



INVESTMENTS IN EDUCATION DEVELOPMENT

Organizing Programs, Business Units and other Service Systems

Diamond of Organization

Credit function

The concept of Flow

Project Explorer

Introductory comment

- Do not expect systematic theory or explanation within this lesson !
- It is dramatically developed domain, recently.
- Several thoughts and possible building blocks are introduced to support your own creativity

One of the long-term goals:

(SSME on FI MU)

- The vision for the future is to establish a center for the field of Service Systems technology components.
- This means
 - to nurture workers, through the collaboration between and within the spheres of business and academics, who are capable of developing new technology, and
 - training operatives to be able to apply this technology.

Leadership “from the front”

- A commandment of successful innovative research project/program:
- Leadership and decision-making is conducted by individuals possessing relevant expertise and relevant context of the Program and understanding deeply this context.

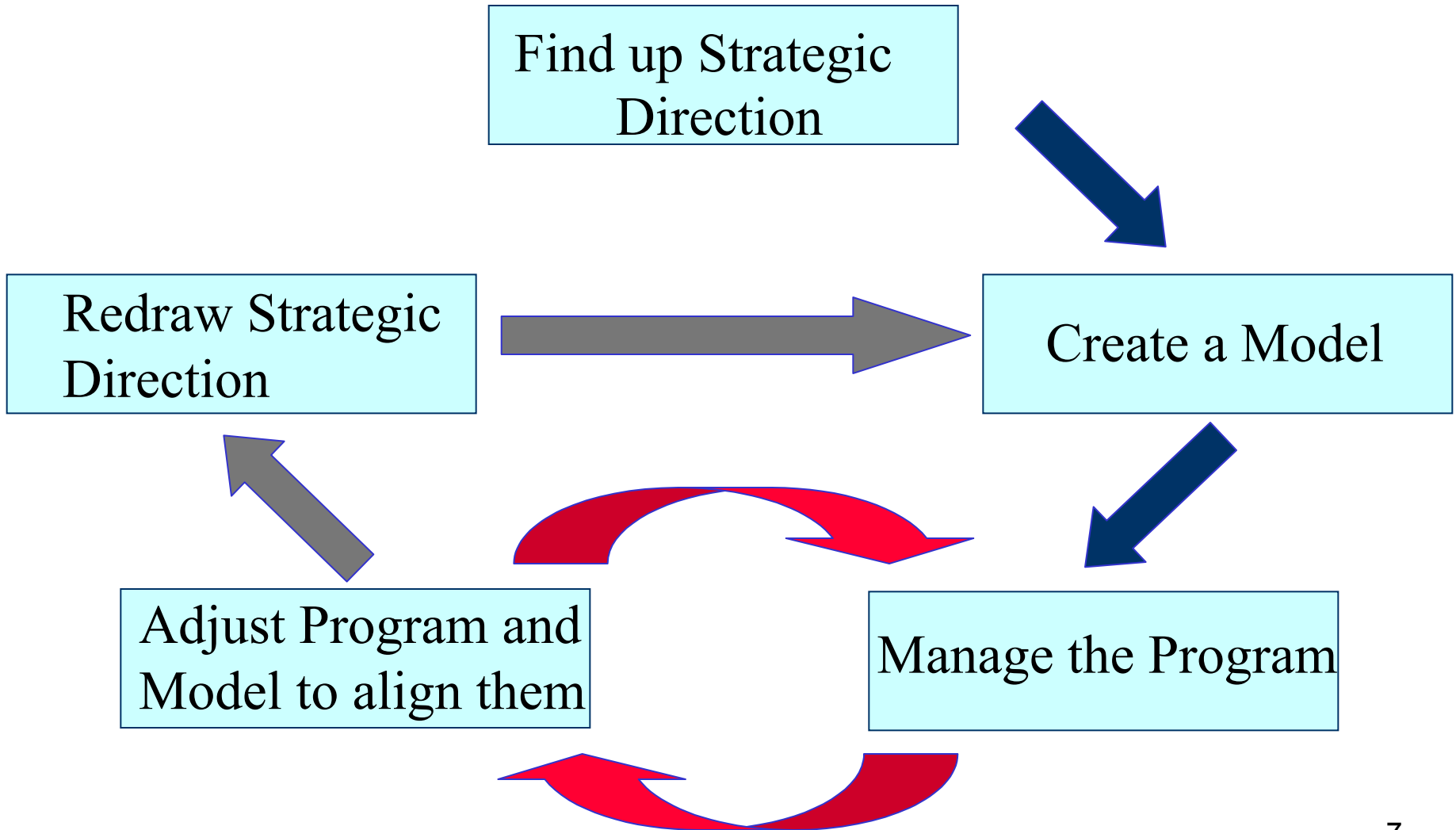
Success in a Program

- Make things bringing added value to deliverables of a program (*-processes)
- Think of the *-processes and make things which help to improve the *-processes
- Assure you have a strategy, everybody knows the strategy, everybody shares the strategy
- Create strategy in a form of “strategic continuum”

Strategic continuum

	Operation interval	1. Developing interval	2. Developing interval	3. Developing interval
LEADERS (definition of strategy)	defined	defined	Definition of strategy	Resources preparation
MANAGERS (design of processes)	designed	Design of processes	Resources preparation	-
WORKERS (performance)	Performance realized	Resources preparation	-	-

Cyclical paradigm



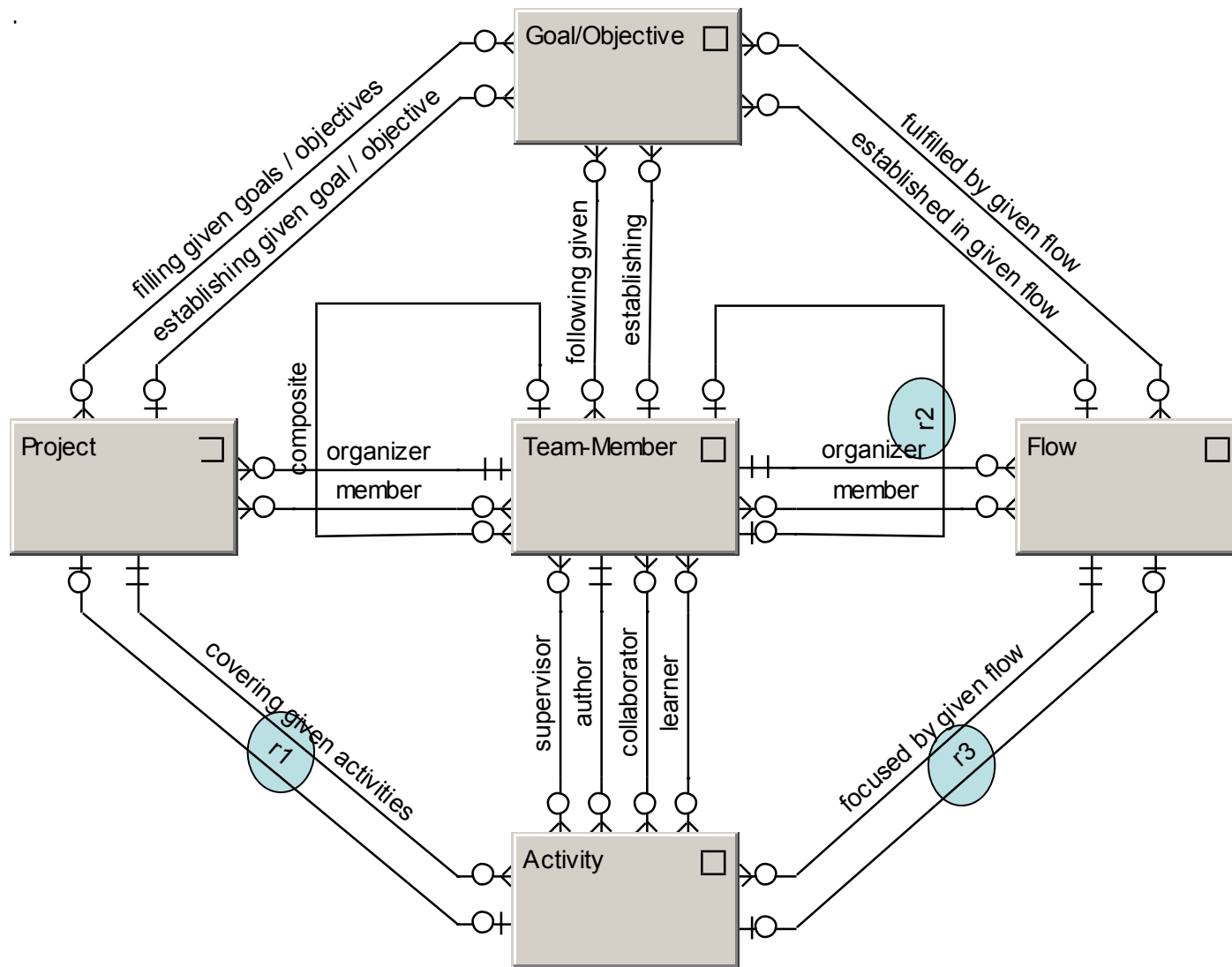
Research project

- Floating project Scope
- Only vision is fixed
- SBS is very dynamic
- Work load is dynamic and unpredictable in details
- Project milestones are time fixed, only
- The funding is usually not clear ...

