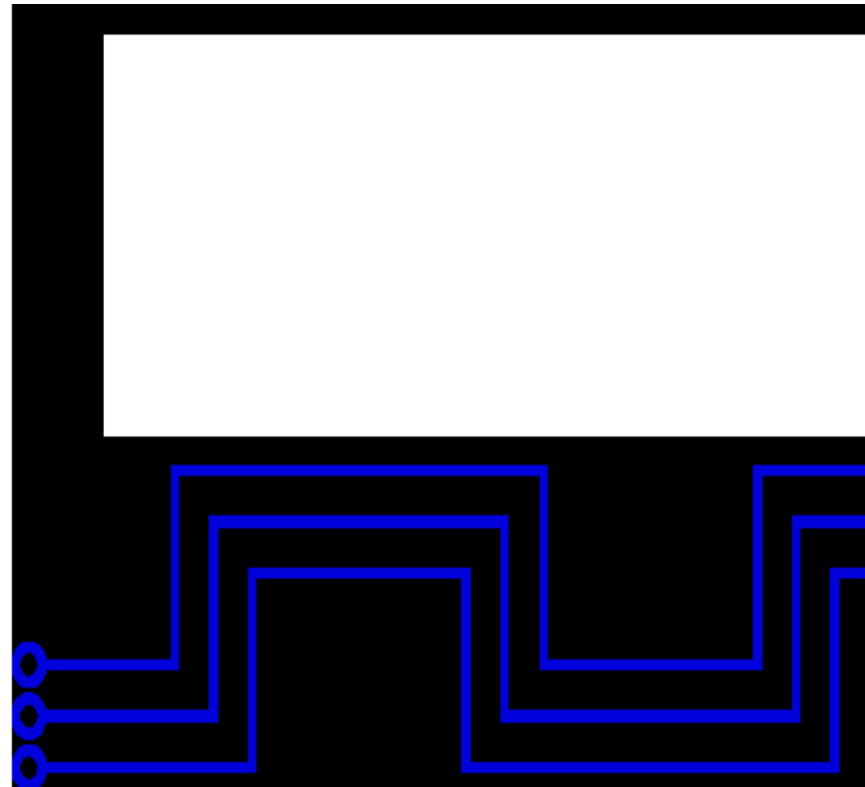


Service environment

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Introduction to Service Science



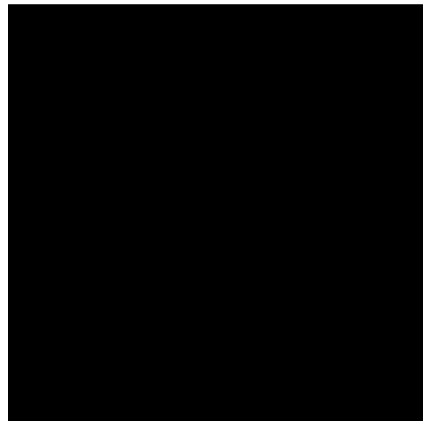
The elements of service system

Provider



- Individual
- Organization
- Any of previous combined with the technology and/or piece of environment
- Technology that provider is responsible for

Client



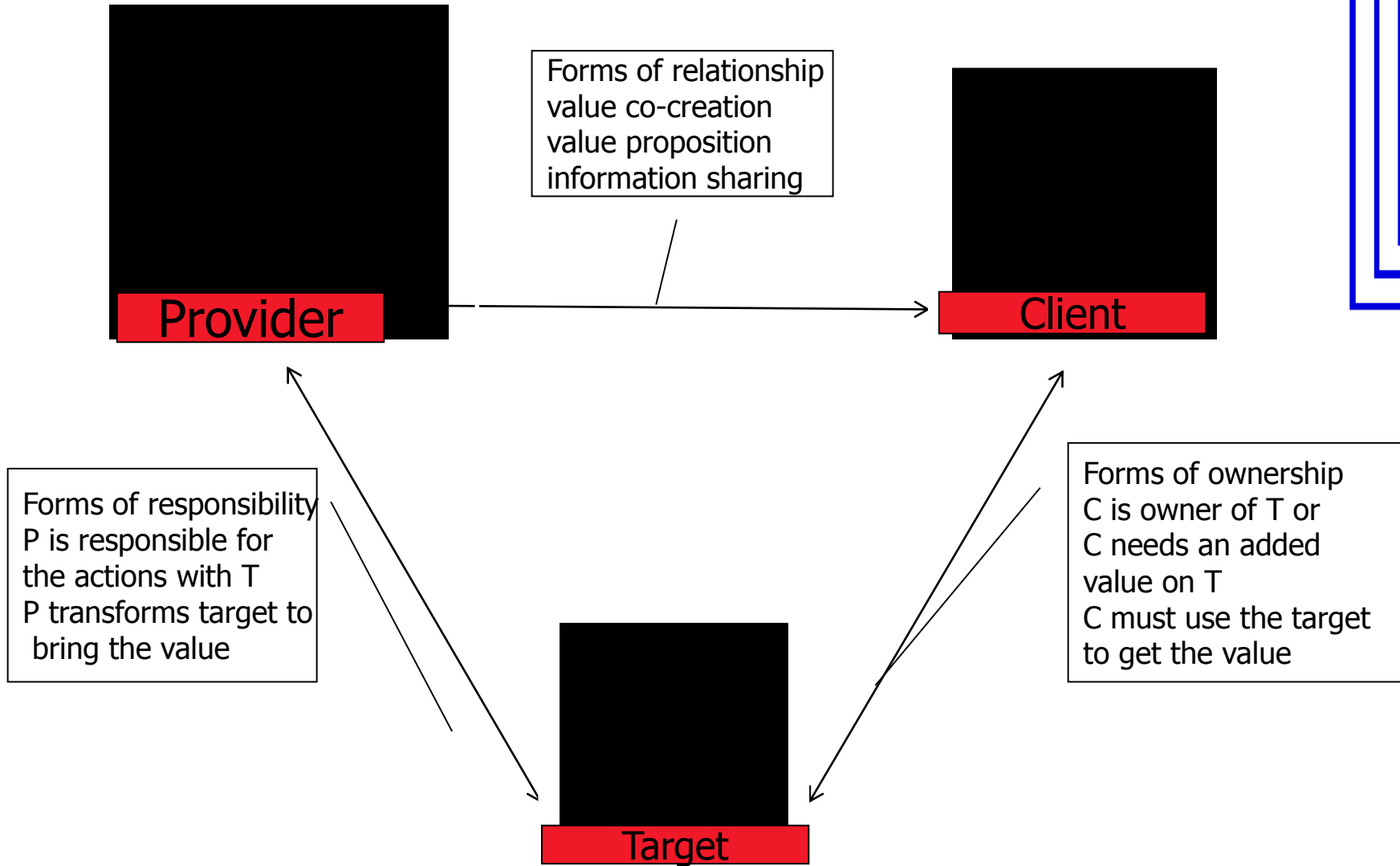
- Individual
- Organization
- Any of previous combined with the technology and/or piece of environment
- Portion of reality owned by Client

