

# Organizational Structures

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# Organizational Structures

- An organizational structure defines
  - Where responsibility and accountability are
  - How information flows
  - How conflicts are solved
- An appropriate organizational structure can simplify communication, keep stakeholders engaged, ensure decisions are taken where it is most appropriate (technically, managerially), and make work more efficient
- Two points of “view”:
  - The organizational structure the project lives in
  - The organizational structure chosen for the project

# Goals of the Unit

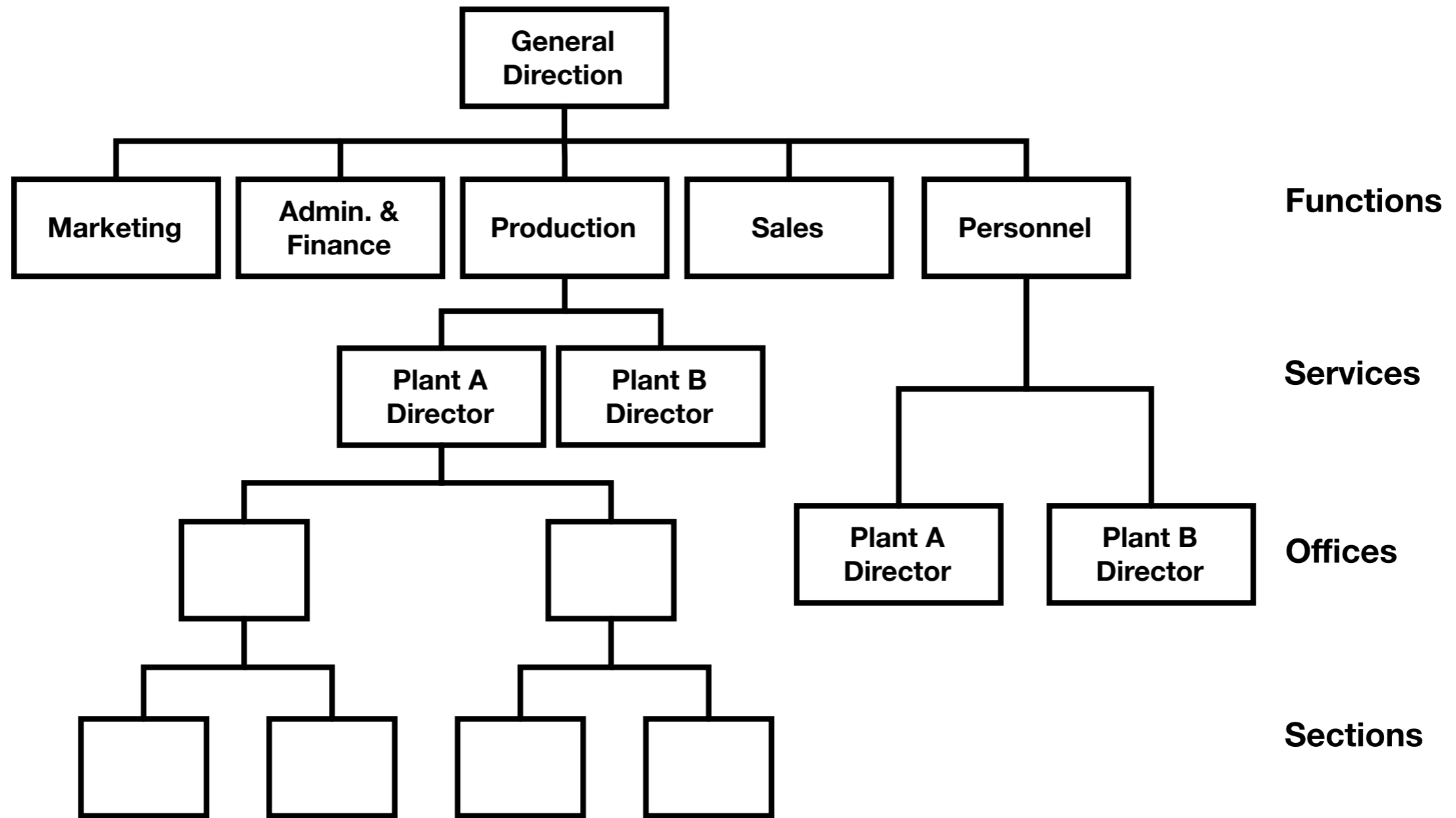
- Goal of this unit:
  - Learn about the most common organizational structures
  - Understand how these structure can positively or negatively affect a project
  - See the influence a project manager can exert, given a project organizational structure
  - See the influence the organizational structure of the performing organization can exert in a project
- We will look at the following organizational structures:
  - Functional/Hierarchical
  - Matricial
  - RACI
  - Agile