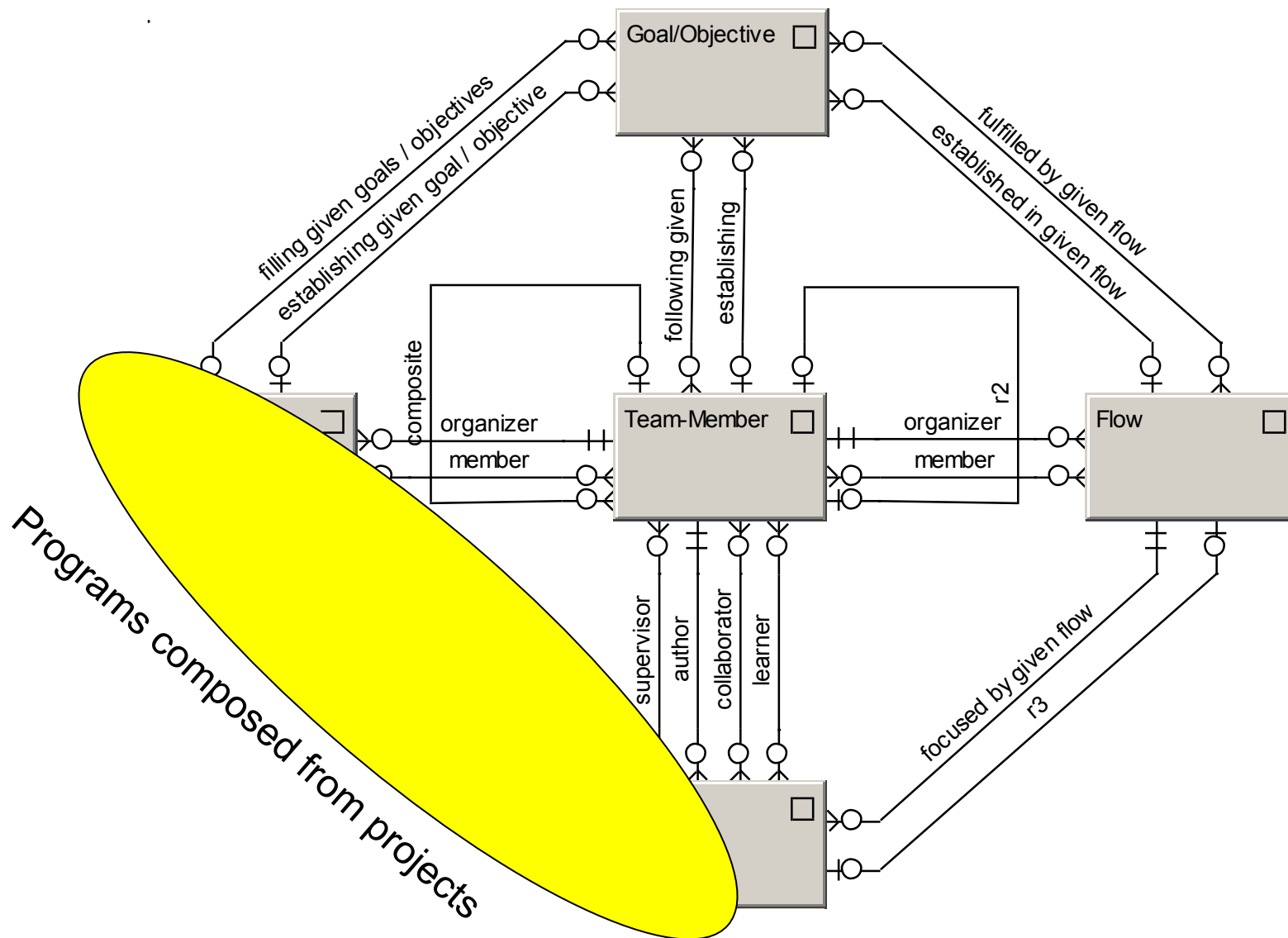
One possible solution

- Double-level management: research project is managed as a program
- Rules and understandable measures
- Motivation: Attention function (“credit function”) – measure of team-member attention relative to the whole project attention

Diamond of research project organization

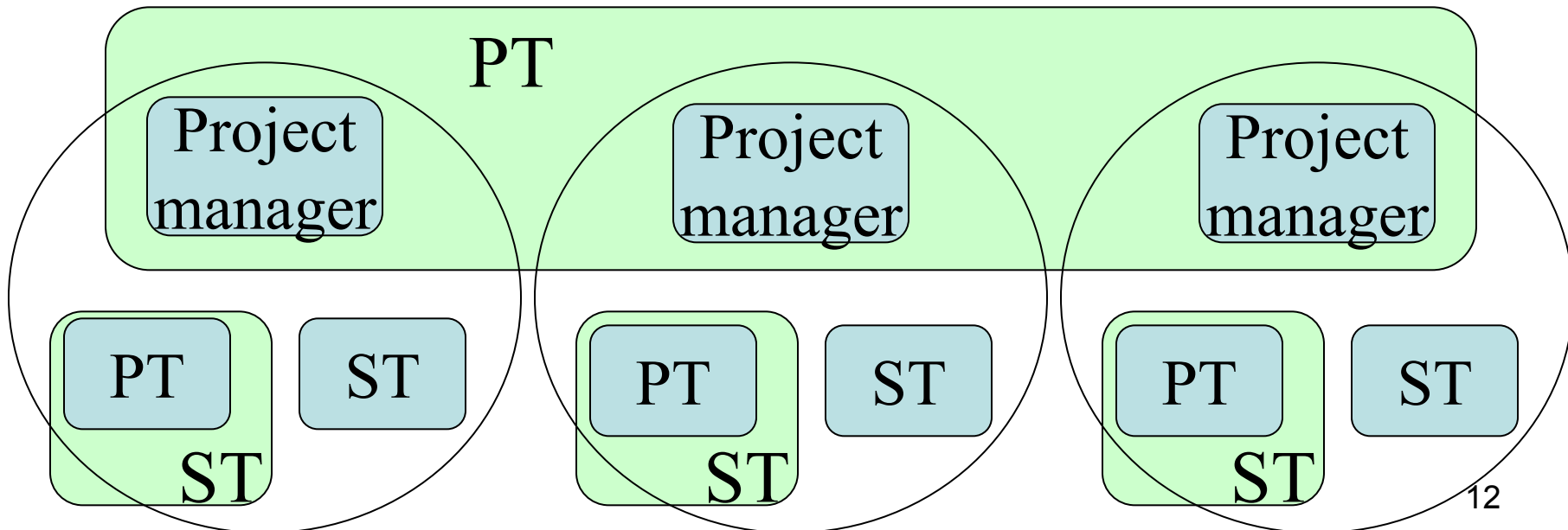
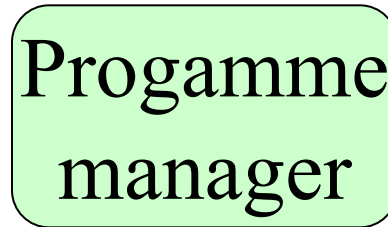
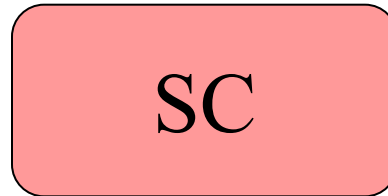


