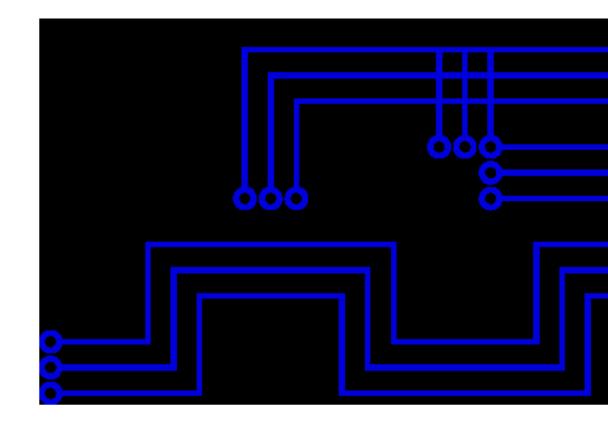




Service Modeling II

© Leonard Walletzký



Why do we need diamonds?

We need to describe things

And their relations

In some given context

Then we need to organize/plan operations

And execute them in some time perspective

Our natural language is

- Redundant
- Ambiguous



4 diamonds

See

 Describing things (objects) and basic relations

Recognize

 Adding context to relations

Organize

 How agents behave to recognized objects, what kind of operations we can do

Do

 Executing planned operations and getting results





See

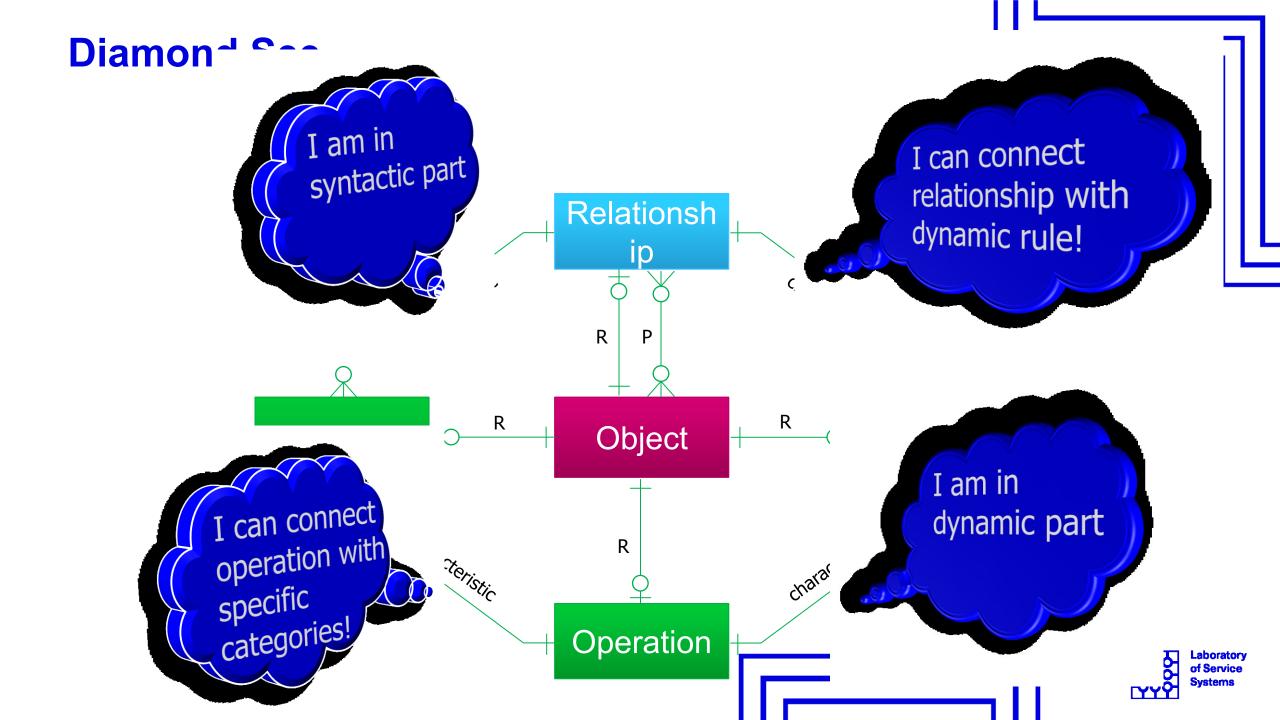
We are projecting the seen object in our mind