# Organizational Structures

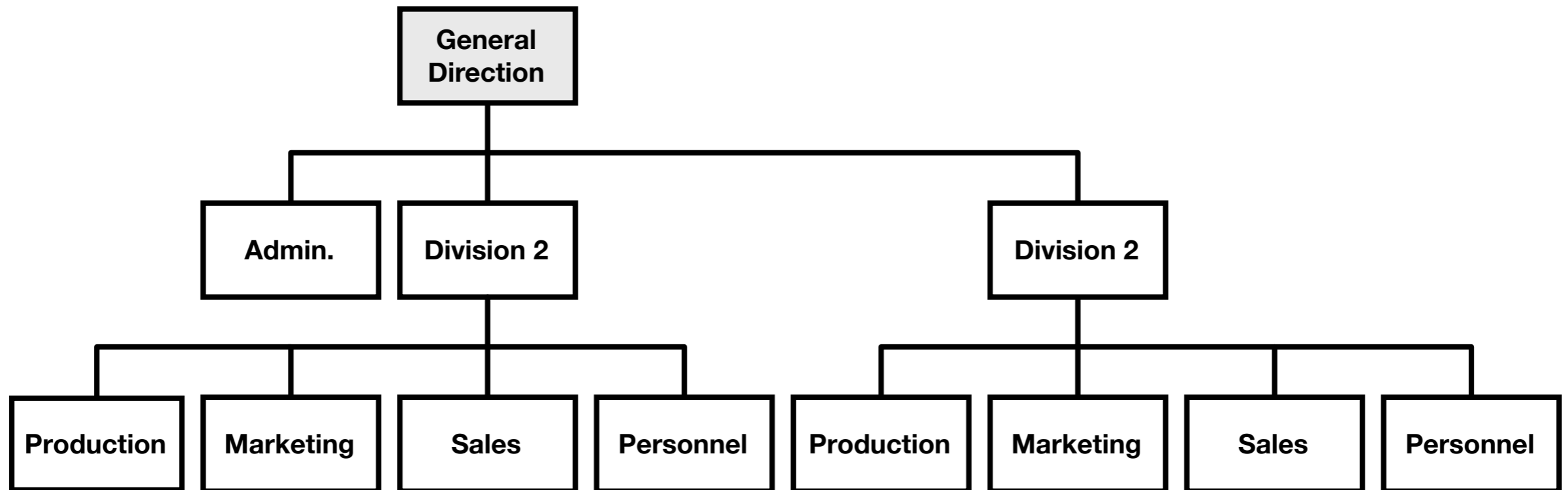
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An overview of the most common organization structures