Diamond of research project organization

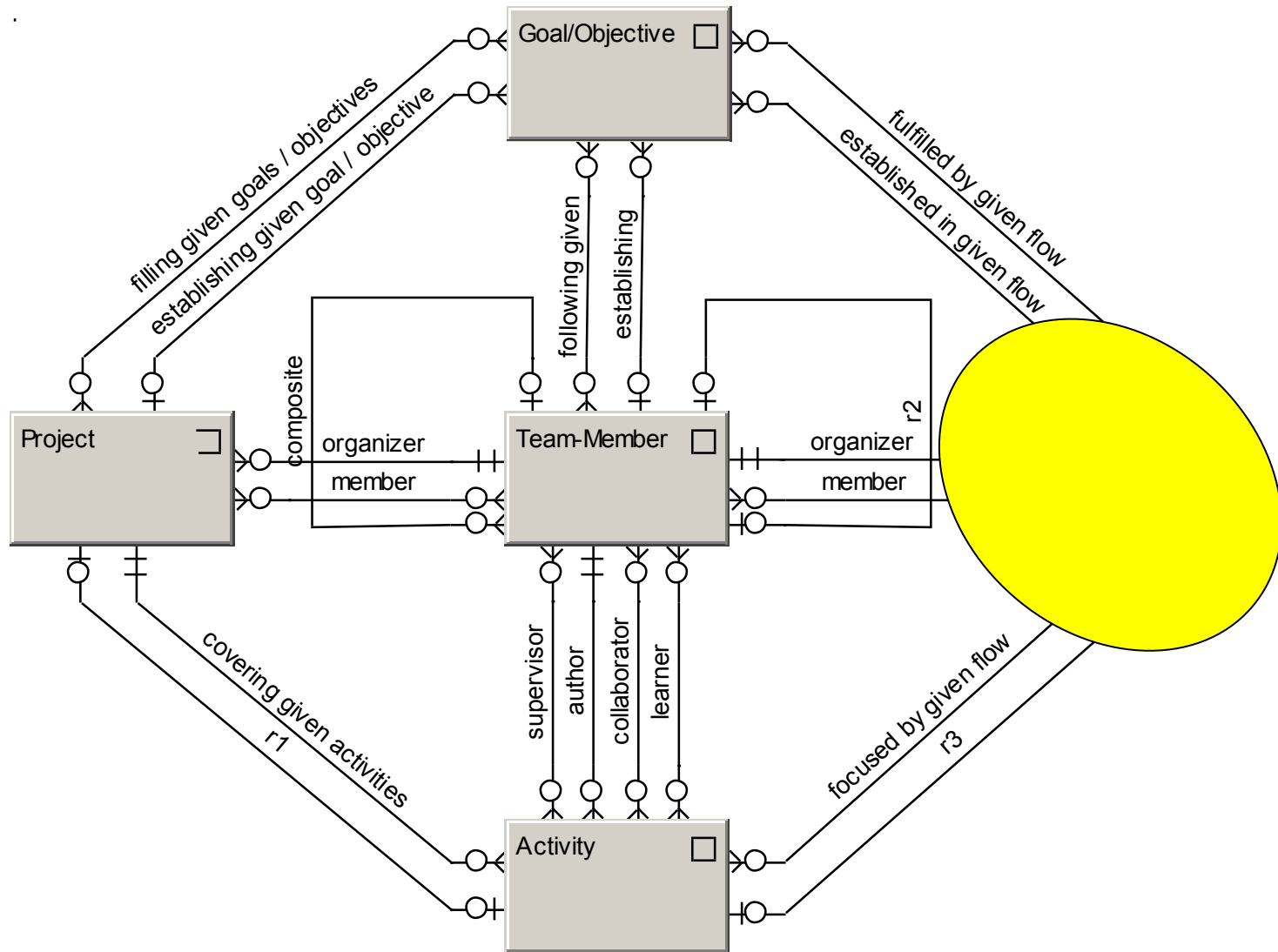


Management in Large Extension – The Programme Management

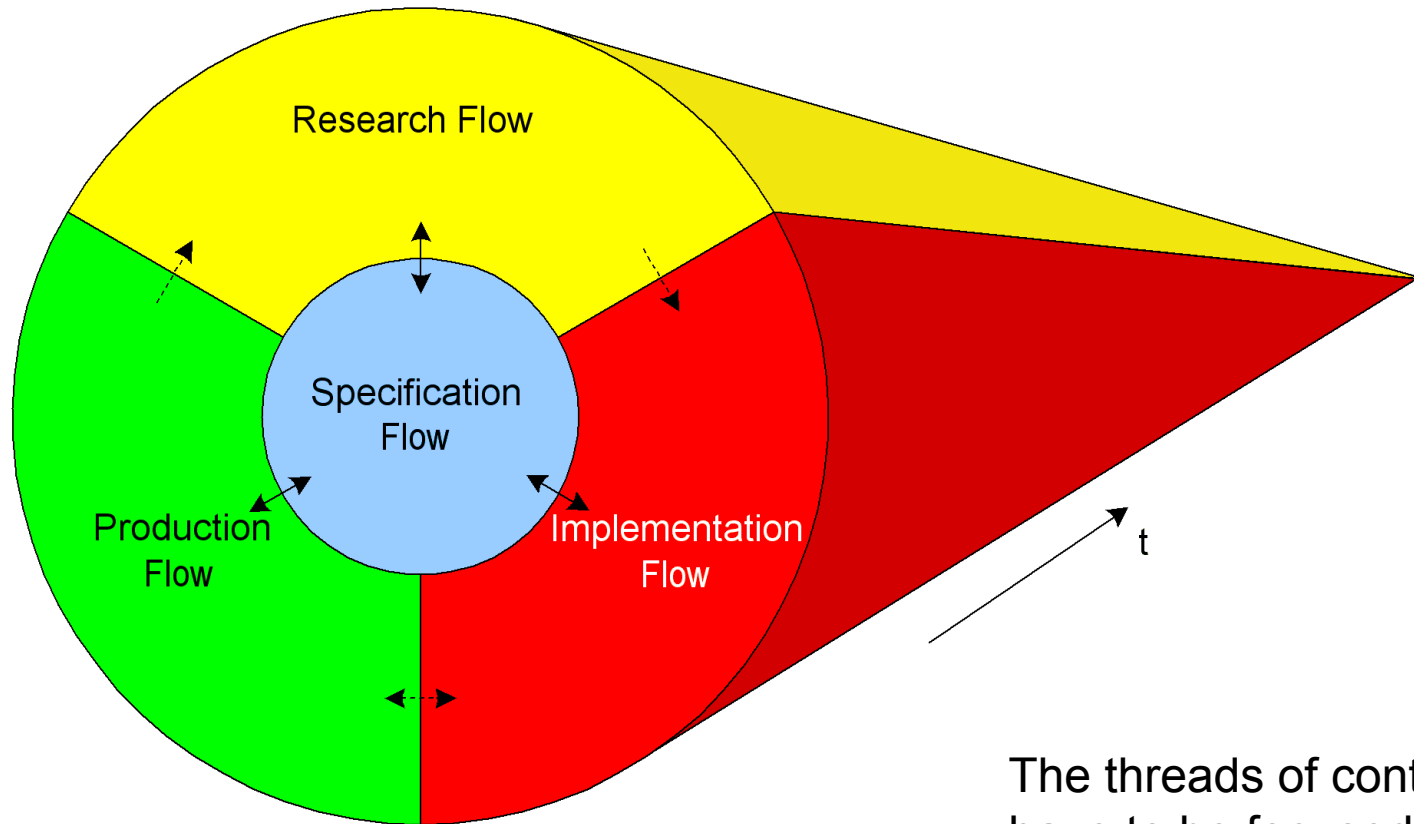
SC = steering committee
PT = project team
ST = support team



Long time attention focusing



Four-flows paradigm



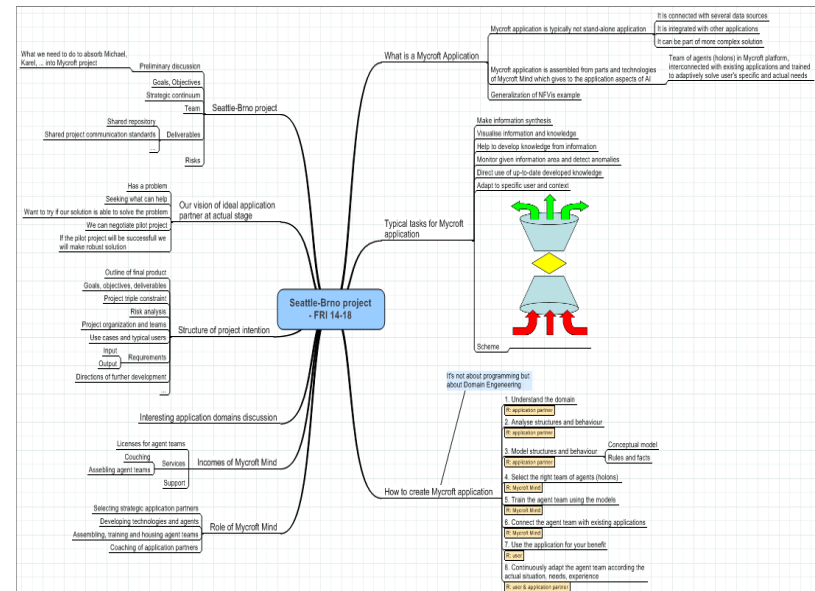
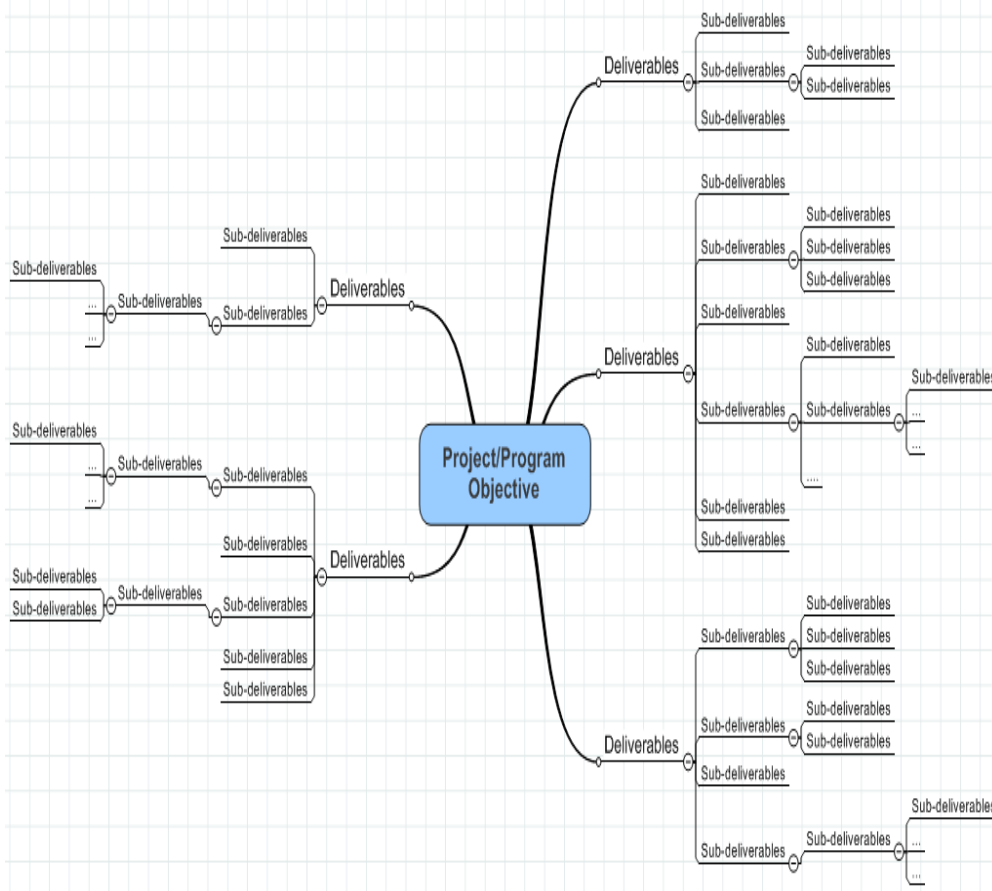
The threads of continual attention have to be focused to “make it better” in the value added projects.

