

Project Management

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Housekeeping rules

- Mute your microphone while not talking
- Questions? Just ask!
- Slides will be shared
- We are using the MIRO board, look at the chat

Who are we?

Kees Zandbergen

- Library
- Age 43
- Project manager
- MA History
- UU Real Estate, Houten, Lean



Sylvia Walter

- Marine biogeochemist
- Scientific experience: GreenHouse Gases (N₂O, CH₄, H₂)
- Research PM since 2009



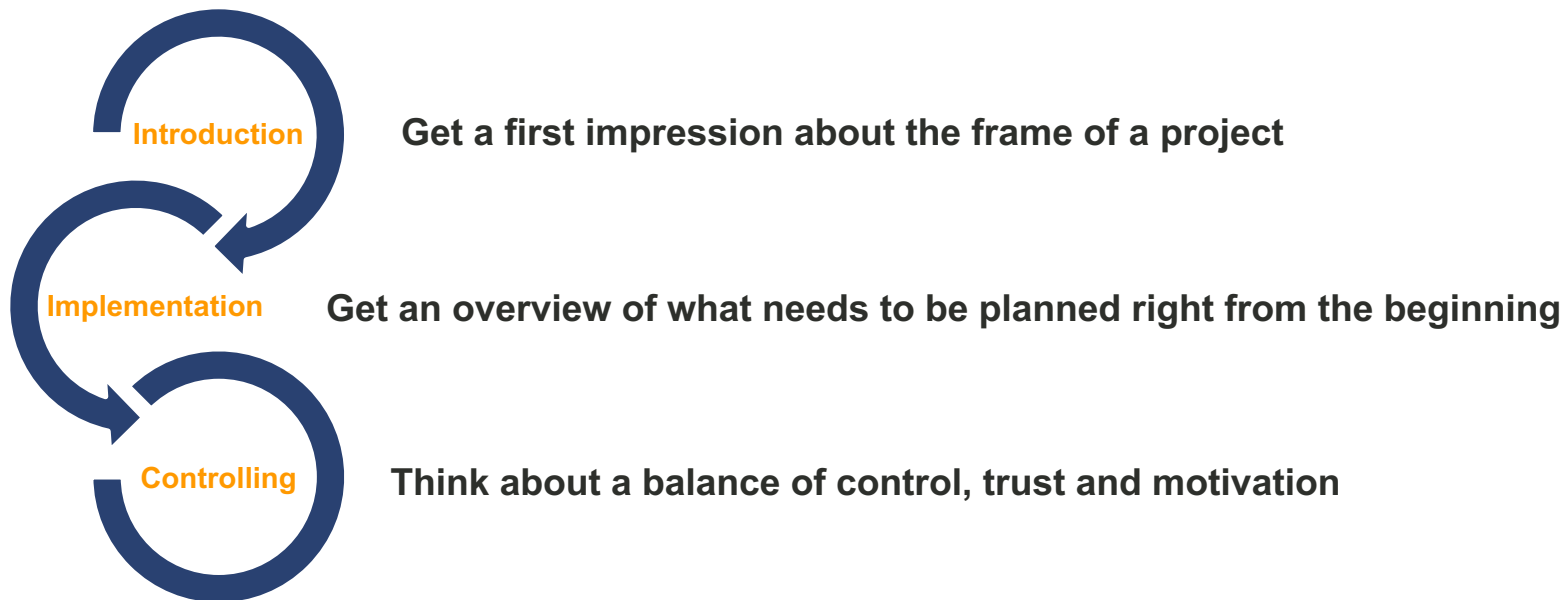
Available tools to ease our work, but ...



... power is nothing without control!



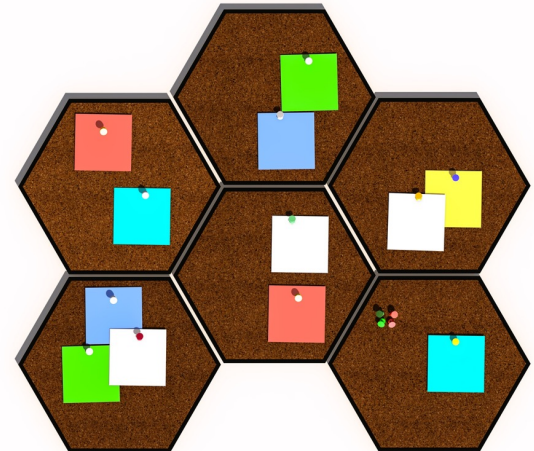
PM workshop - agenda



Common pitfalls – Interactive discussion about experiences, fears and mitigation strategies

Aim of the workshop

- Get started!
- Give some think-about
- Realise that projects are different, but can share common PM practice

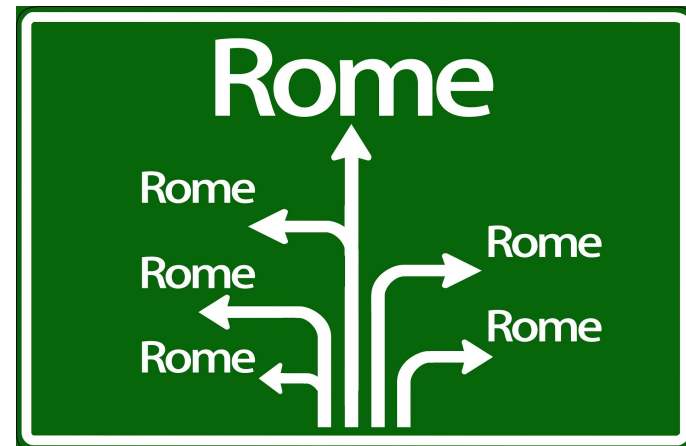


How can I ...

- ... use my **time** more efficient / effective?
- ... handle all the **different challenges**, even those I'm not trained for?
- ... **plan** my project and ensure to stick to it?

Tip


Keep in mind:
each project
is different!



What is a project?

*A **project** is a temporary endeavour undertaken to create a unique product, service or result. It is performed by people, constrained by limited resources, planned, executed, and controlled.*

(PMBOK Guide, 1996, 2008)



Paper
Proposals
Measurements
Campaigns
Conferences

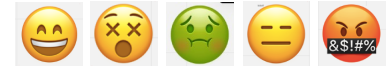
- Temporary, with a defined beginning and end in time
- Defined scope and resources
- Unique, not a routine operation
- Requires a specific set of operations and tasks, designed to accomplish defined objectives
- Often includes people who don't usually work together
 - International, interdisciplinary, intercultural, intersectoral

What is project management?

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.

Aim of project management is to deliver on-time and on-budget what contractually has been agreed on.