# Hierarchical



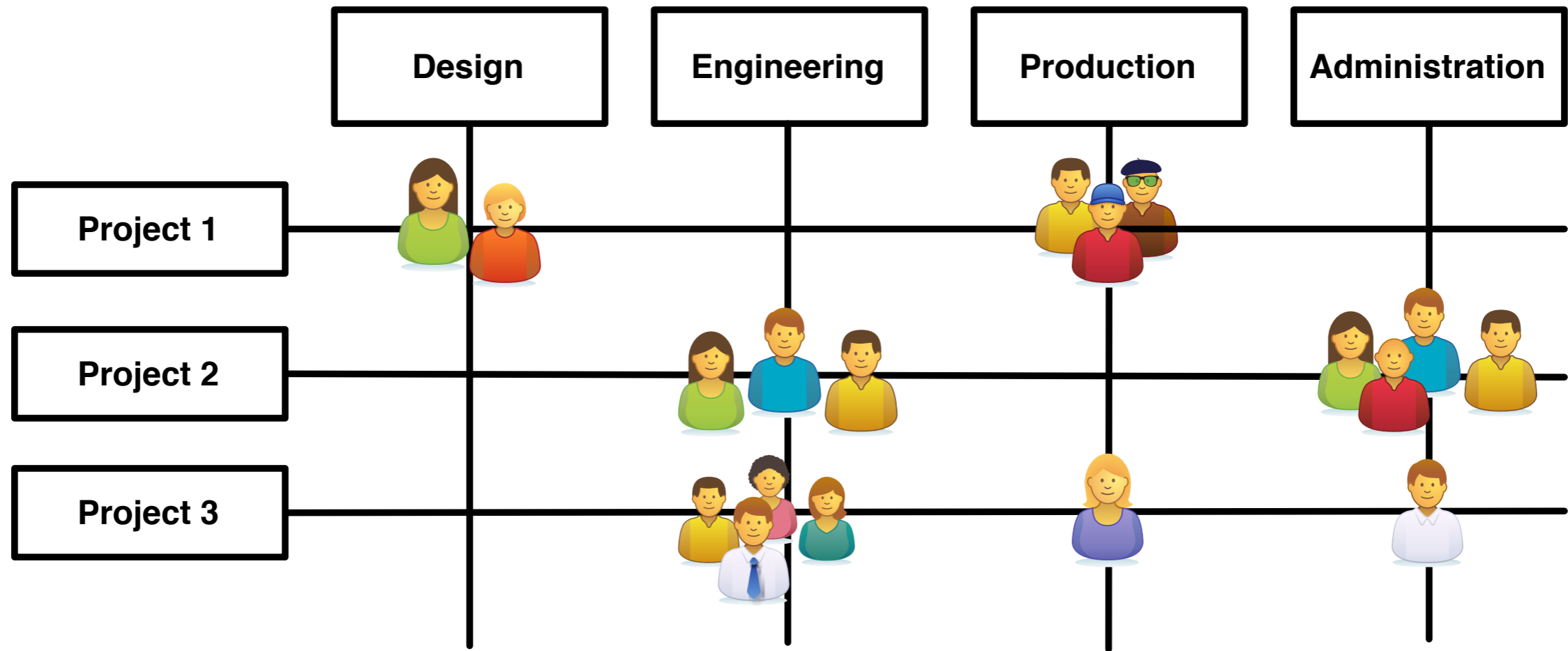
# Divisional



# Hierarchical and Divisional: Comments

- Each employee has a clear superior
- Work is organized according to functions/divisions
- Operational decisions are taken to the top of the hierarchy and propagate down to other functional areas
- Projects can:
  - Live in a “subtree” of the organizational structure
  - Temporarily borrow resources from different functional units (maybe part-time)
  - “Negotiate” project activities with the responsible of the organizational functions, which need to be involved to carry the activities out

