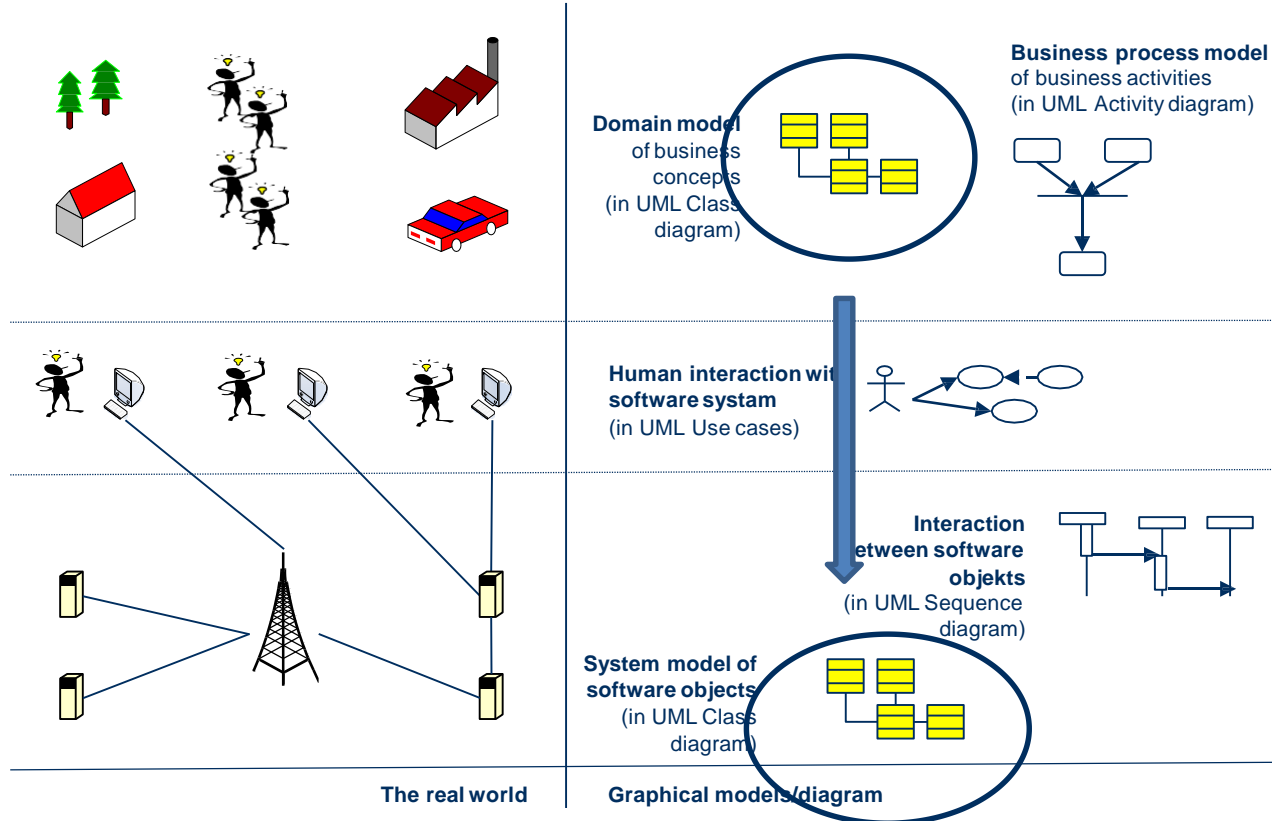
Towards implementation



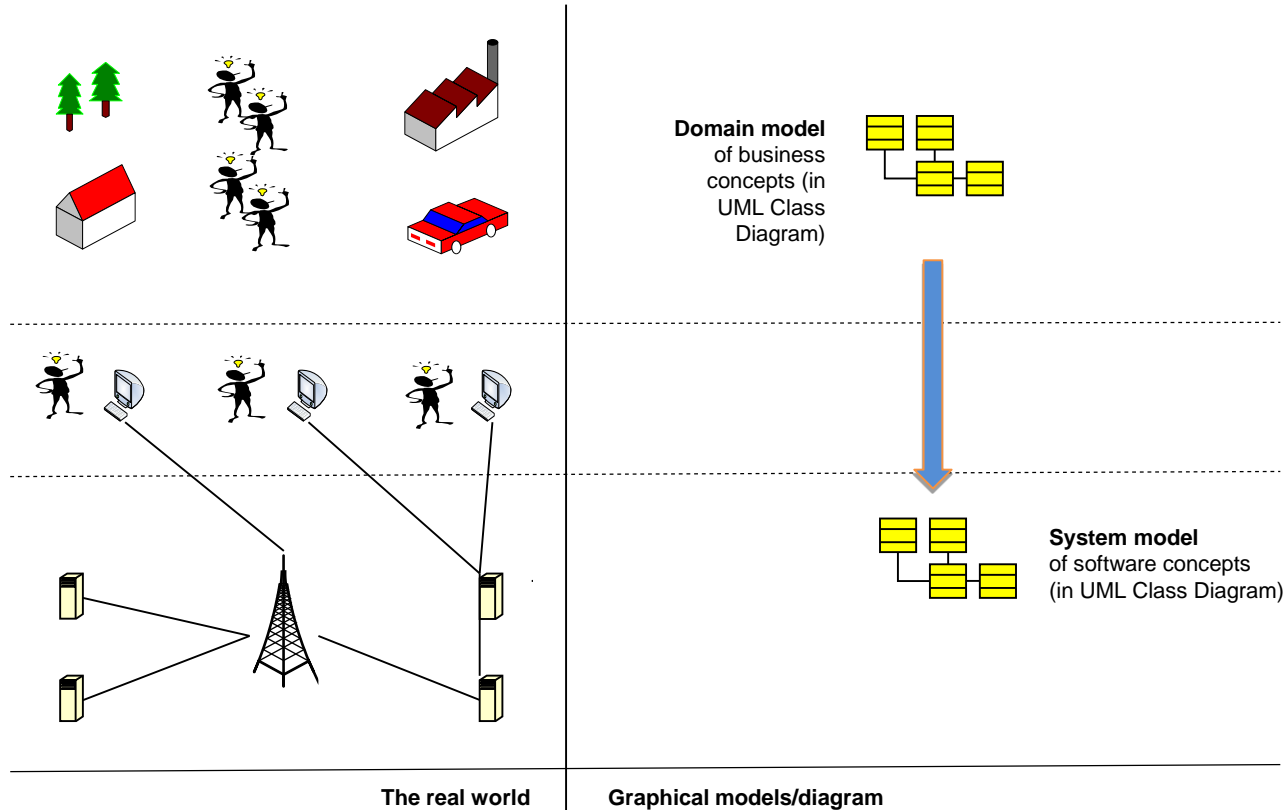
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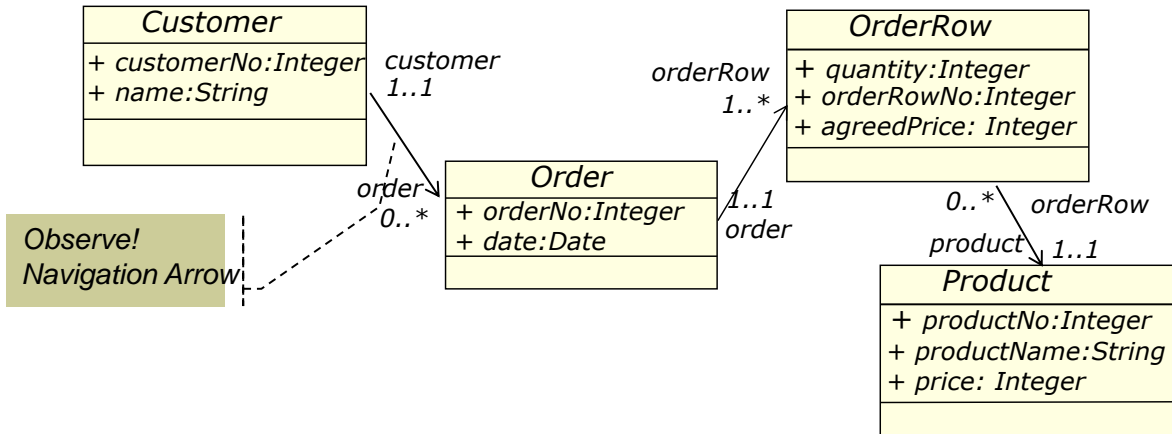
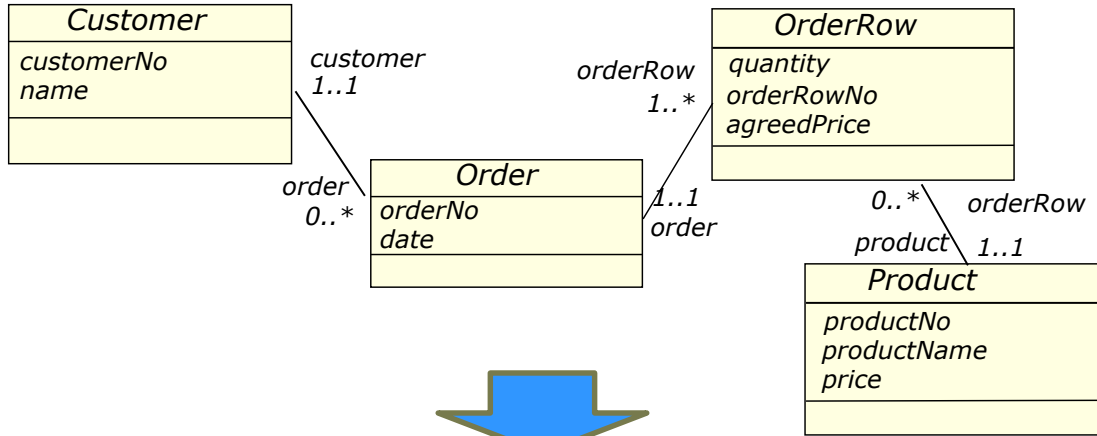