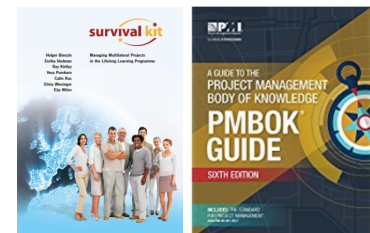
Your feeling about PM?



Let us know in the chat!

Literature

- *Bienzle et al. 2010: Survival Kit - Managing Multilateral Projects in the Lifelong Learning Programme, ISBN: 978-3-9502772-3-4*
http://www.european-project-management.eu/fileadmin/images/Survival_Kit_EN.pdf
- *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*



PM knowledge draws about

- **Identifying** scientific and administrative requirements
- **Addressing** the various needs, concerns, and expectations of participants in planning and executing
- **Setting up**, maintaining, and carrying out effective and efficient communication strategies
- **Managing** participants towards meeting project requirements and creating project deliverables
- **Balancing** the competing project constraints, which include, but are not limited to:
 - Scope
 - Quality
 - Schedule
 - Budget
 - Resources
 - Risks
- **Monitoring** specific project characteristics and circumstances influencing the constraints to focus on
- **Evaluating** the relationship among those factors, which could likely affect each other

General project challenges



- Are you able to ...
- ... combine different skills?
 - ... fulfill contractual duties?
 - ... lead a diverse consortium?
 - ... ensure quality and impact?
 - ... be inspiring and motivating?

Adopted from: Bienzle et al. 2010: Survival Kit - Managing Multilateral Projects in the Lifelong Learning Programme

PM = asking questions + implement the answers

Communication
With whom and
why?

Time
Can defining time
lines and work
plans help?

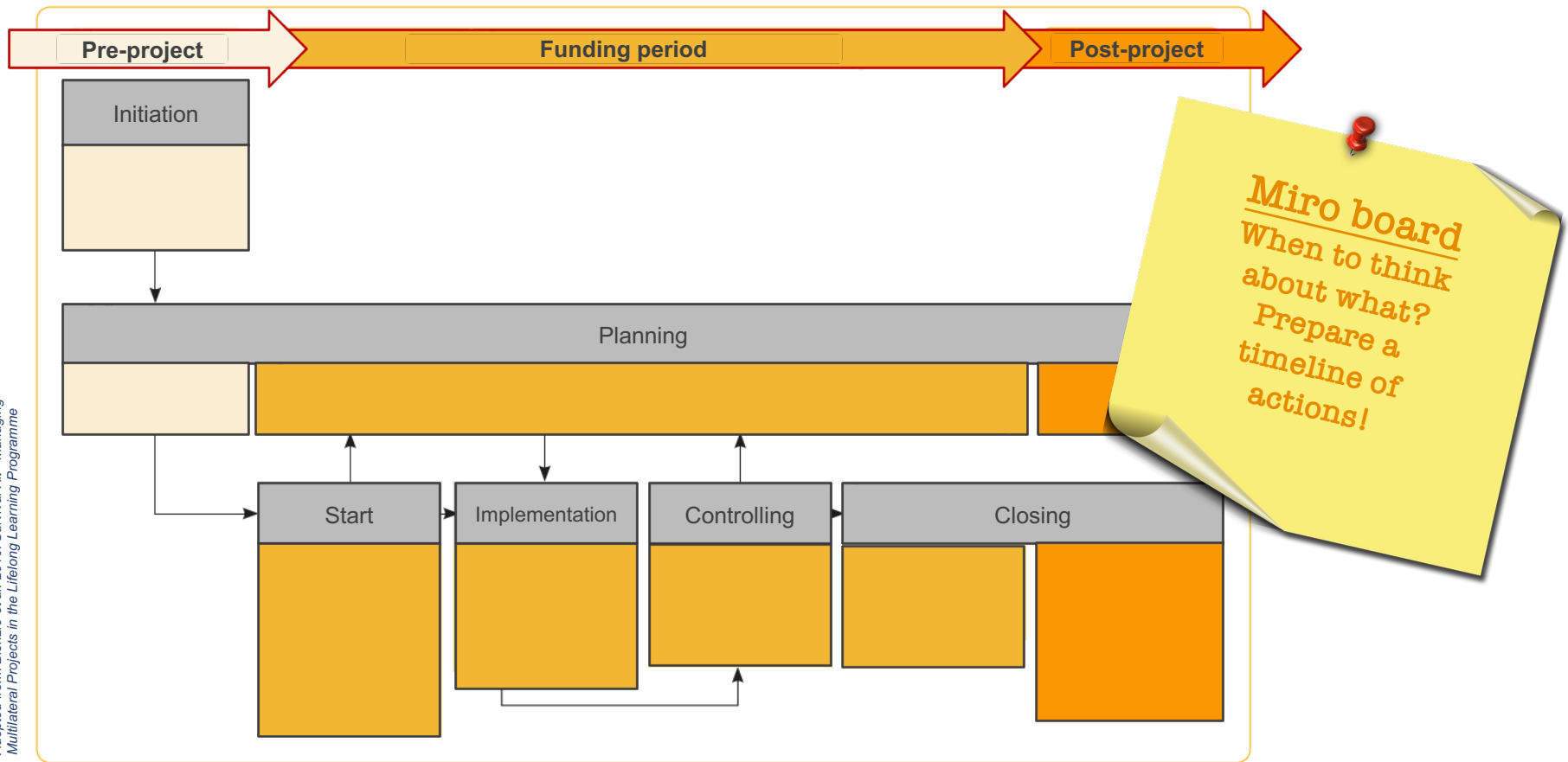
Pitfalls
What can go wrong?
What can I learn
from other
projects?

Dissemination
Why am I doing
research?
How can I create
impact with my
results?

Rules
Do I know
the rules of my
funder?
Consequences of
failing?