It has

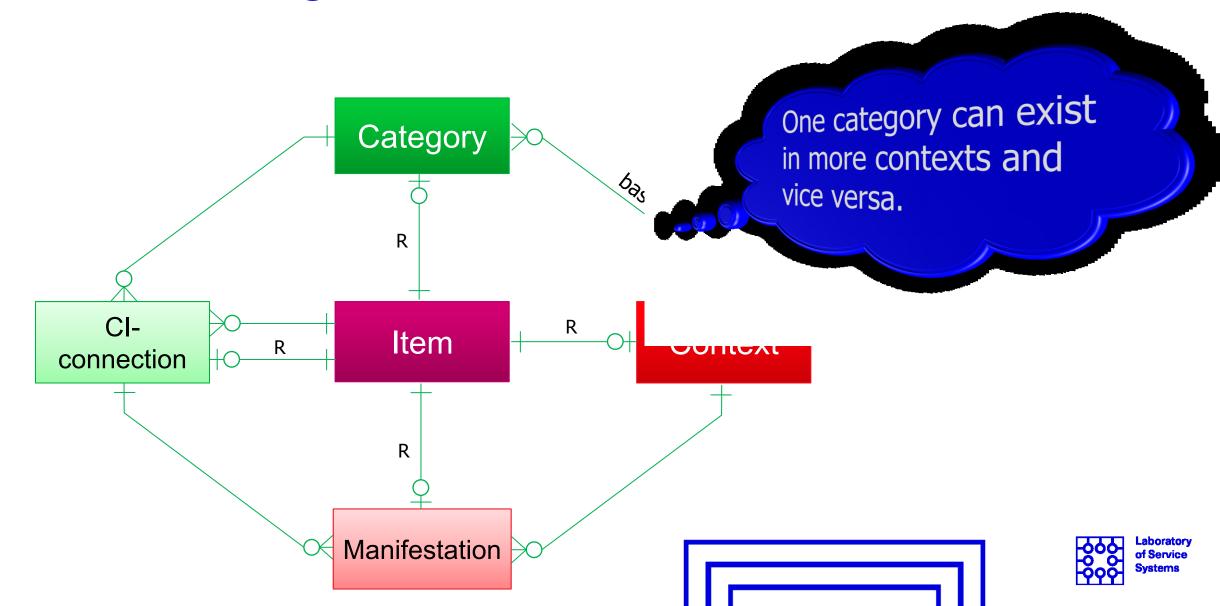
- Particular shape or form
- There can be some different varies of this object
- It can be used for some purposes
- Using this object is under some rules

There can be connections to other objects





Diamond Recognize



3rd diamond



Organizing diamond



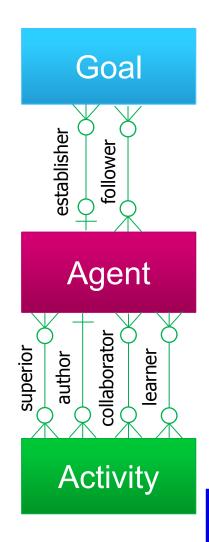
How is your life / position / work organized