Towards implementation

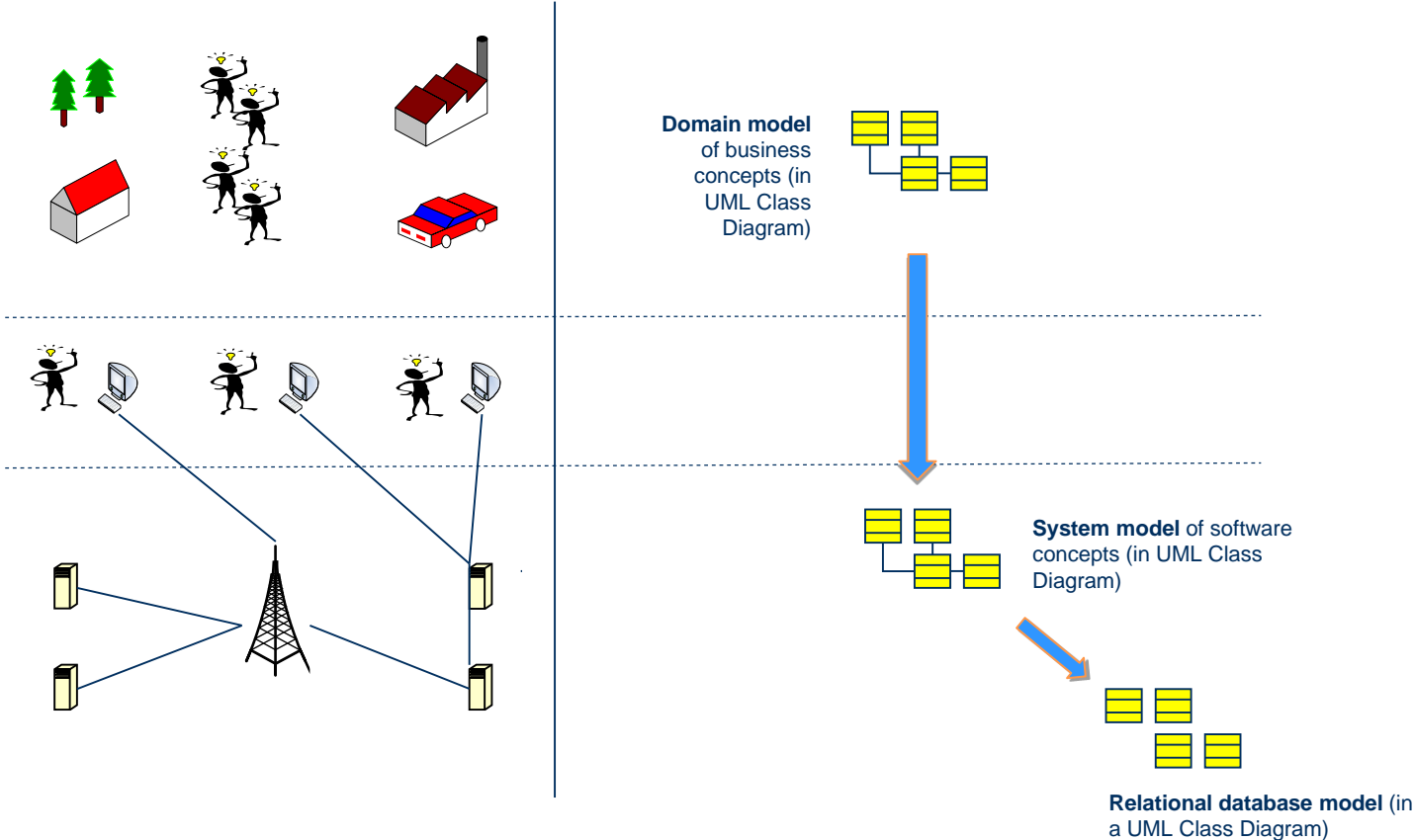


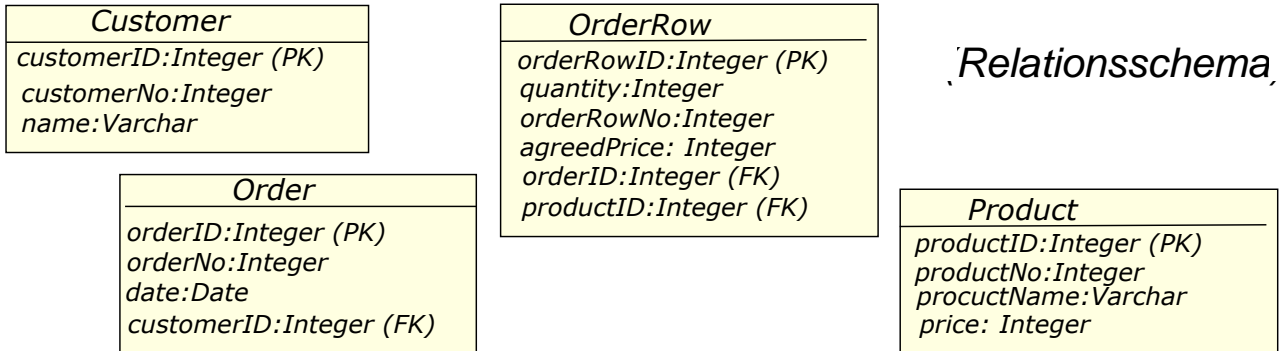
