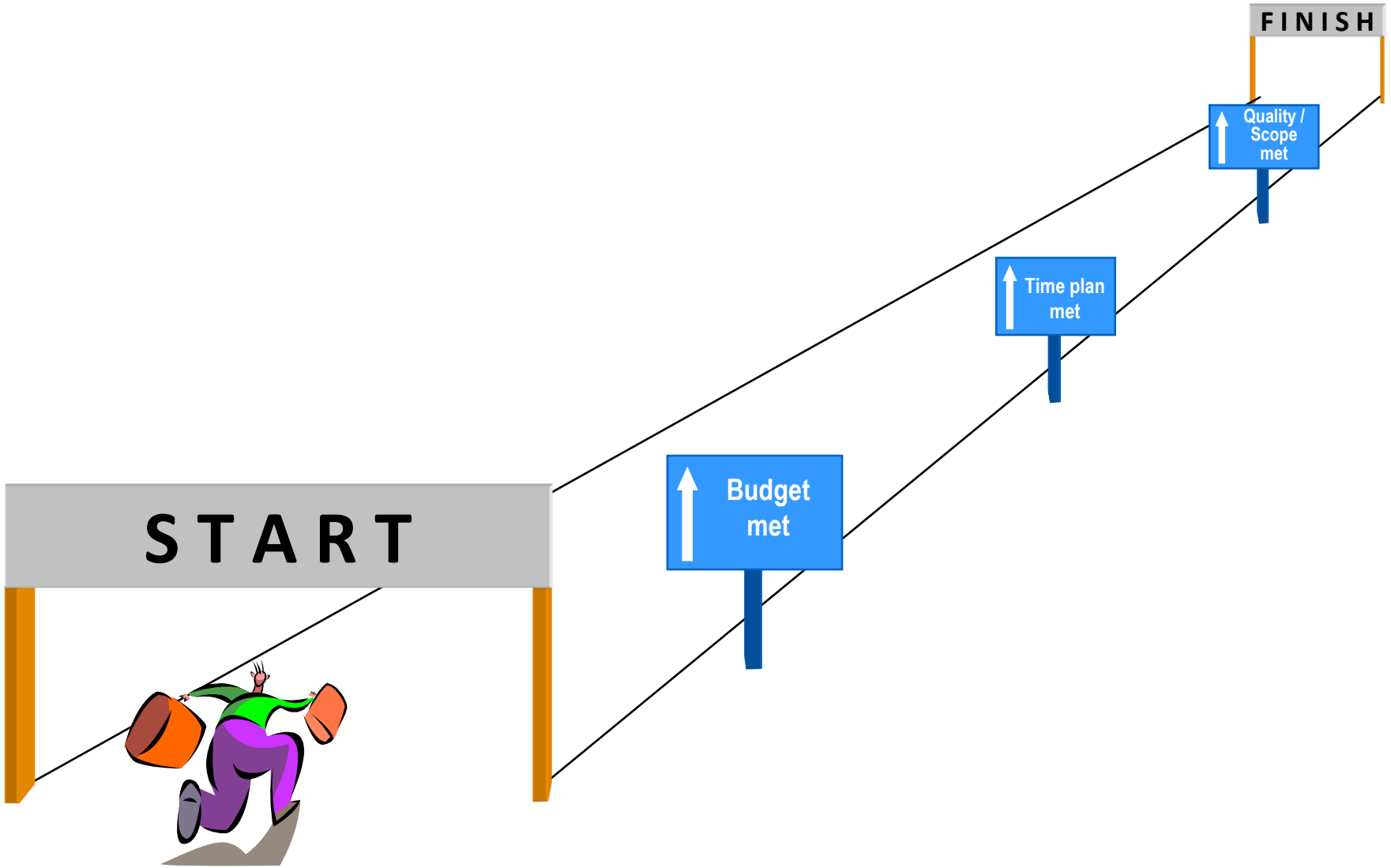
# Project Management
## Part 5

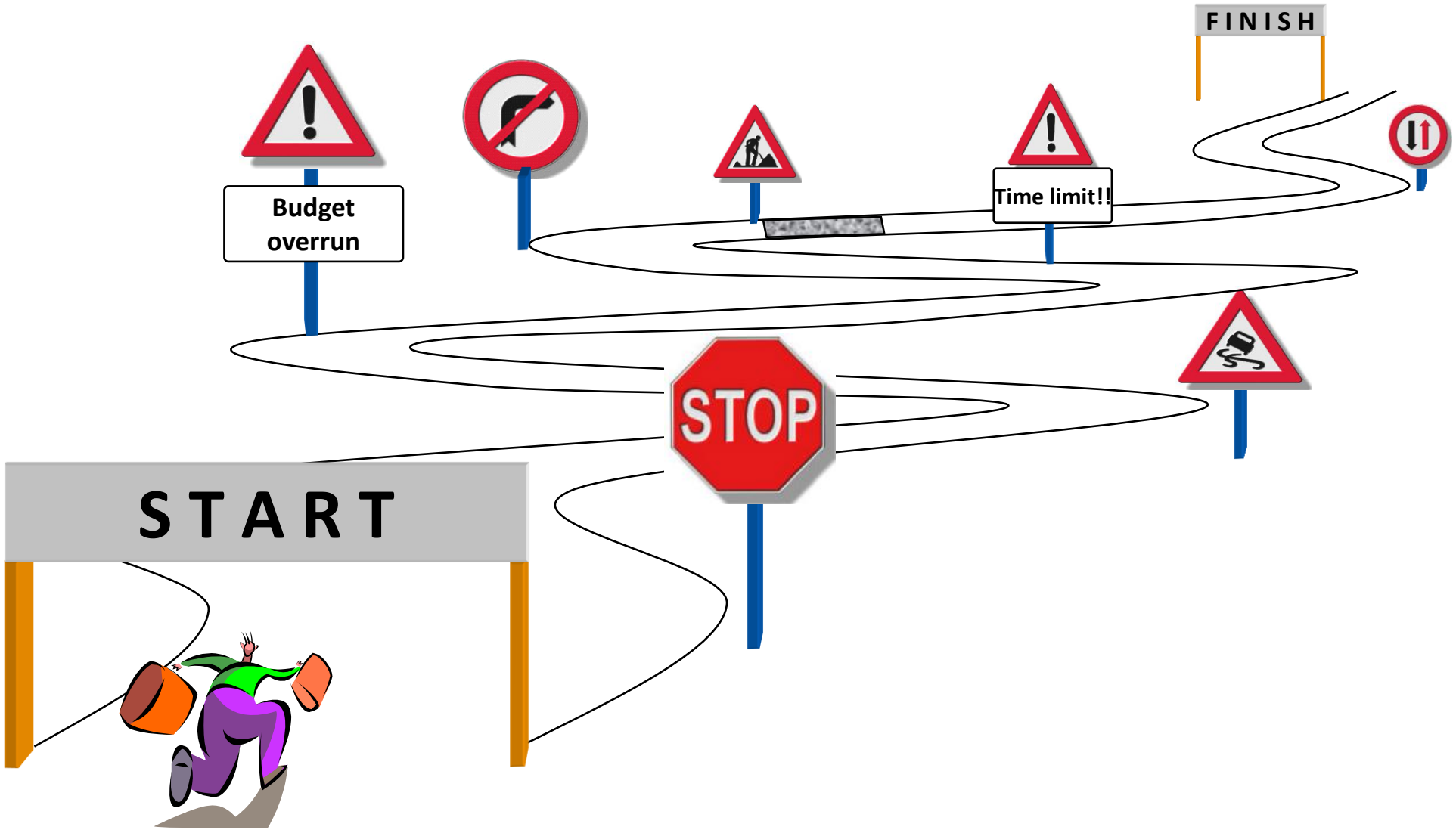
1. Introduction
2. People & Teams
3. Classical Project Management
4. Agile Project Management
5. Hybrid Project Management