Structure of attention

-- planned and paid

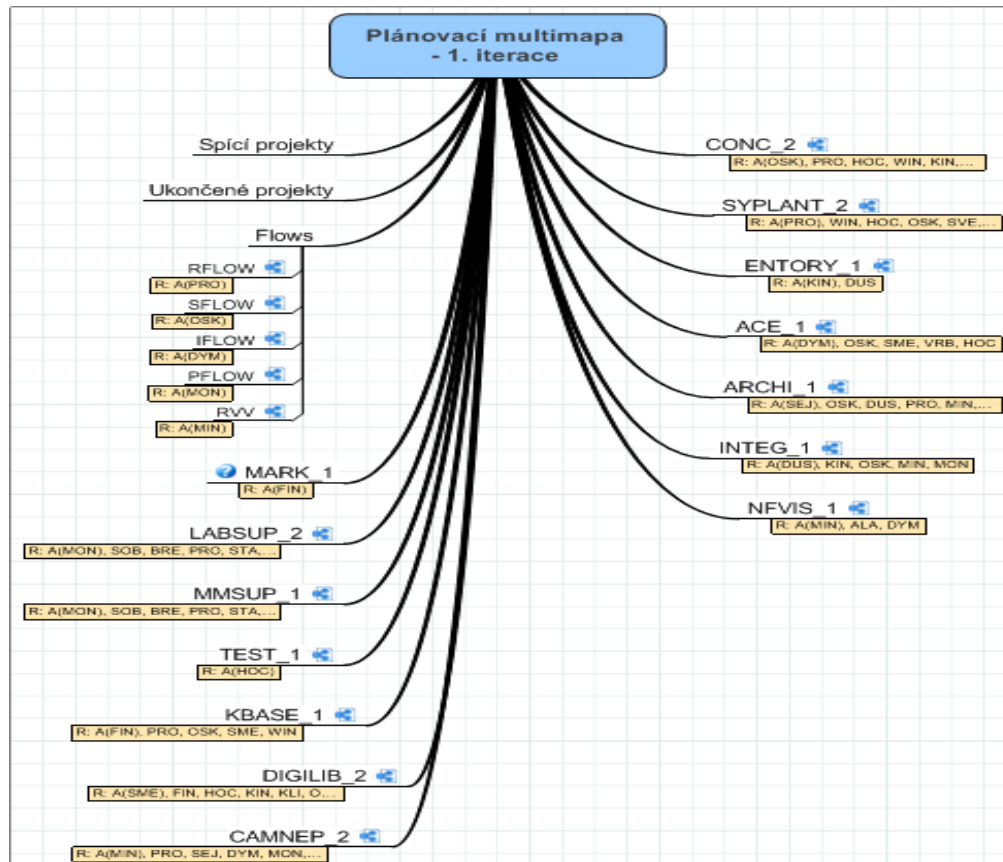
- How much attention was/will_be paid to
 - Research activities
 - Specification activities
 - Implementation activities
 - Production activities
- Lesson learnt from history
- Base for motivation system