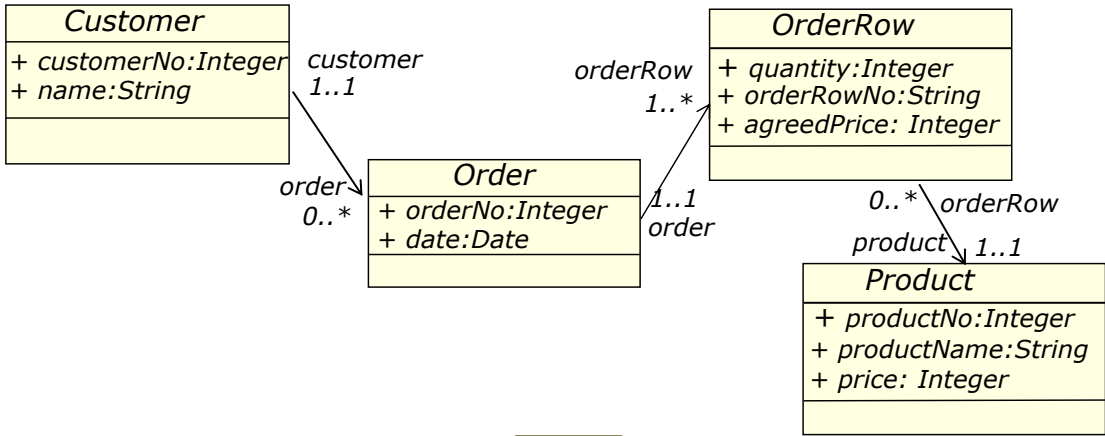
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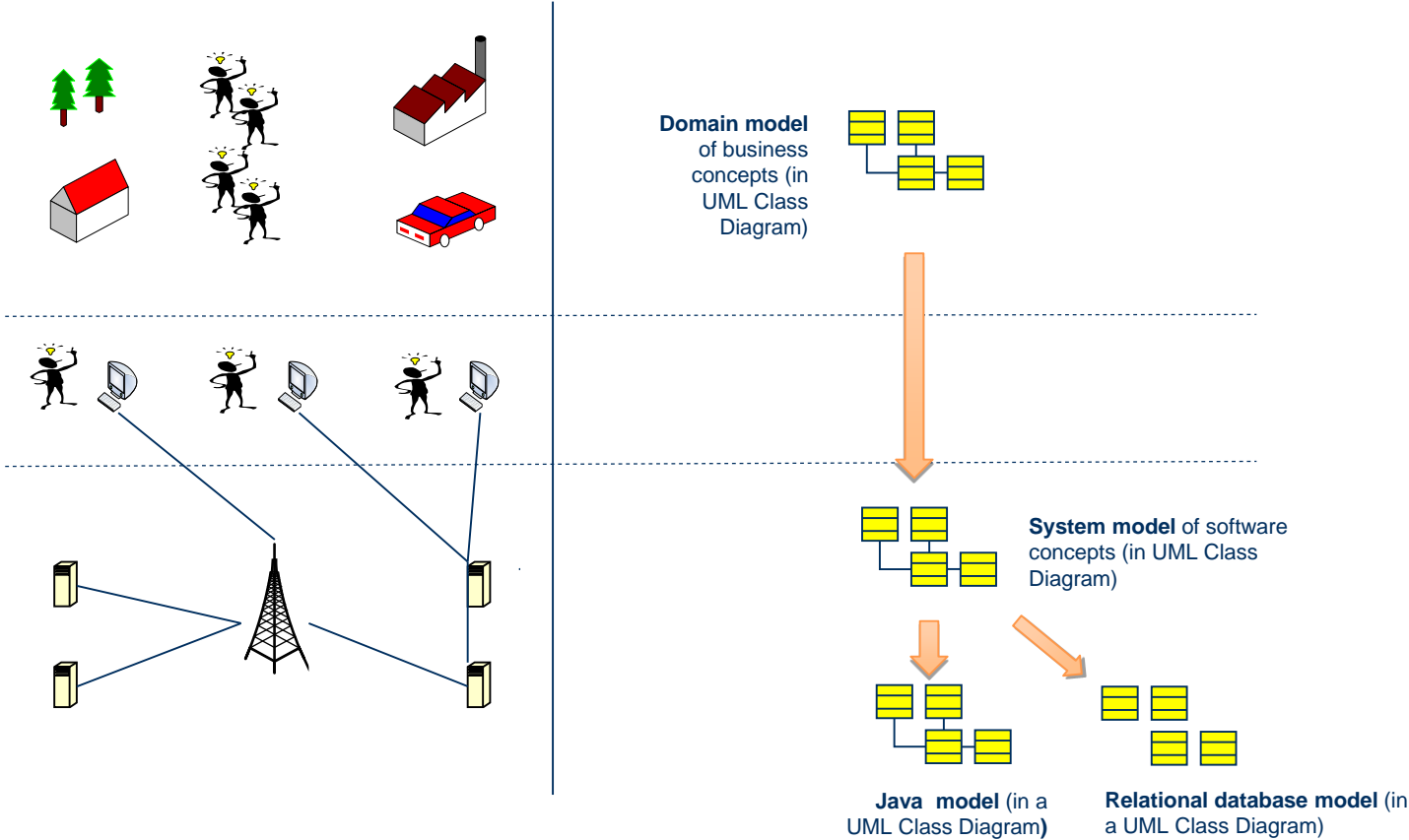