Target

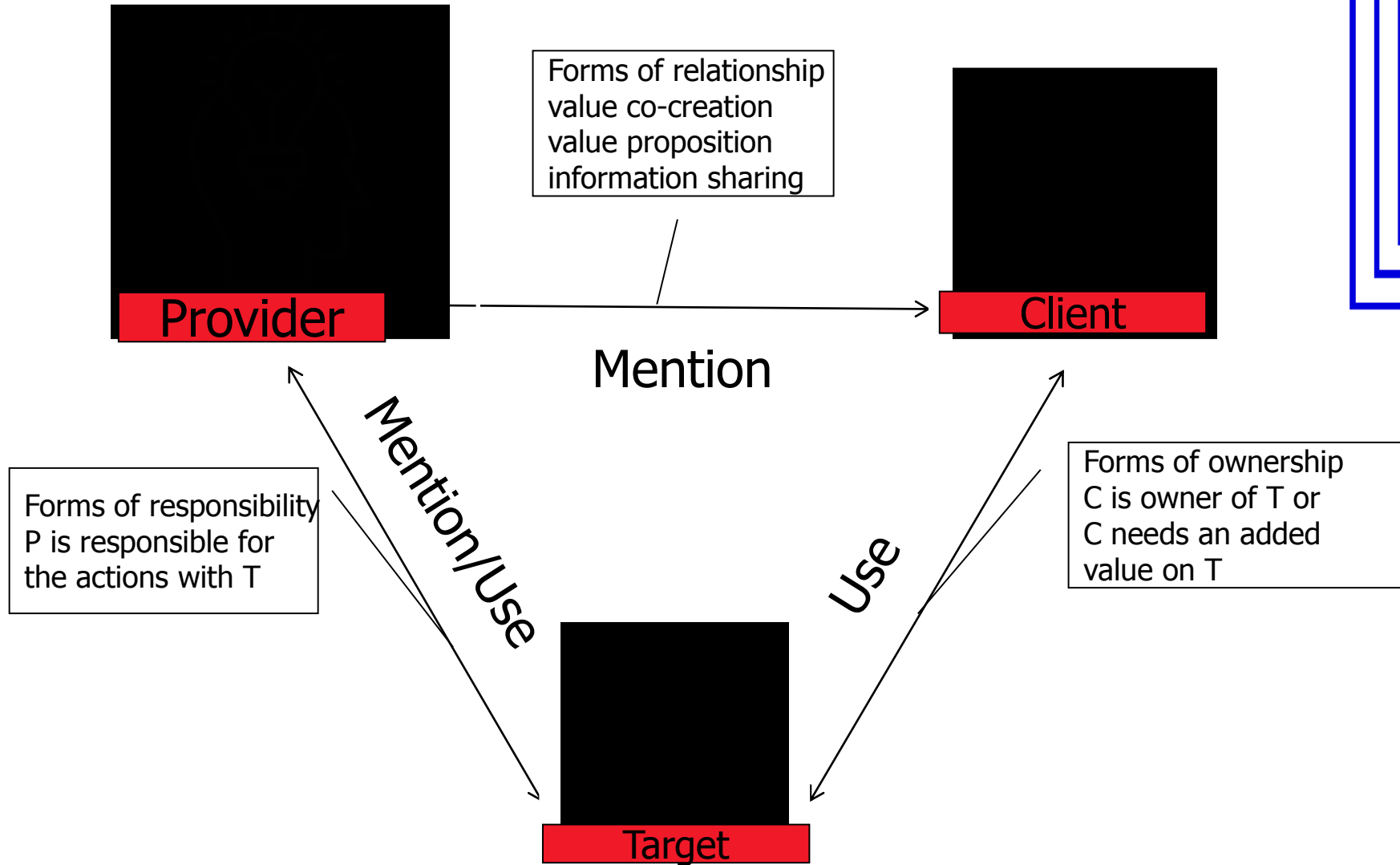


- The reality to be transformed or operated on by Provider for sake of Client
- People, dimensions of business
- Dimensions of products, technology artefacts & environment
- Information, codified knowledge