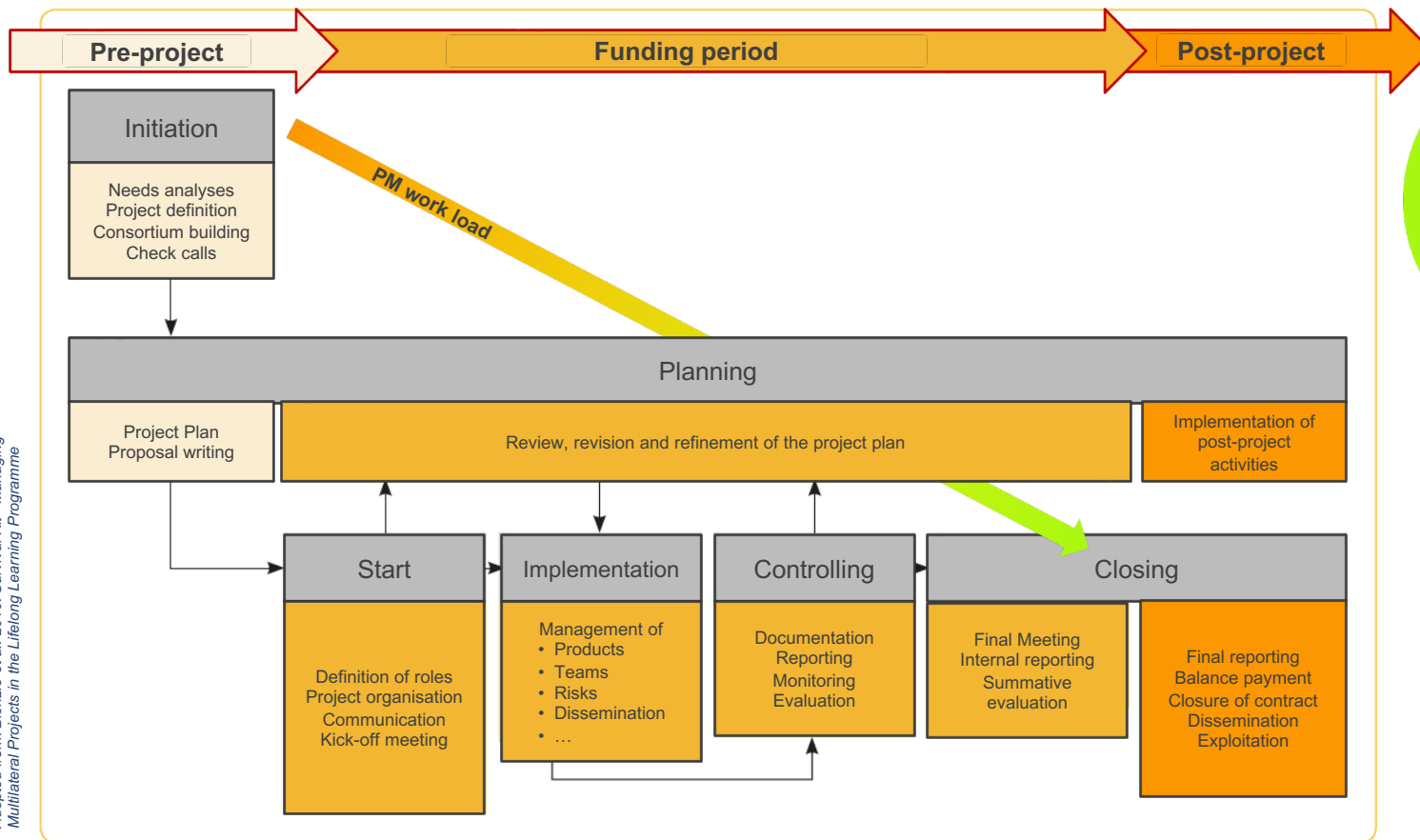
Collaboration
With whom?
And with whom for
sure not?
How to
organise?

Timeline of a project



Adopted from: Bienzle et al. 2010: Survival Kit - Managing Multilateral Projects in the Lifelong Learning Programme

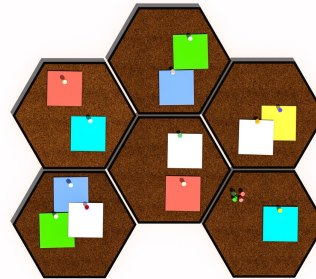
Timeline of a project



Tip
Think about PM in advance and **take your time!**

Implementation of a project

... it is all about plans!



- Risk Management Plan (RMP)
- Data Management Plan (DMP)
- Dissemination & Exploitation Plan (PEDR)
- Public engagement and Communications Plan
- Data Protection Impact Assessment (DPIA)
- Ethical protocols, Nagoya protocol
-

These plans are often defined as deliverables of the project or are already part of the proposal!



Mother of all plans
Project Management Plan
(PMP)

Tip
Make use of
s.m.a.r.t.ly
defined
deliverables!

Tip
Good plans in advance reduce trouble, work load and safe time!

Tip
Ask your Research support office, library colleagues, ...

Implementation of a project

Project plans have to implement the contractual bindings!

LEGALLY ENGAGING

Within consortium

Consortium Agreement

**Between consortium and
funding agency**

Rules for Participation

Grant Agreement

Treaty of the EU

GUIDELINES

(e.g. financial, IPR, reporting)

Risk Management

What is a risk?

A **risk** is an uncertain event or condition that, if it occurs, affects a project's objectives.

A ***Risk Management Plan*** is a document prepared to foresee risks, estimate impacts, and define responses and responsibilities to issues.

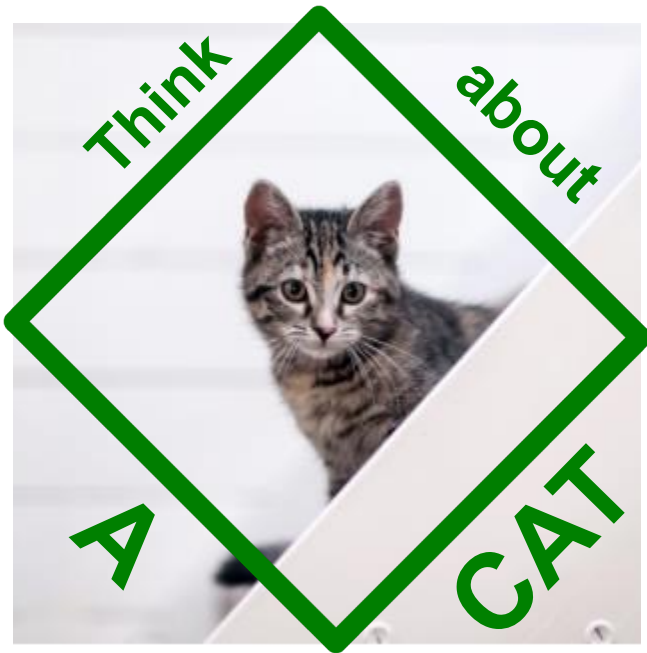
Risk Management



Denial of problems
have the potential to
even kill your project!