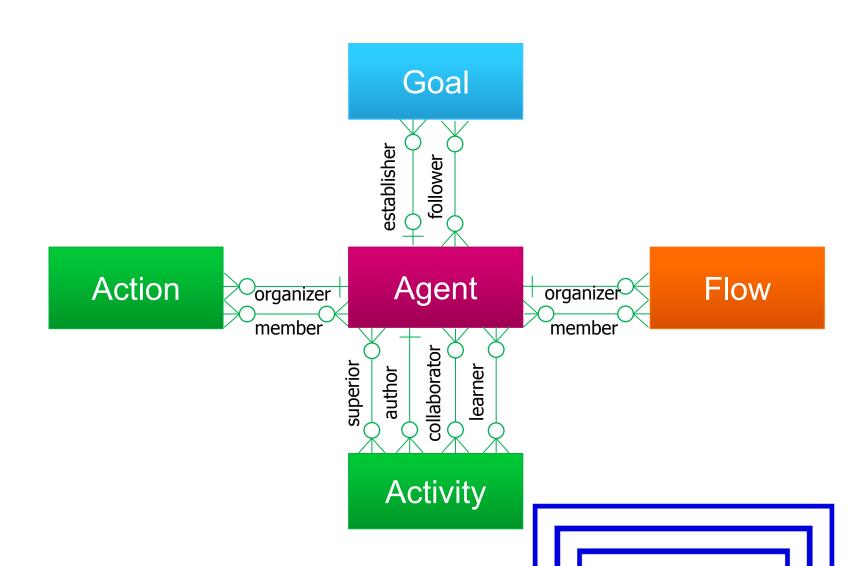
How can be some agent

member of some team
working on projects
educated or taught someone

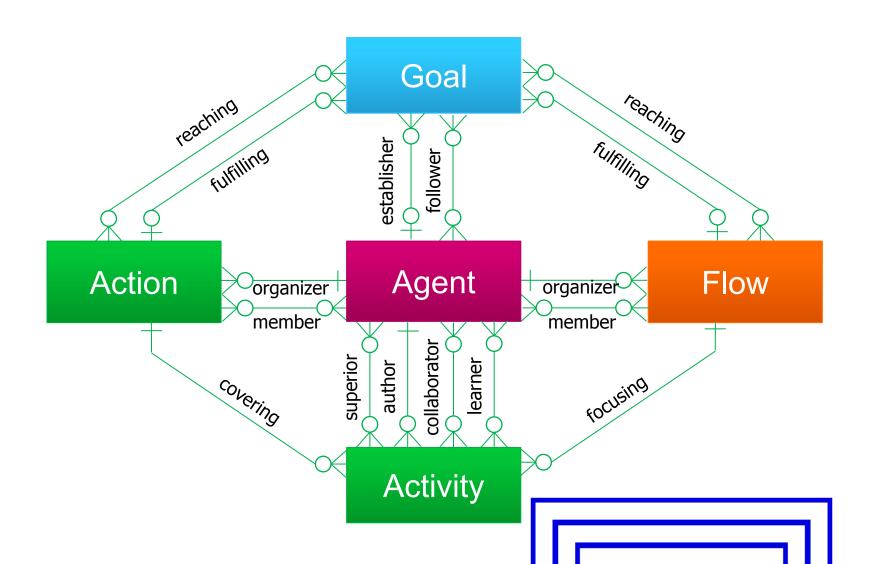




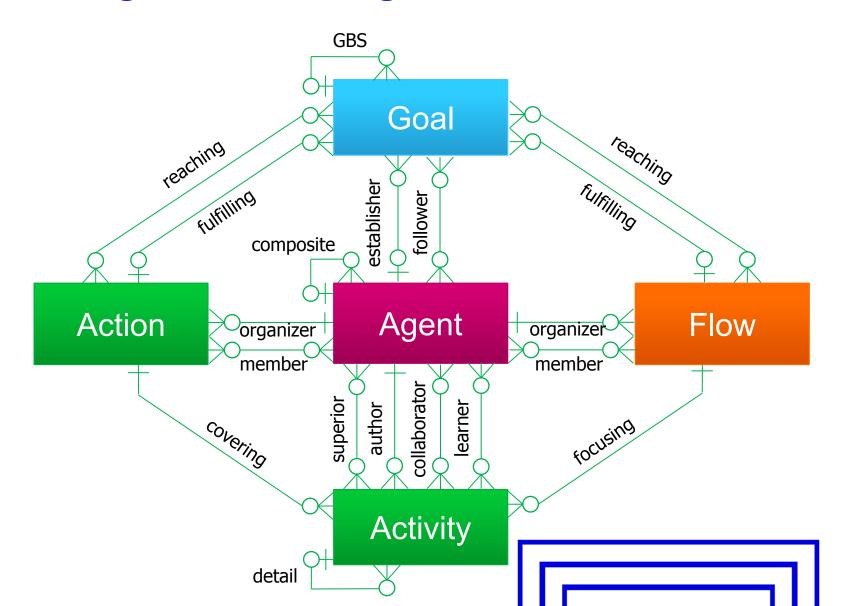




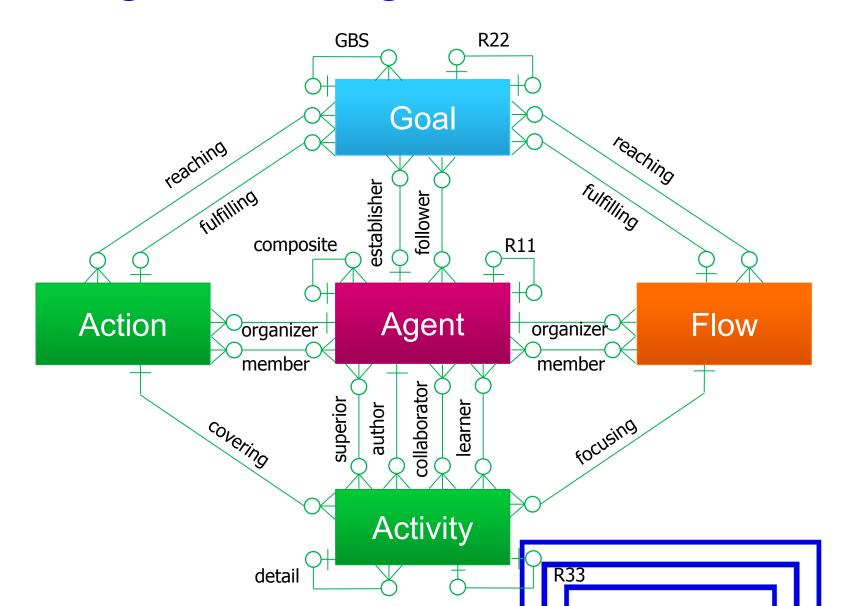




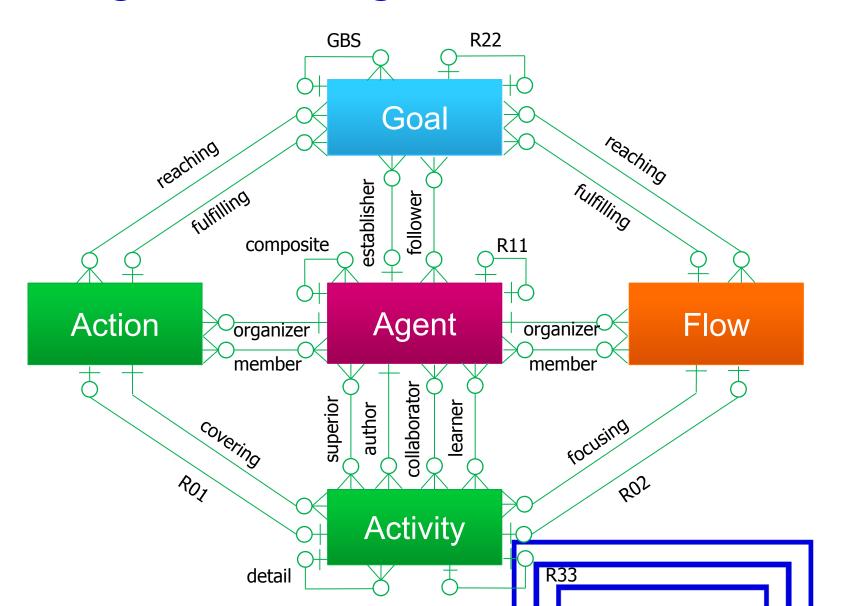