SBS – the most important Project/Program visualization

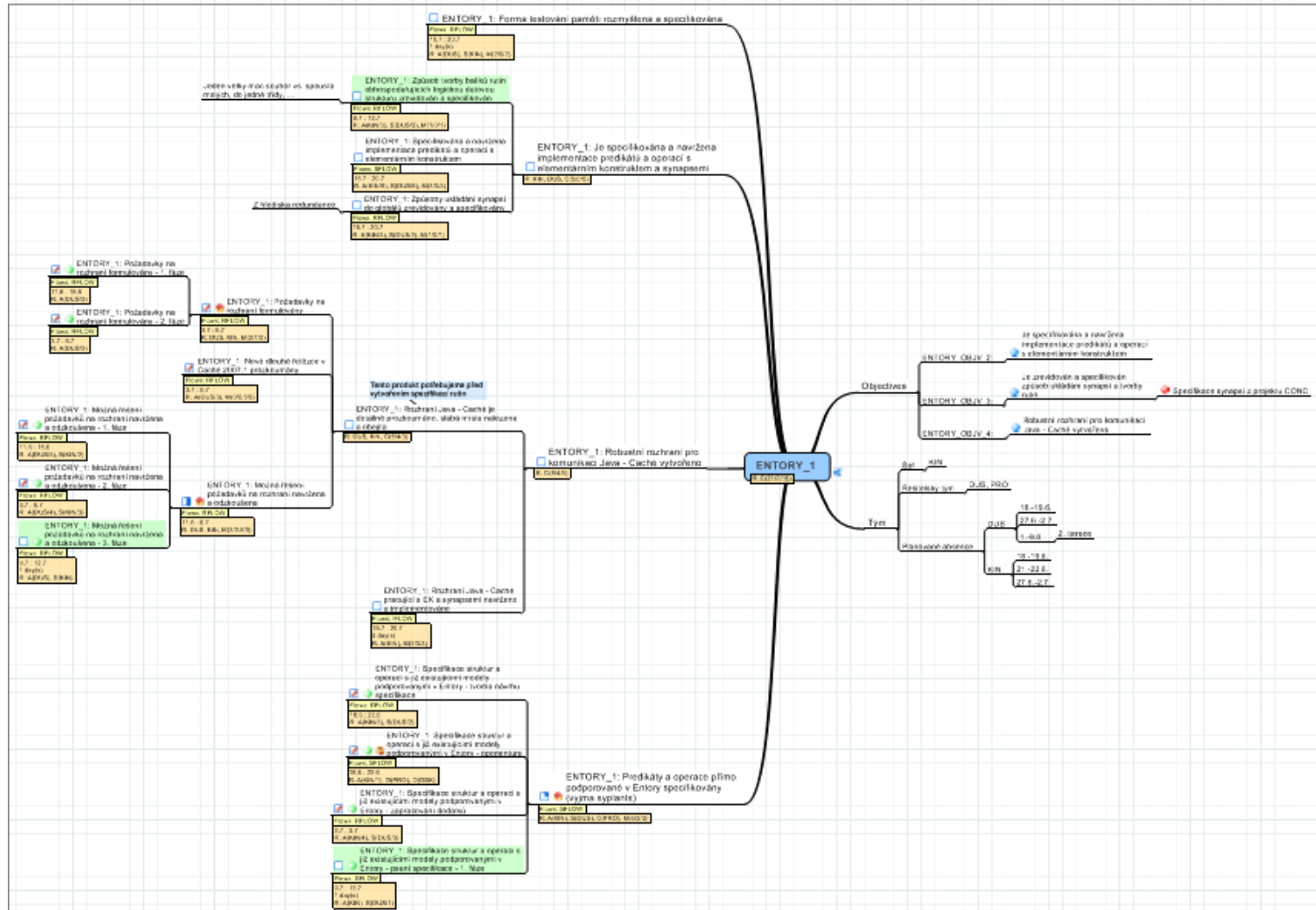


Planning multi-map

– an example of Program SBS



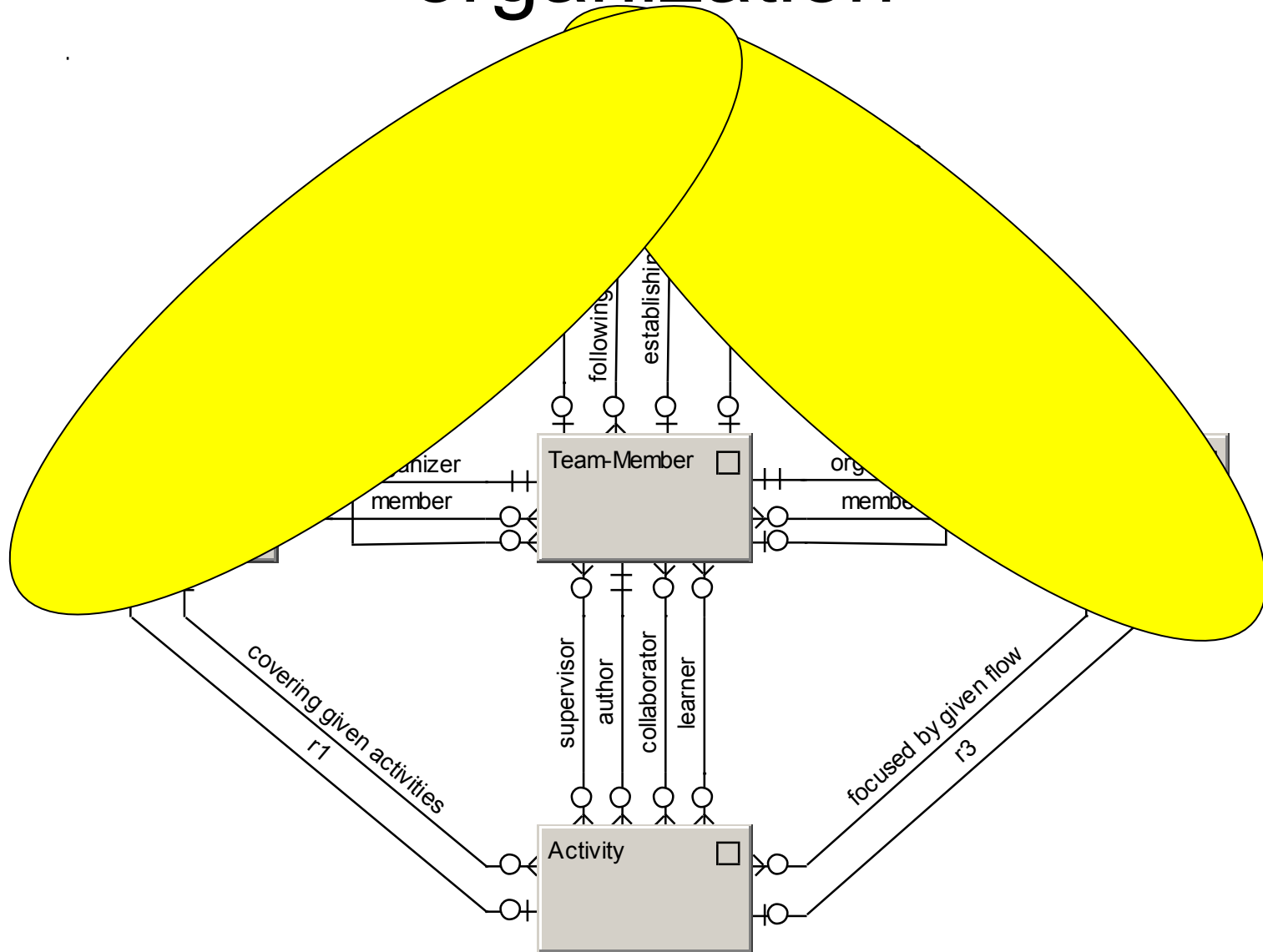
Project planning map – an example



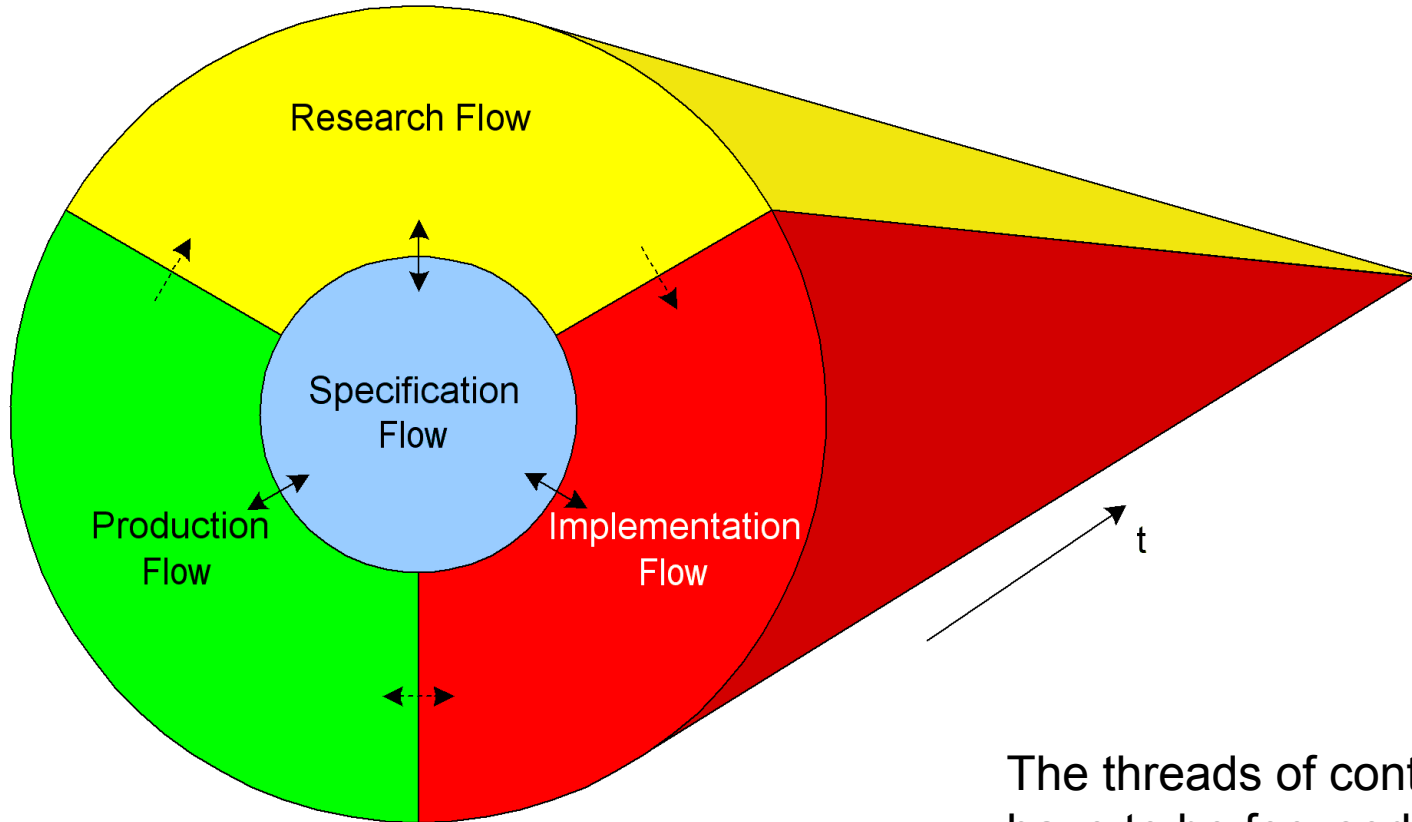
The project management process

- The **value added project** is accompanied by
 - a **project of objectives setting**, elaborating, and evaluating
 - a **project of flows progress**
- Regular time scheme of
 - planning meetings
 - evaluating meetings
 - development stages and phases