- Delayed recruitment
- Instrument / experimental failure
- Lack of scientific progress
- Lack of data quality / quantity
- Lack of staff qualification
- Personal conflicts
- Lack of communication / interaction / exchange
- Lack of training quality
- Financial and / or administrative mismanagement
- Insufficient scientific and / or administrative coordination
- Resignation / failure / bankruptcy of partners
- Insufficient sustainability of outcomes
-

Risk Management



Risk strategies – ACAT

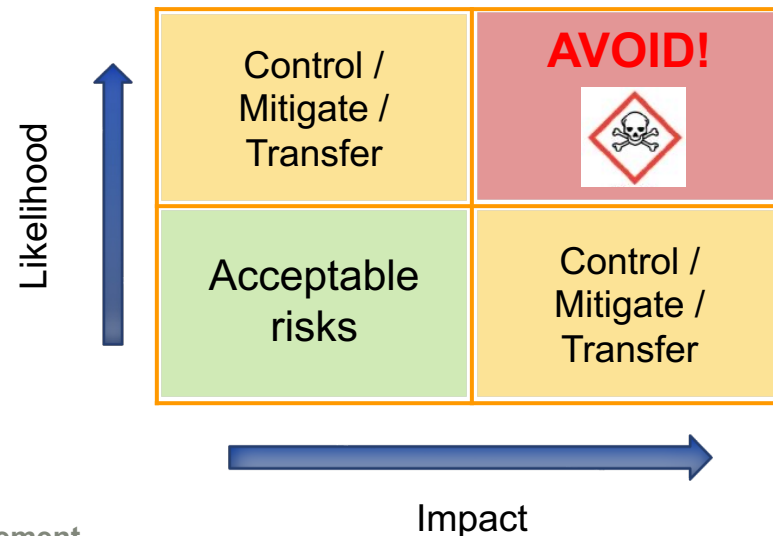
- *Avoid risks* – Change plans to circumvent the problem
- *Control/Mitigate risks* – **R**educes impact or likelihood (or both) through intermediate steps
- *Accept risks*– Take the chance of negative impact, eventually *budget* the cost
- *Transfer risk* – Outsource or **S**hare risk to third party or parties that can manage the outcome

Risk Management



Risk assessment is an estimation of quantitative and / or qualitative effects on your project.

Risk matrix: define the level of risk by considering the category of probability or likelihood against the category of consequence severity.



Risk Management

Good practice

- Realize, that not all risks can be controlled by you, but that a good planning can help a lot to reduce effects on your project
- Include all risk dimensions of your project



- Inform yourself and your partners about relevant requirements / deadlines in time
- Discuss relevant issues in advance and keep communicating
- Start tasks in time and do not delay critical issues
- Stick to the planning, but keep flexibility where possible
- And review the risk lists regularly as an instrument of control

Tip

Having a good risk management does not mean awaking sleeping dogs!

Data Management

A **Data Management Plan** is a formal document that outlines how data are to be handled both during the project and beyond.

The **aim of a DMP** is to consider all aspects of data management to ensure well-managed data during the project and sustainability of data beyond.



FAIR DATA
Findable
Available
Interoperable
Re-usable



Data Management Plan (DMP)

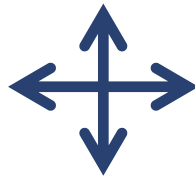
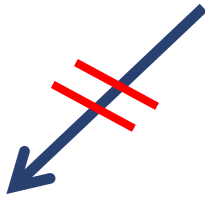
- Purpose of data collection / generation
- Relation of data to the objectives of the project and utility
- Storage during research, e.g. naming, types, format, size, used software
- Gathering data, e.g. origin, used methods and standards, re-use of existing data
- Quality assurance and control
- Meta data / general documentation
- Access, share, re-use
- Security of data
- Back-ups, general responsibilities
- Archiving and long term preservation
- Ethical / juridical issues
- Costs

Upcoming workshops and events

18 Nov	<p>Introduction to R & Data - 18 November 2020 - ONLINE 18 NOVEMBER 2020 FROM 09:00 TO 17:00 R is a powerful scripting language for data handling, visualization, and more. We aim to give you the tools to start exploring R and all it has to offer.</p>
23 Nov	<p>Utrecht Data Management Community get-together #3: need and nice to know 23 NOVEMBER 2020 FROM 13:00 TO 14:00 The place to exchange knowledge and experience on different aspects of Research Data Management.</p>
3 Dec	<p>Best Practices for Writing Reproducible Code - 3 & 4 December 2020 - ONLINE 3 DECEMBER 2020 FROM 09:00 TO 13:00 In this hands-on workshop, you will learn to become a better programmer.</p>
8 Dec	<p>Handling Personal Data in Research - 8 December 2020 - ONLINE 8 DECEMBER 2020 FROM 15:00 TO 17:00 This workshop will introduce you to the General Data Protection Regulation (GDPR) and how it applies to research data.</p>

www.uu.nl/en/research/research-data-management/tools-services/training-and-workshops

Impact ...



... am I still in a PM workshop?

... Frogs have an impact!

II) Implementation

Pause

- 15 min.
- Bring something what you associate with communication in project management



Gaming!

➔ *Miro board*



Painting a picture: as a team, paint the picture that most matches the instructor's picture

- Step 1: making teams > 5 -6 members, preselected
- Step 2: assigning roles > 1 instructor, 1 coach, many artists
- Step 3: setting up > Whiteboard, instructor minimizes Whiteboard
- Step 4: drawing, part 1 > 4 minutes of painting
- Step 5: interim score > Instructor maximizes Whiteboard for interim result, then minimizes again
- Step 6: drawing, part 2 > 4 minutes of painting
- Step 7: return to group and share the result. The best match wins!



Instructor

Instructor: has the original picture, gives oral directions to the artists, without seeing their activities



Artists

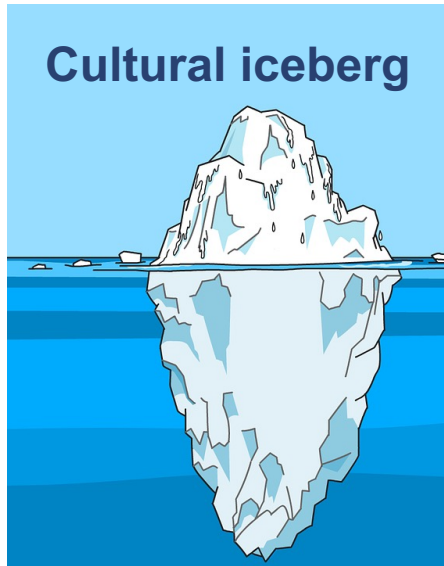
Artists: paint the picture on the whiteboard, based on the directions of the instructor, without knowing the original

Coach: guides the artists through the drawing process, focus on collaboration and skills.