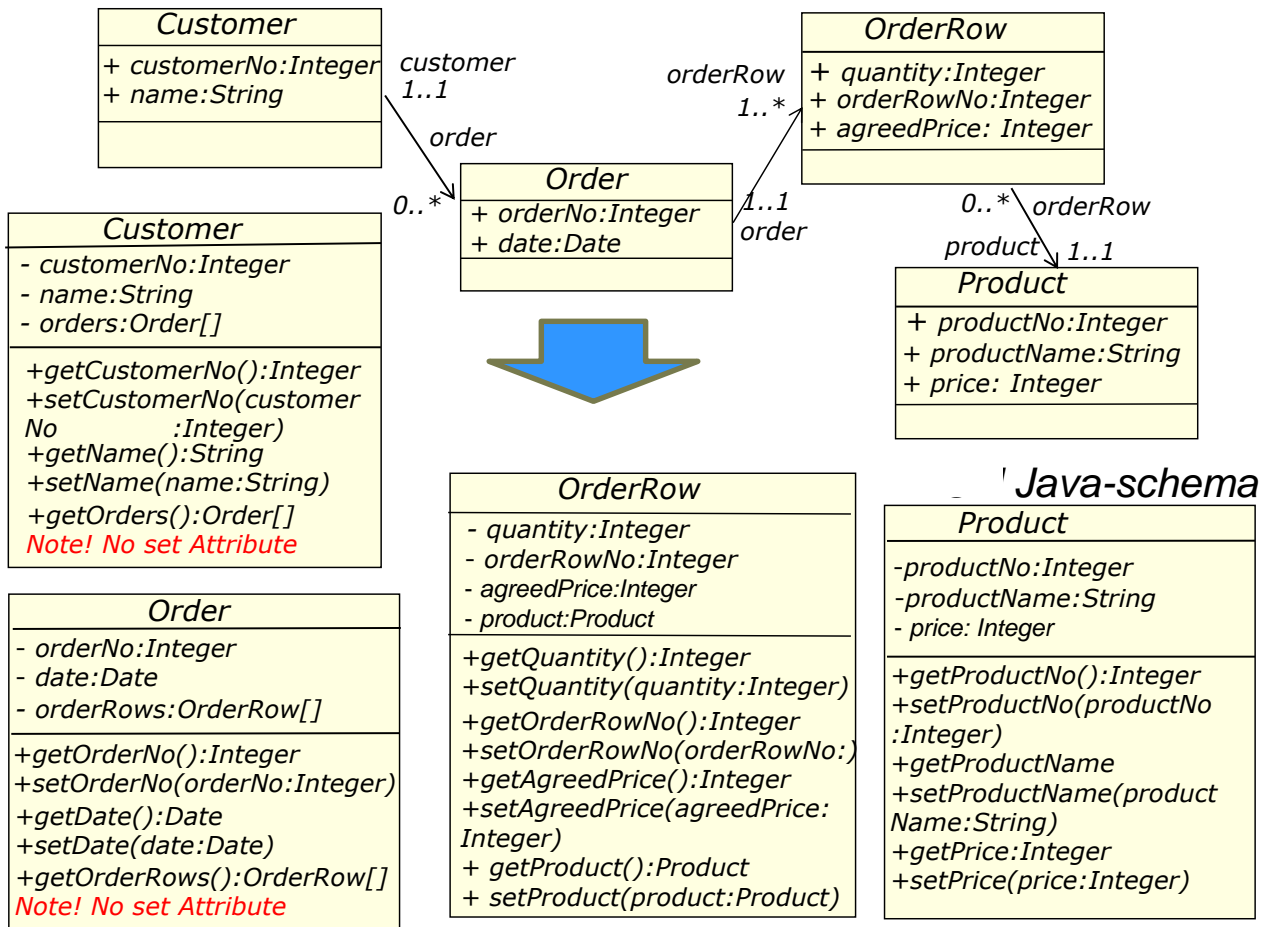
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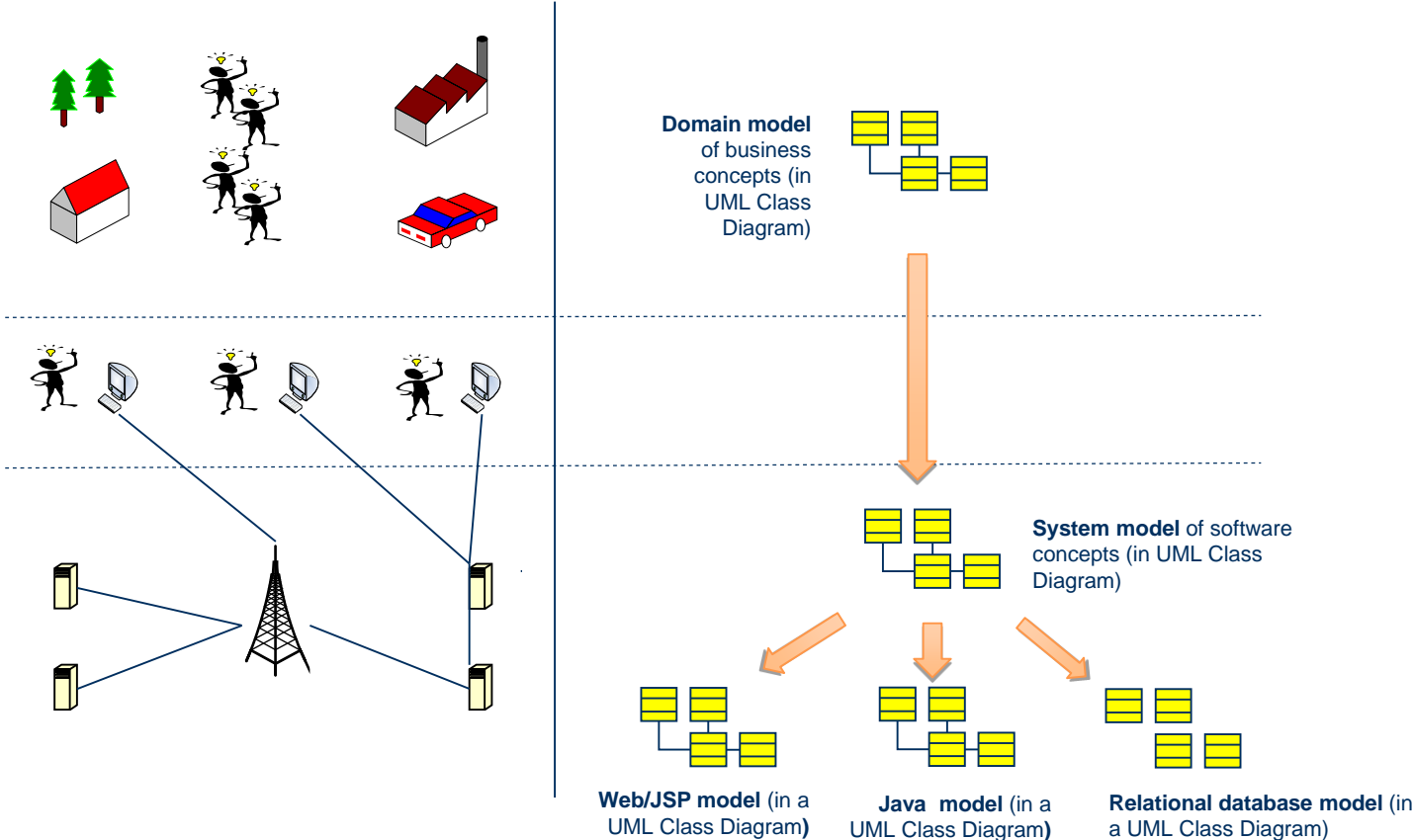