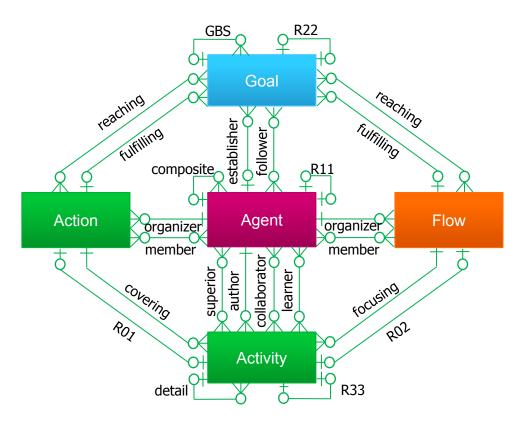


Diamond of Organization - Summary

Matrix-based organization: Action vs. Flow

Activity vs. Action / Flow

R-edges





4th Diamond - DO

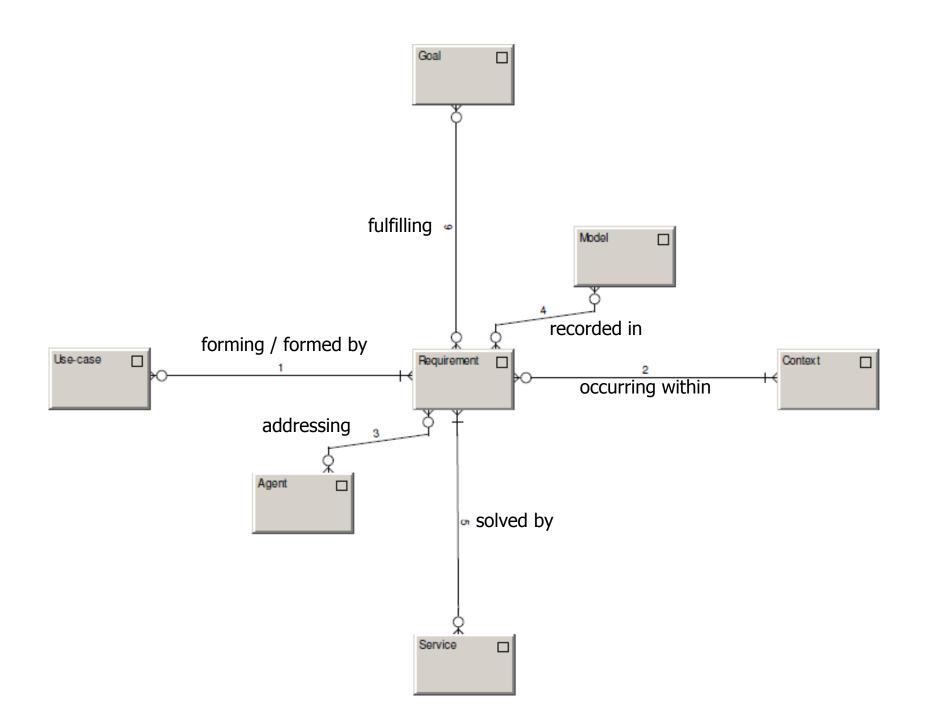
Describing the service environemnt

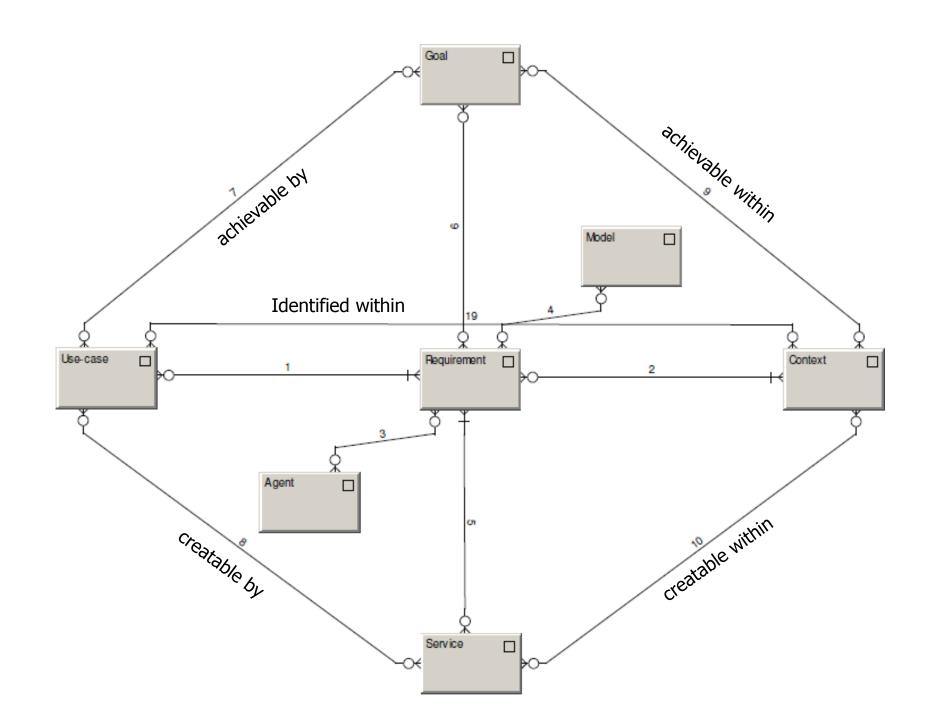
Illustrating how the service is provided