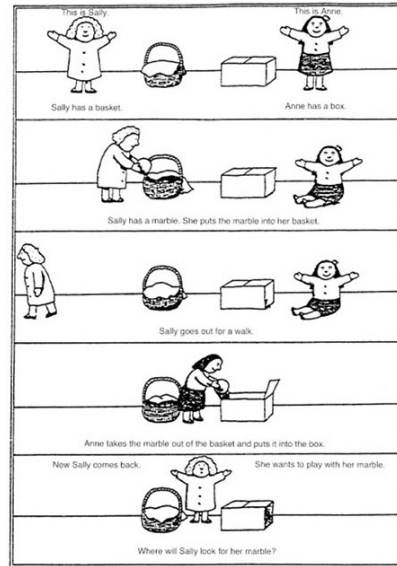


Coach

Communication awareness is key!



Cultural differences



**Perceptions
Expectations**

Other factors

DISAGREEING

Israel Germany Denmark Australia US Sweden India China Indonesia
France Russia Spain Italy UK Brazil Mexico Peru Ghana Japan
Netherlands Singapore Saudi Arabia Thailand

Confrontational

Avoids confrontation

COMMUNICATING

US Netherlands Finland Spain Italy Singapore Iran China Japan
Australia Germany Denmark Poland Brazil Mexico France India Kenya Korea
Canada UK Argentina Peru Russia S. Arabia Indonesia

Low-Context

High-Context

LEADING

Denmark Israel Canada US France Poland Saudi Japan
Netherlands Finland UK Germany Italy Russia India Korea
Sweden Australia Brazil Spain Mexico Peru China

Egalitarian

Hierarchical

Country specifications

Politics

Terminology

Language

Personality

Communication

Requirements

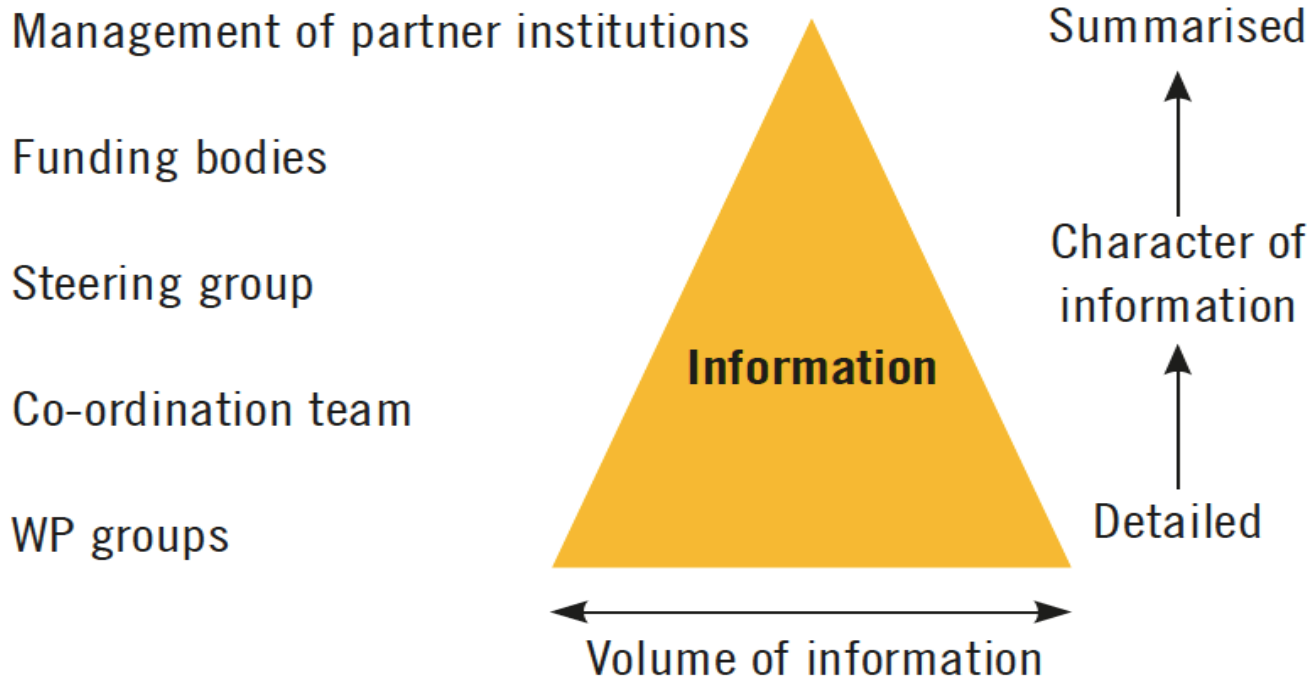
- **Who** (students, consortium, partners, stakeholders, ...)
- **What** (general information, results, reports, ...)
- **When** (timeline based on project)
- **Where** (information level)
- **Why** (to inform, remind, request, conflict solving,...)
- **How** (facilities, availability)

Tip

Identify the communication requirements right from the beginning to ensure a smooth project!

Communication

... as an example: Reporting towards ...



Pause

- 10 min.



Project Management Plan

*A **Project Management Plan** is a formal, by the consortium and / or stakeholders approved document used to guide both project execution and project control.*

Objective: to document the planning assumptions and decisions, facilitate communication among project stakeholders, and document approved scope, cost, and schedule baselines.

Project Management Plan (PMP)

Already in the proposal ...