Towards implementation

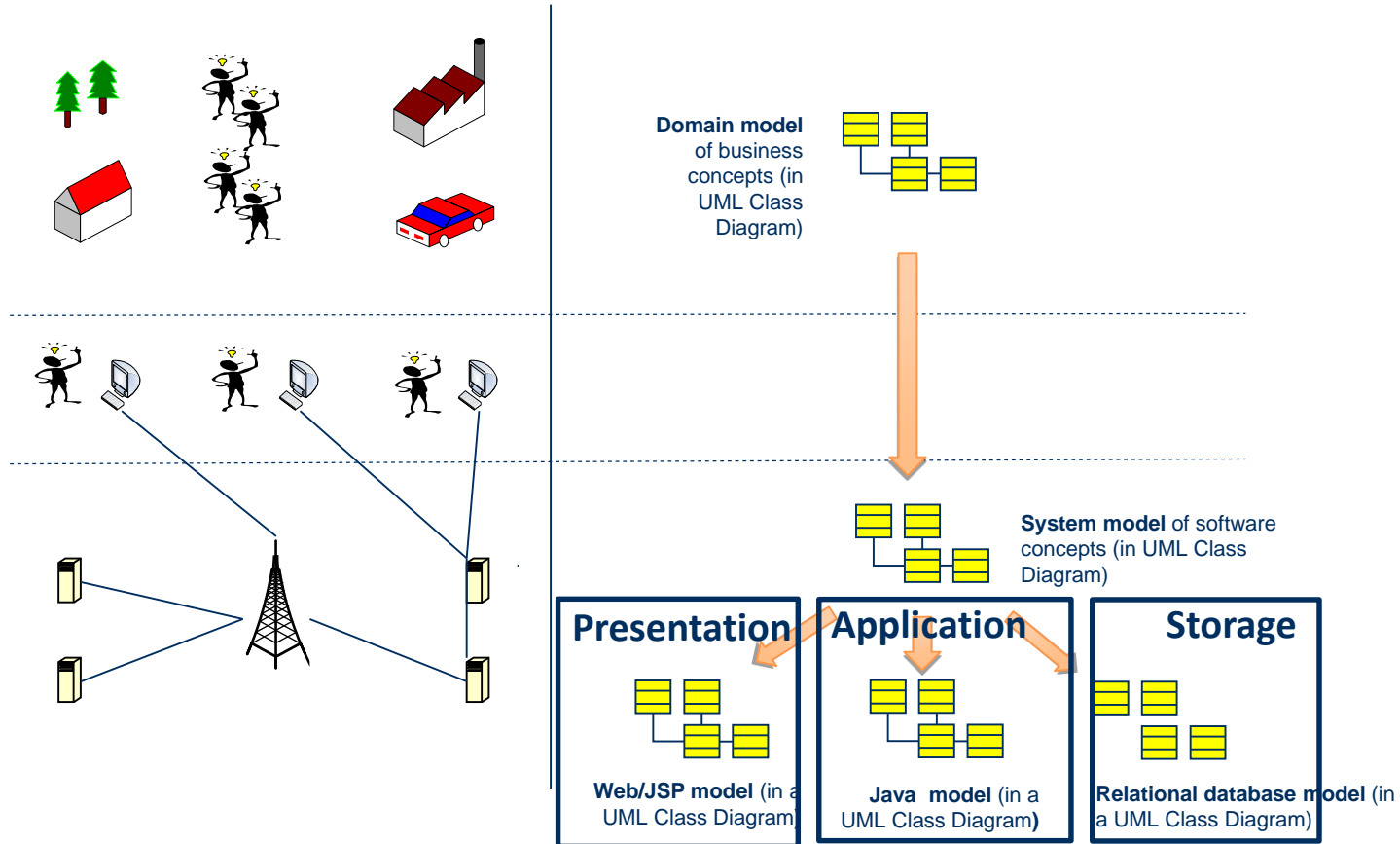




Towards implementation



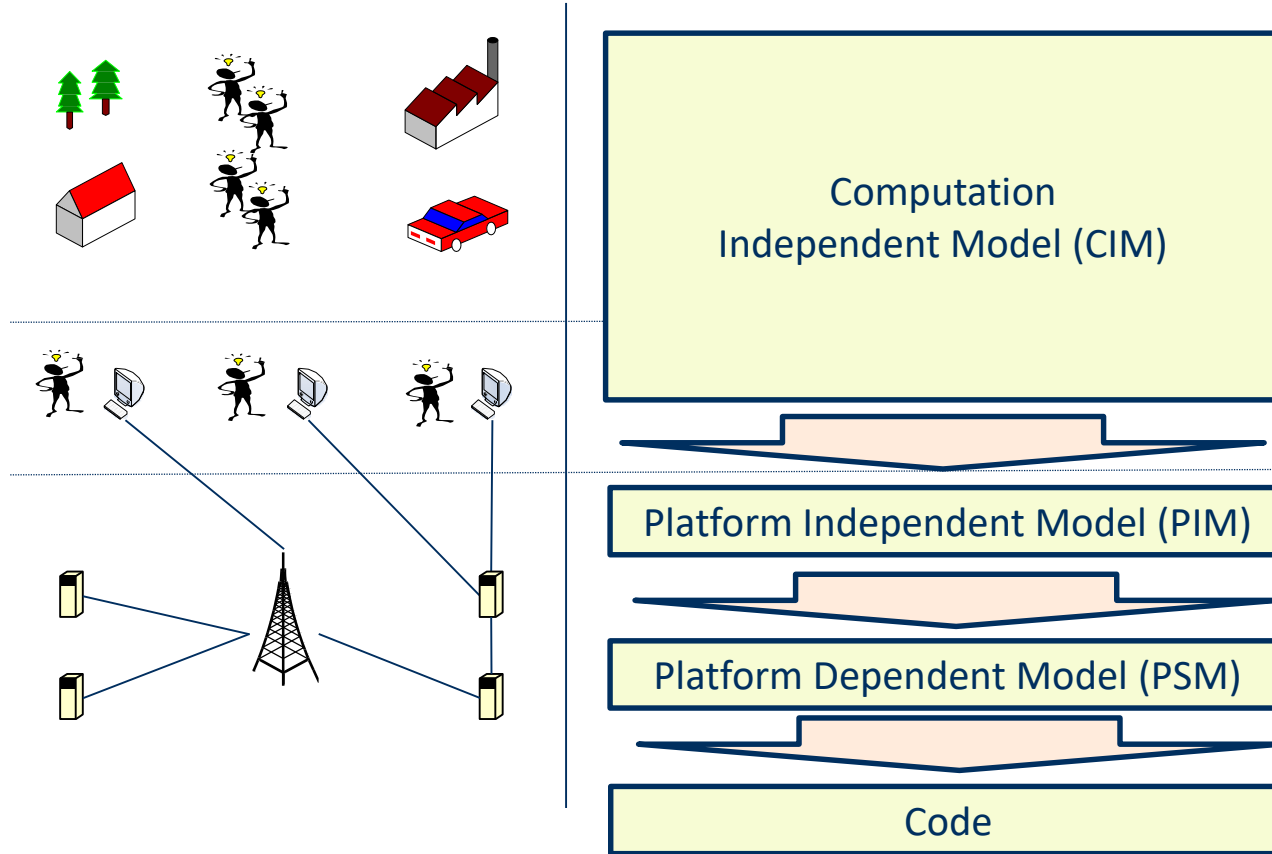