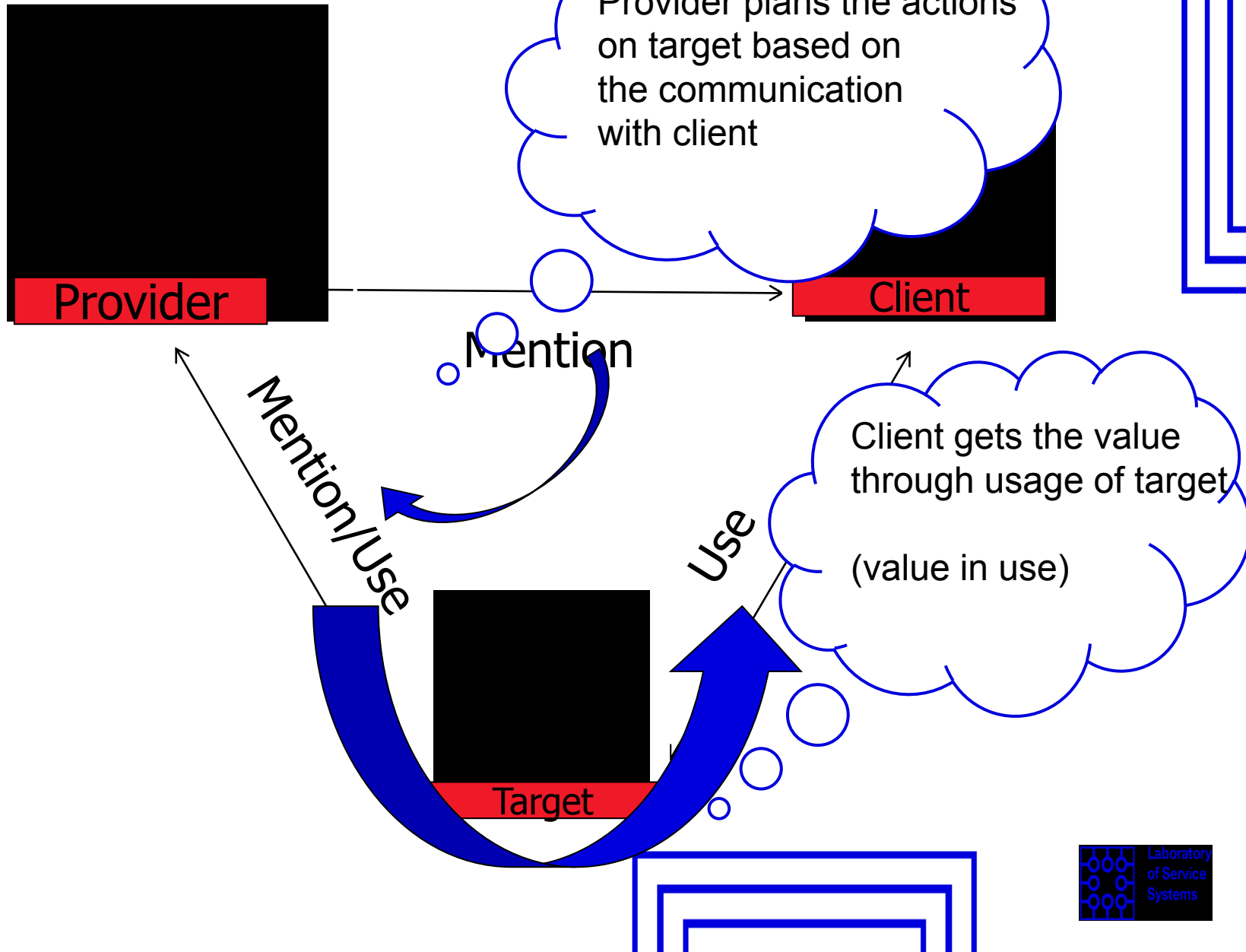
Value proposition



Mention - Use



Mention - Use



Value

Value proposition is hidden

- is hidden by the hill

Hierarchy of barriers hiding the target

- have to be overcome step by step
- leads to process of value estimation

Value can not be proposed

- **It can be only estimated**
- is used to find value proposition
- there is not a target, only target area
- target area is the space of all sub-targets, corresponding with particular value estimation

Value estimation

modified by the value co-creation process

motivated by the decreasing of the level of information asymmetry of both parties

the process is about particularize of value estimations

till the moment of founding the value proposition

Value proposition

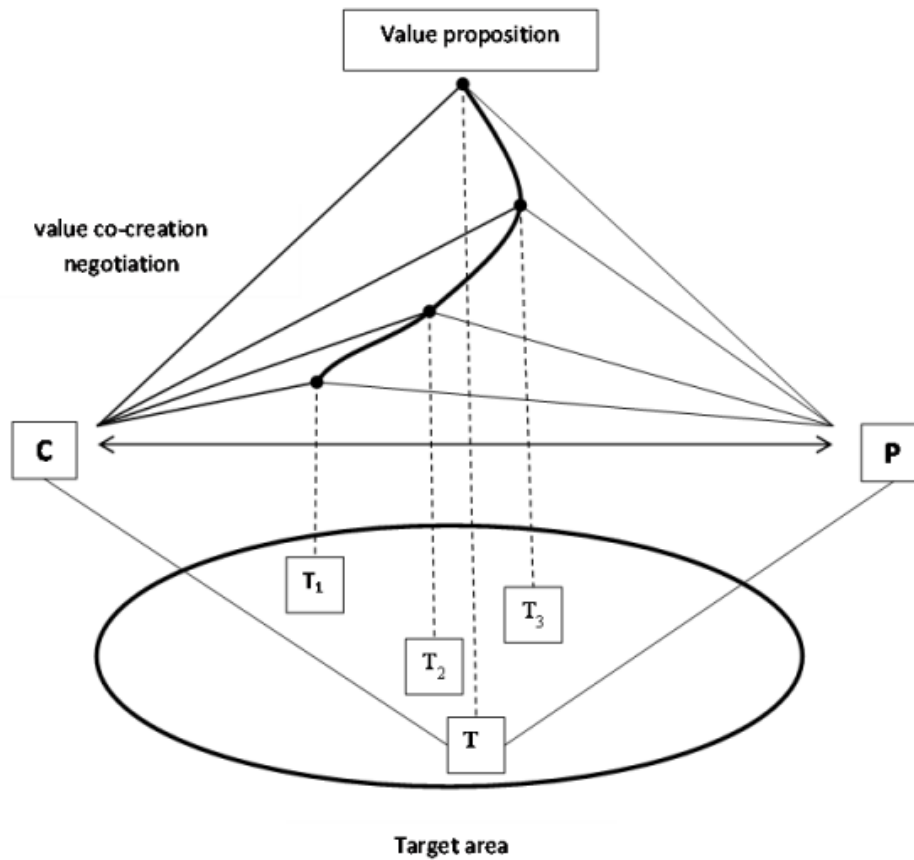
can be found in the moment client and provider can see the target

- share the same point of view
- both can see the utility level
- and share as well

both partners agree with concrete mutual criteria of success

- variables to test
 - no of customers
 - profitability
- target values
 - number of customers rise of 30%
 - profitability rises more than 10%

Value proposition



Costs of value estimation

must be shared and paid

- problem is complex
- must be understood and explored

provider must be paid for using his sources to do it

Client is paying for the analysis of the target area

System complexity

Provider, Client or Target may contain one or more service systems

- Those service systems need to cooperate in some way
- The cooperation between those service systems is also service system