Diamond of research project organization



Four-flows paradigm - reminder



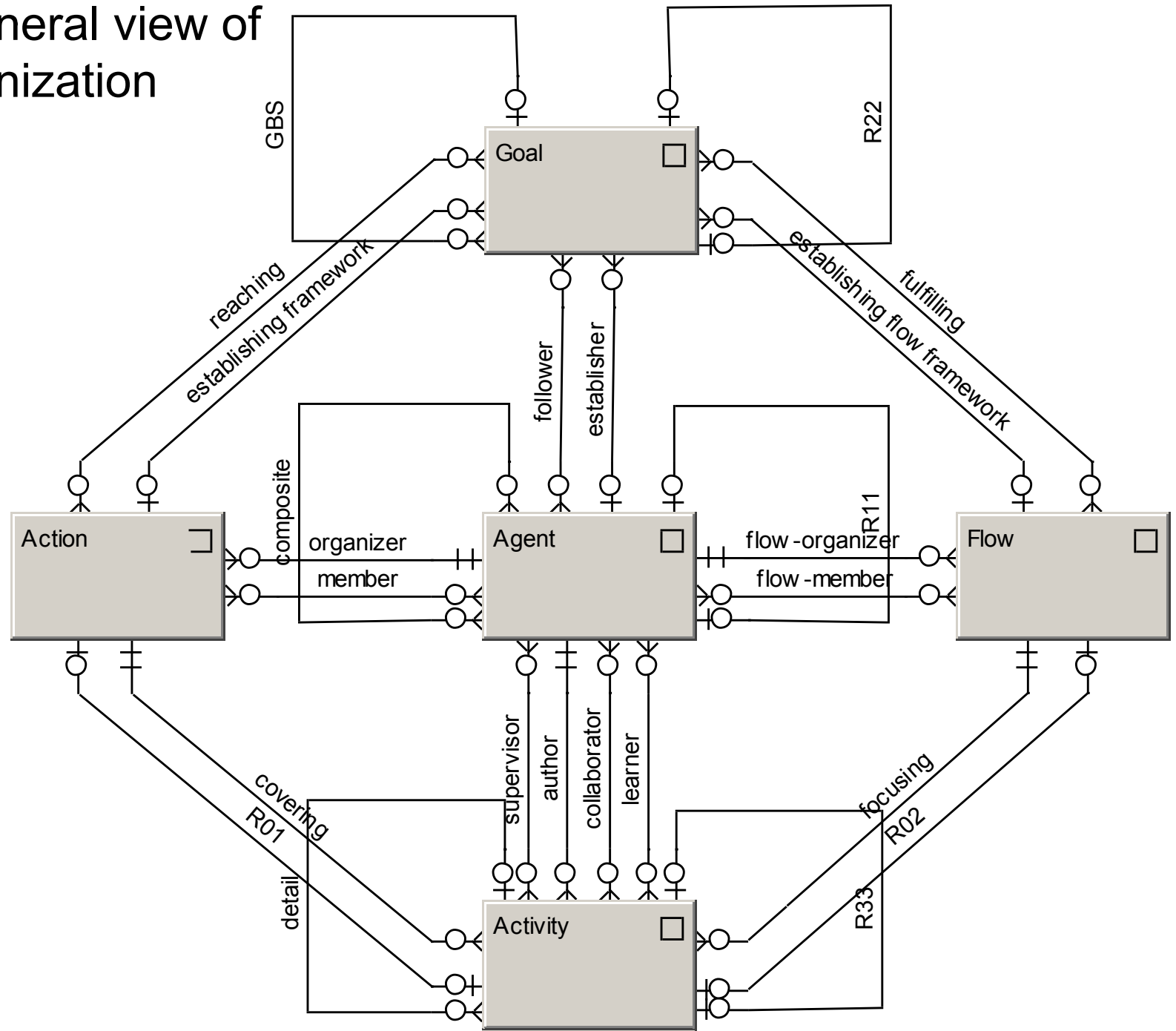
The threads of continual attention have to be focused to “make it better” in the value added projects.

Flow interactions:

what a “row” flow wants on “column” flows

	Research flow	Specification flow	Implementation flow	Production flow	Environment
Research flow	By doing research discover what is the right subject of a future research	Properly describe and externalize, what I had discovered	Create pre-prototype, which helps me better validate and focus my research	Find an use-case rendering usefulness of my ideas	Outsource for me investigation of a given domain
Specification flow	Think not resolved aspects arising in course of specification writing to the end	By doing specification discover what is the right subject to further specification	Implement what I specified for you	Verify wether my specification describes comprehensively the problem	Verify clarity of my specification for you, i.e. the relevant environment
Implementation flow	Think aspects not properly captured in a specification that appeared during my work to the end	Specify unclerness that obstruct me in the process of implementation to the end	By implementation discover what is the right subject to further implementation	Pack to usable form all this what I did implement	Outsource for me implementation of a given domain
Production flow	Think up how my use-case can be realized in a better way	Specify on what principles my use-case is functioning	Improve and repair all this what I prepare to use	By production discover what is the right subject of a further production	Use my product!
Environment	Think up a way you can solve this my issue	Specify for me a way of my issue solution properly	Implement the solution of my issue	Deliver usable versions of the product continually	?

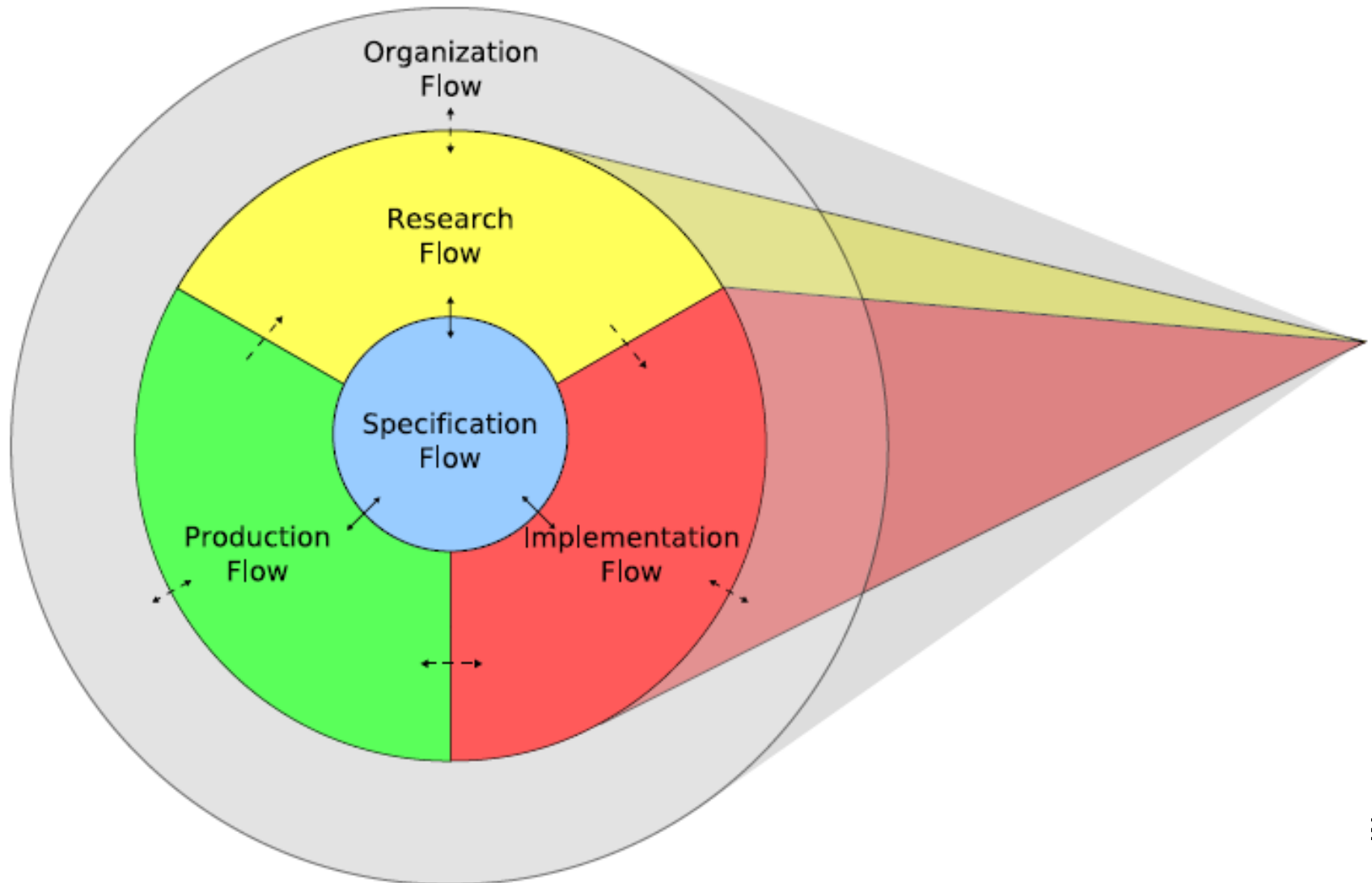
A general view of organization



PPPM could be completely described by means of co-operating agents or Service Systems.