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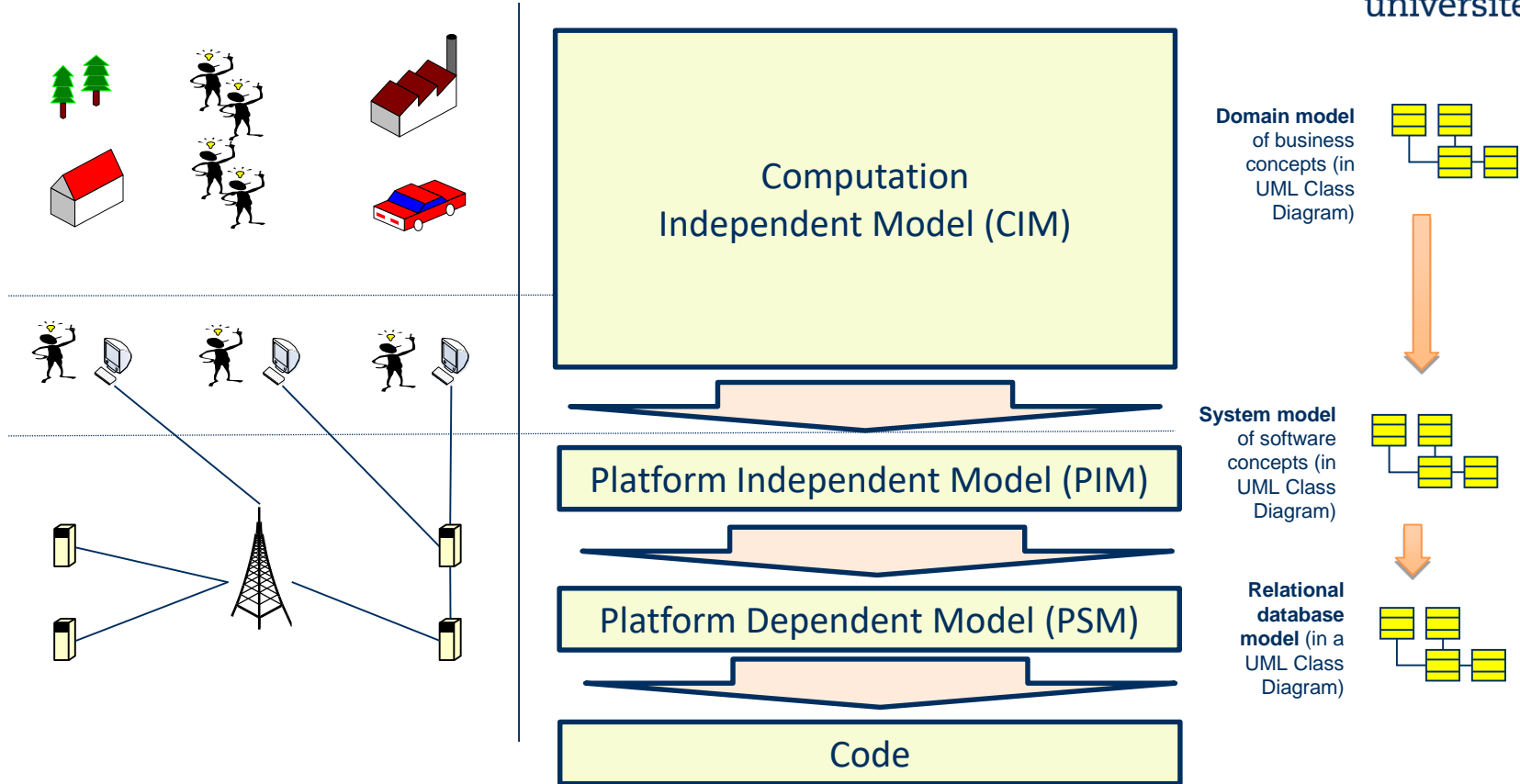
Model Driven Architecture