If they are not a simple person or technology

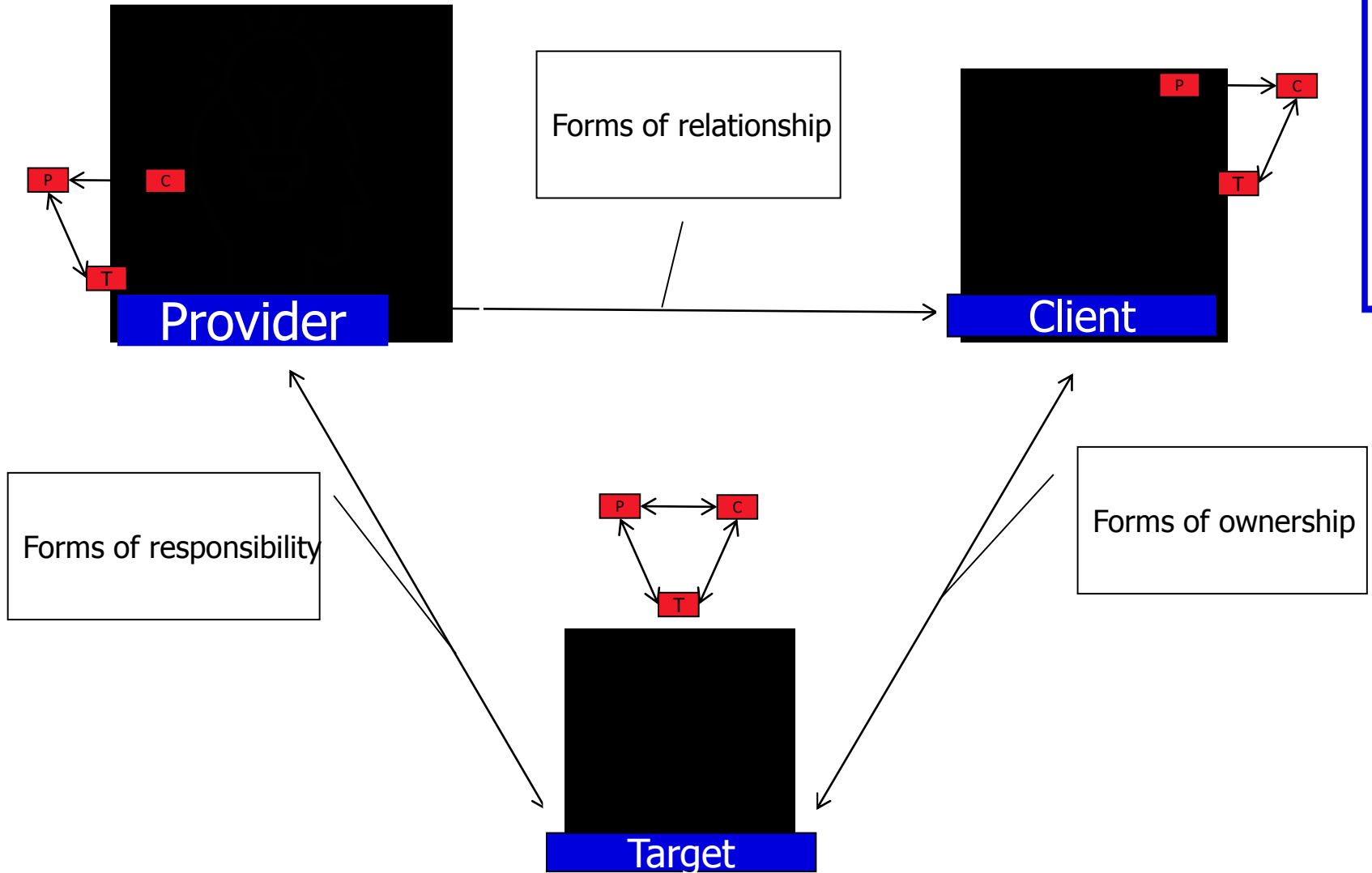
They can be organization, more complex entity etc.

- Technology with the community of developers

It must be organized in synergy

- Some services must be finish first, some in the specific order etc.

Service system



The time dimension

Selling a service means a lot of preliminary work

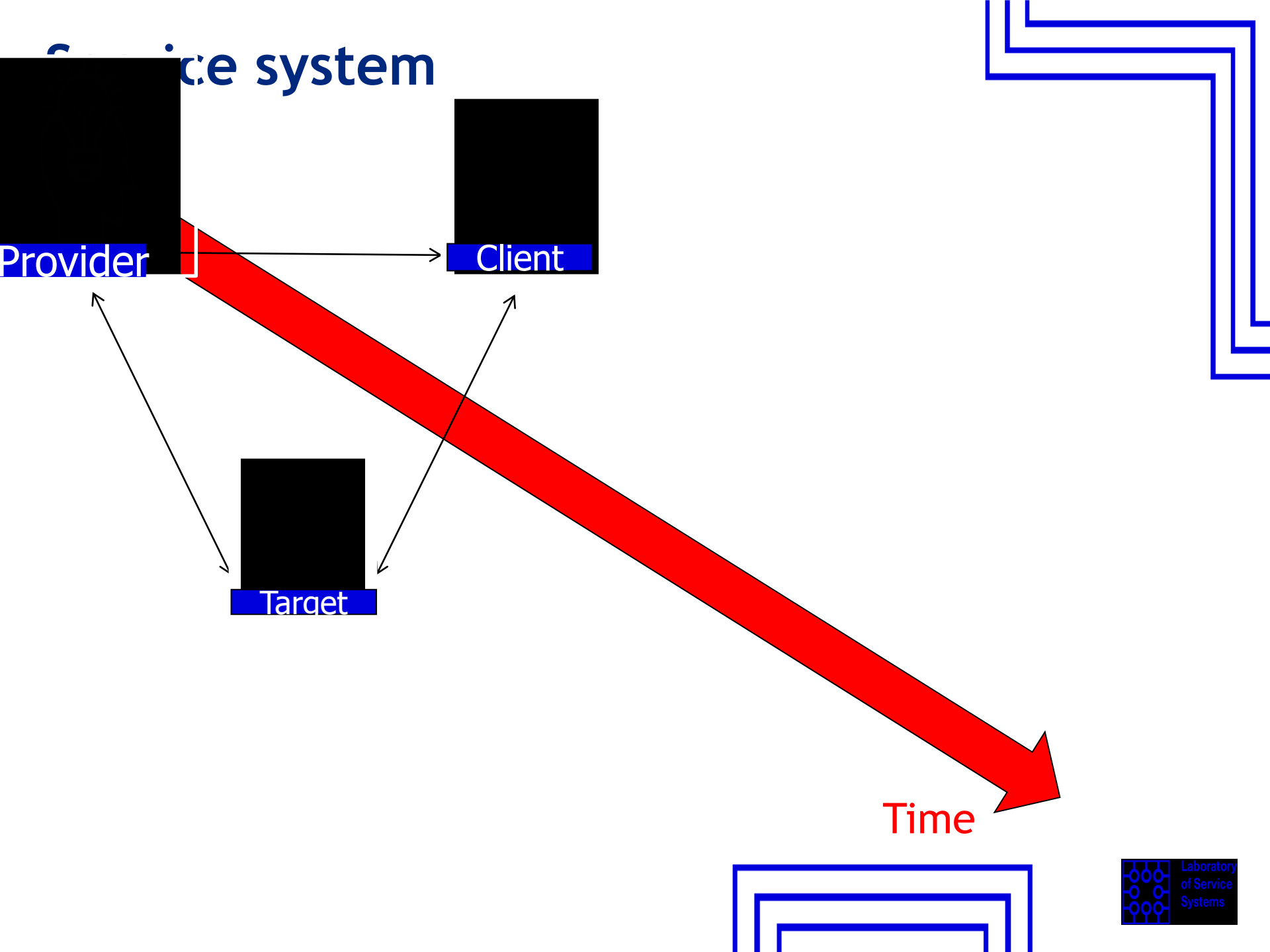
Sold product means success

Selling a service is the beginning

- Start of the service execution
- Preliminary work is about
 - Value proposition
 - Service modelling

Providing services means continual development

To stabilize the service system is necessary to continue with the cooperation



Service system

Provider

Client

Target

Time

Role of time

The roles of all elements are not changing during whole life cycle of the service system

Time period of existence of a service system is not a trivial one compared to actions performed within a service provision systems

The dividing of the time and planning of the life cycle are important for the relationship client - provider

Example

Two companies

- Software developer EasySoft
- Telecommunication company Telecoco

Problem

- Telecoco want to have outsourced information system, developed by EasySoft

The service system is easily created

Is there any possibility (or need) to create other service system?