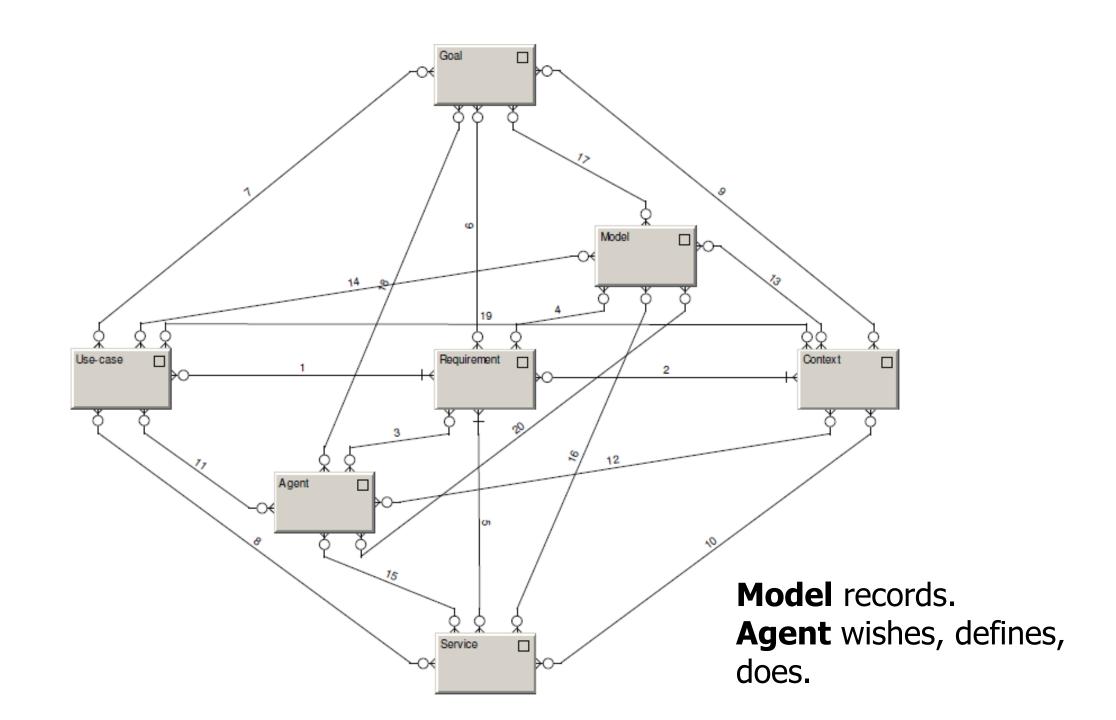
Adding multicontextual view to service analysis

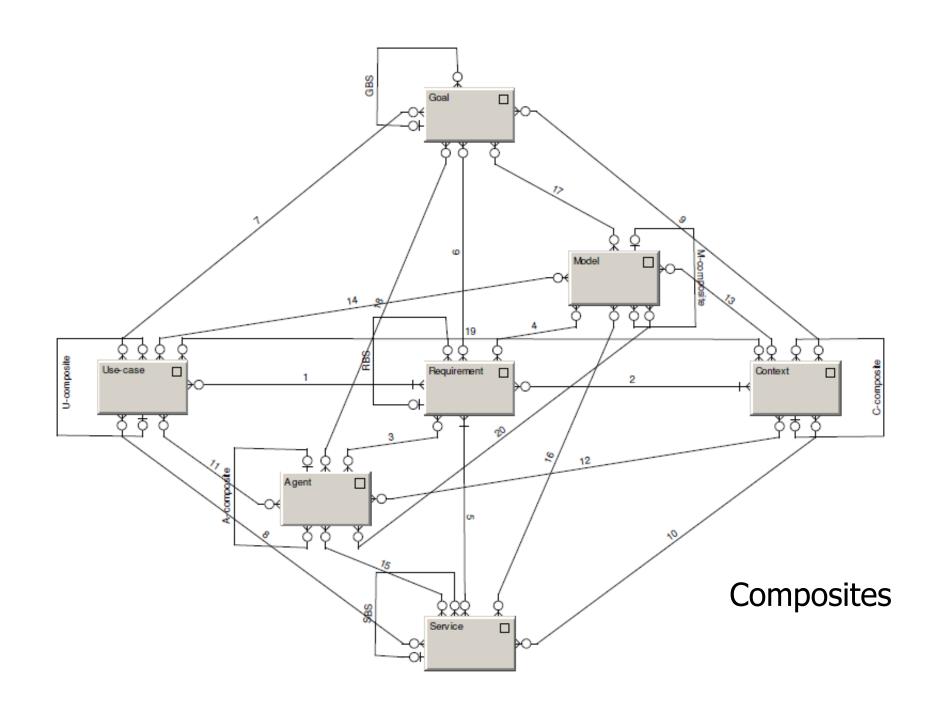
Helping to compose and decompose the services