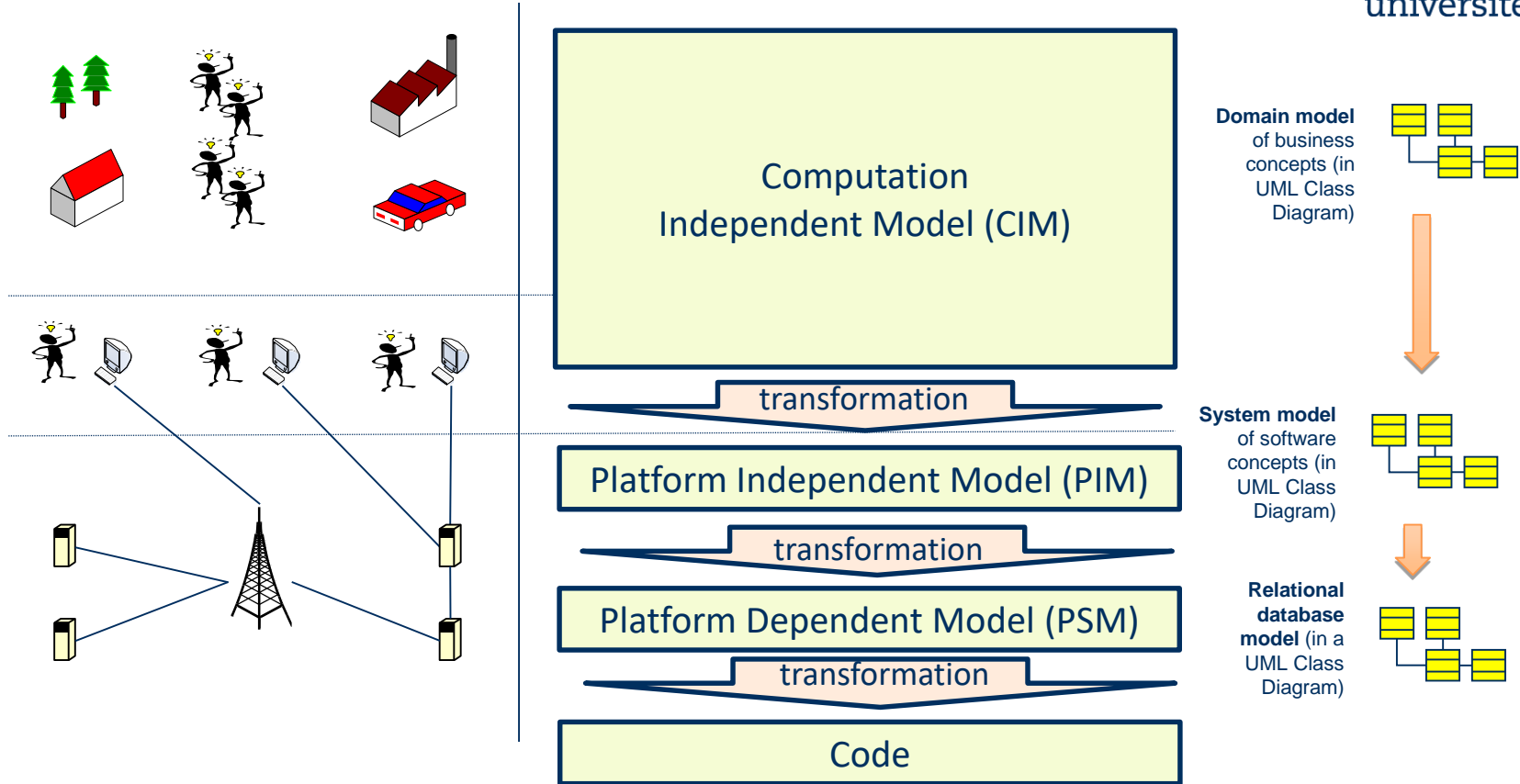
Model Driven Architecture



Model Driven Architecture



Model Driven Architecture



From enterprise and system models to information standards in healthcare



Healthcare standard

- CONTSYS

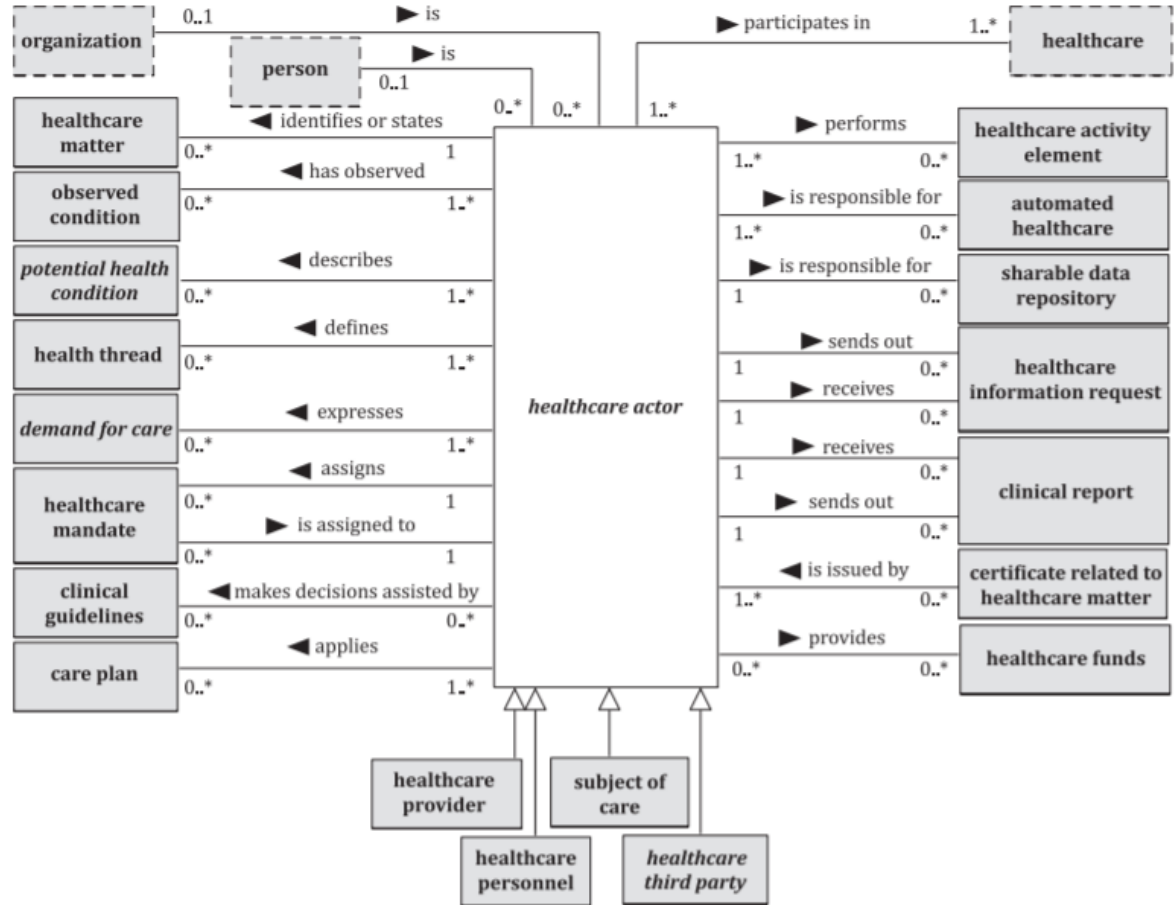
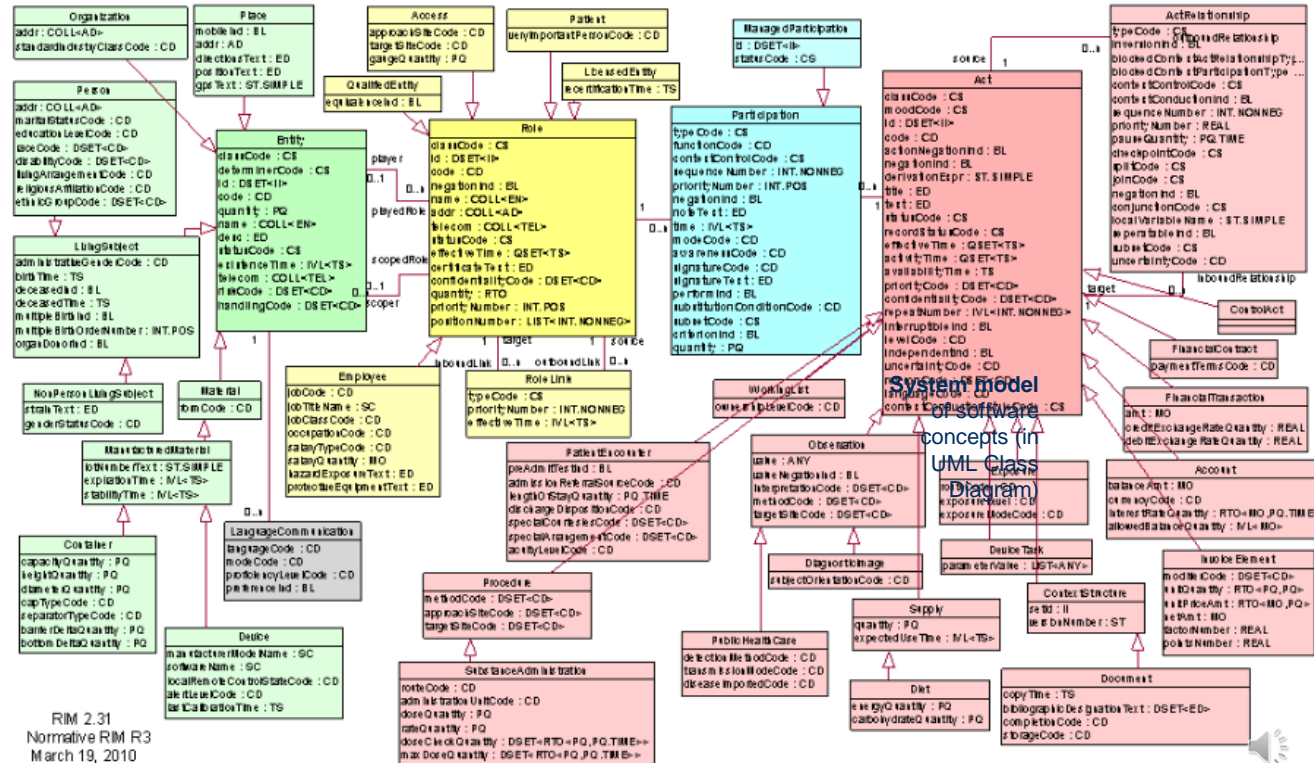