# Initialisation

# Project progress - naive assumption



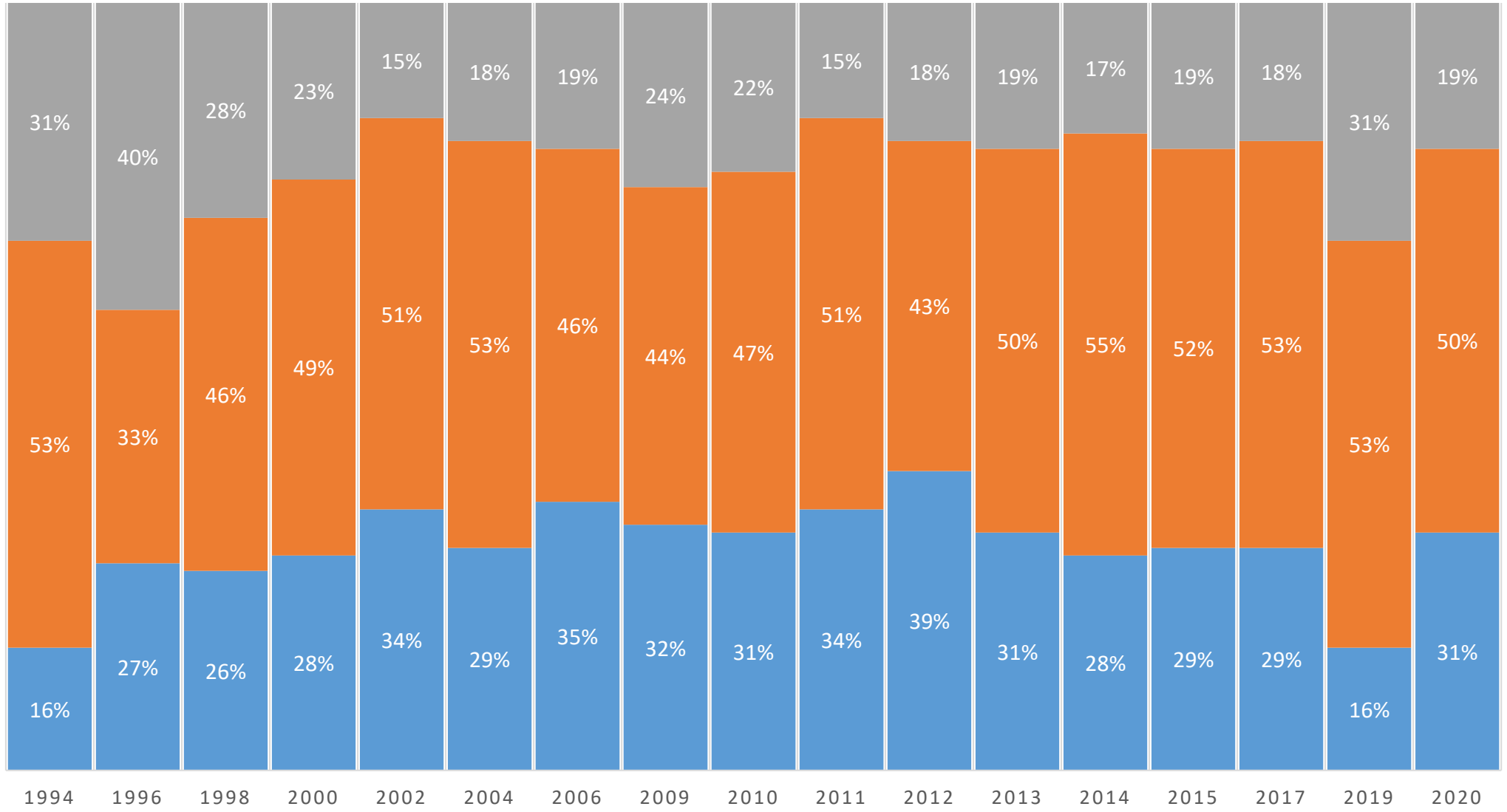
# Project progress - realistic



**If anything can go wrong,**
**it will.**

(Capt. Edward A. Murphy, 1949)