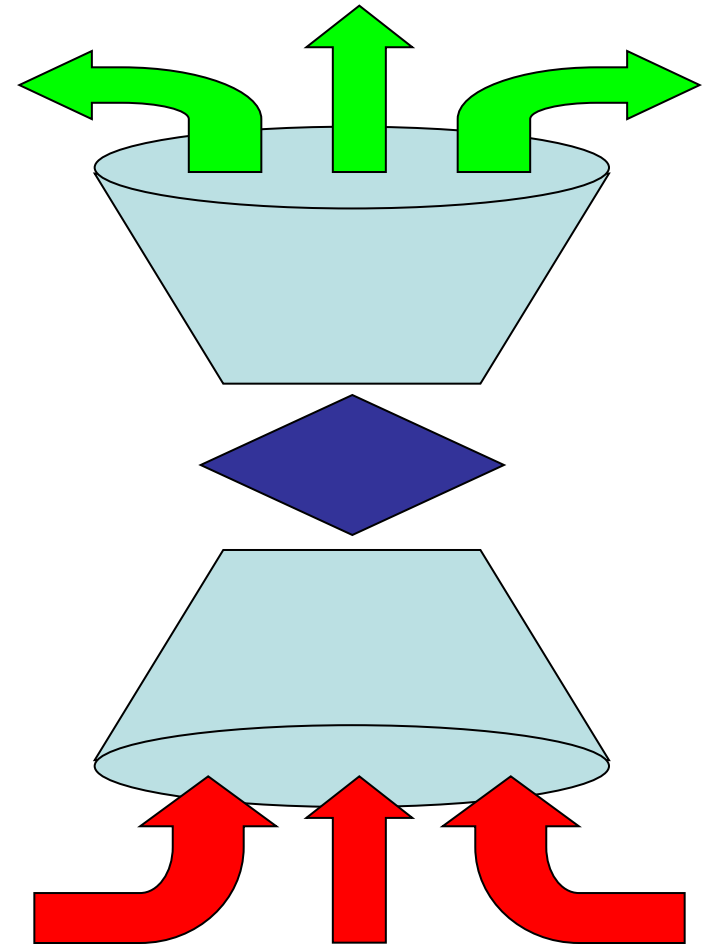
- Management is a service
- Organization is a service
- Deliverables creating is a service
- Roles of Client and of Provider are in various contexts differently spread on agents
- ...

Flow: long-lasting attention within the organization framework

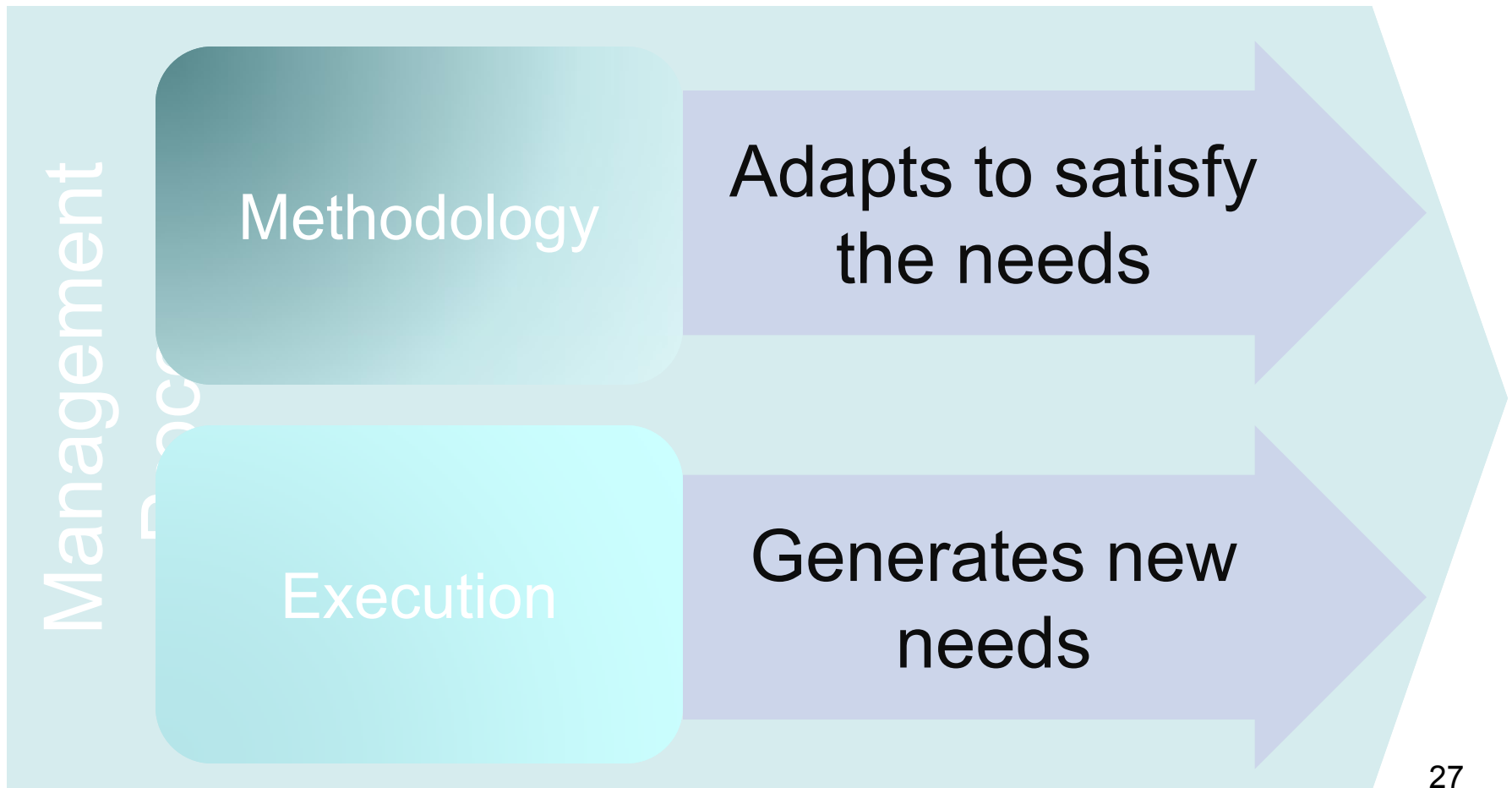


The double-funnel adaptive principle

- **Synthesis of information** from heterogeneous net of data sources
- **Visualization of the synthesis result** directly supporting decisions of an expert “**now and in a given situation**”
- **Support of momentary knowledge utilization**, not only the pre-prepared knowledge utilization
- **ADAPTIVITY !!!**



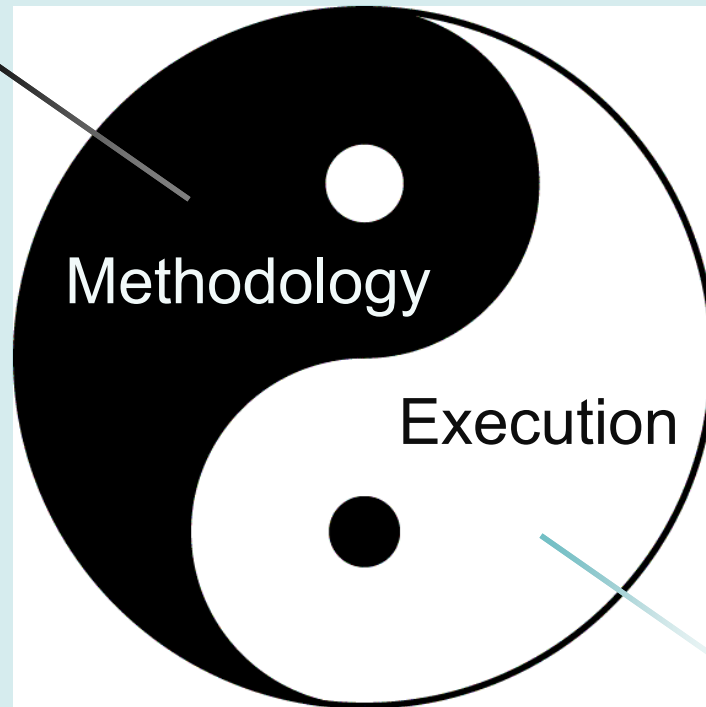
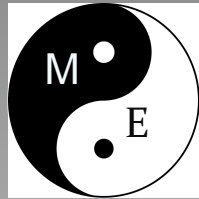
Management Process Development



Sustainability of Management Process Development

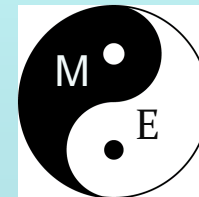
Defines

- Introspection
- Evaluation
- Revision of



Performs

- Introspection
- Evaluation
- Revision of



Management Process

Solution at Conceptual Level

Project Categories

Technology

Application

Organization

Flow

Task Categories

Research

Specification

Implementation

Production

Organization

Business

Education

Attention Function

Evaluates each task and assigned team member by defined amount of credit

Universal measure to every undertaken activity

Attention Flows

Long term focus of attention on domains derived from *task categories*

Realized as a project of *flow category*

Solution at Organizational Level

Projects Introduced to Program

- 3 Organization Projects:
 - Strategic Project (SP)
 - Executive Management in Large Extension (EMILE)
 - Forming in Large Extension (FILE)
- 7 Flow Projects (7FP): each task category one project