And if yes, are they related?

Service system

Provider –
EasySoft

Client –
Telecoco

Target –
Information
system

Benefits are focused to the client

Easysoft uses its competencies to act for the sake of Telecoco

There is one more special relationship

- The payment is also service system

Service system

Provider
Telecoco

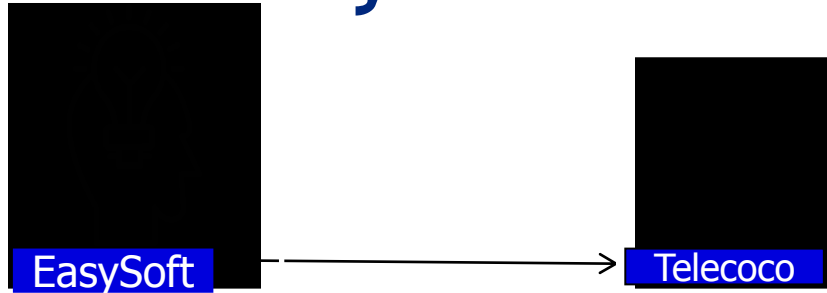
Client
EasySoft

Target
The bank
account of
EasySoft

The provider (Telecoco) acts on Target (send the payment) for the sake of EasySoft

This service system can not exist without the first service system

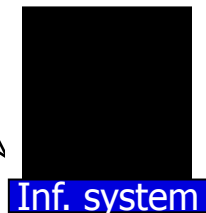
Service system



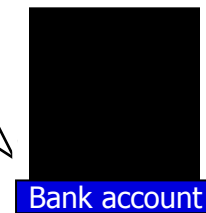
Secondary service system



Prime service system



Action based on value in prime SeS



Prime service system

Primary created service system

The roles are distributed and do not change

Creation of this service system causes the creation of next service systems

We need to analyze

- The relationships between them
- The possibility of influence
- The causes of synergy

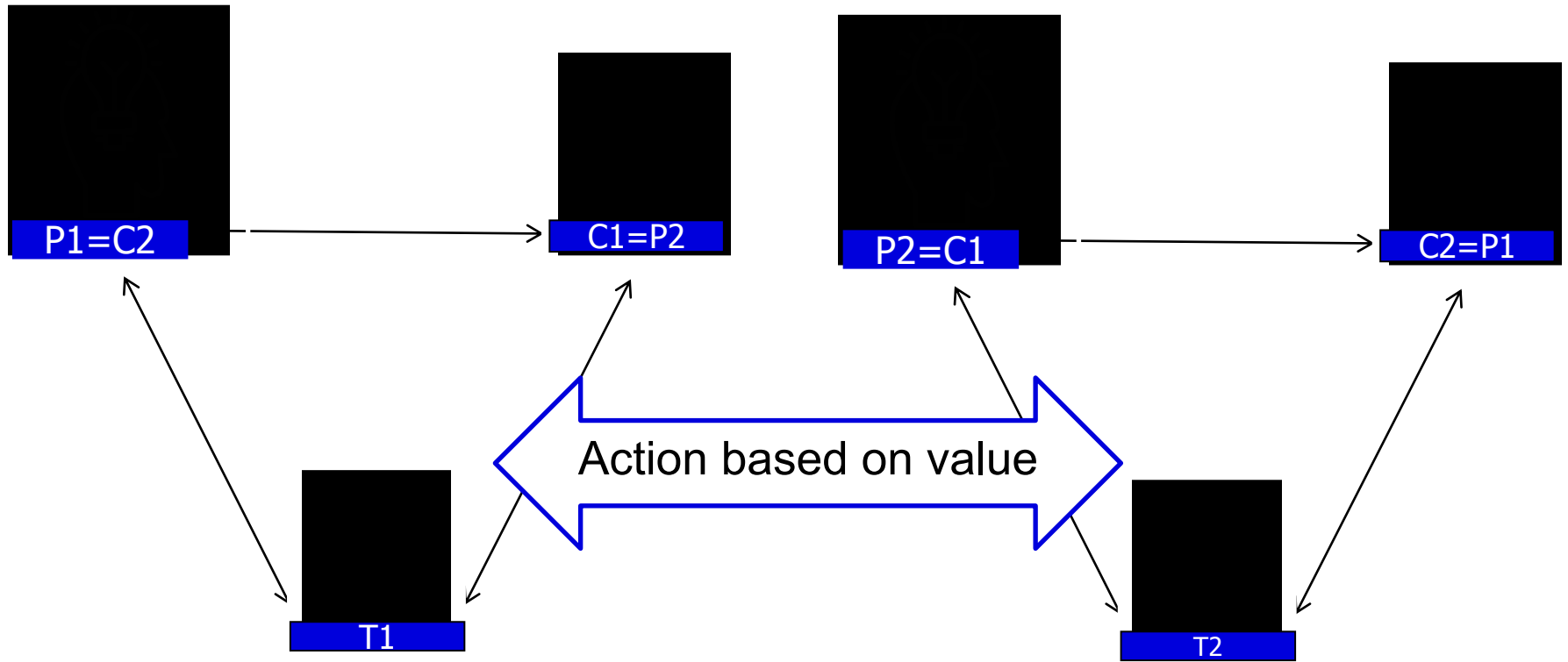
Cooperation of service systems

Lets have some service system (S1) with provider, client and target defined

We say the system S1 cooperates with system S2 if

- Agent who plays the role of client in S1, plays role of provider in S2
- Agent who plays the role of provider in S1, plays role of client in S2
- Benefits for the client in S2 depends on benefits for the client in S1 (or vice-versa)
- The target is not same

Service system



Example of cooperation – internships on FI

Client

- A business partner
- Wants to have properly educated students

Provider

- Faculty of informatics
- Has abilities to educate the students

Target – study programs with internships

- Provides the students

Cooperating service system

Internships projects

- For the successful study program faculty needs
 - Practice – an internships with quality emphasis
 - Mandatory for every student enrolled in the program