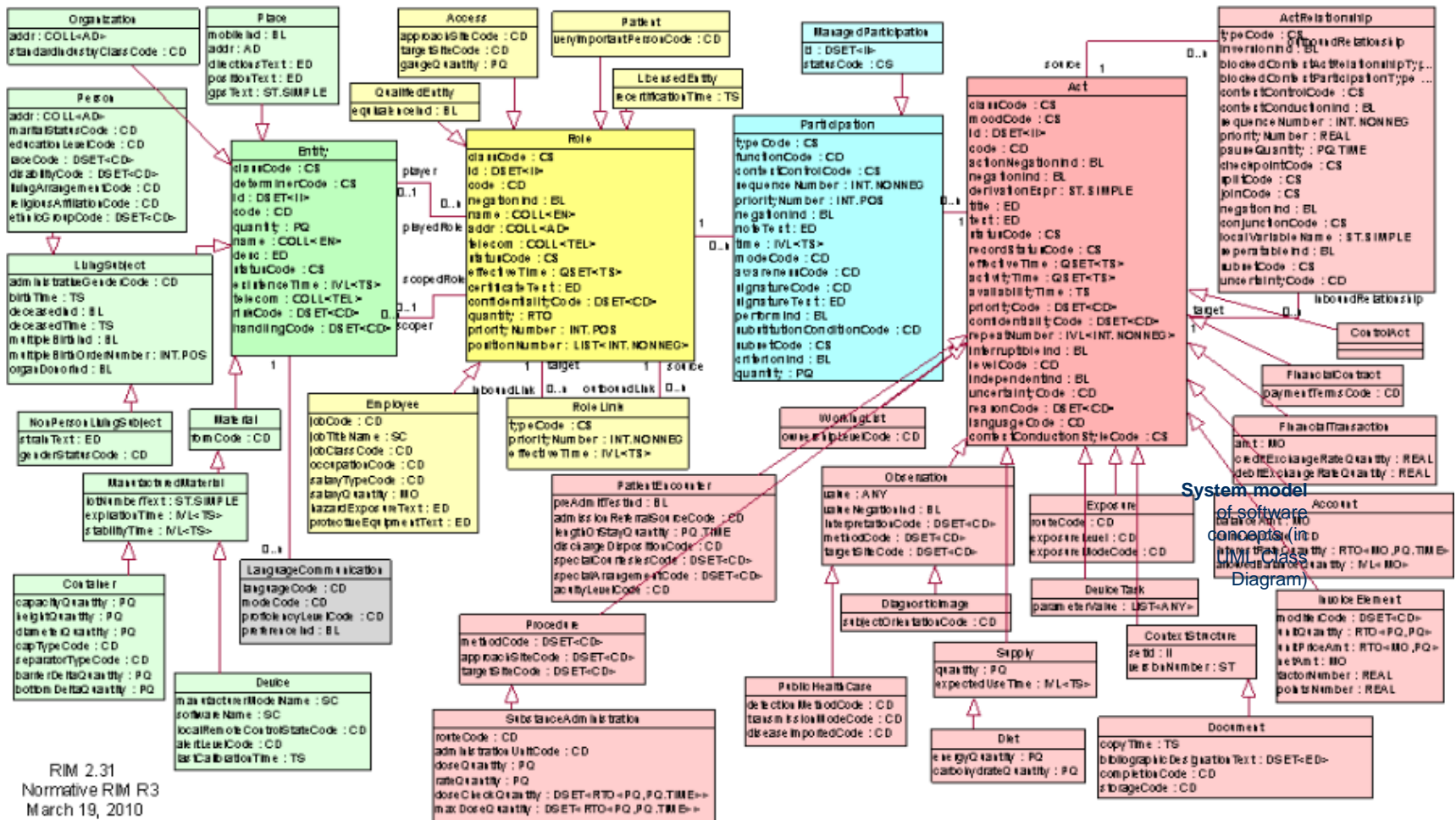
Figure 4 — Healthcare actor (UML representation)



Healthcare standard

- HL7 RIM





To discuss

You are part of a project to implement and introduce in a new EHR that need support the healthcare practice but also communicate electronically with other health care providers, such as hospitals:

- What activities do you suggest to have a successful implementation and introduction?
- How would you work with information standards?