# CHAOS – Report I



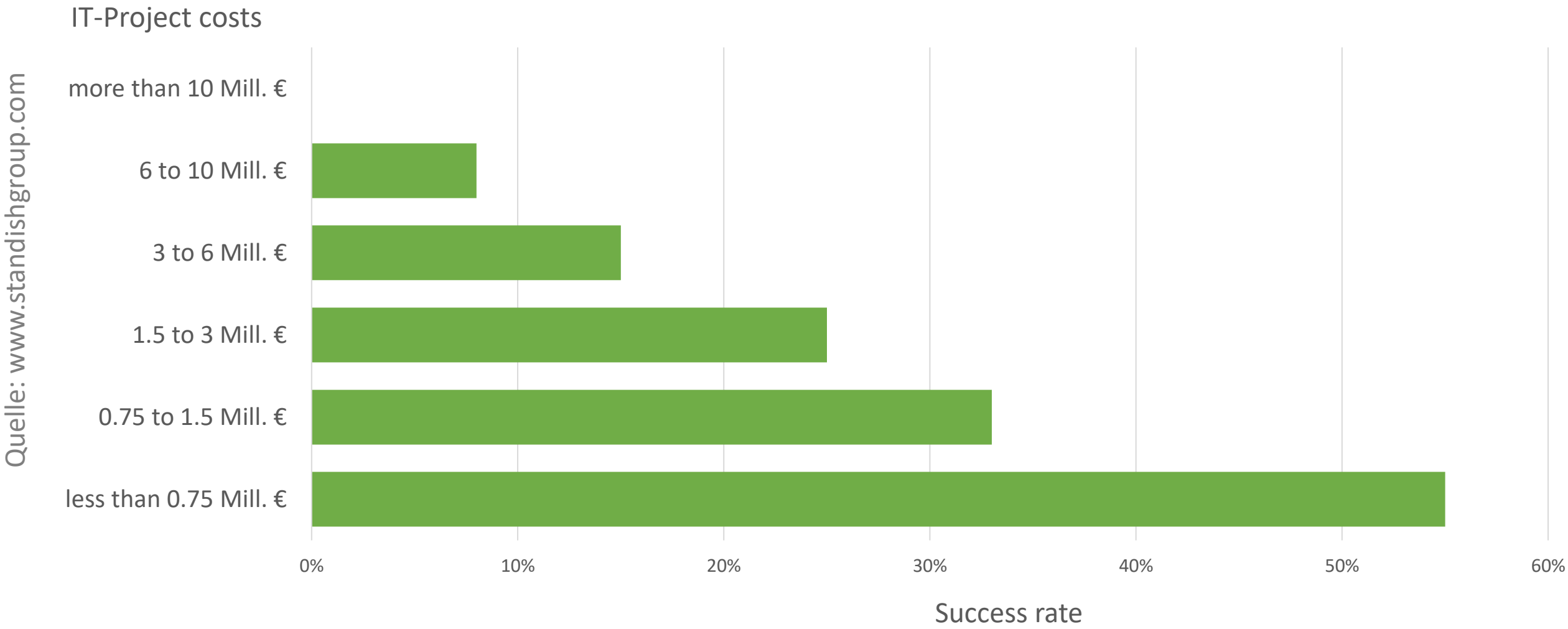

Quelle: www.standishgroup.com

Successfully completed

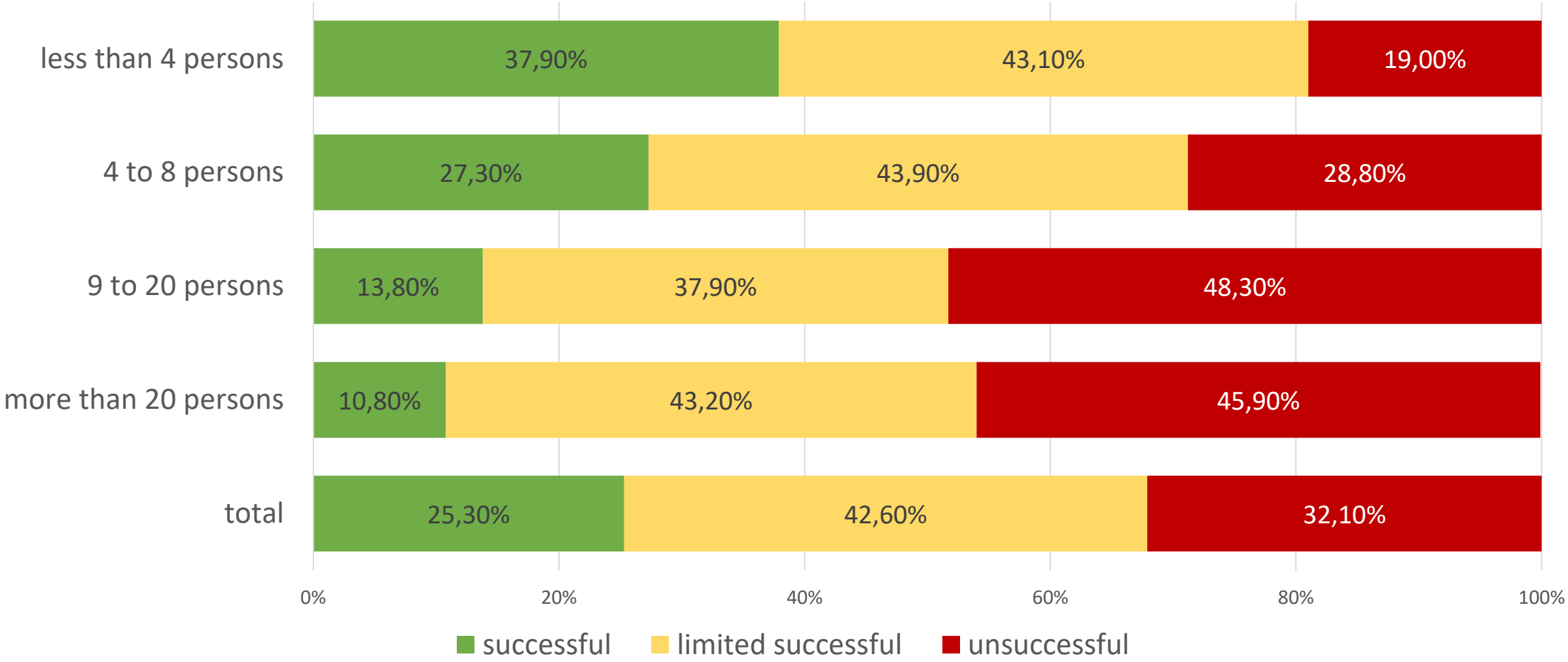
Time and cost scope blown up

Failed

# CHAOS-Report II
# Project success according to project costs



# CHAOS-Studie III
# Project success as a function of team size




Quelle: www.standishgroup.com


DILBERT
BY SCOTT ADAMS
THE SOFTWARE UPGRADE WILL BE WRITTEN AND ROLLED OUT IN THREE MONTHS.
HAS ANY PROJECT OF THIS COMPLEXITY EVER BEEN COMPLETED BY THE ESTIMATED FINISH DATE?
NOT YET. WE'RE CONFIDENT WE'LL BE THE FIRST.
IS THAT BECAUSE YOU'RE DOING THINGS DIFFERENTLY FROM ALL OF THOSE WHO WENT BEFORE AND FAILED?
NO. WE'RE DOING THINGS EXACTLY THE SAME WAY AS THE PEOPLE WHO FAILED.
DO YOU SEE WHAT I'M GETTING AT?
NO. NOT REALLY.
AND WE EXPECT TO BE ON BUDGET.
SNORK!
DilbertCartoonist@gmail.com
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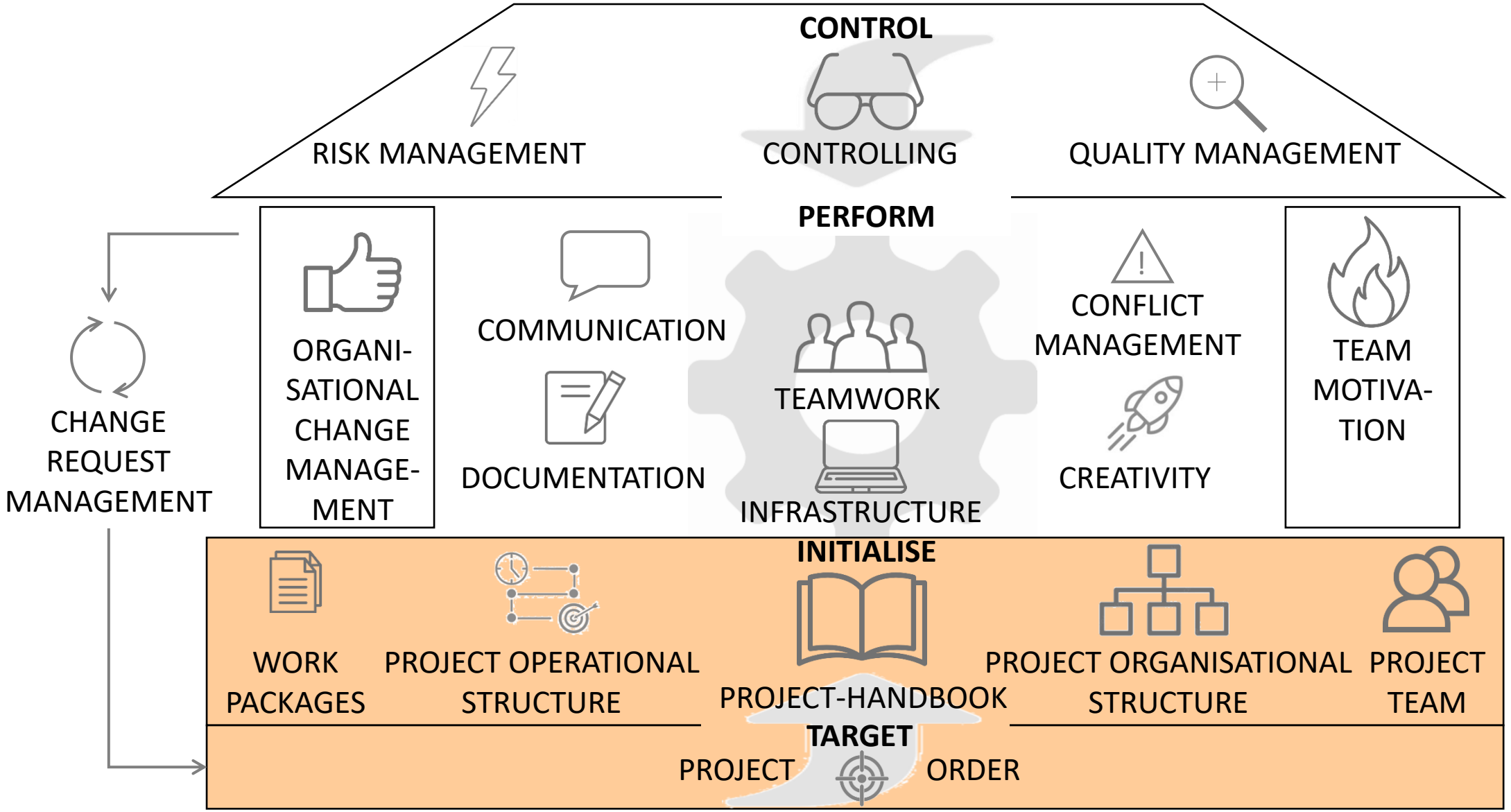
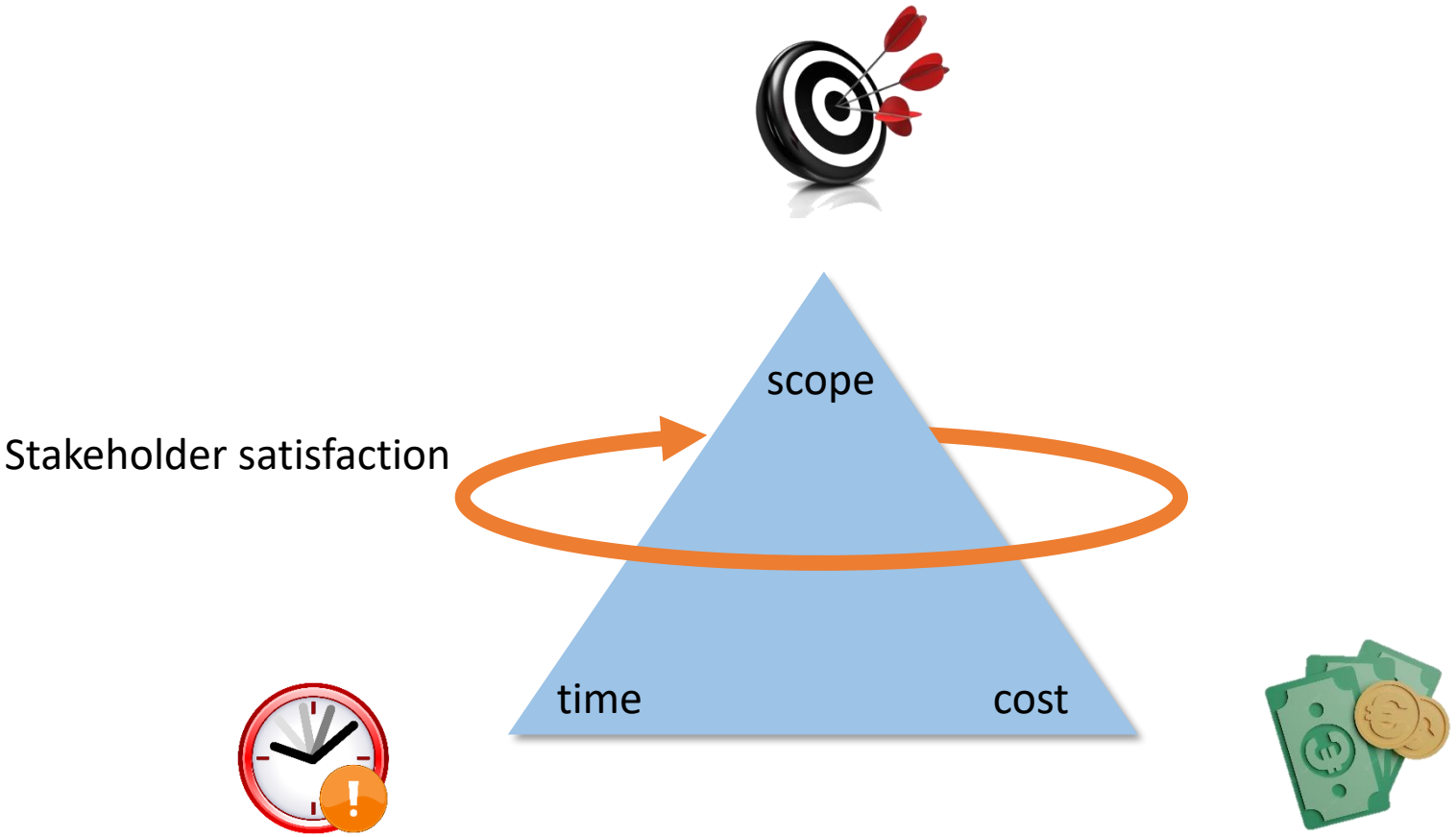
# PM House – The Foundation