Client

- Faculty of informatics
- Demand the internships positions for the students

Provider

- The company
- Offers the positions for the students

Cooperating service system

The target

- The study programs
- Students are „only“ the products of the study program

Faculty wants to improve the study program

- Through the internships
- Using the feedback from the partners

In this case the target is the same in both cooperating service systems

Dual service system

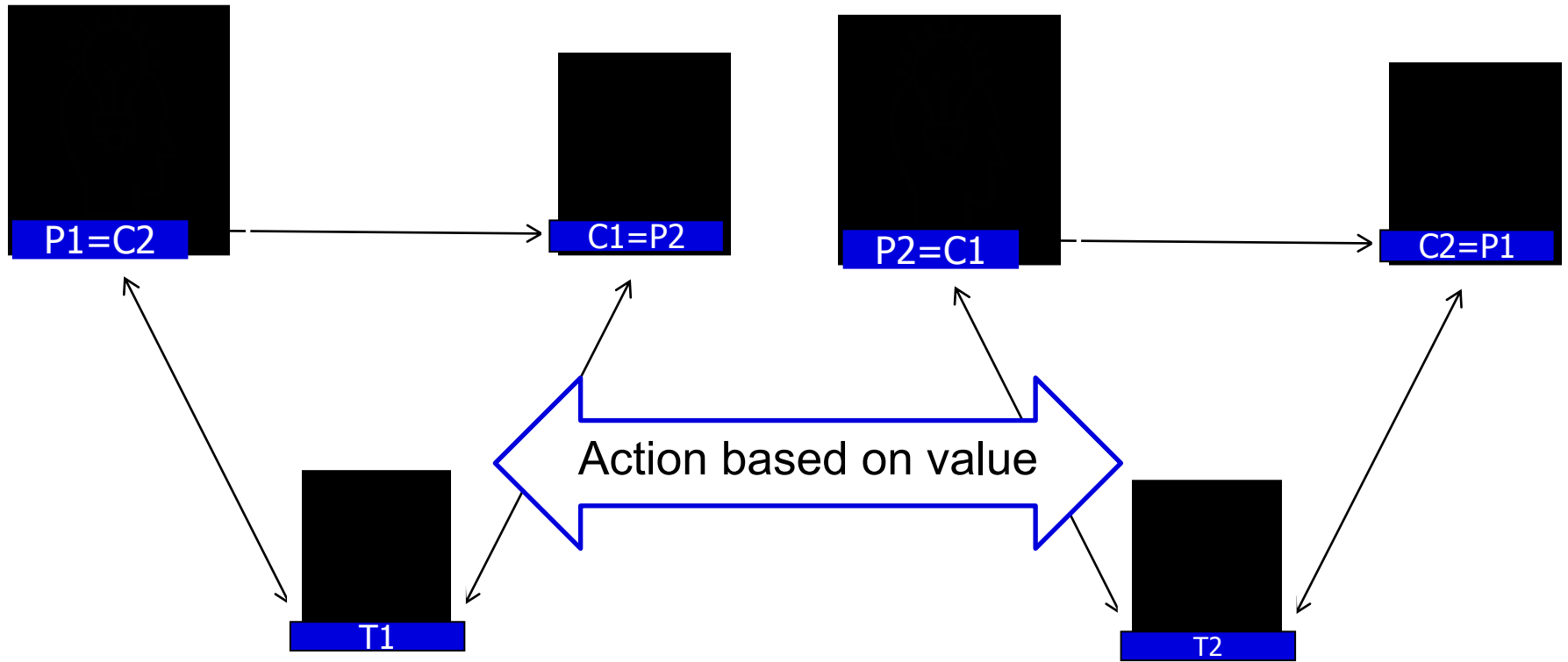
Let's have the prime service system S1

Let's have a second service system S2, where

- Agent who plays the role of client in S1, plays role of provider in S2
- Agent who plays the role of provider in S1, plays role of client in S2
- Benefits for the client in S2 depends on benefits for the client in S1 (or vice versa)

Target is the same in S1 and S2 with the bidirectional value proposition

Dual service system



Service system environment

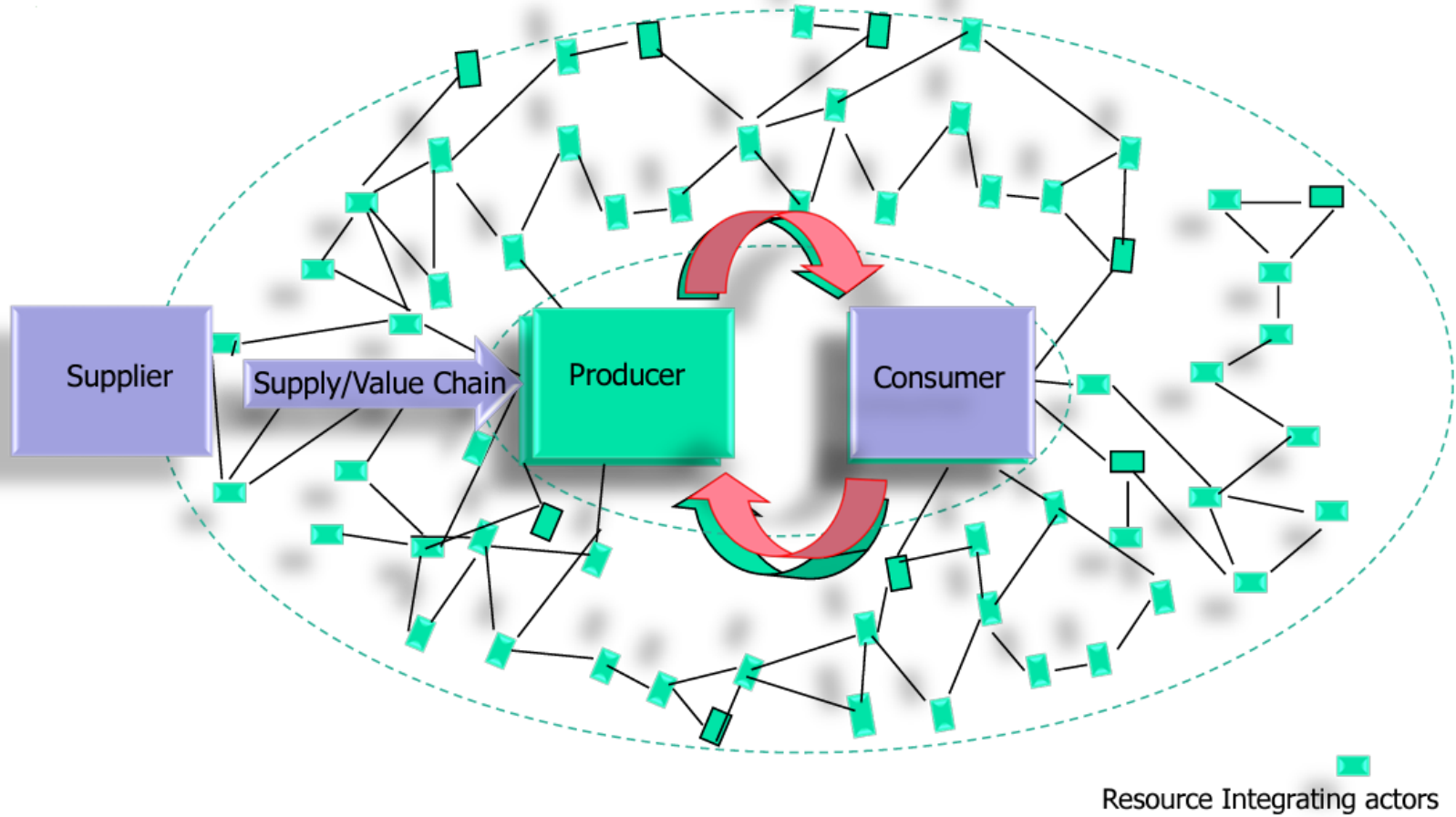
Are there any other possibilities of the cooperation?