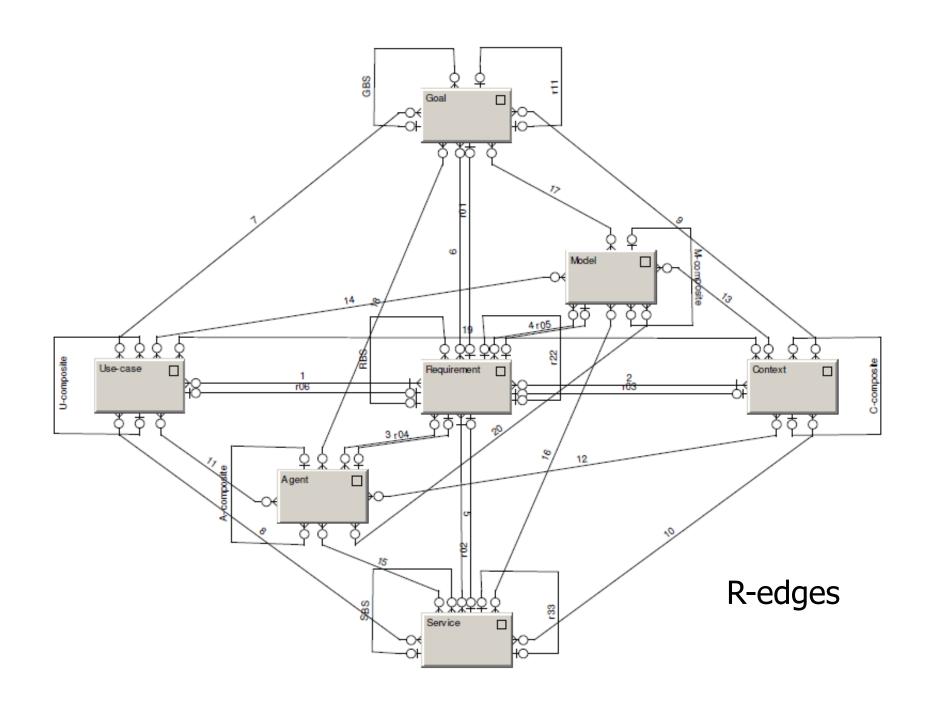












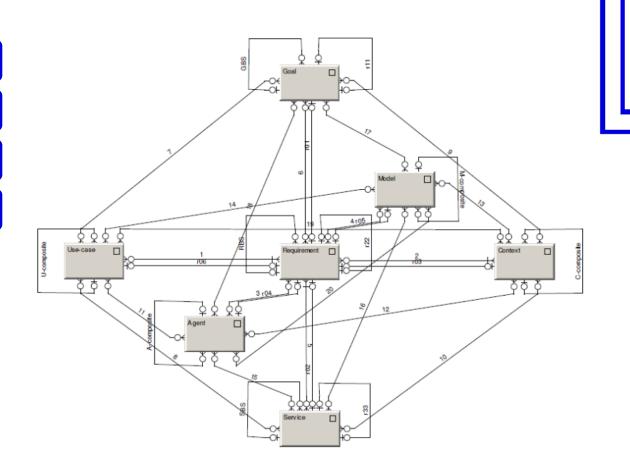
Diamond of Predictive Behaviour

Depicts the motivation of agents to DO

Everything can be seen as a requirement

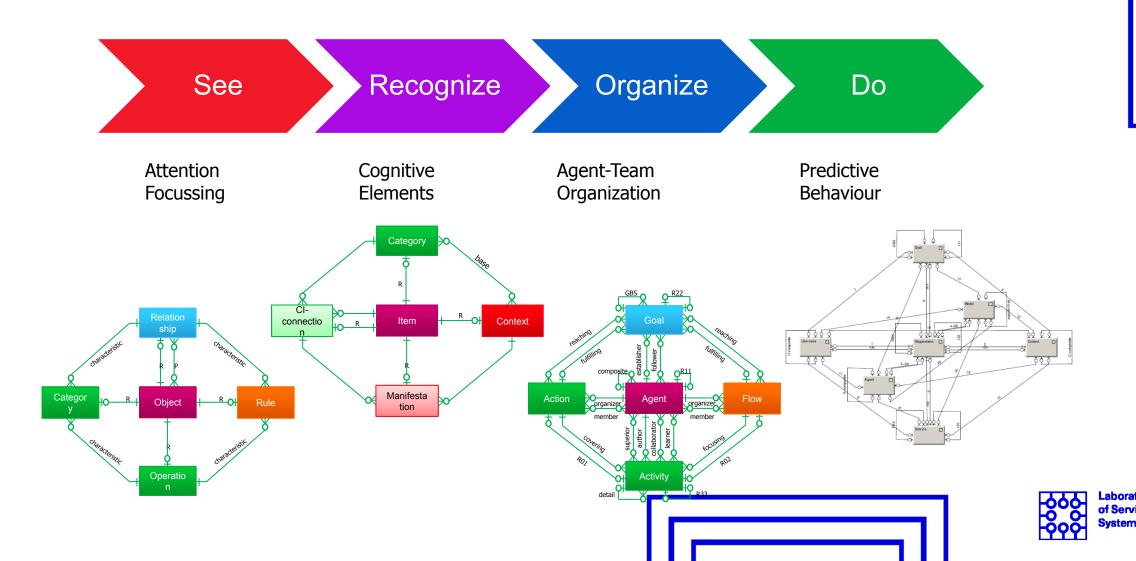
Forming and being formed by behavioral patterns

Models as a system memory





Diamond-Path Framework Overview



Case study

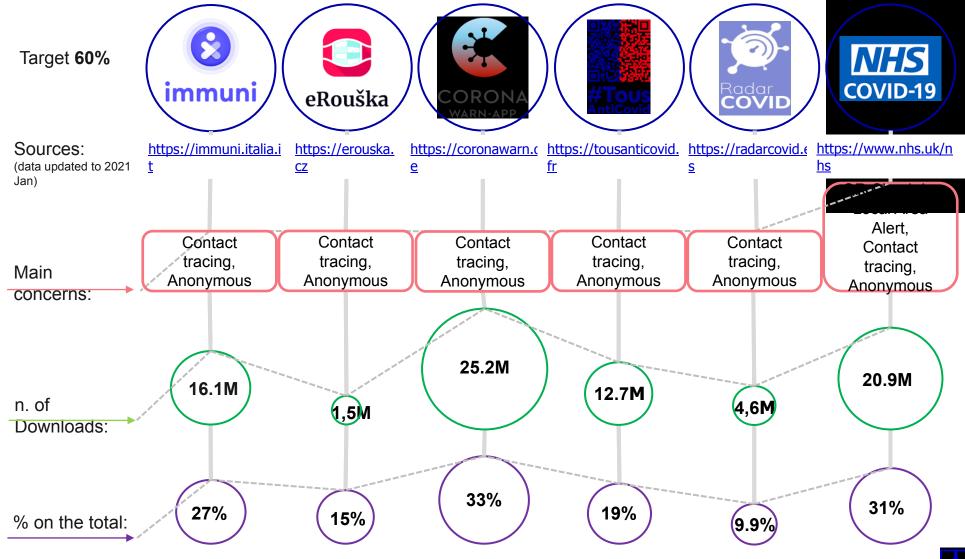
COVID 19 tracking application

The application of immuni (ITALY)