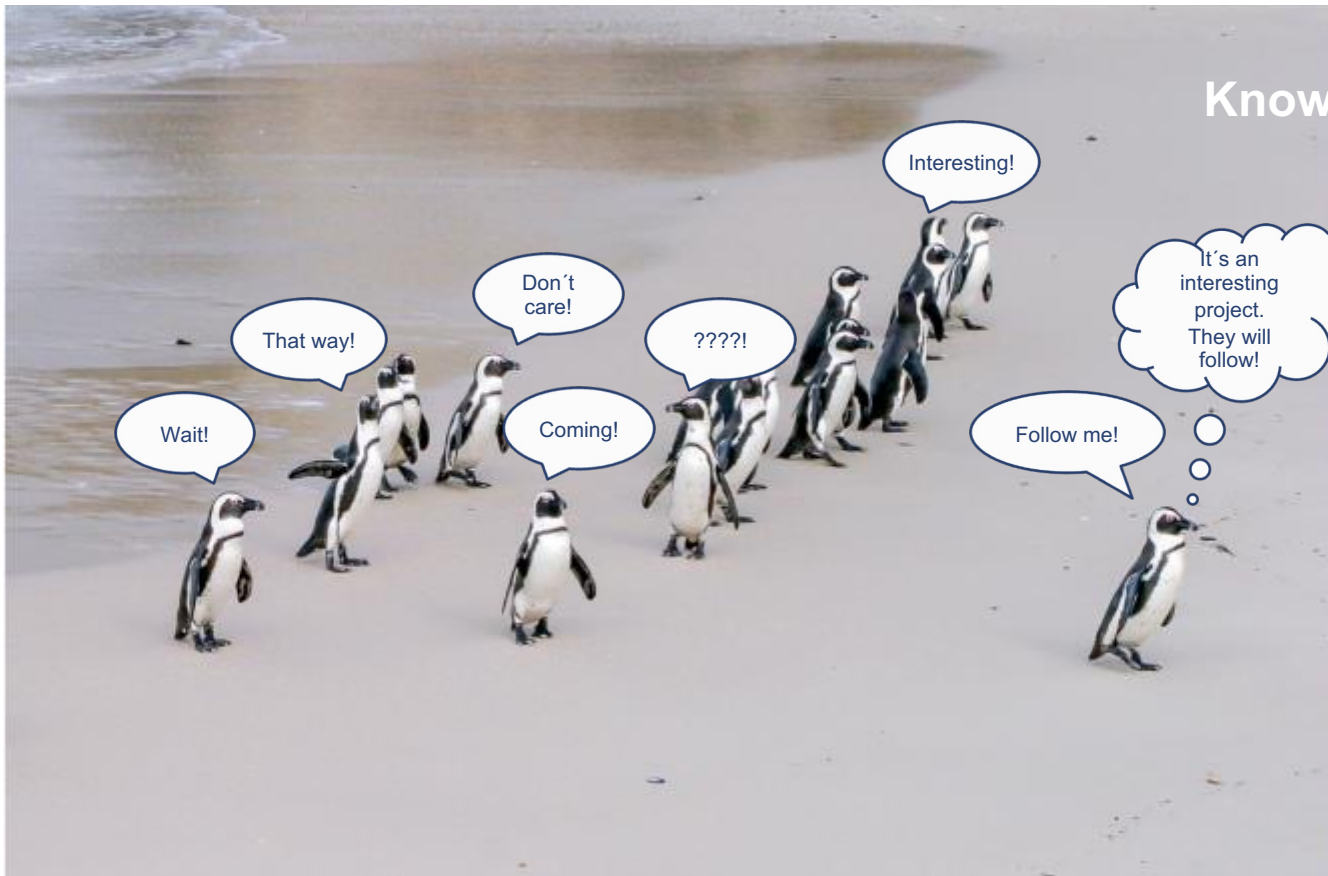
- Executive summary
- Project overview and scope
- Project goal and objectives
- Project structure and management approach (e.g. consortium, boards, committees)
- Deliverables and milestones
- Risk management
- Project schedule

Tip
Templates are very helpful to reduce work load and streamline input!

... and more ingredients

- Detailed communication management and visibility
- Meetings and communication channels
- Data quality assurance, evaluation, exchange
- Information management and lines
- Supervision and responsibilities
- Resources, facilities and staff support
- Scientific input
- Reporting and documentation
- Specific organizational standards such as policies (e.g., HR, health, safety, ethics, PM), product and project life cycles, and quality policies and procedures (e.g., process audits, improvement targets, checklists, and standardized process definitions for use in the organization);

Controlling



Know your team!

Controlling

- **Funder related:** mandatory control mechanisms requested (e.g. EU)
- **Project related:** Tight time schedule, cascade organized project
- **Consortium related:** difficult partners, inexperienced consortium

Depends on project type and leadership style



... and know yourself! Are you able to...

- establish and maintain contacts?
- inspiring people?
- communicate effectively about project needs?
- negotiate to secure scarce resources?
- use your valuable time effectively?
- motivate people to fulfill administrative tasks?
- play hard if necessary?



Controlling

- **Whom** do you want to control, **what** and **when**?
- And **why**?
- **How** do you want to control?

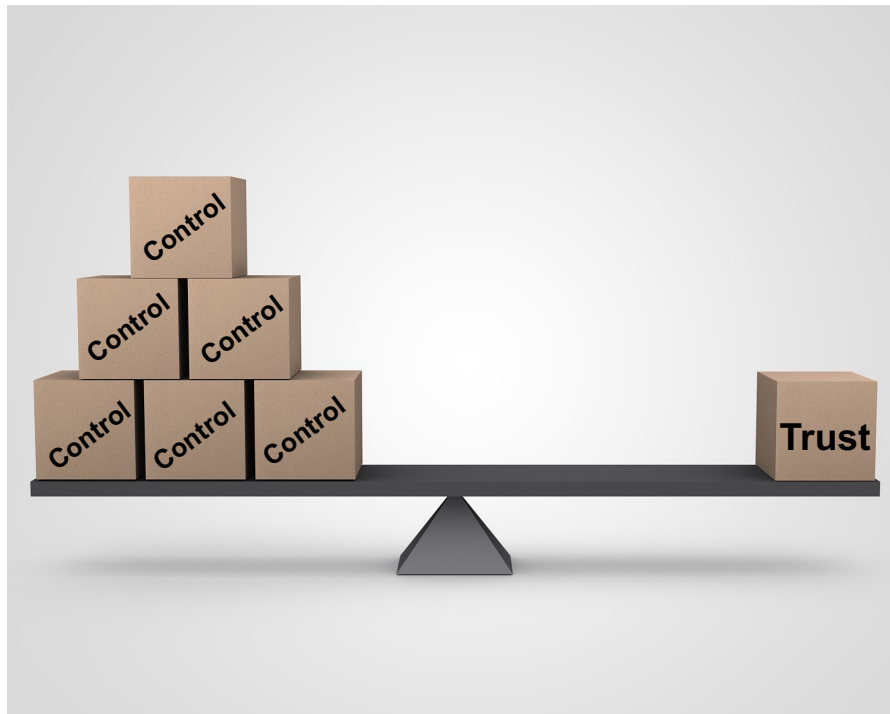


Tip

If possible
choose control
mechanisms that
fit to your style of
leadership!