# Matricial

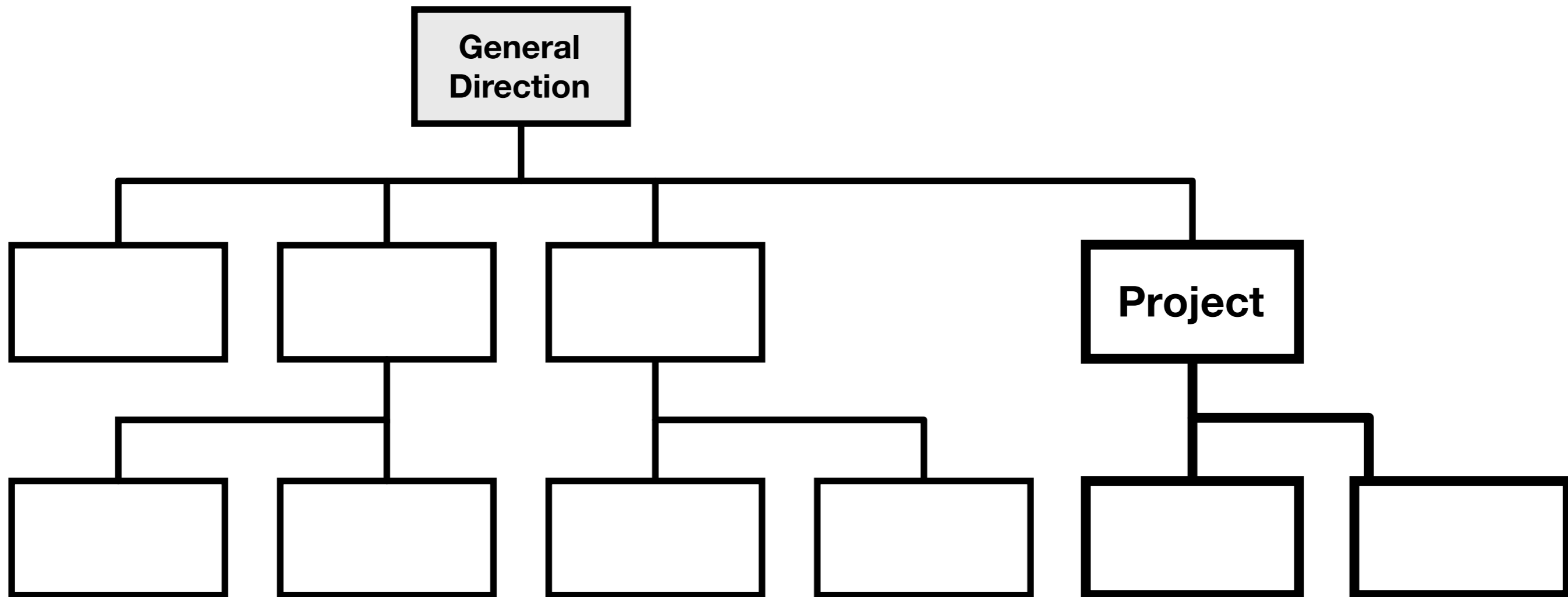




# Matricial: Comments

- Structural accommodation of projects: just add a line to the matrix!
- However:
  - Two bosses “syndrome”
- One point is where the decisions are taken:
  - Weak matrix: FUNCTIONAL AREA
  - Balanced matrix: SOMETHING IN BETWEEN
  - Strong matrix: PROJECT
- May or may not contain a PMO (Project Management Office) for sharing resources, monitoring and control

# Dedicated Team



# Dedicated Team: Comments

- Large or significant projects can be accommodated by creating a temporary structure in the organization and allocating the team
- Some of the issues include:
  - Groupthink (similar to the divisional structure)
  - Reallocating personnel when the project ends

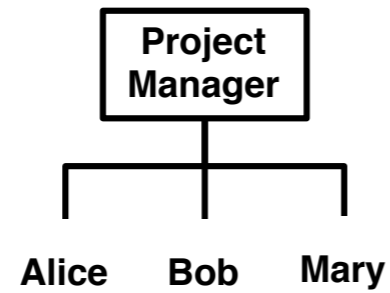
# Project Organizational Structures

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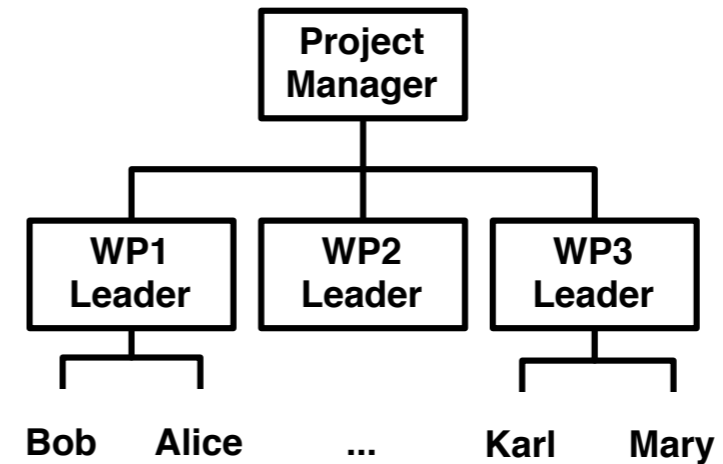
An overview of the most common project organizational structures