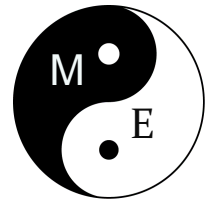
Mills

- Organizational rhythm of SP, EMILE, FILE, and 7FP
- Mills ensure the regularity and proactiveness

Solution at Organizational Level

Flow Projects

- Are *executed* in accordance with the *methodology*
- Change the *methodology* in accordance with the needs and requirements emerging in the execution of all projects



Regularity

- Organizational rhythm of Flow Projects
- Ensure the systematic and proactive approach

Solution at Technical Level

(1)



Principle we have applied

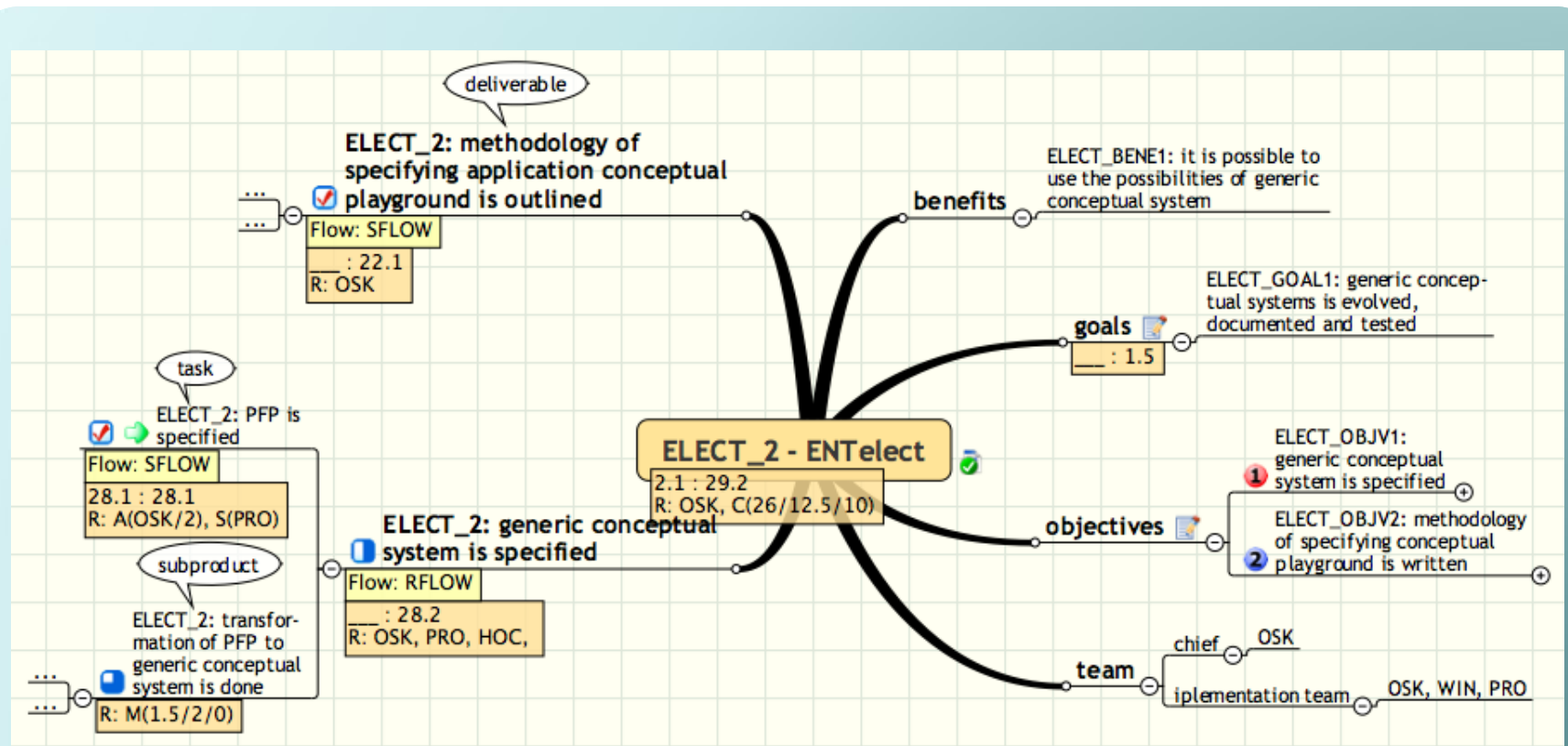
- Principle of work with unknown: ICT support of business has to be done in a way it can easily support also such requirements that business owners are not aware of today



Tools we have used

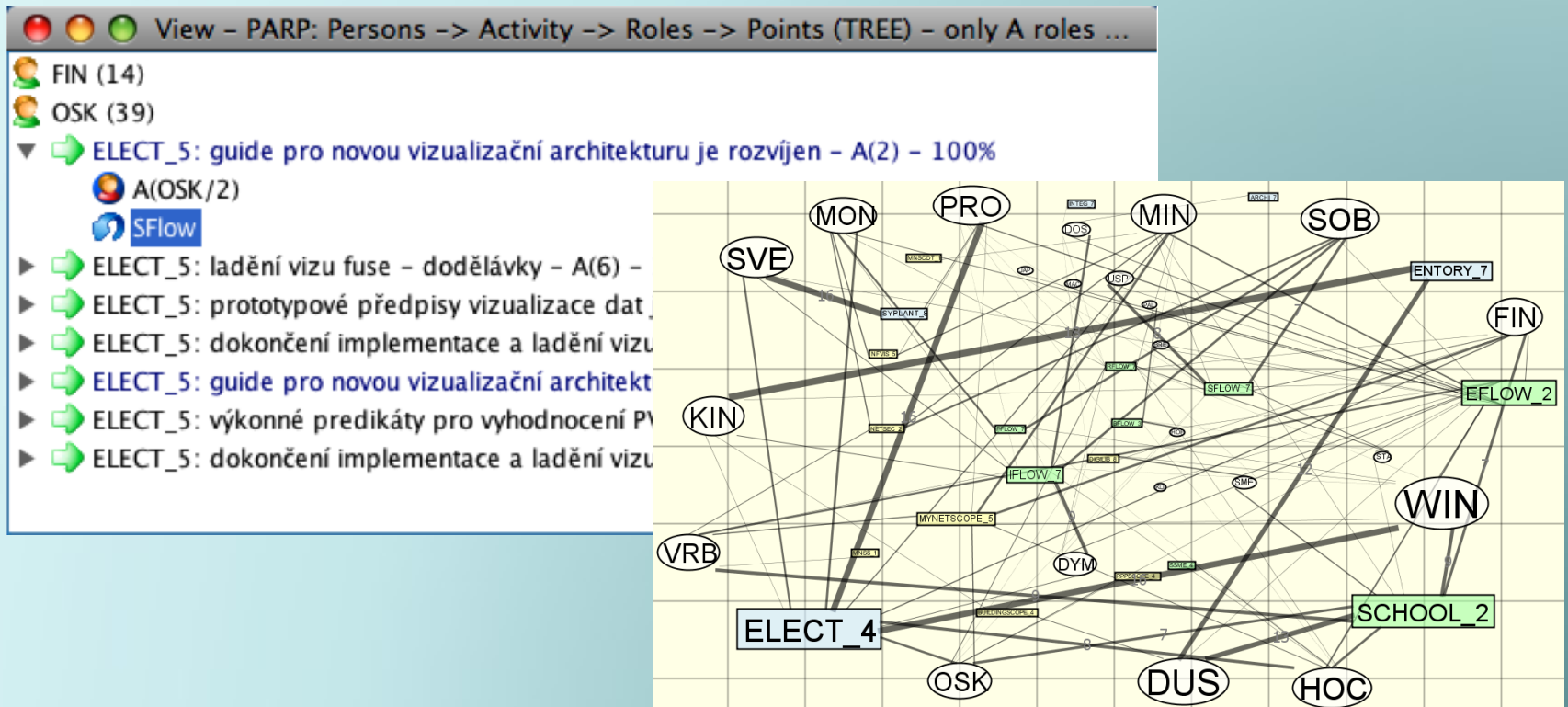
- Mind Manager – flexible mind mapping editor
- Project Explorer – flexible tool for reporting and analysis

Solution at Technical Level (2)



Mind Maps (Mind Manager)

Solution at Technical Level (3)



Project Explorer (proprietary tool)

To achieve sustainability of management process:

Conceptually

- Each task performed or to be performed is categorized by task category
- For each task category dedicated flow project has been launched to handle the evaluation, revision and improvement of the way the respective tasks are performed

Organizationally

- Flow projects are *executed* in accordance with the *methodology*
- Flow projects change the *methodology* in accordance with the needs and requirements emerging in the execution of all projects

Technically

- Universal modeling principle was applied
- Existing mind mapping tool is being continually adapted and new analytical tool is being iteratively developed

THE END

Thanks to Michal Oskera for his nice “blue slides”