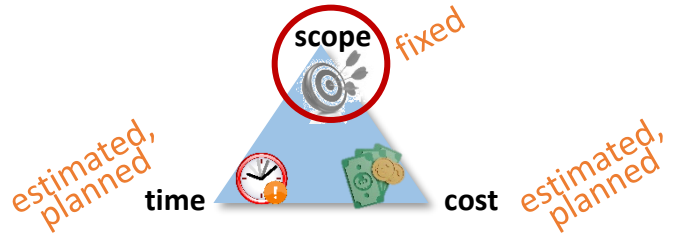
# Time – Scope – Cost

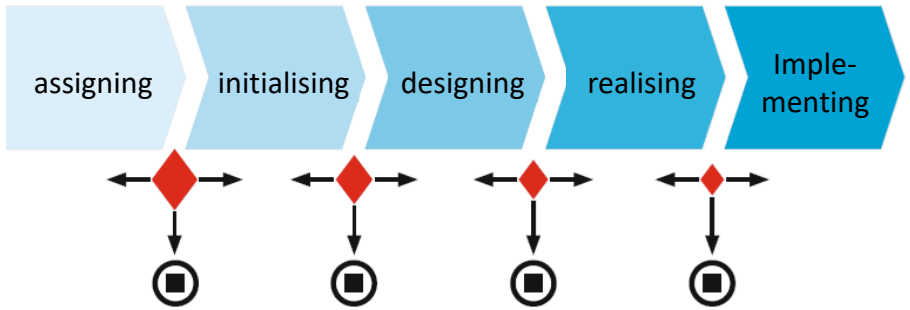
- A magic triangle with interdependencies



# Characteristics of Classical Project Management

- Goals and requirements are fixed, expenses and deadlines are variable (estimated, planned). The requirements for the project result are defined at the beginning and are not significantly changed in the course of the project.
- Projects are usually processed linearly. They run from phase to phase until the end of the project. Project results and project output are delivered and assessed at the end of a project phase or even at the very end of the project.
- The typical life cycle of a project consists of the rough phases of assigning, initialising, designing, realising and implementing. Each of these phases is worked through once in the project. At the end of each phase a predetermined breaking point is provided.
- The influence of the stakeholders in the project (client, user, etc.) decreases in the course of the project. At the beginning, during the goal and requirement definition, it is largest.
- Project communication takes place in lengthy meetings with often extensive documentation.