# Hierarchical

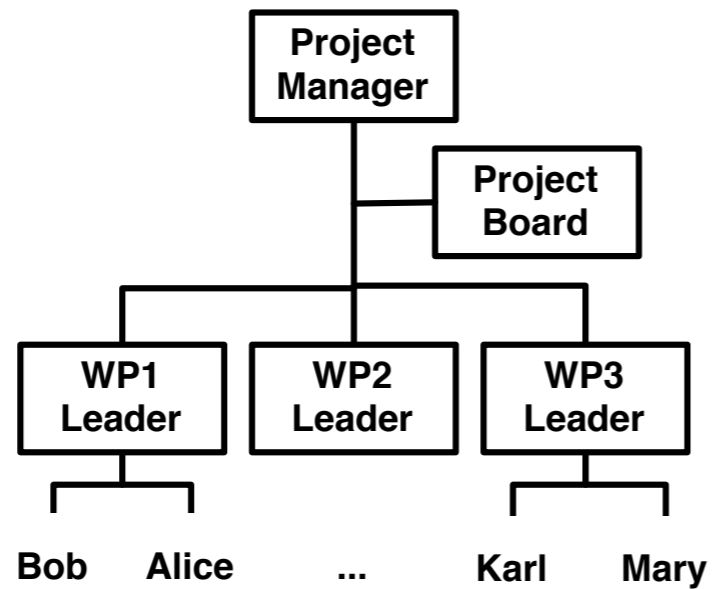
(a)



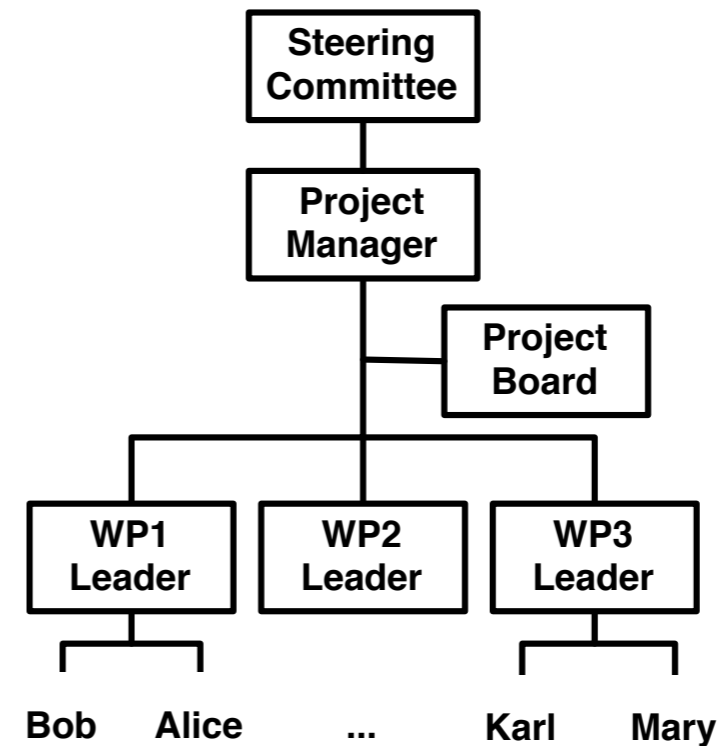
(b)



(c)