- Thus, ...
 - **Establish** control mechanisms fitting you and the project
 - **Allocate** time to control
 - **Communicate** consequences

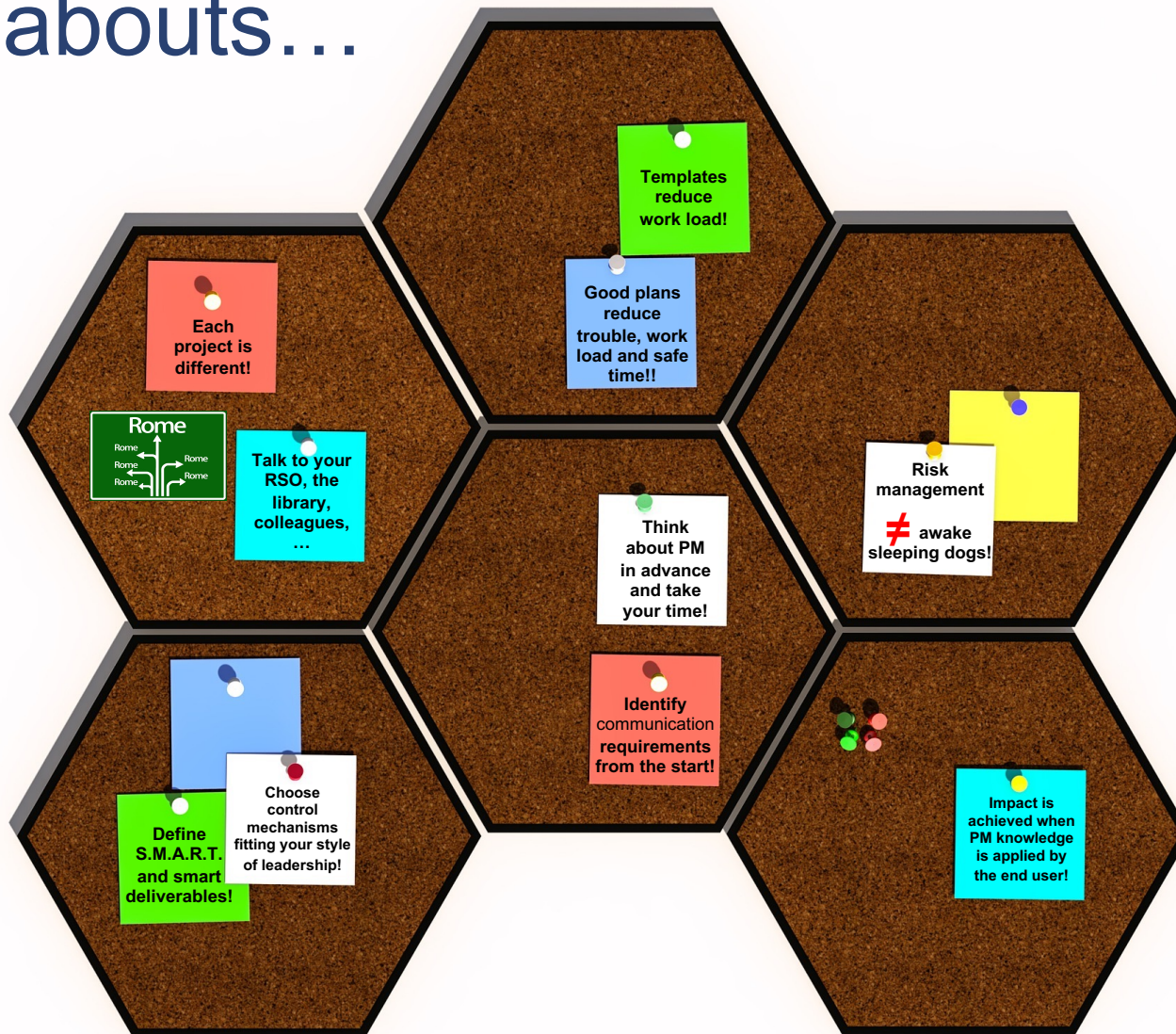
Controlling



Arguments to submit a report

- Contractual
- Demonstrate transparency / accountability
- Builds relationships and open communication, e.g. with funder
- Secures current funding
- Improve future fund-raising
- Could be used for dissemination
- Shows professional skills
- Builds analytical skills
- Builds collaboration capacity
- Gives a competitive edge, e.g. for partners


Think abouts...



Project Management
Asking questions and implement the answers!

Exchange experience

- **What are your experiences, fears, mitigation strategies?**
- **What lessons have you learned from previous projects?**



If you want to build a ship, don't drum up people to collect wood. Don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea.

Antoine de Saint-Exupery

**Thanks for
your attention!**

Atlantic Ocean, somewhere on the way to Halifax

Communication ... to keep in mind

Process of communication

- **Paralingual:** Pitch, tone, and inflections in the sender's voice affect the message being sent.
- **Feedback:** The sender confirms that the receiver understands the message (e.g. directly asking for response, questions for clarification)
- **Active listening:** The receiver confirms that the message is being received (e.g. giving feedback, questions, prompts for clarity)
- **Effective listening:** The receiver is involved in the listening (paying attention, asking relevant questions)
- **Nonverbal:** Facial expressions, hand gestures, and body language contribute to the message

50% of communication ... is listening / observing

Start with your own SWAT analysis

- **S**trengths, **W**eaknesses, **O**pportunities, **T**hreats -



Stakeholders of a project

Enterprise environmental factors refer to conditions, not under the control of the project team, that influence, constrain, or direct the project. Enterprise environmental factors are considered inputs to most planning processes, may enhance or constrain project management options, and may have a positive or negative influence on the outcome. Enterprise environmental factors vary widely in type or nature. Enterprise environmental factors include, but are not limited to:

- Organizational culture, structure, and governance;
- Geographic distribution of facilities and resources;
- Government or industry standards (e.g., regulatory agency regulations, codes of conduct, product standards, quality standards, and workmanship standards);
- Infrastructure (e.g., existing facilities and capital equipment);
- Existing human resources (e.g., skills, disciplines, and knowledge, such as design, development, legal, contracting, and purchasing);
- Personnel administration (e.g., staffing and retention guidelines, employee performance reviews and training records, reward and overtime policy, and time tracking);
- Company work authorization systems;
- Marketplace conditions;
- Stakeholder risk tolerances;
- Political climate;
- Organization's established communications channels;
- Commercial databases (e.g., standardized cost estimating data, industry risk study information, and risk databases); and Project management information system (e.g., an automated tool, such as a scheduling software tool, a configuration management system, an information collection and distribution system, or web interfaces to other online automated systems).