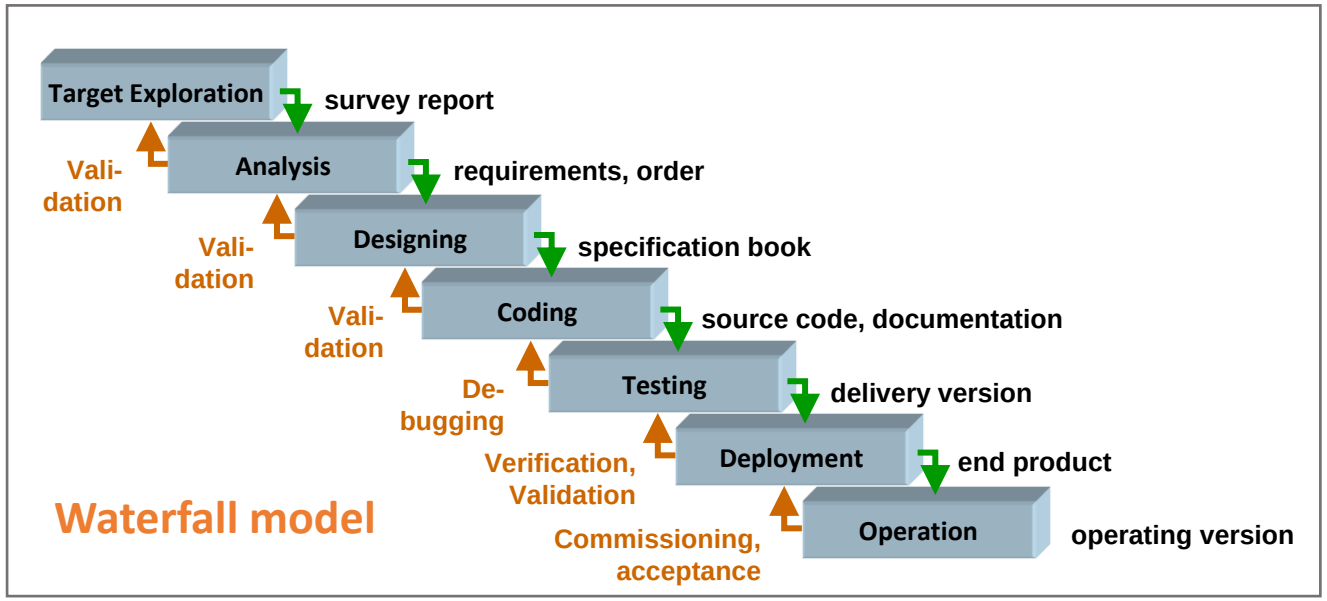


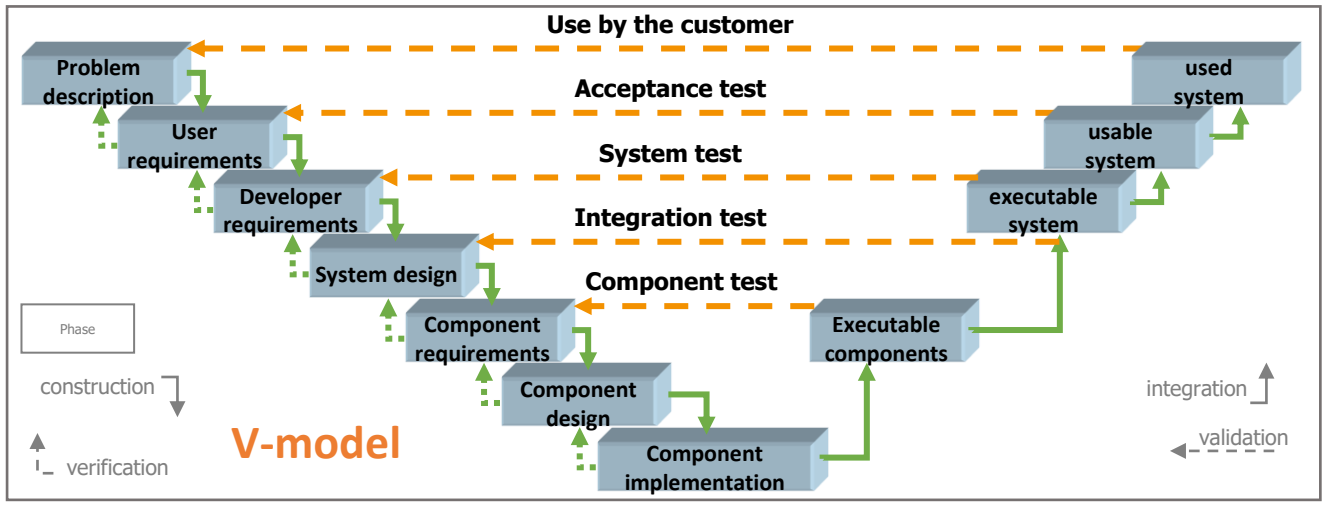



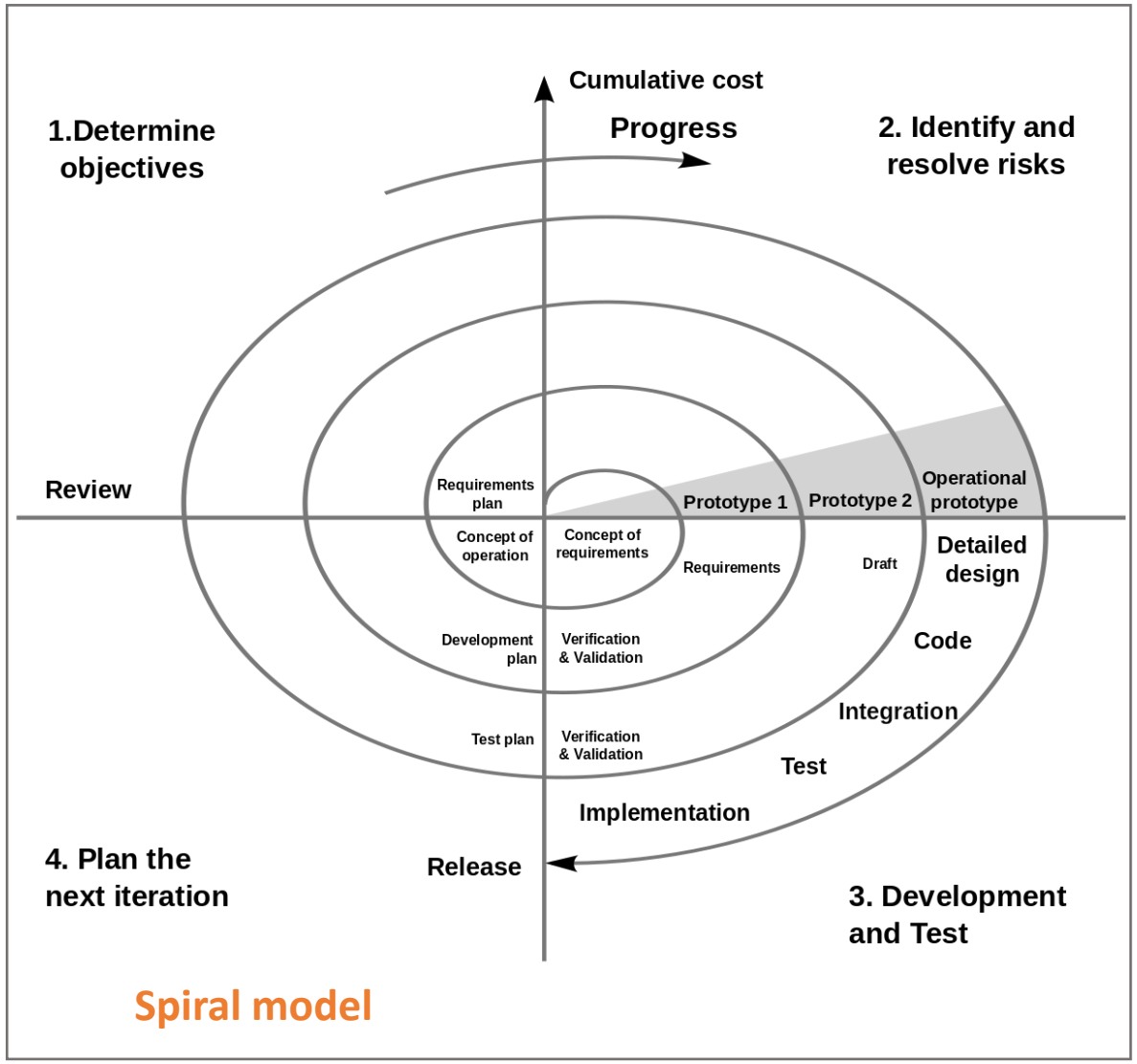

**Plan driven approach**

- Map the future through plans and then follow those plans
- Break the project down into work packages
- Targeted structuring of work packages into individual planning and implementation stages

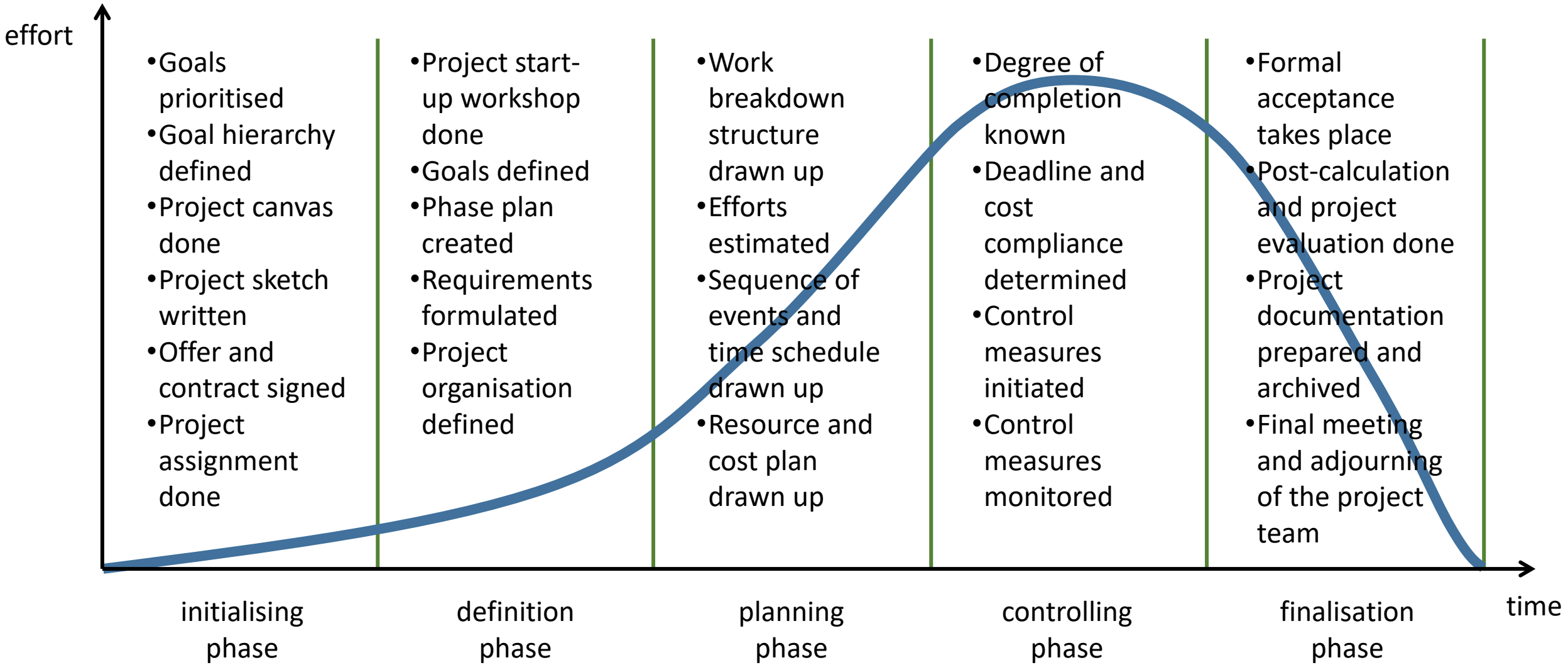
# Different number of phases and arrangement depending on project specifics