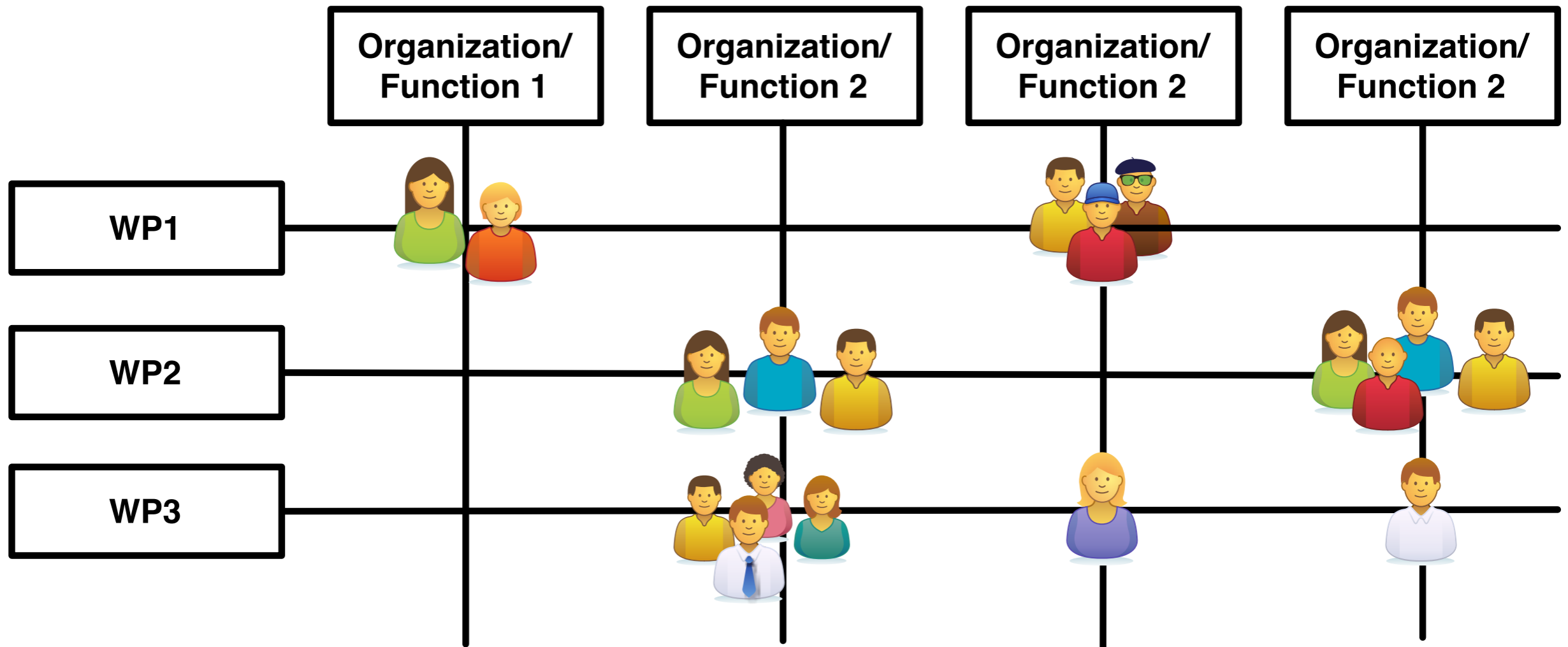
(d)



# Hierarchical Project Structure: Comments

- Each team member has a clear superior
- The structure often reflects the project organization (WPs)
- Operational decisions are taken to the top of the hierarchy and propagate down to other functional areas
- More complex projects can accommodate complexity by adding structure to the organization
- One risk is “management by committee”, especially if roles are appointed according to seniority/politics/...

# Matricial



# Matricial Structure: Comments

- Good for multi-partner/multi-divisional projects: each team member belongs to an organization and is assigned to a WP
- For very complex or projects with dedicated teams, the columns can represent specific project areas/functions/geographically distributed offices
- Decision taking is one issue (see RACI)



# RACI Matrix

WORK PACKAGE	P1	P2	P3	P4	P5	P6	P7	P8
WP0. Project Management	AR	C	C	C	C	C	C	C
WP1. Case Study Requirements	C	C	C	AR	R	C	C	R
WP2. Network Architecture Definition		AR			C		C	C
WP3. Software Development	AR			R	C	R		C
WP4. Assessment and Evaluation	C	C	R		AR	R	R	R
WP5. Sustainability & Exploitation	R	R	AR	R	R	R	R	R
WP6. Dissemination	R	R	R	R	R	AR	R	R

- **Responsible:** people expected to actively participate in the activity and contribute to the best of their abilities
- **Accountable:** person who is ultimately responsible for the results
- **Consulted:** people who must be consulted before a final decision is made
- **Informed:** people affected by the activity/decision; informed, they do not participate in the effort

# RACI Matrix: Comments

- Clear allocation of roles for each project task/work package
- It specifies both decision and information flows
- More useful for larger projects involving different partners