What to do if

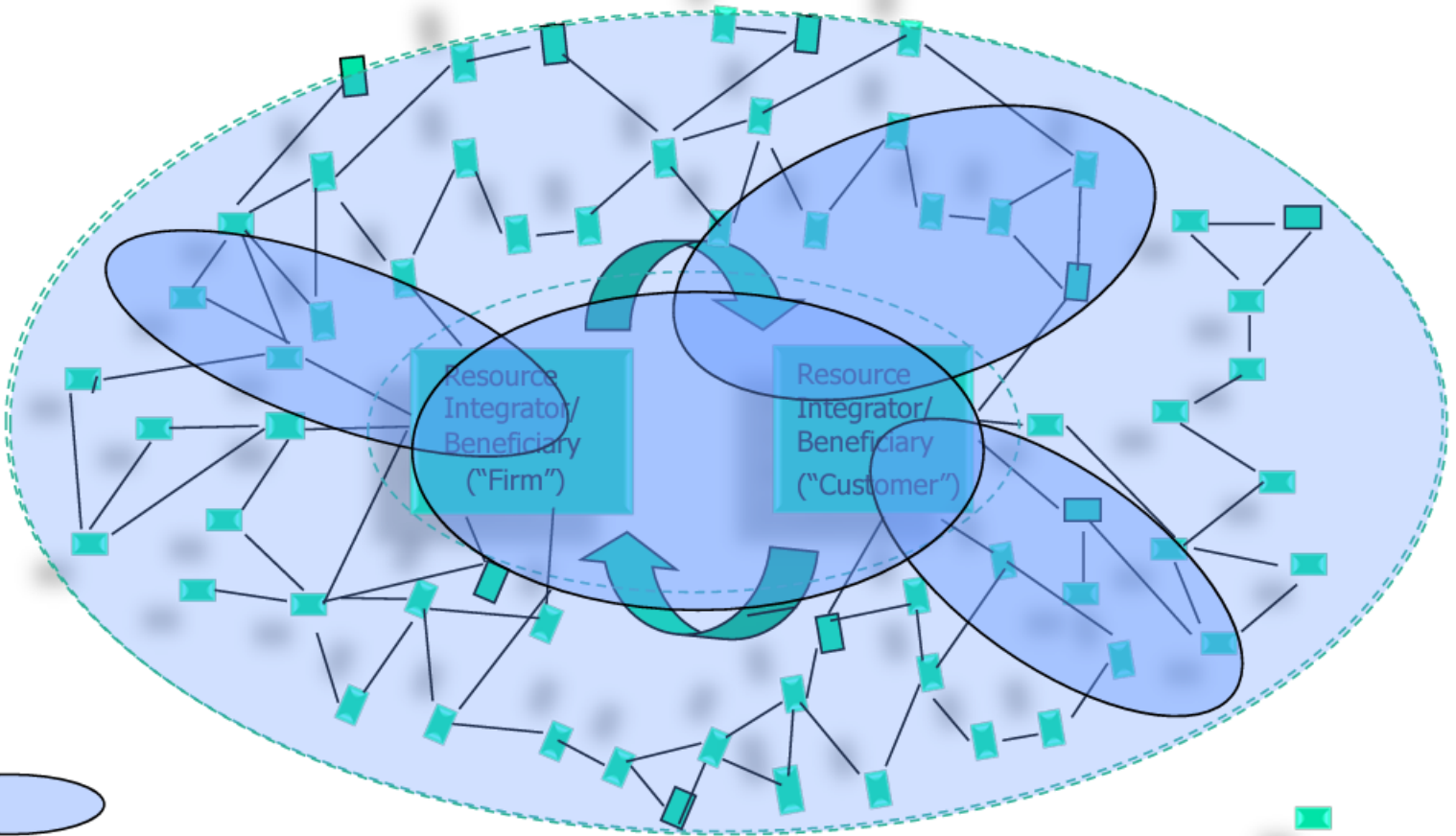
- Client or Provider in one service system plays the role of of the Client, Provider or Target in other service systems?
- If the value proposition or the benefits depends on other related service system?
- Company is able to pay only if its customers will pay