First, the value of current application is analyzed

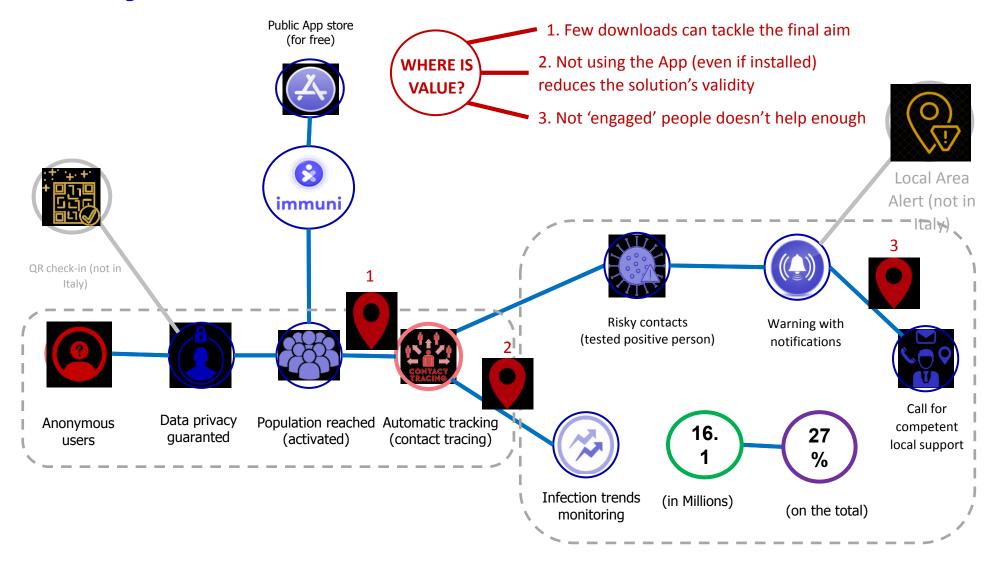
Second, the design of "an ideal application" is suggested with the examples of the value

Case study





Case study



Smart Service Canvas

Actors

Goals

- What goal is fulfilled by a service?
- Are there any sub-goals that need to be taken into the account? Are they part of the main goal GBS?
- Who is the establisher of the goal? Who is the follower?