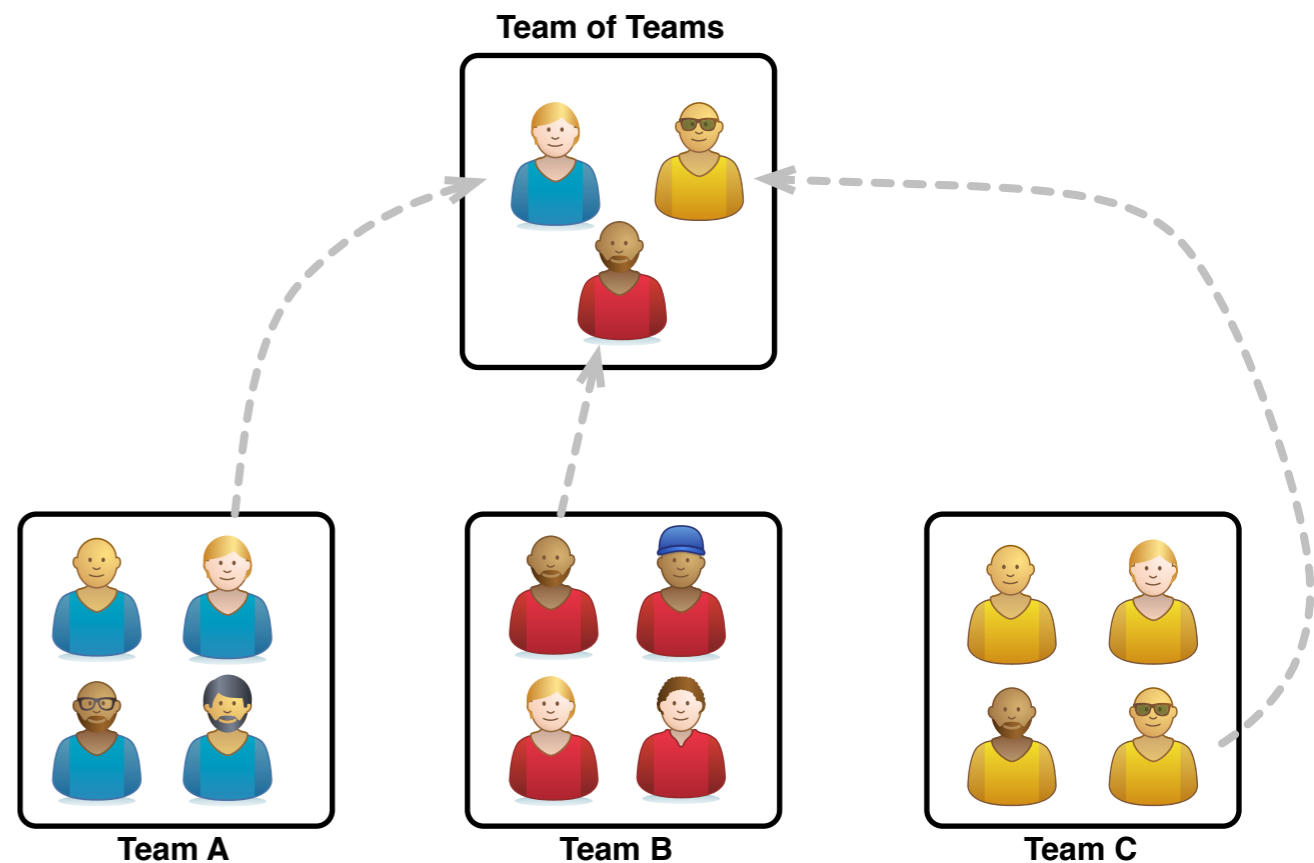
# Agile Teams

- Agile development prefers **small** and **dedicated** teams of collaborating people, with interchangeable roles (team over individuals)
- In a typical situation: **5-9 people** + **shared ownership** (of results and issues) + **rotation of roles and functions**
- Roles in SCRUM:
  - Scrum **master**: measures project progress, solves issues, and “shields” the team from external influences
  - **Customer**: product owner (requirements, removes impediments)
  - **Team**: self-organizing and responsible of carrying the work out
- Pair programming: **driver** + **navigator**

# Agile Teams

- One critique is that agile teams are too small for large projects
- In these situations a “**team of teams**” can be used
- The team of teams concept can be extended to arbitrarily complex structures

## Team of Teams



# Conflict Resolution: Example

- Together with the organizational structure, it might be useful to describe how issues are reported and information flows
- Consider the following:
  - Formality and means for issue reporting
  - Who/how conflicts are solved (example: the PM decides; the Steering Committee decides; consensus/majority voting, ...)
  - How decisions are tracked (i.e., is a formal record kept?)
- Some hints:
  - Favour early and open issue reporting
  - Escalation: define structures in which issues are solved at the lowest possible level in the hierarchy
  - Make sure the information about the decisions taken flows and involves all relevant actors