Value proposition can be set properly only if we know all related inputs


Micro exchange



Exchange within service ecosystems

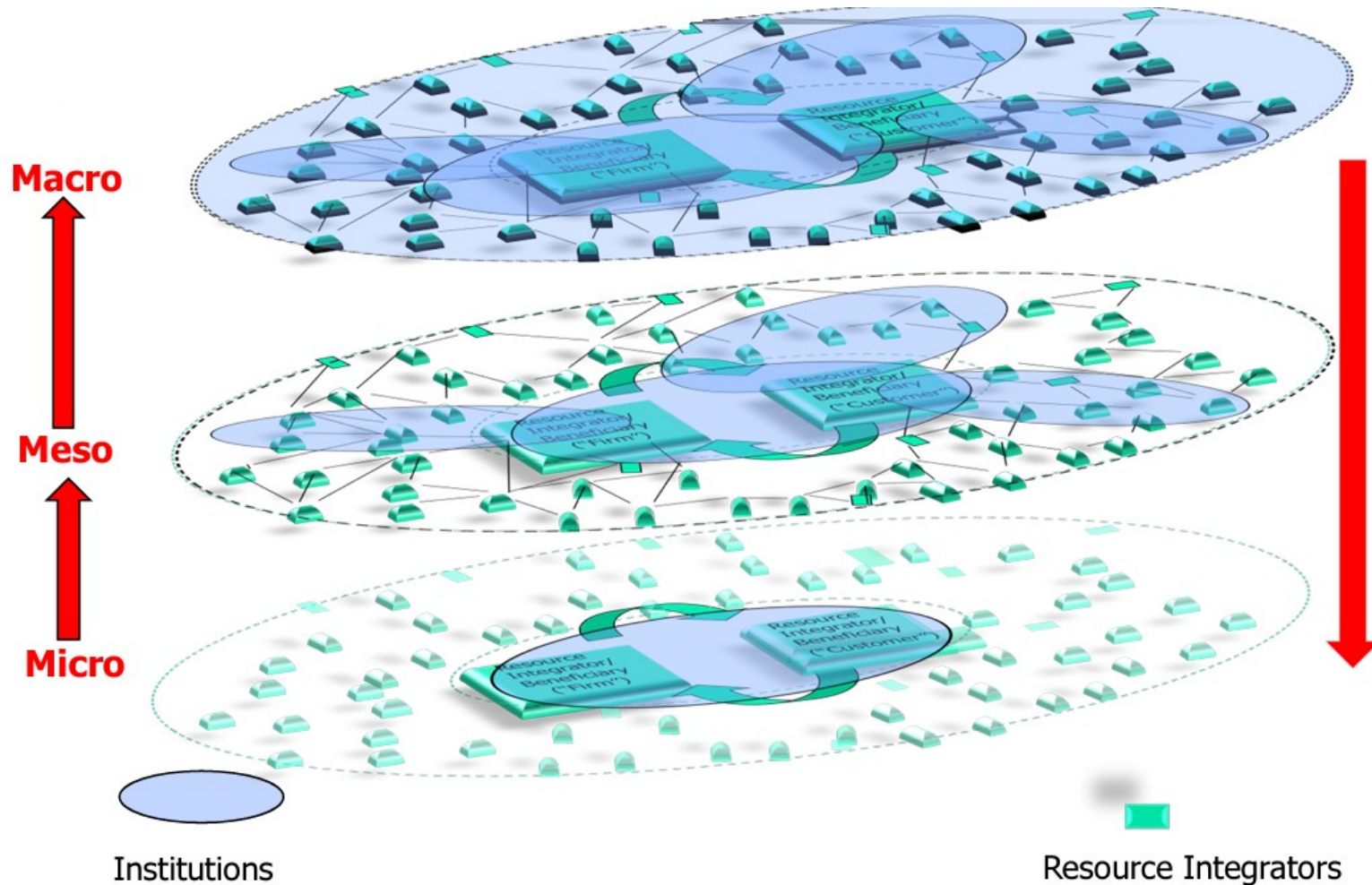


 Institutions & Institutional arrangements/logics

 Resource Integrators

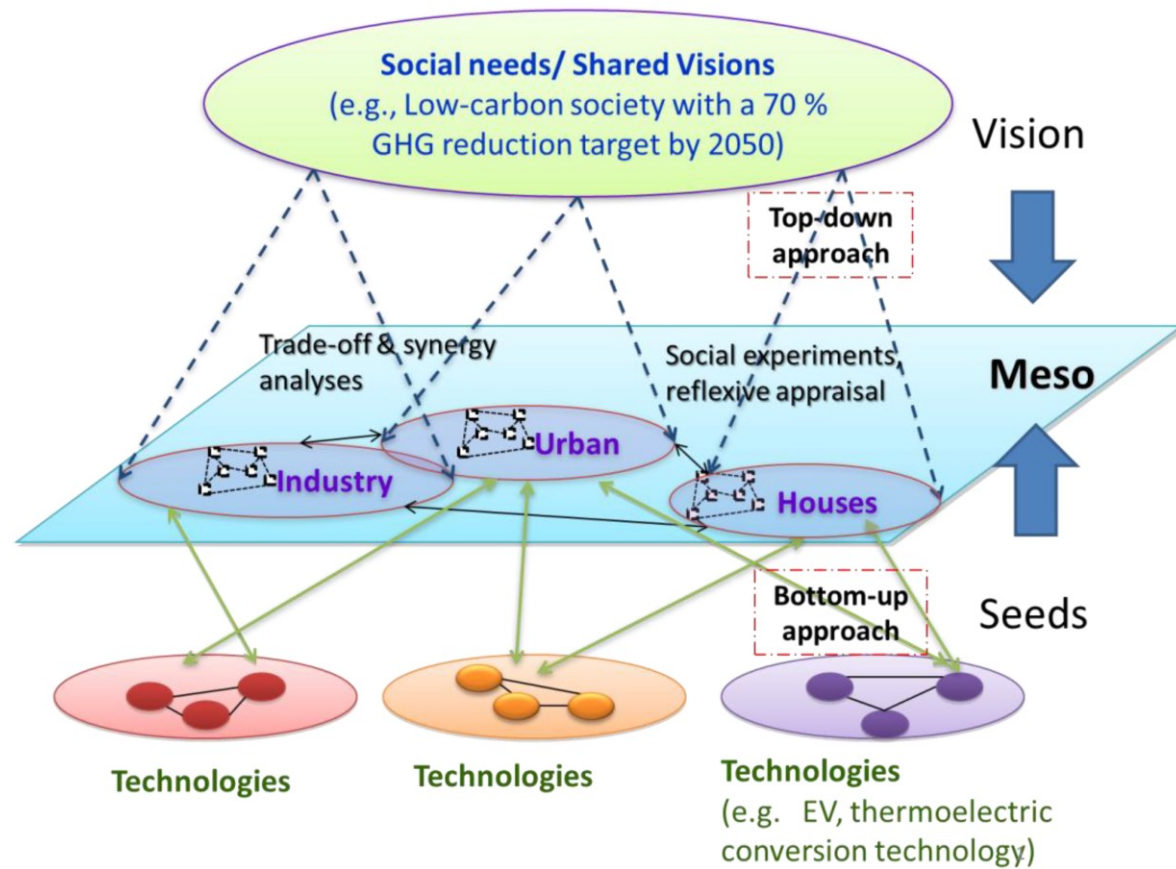
S. Vargo: Service-Dominant Logic: Foundations and futures, 2018, presentation on Research seminar at Karlstad University

Structuration of service ecosystems



S. Vargo: Service-Dominant Logic: Foundations and futures, 2018, presentation on Research seminar at Karlstad University

Service system environment



Hara, K.; Uwasu, M.; Kobayashi, H.; Kurimoto, S.; Yamanaka, S.; Shimoda, Y.; Umeda, Y. Enhancing Meso Level Research in Sustainability Science—Challenges and Research Needs. *Sustainability* **2012**, *4*, 1833-1847. <https://doi.org/10.3390/su4081833>

Service system environment

During negotiations must be explored not only the target, but also all important relation

Cooperating service system

Dual service system

Service environment