Project management & Leadership

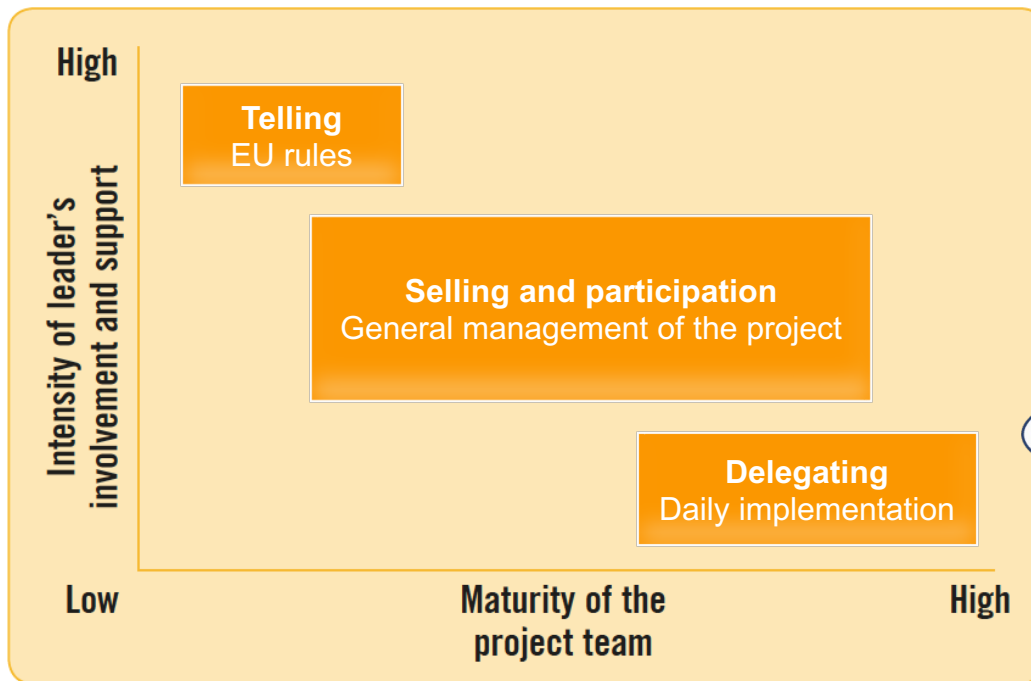


Know your team!

... but also know yourself!

- How good are you at establishing and maintaining contacts?
- Do you have an inspiring personality?
- Are you able to communicate effectively about your research work?
- Can you negotiate to secure scarce resources?
- Do you use your valuable time effectively?
- Can you motivate people to fulfill administrative tasks?
- Can you play hard if necessary?

Project management & Leadership



Leadership styles; Paul Hersey and Kenneth H. Blanchard (Bienzle et al. 2010: Survival Kit – Managing Multilateral Projects in the Lifelong Learning Programme, ISBN: 978-3-9502772-3-4)



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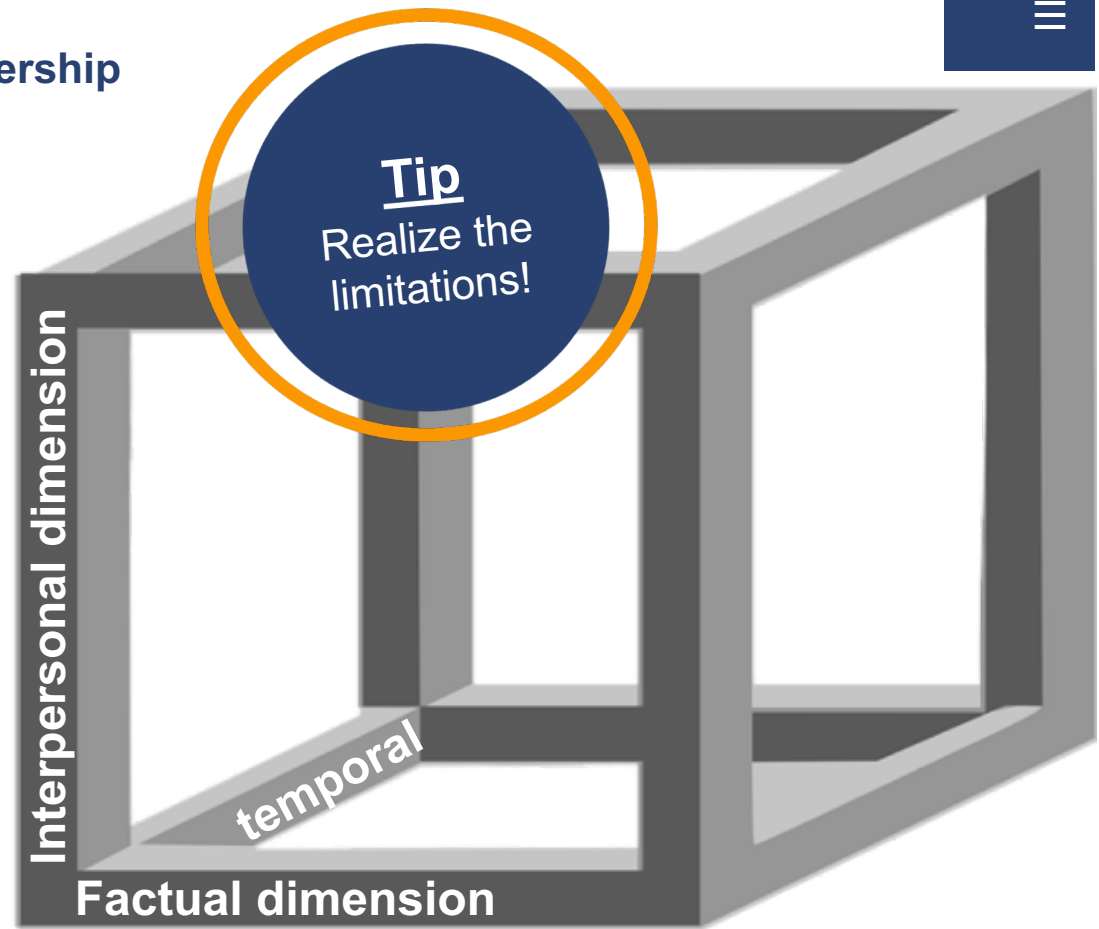
Dimensions of PM and leadership

Interpersonal dimension of leadership

- Vision, objectives
- Team building
- Motivation and encouragement
- Support and feedback
- Values
- Communication
- Conflict management
- Understanding of interaction and development processes

Factual dimension of PM

- Planning
- Organization
- Monitoring
- Contracts
- Finances
- Reporting



Helpful links

- <http://www.european-project-management.eu/indexea25.html?id=24#c245>



The travelling expo 'Ocean Plastics Lab' is coming to Brussels!



Willem De Moor
Advisor JPI Oceans - Flanders Marine Institute

The exhibition on marine litter which shows some of the results of our microplastics research projects will be open and freely accessible from 9 to 19 April at the Esplanade in front of the European Parliament.
More info: <http://bit.ly/2FuUG5f>



The Project Management Institute and their standard



- Largest not-for-profit professional membership association for the project management profession
- Worldwide-recognised standard for project management that provides a common language for project management around the world.



The PMI standard applied to scientific research



- Processes in scientific research where the PMI standard can help:
 - ❑ Concept/scientific idea
 - ❑ Proposal preparation
 - ❑ Project Planning
 - ❑ Implementation of plan
 - ❑ Monitoring & controlling
 - ❑ Closure & reporting