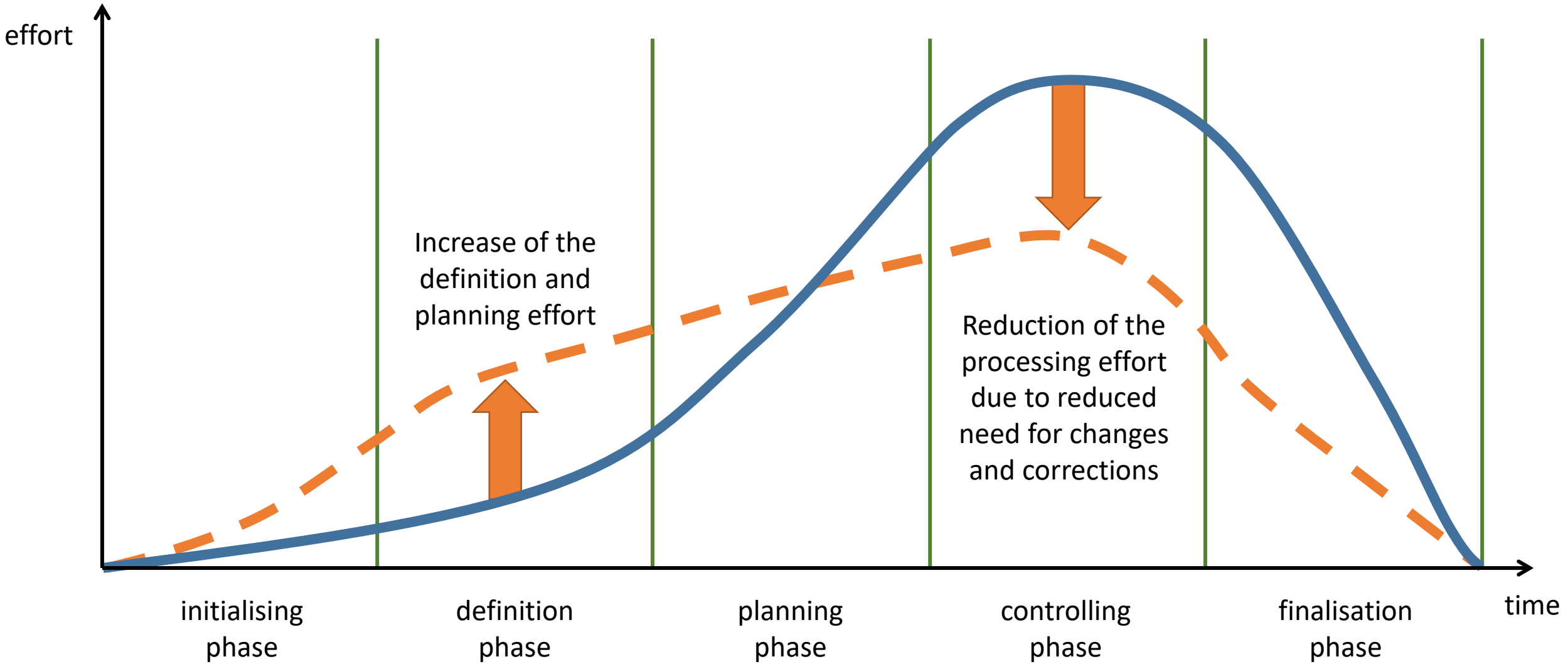



# Typical phases in all projects




Project life cycle divided into phases

# Typical phases in all projects

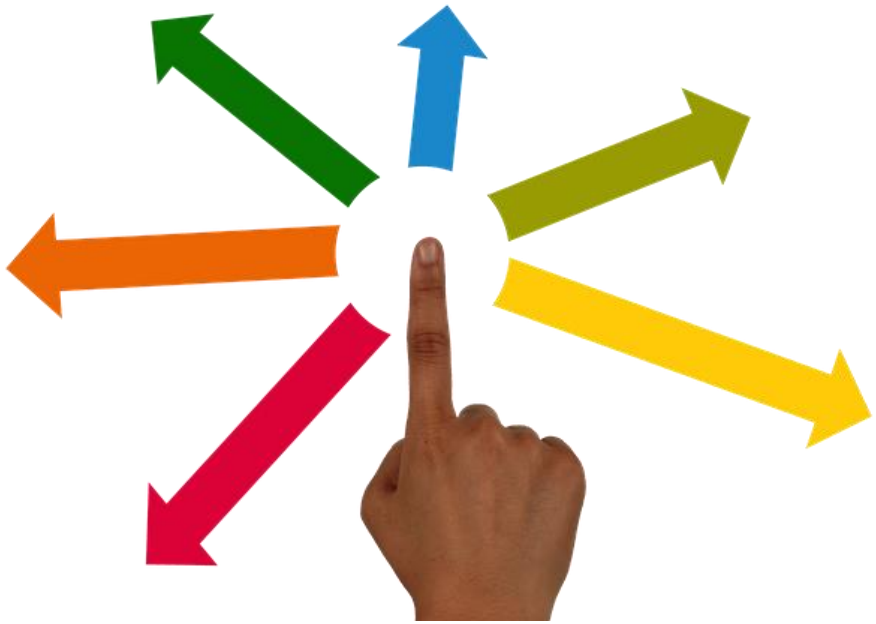



Project life cycle divided into phases

# Tasks in the early project phases

Goal analysis of the project

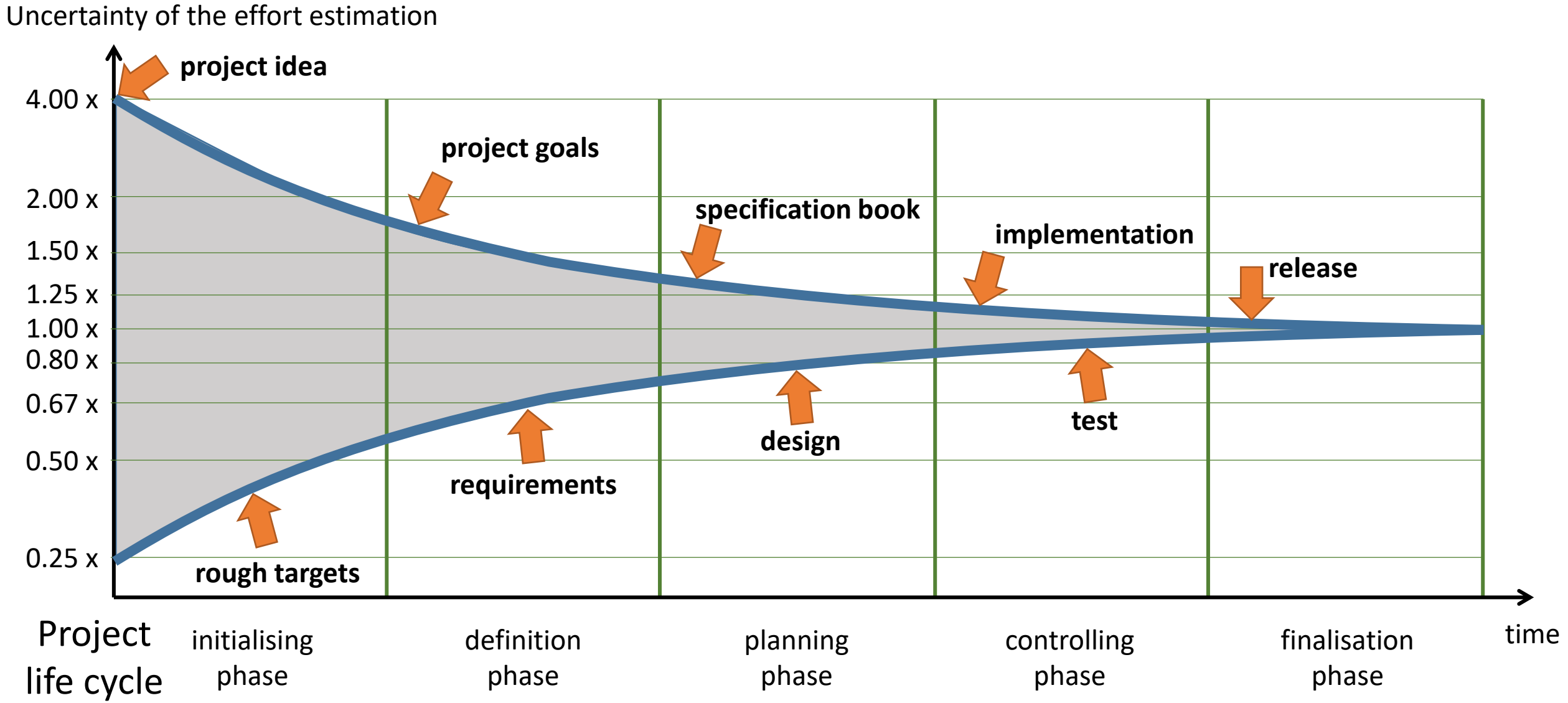
Clear formulation of goals



Complete requirements

Suitable project organisation

# Reduce uncertainty through systematic target formulation



# Functions of targets

- Comparison of the expectations of the participants and development of a common understanding through exact, written formulation
- Basis for project planning
- Basis for being able to set up meaningful target/actual comparisons in project controlling
- Decision support: Prioritization of alternatives and success evaluation
- Motivation: joint development promotes team spirit and result-oriented way of working

# Formulate good goals – observe the SMART principle

**S**
- **s**pecific
- simple, understandable and precise

**M**
- **m**easurabel
- Clear criteria and limits for checking compliance

**A**
- **a**chievable
- achievable under realistic conditions

**R**
- **r**elevant
- relevant to the project and in relation to the overall objective

**T**
- **t**ime-bound
- Temporally classifiable, plannable

# Prioritise goals

Different possibilities :

- Establish a ranking from the most important (priority one) to the least important objective (priority corresponds to the number of objectives)
- Prioritisation in categories, e.g. MuSCoW principle

Must-have,
Should-have,
Could-have and
Won't-have goals

# Goal hierarchy
# Define goals at different levels

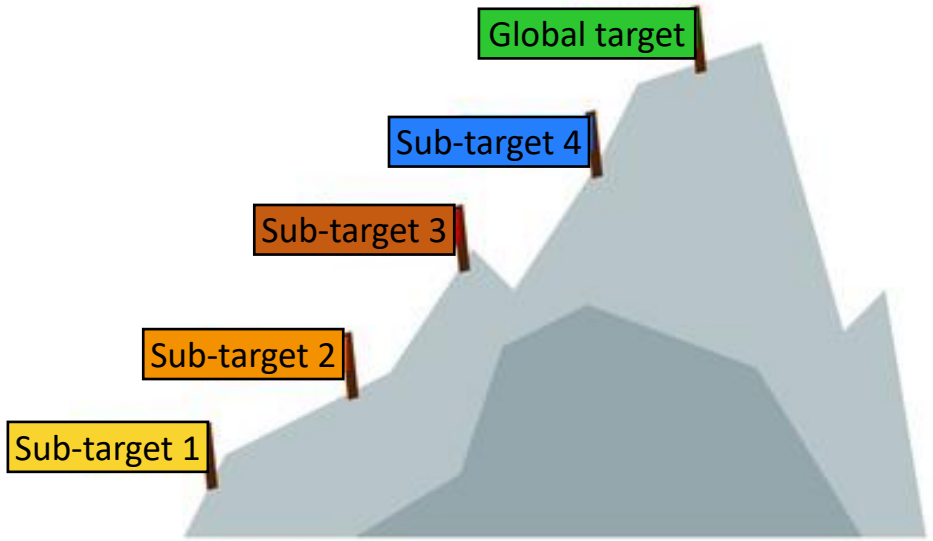

| Example |
| --- |
| Increase turnover by 4% by the end of the year |
| Development of an online customer portal |
| Performance targets, cost targets, time targets, social targets, non-goals, etc. |
| Performance: functions, comfort, etc.<br>Costs: project costs, operating costs<br>Time: duration, end date |
| Functions: Number of functions<br>Project costs: Costs in €<br>Duration: in months |
| Number of functions: min. 10<br>Costs: max. 2 Mill. €<br>Months: max. 12 months |

# Goal-setting process

- Participants: Client, project manager and project team plus all those who will be affected by the project results (stakeholders)
- Subjective realities collide
  (e.g. different objectives, perception of the current state)
- Important: Developing a common understanding
- Definition of goals as precise as possible
- Delineation of the problem
- Development of project restrictions (know-how, time, resources, ...)
- Setting the overall goal or rough goals
- Rough goals = target. Must not change during the project. Otherwise: Project termination!