Resources

Requirements

- What requirements are important for service design?
- What goals are they born from?
- Are all requirements in the same context?

Institutional arrangement

Agents

- What groups of stakeholders are involved into service?
- Are there any special groups of agents that must be mentioned?
- What is their role in the GBS/ Actions/ Flows?

Co-creation

Value co-creation

- How the value is co-created?
- How does each agent contribute on the value co-creation?
- How the service is linked to other services?
- What is its role in the value cocreation chain?

Contexts

- In what contexts is the service able to provide a value? Which context is the main one?
- Are there any contexts influenced by the service? How?
- Is the service sustainable in all

Endowment

- What resources are necessary to create and maintain the service?
- What are the necessary inputs from other services?

Use-cases

- Are there any practical applications of the similar service?
- How they are designed?
- What aspects can we use?

Value proposition

- How is the value proposition formulated?
- Who are addressing and addressed agents?
- How is their response evaluated?

Actions

- What necessary actions must be done to create/ maintain/ cooperate on the service?
- Are there any actions that take part in other context? And how?

Flows

- What flows are affected/newly defined by the service?
- In what contexts do they appear and how?

Activities

- What activities do the actions and flow contain?
- What roles do they play in other contexts?

Measures (KPI)

- What are defined indicators to monitor quality and the level of value provided?
- How is the innovation level monitored?
- Are the effects of the service monitored in all contexts?

Goals

- 1. To monitor a spread of covid-19.
- 2. To prevent covid-19 infection.
- 3. To help people to get oriented.
- 4. To protect non-infected people □
- 5. To enable normal life

CHECKED

Contexts

- 1. Medical the key is to prevent the congestion of hospitals
- 2. Social people need to understand why the must be isolated

PARTIALLY-CHECKED

Actions

 Send warning – this actions happens if the user is infected. The users who were in contact with him/her will be warned. □

> PARTIALLY-CHECKED

Requirements

- 1. To inform about the contacts $\hfill\Box$
- 2. To provide information about current situation □

PARTIALLY-CHECKED

Endowment

1. Information about test results

PARTIALLY-CHECKED

Flows

- 1. To monitor surrounding
- 2. To receive positive test information □

PARTIALLY-CHECKED

Agents

- 1. Inhabitants
- 2. Medical institutions
- 3. Sanitary stations

PARTIALLY-CHECKED

Use-cases

1. Are All Covid -19 applications

CHECKED

Activities

- 1. Detect all close devices
- 2. Send information to sanitary station □
- 3. Receive information about positive contacts □

PARTIALLY-CHECKED

Value co-creation

MISSED

Value proposition

- 1. To be informed about the possible infection
- 2. To know what to do

PARTIALLY-CHECKED

Measures (MPI)

- 1. No of installations □
- 2. No. of informed users □

PARTIALLY-CHECKED

Goals

- 1. To monitor a spread of covid-19.
- 2. To prevent covid-19 infection.
- 3. To help people to get oriented.
- 4. To protect non-infected people □
- 5. To enable normal life

CHECKED

Contexts

- 1. Medical the key is to prevent the congestion of hospitals
- 2. Social people need to understand why the must be isolated
- 3. Economic to enable economy to run

PARTECKED CHECKED

Actions

- Send warning this actions happens if the user is infected. The users who were in contact with him/her will be warned.
- 2. Get the status get the current health status from register□
- Connect to register connect to the register of test and vaccination PARTIALLY-

CHECKEED

Requirements

- 1. To inform about the contacts
- 2. To provide information about
- 3. **FUTTERN** telt tests and vaccination □



Endowment

- 1. Information about test results
- 2. Information about the vaccinations
- 3. Control of private data

PCHRECKED - CHECKED

Flows

- 1. To monitor surrounding □
- 2. To receive positive test information □
- 3. To monitor the validity of test and vaccination

PACHECKED CHECKED

Agents

- 1. Inhabitants
- Medical institutions
- 3. Sanitary stations
- Business entities will use the app to confirm the person health status



Use-cases

1. Are All Covid -19 applications

CHECKED

Activities

- 1. Detect all close devices □
- 2. Send information to sanitary station □
- 3. Receive information about positive contacts □
- 4. Get the information about new test or vaccination

PCHRECKEDY-CHECKED

Value co-creation

- The interaction based on information sharing (the confirmation about healthy status)□
- 2. The control on the vaccination and testing

CHECKED

Value proposition

- 1. To be informed about the possible infection
- 2. To know what to do
- 3. To get proper date and place for tests and vaccination

PARECKED-

CHECKED

Measures (MPI)

- 1. No of installations □
- 2. No. of informed users \Box
- 3. No. of tests linked with app □
- 4. No of vaccinations linked with app □
- 5. No. of questions □

PCHRECKEDY-CHECKED

Reflection

Do you find it interesting?

And useful?

Why has it remained a pure theoretical concept?

Is it too complex?

You will get the possibility to share your opinion!