➔Result: To describe the overall objective of the project as clearly as possible

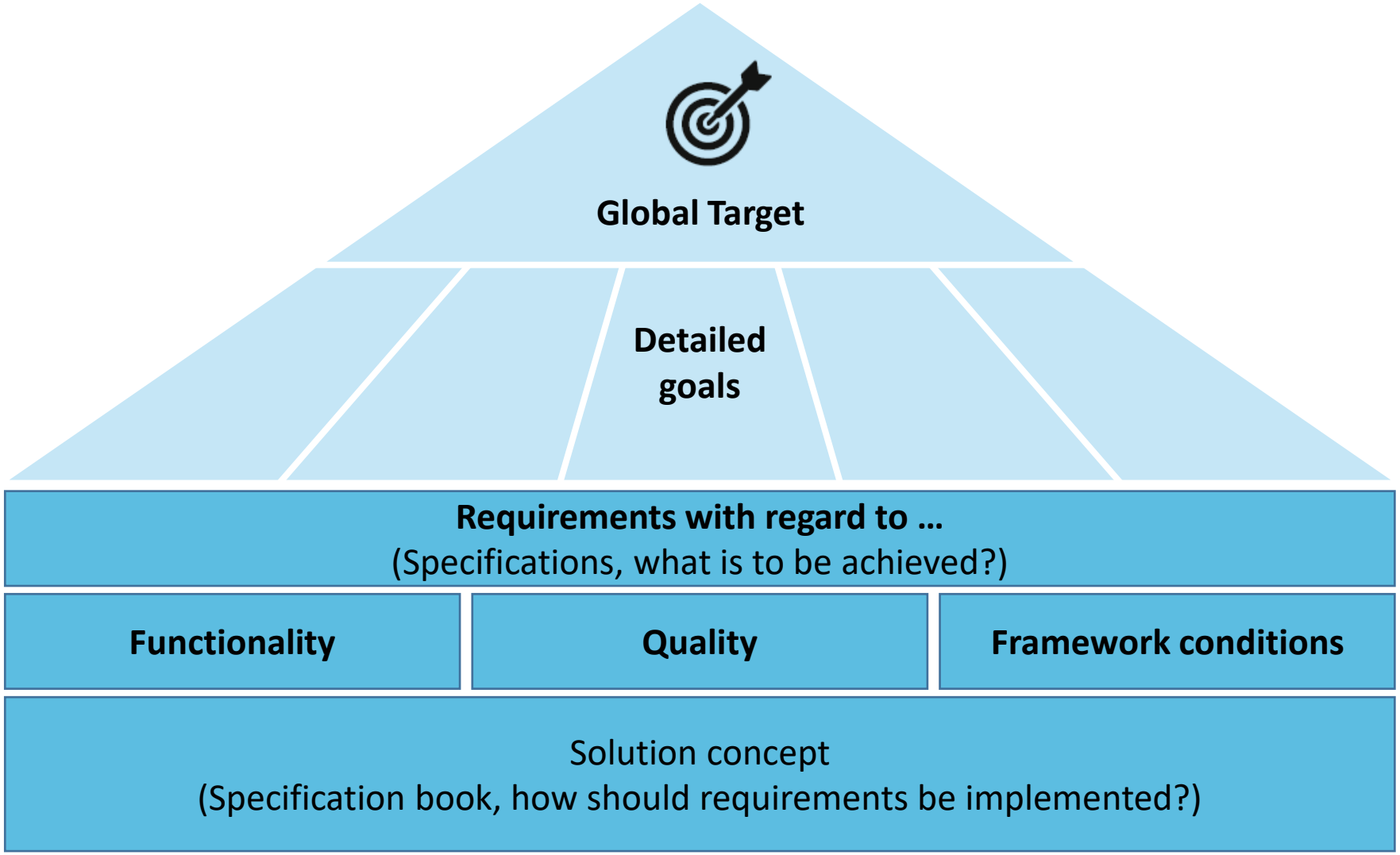
# Create your first rough project plan with simple means




Objectives of phase and milestone planning:

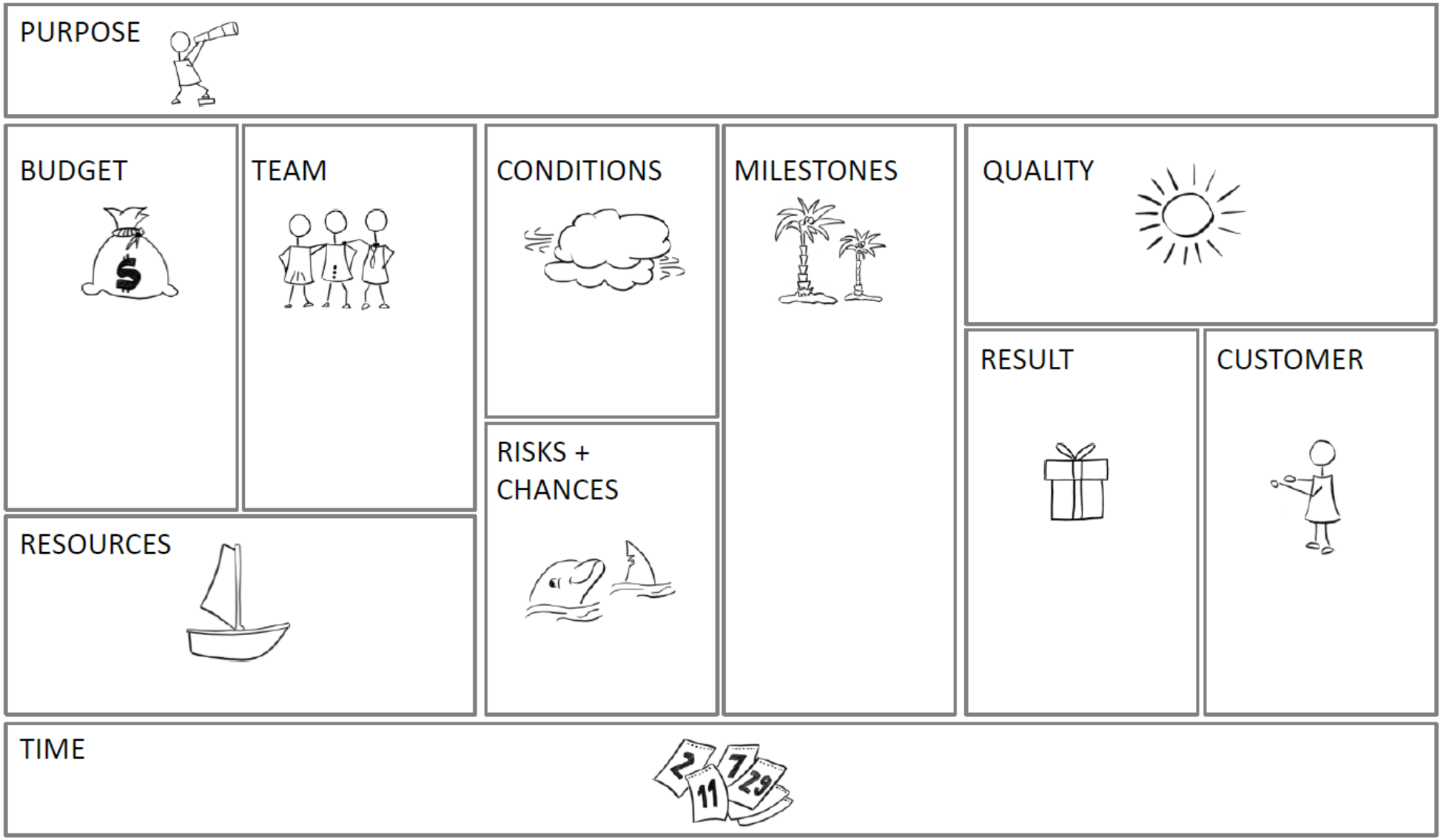
- First rough structuring of the project by dividing the project into phases
- Gain an overview of the course of the project by assigning tasks and resources to the phases
- Initial estimation of costs

# Interaction between goals, requirements and solution concepts



# The project canvas

- Visual metaphor
- 11 Project modules
- 30 Effective questions
- Design-oriented approach
- Tried and tested communication formats



# Initialisation: Tips

- Familiarize yourself "on site”
- Description of the actual state
- Determination of the personnel structure in the company (experts, contact persons, responsible persons...)
- Documentation of each step by
  - Conversation notes
  - Emails, letters
  - Project outlines
  - Project progress reports
  - ...

# Conversation note Example

Project: **METHUSALIX**
Participant: KNAU
KRU
ÖHL
WINE
EVER

Date: 4.12.
Author: EVER
Place: Wildschönau

**Content:**
2 work projects are defined:

1. Large scoreboard: Area of responsibility: KRU
Selection and connection of the large display board. You want to display
-Advertising
-Movie
- Athlete information
- Real-time timekeeping, placement

Current contact: Microgate (Italy)
The size, feasibility and costs of alternatives should be clarified

2. Runner management: Area of responsibility: ÖHL
The data of the runners should already be recorded at the WC with a view to the World Championships.

**Further procedure:**

| What? | Who? | Until when? |
|---|---|---|
| 2 further coordination dates of the group:<br>23.12., 10:00 am, Wildschönau<br>13.1., 4:30 pm, Wildschönau | | |
| Contact address of the rental company<br>Organize the large display board and forward it to KRU | KNAU | 5.12. |
| Exploring alternatives to the large scoreboard<br>Check of scoreboard and its interfaces, especially with timekeeping | KRU, WINE | 23.12. |
| Email Access database to ÖHL | EVER | 4.12. |
| Analyze old database | ÖHL | |
| Create a function model | ÖHL, WINE | 23.12. |
| Design Creating a Data Model | ÖHL | 22.12. |
| Validate the Data Model | JE, ÖHL | 23.12. |

# Project sketch

- First document that is created in the course of a project initiation and that describes the framework conditions and the content of the project.
- Content:
  - Purpose of the project, background
  - Goals / Non-goals
  - Effort
  - Input
  - Output
  - Framework conditions and risks
  - Organizational structure, contact person
  - Milestones
- Usually basis of supply and basis for further action

# Project sketch Example

**PROJECT SKETCH**

| Project-No: | 1108 | Date: | |
|---|---|---|---|
| Designation: | TiriHouse – Development of a data warehouse for Tiritec GmbH | | |

**PURPOSE (main purpose, secondary purpose, background)**

Tiritec® GmbH is a company specializing in Internet and mail order (eCommerce). Founded as Tiritec® GmbH in 2002, the number of processed orders has grown healthily and steadily since then, and the sales development is sustainable. The business model is continuously optimized. In spring 2009, the company was renamed Tiri® GmbH. The online shop Tiri.de focuses on technology, living & household, toys, pet supplies and car and garden accessories. At the company headquarters in Upper Bavaria, personal advice takes place and there is the possibility to pick up ordered goods. In addition to active customer advice and service, the company also offers sales by phone and e-mail. The target groups include end consumers as well as corporate and dealer customers. Tiri sells high-quality screen protectors under the trade name OnScreen® as its own product. These are manufactured by the company precisely for almost all displays.
Currently, the master data management of Tiri GmbH (as far as product data, etc. is concerned) takes place in "Buro+" of the company microtech GmbH from Bad Kreuznach. The central "collection point" of the orders is the online shop based on "xt:Commerce" (open source). The processing of orders is carried out by the mail order software "pixi*" of the company mad geniuses GmbH from Munich.

Behind Büro+ is the "NexusDB", which (without further middleware) is not directly accessible (there is only a COM+ interface). The xt:Commerce runs with a MySQL database to which free access exists. The same applies to the Microsoft SQL Server running pixi*.
For business intelligence (reporting, analysis and planning), the company uses an "in-house solution" based on Microsoft Access, which is currently being developed and operated by an employee in controlling, in close cooperation with management and technology.
Microsoft Excel is used to summarize and present evaluations and (partial) results. At the same time, the XLS format forms the basis for many imports and exports to master data management (Office+). The "collection" of data takes place via data exports directly from Büro+, exports via web scripts from xt:Commerce and reports from pixi*.

**OBJECTIVES (main objectives, secondary objectives)**

The aim of the project is to prepare a cost-effective data warehouse solution for the company. A concept for the ETL process from the different data stocks and a data warehouse solution with corresponding OLAP functionality are to be created. Corresponding providers (e.g. Palo of Jedox AG) will also be checked for suitability for Tiri and an evolutionary prototype of the overall solution will be created.

**NON-GOALS**

- It is not a goal of the project a complete productive implementation of the data warehouse or data warehouse. OLAPand ETL processes. This implementation is done by the company itself.

**Costs/effort for the client**

Implementation:
x,-
Running costs:
To be determined.

**Necessary INPUT**

Access to interfaces of existing systems (data definitions, etc.)
Contact person for formulating the requirements for the evaluations.

**Desired OUTPUT and DOCUMENTATION**

- Content results
  - As-is analysis, requirement specifications and functional specifications
  - Interface concept
  - ETL Process Documentation
  - OLAP Definition
  - Evolutionary prototype
  - Slide sets for intermediate and final presentation
  - Implementation of the prototype
  - If applicable, manual for the use of the system, if necessary training documents
  - Right to use the resulting solution
  - ...
- Documentation
  - Project plan for coordination with the client
  - Project Handbook
  - Project diary, project progress reports
  - Meeting minutes

| Project-No: | 1108 | Date: | |
|---|---|---|---|
| Designation: | TiriHouse – Development of a data warehouse for Tiritec GmbH | | |
| Support: | | | |

**DATES**

**Kick Off:**
Customer meeting
Detailing of the order
Proposal project schedule
Clarification of schedule until interim presentation

**Milestone 1:**
Presentation surfaces, basic functions
Acceptance by the client
Clarification of schedule until final presentation
Decision on further action

**Final presentation**
Presentation of the implementation
Acceptance by the client

**RESOURCES**

| | |
|---|---|
| **Team** | 8 people |
| **Working time** | a total of approx. 700 to 1,000 working hours in the project |
| **Cost** | The total costcontribution is x Euro. The contractor will issue an invoice for this amount upon successful completion of the project. |
| **Expenses** | The use of thecontractor's existing infrastructure as well as travel expenses for a meeting at the client are included in the above-mentioned cost contribution. Should further costs, especially for travel or technical equipment, be incurred, these will be charged by the contractor after prior consultation with the client. |

**FRAMEWORK CONDITIONS AND RISKS**

- The client is personally available for the explanation of the project order, for interim presentations and for a final presentation.
- Communication with the client usually takes place via the student project manager or via the supervising university lecturer. Questions arising in the course of the project work are bundled and answered at short notice (ideally within 2 working days) by the client.
- At the moment, no aspects are known that could jeopardize the achievement of the project goal. The client and contractor will exchange information regularly, for example at the beginning of a calendar month, as to whether risks are emerging.
- The implementation of a study project serves both to achieve a good project result and to train students. However, the character of a study project results in boundary conditions (processing within the framework of the semester organization, organization, no warranty, etc.) that the client is aware of. Should special and further requirements exist here, these must be agreed separately.
- All data and information transmitted in the course of the project are strictly confidential.
- The contractor's existing equipment will be made available free of charge as part of the project. If special facilities (hardware, software, ...) are necessary for project processing, coordinationwith the client is sought.
- The client agrees to the publication of a projectannouncement on the homepage of the contractor with picture.

**ORGANISATION**

| | | |
|---|---|---|
| **Client:** | Tiritec GmbH<br>Max-Josef-Str. 2<br>83109 Großkarolinenfeld, Germany<br>http://www.tiri.de | Email |
| **Contactperson:** | N.N. | Email |
| **Project coach:** | N.N. | Email |
| **Project** | N.N. | Email |

# Offer and contract

- After successfully accepted project outline →Submission of quotation
- Type of contract
  - Fixed price basis (possibly plus service fee)
    Lump sum to be paid upon successful completion of the project
    →Precise requirement description and cost estimation required
  - Time and Material
    Contractor issues invoices according to agreed cost rates and (e.g. monthly) deadlines according to the expenses incurred to the customer
    →high level of trust needed
- Regulation of the most important content
  - Start, duration and place of performance
  - Cost rates / payment dates
  - Further education and training costs
  - Rights (e.g. code) and transfer documents
  - Acceptance of the contract

# Project assignment - document results!