

Principles of Project Management

Module 1 Terminology



A Project ...



- is an approach to solution of a problem
- has the following characteristics
 - a **project goal** - clearly defined, **measurable**
 - a **beginning** and an **end** - i.e. limited in time
 - requires **multiple participants**
 - interdependent constraints - **time, resources** and **costs**
 - **uniqueness** (as a result of goals, constraints)
 - **complexity**
 - **may involve (substantial) risk**

Project Management (PjMt)



- The organised **planning** and **conduct** of the complex activities within a project
- **Effective**
 - doing the correct things
- **Efficient**
 - doing them correctly
- Goal oriented
- Optimising time, money and resources

3 Levels of PjMt



- **Subject Matter**
 - **Terms of Reference [Projektauftrag], Goals and how they will be achieved, Sub-projects**
- **Methods**
 - **Methods, Techniques and Tools that will be used during the project**
- **Relationships**
 - **External and internal relationships**

Successful Projects



- Balance between subject matter, methods and relationships determines project success
- Relationships within project team probably most important
- Project Manager (PJM) should have
 - good understanding of the subject matter
 - good knowledge of methods and tools
 - excellent team-building and social skills



Project Goal(s)



- Defines **what** is to be done
- Agreed between contracting parties [Auftraggeber und Auftragnehmer] and accepted by Project Manager
- Enhanced through a **detailed** specification

Project Goals must be



- Achievable
- Complete
- Clear - not open to interpretation
- Measurable
- Consistent
- Solution independent (“what” not “how”)
- Documented - **in writing!**
- Agreed between all involved parties

Projects Goals are defined



- to provide both client and contractor with a reliable basis for planning and implementation
- so that the client knows **what** he will receive, **when** and **at what cost**
- to provide a basis for the **acceptance** of the project deliverables

Project Goals need Metrics



- Production line “B2” completed, **producing 35 units/day**
- Warehouse software **installed and in use** for **6 weeks**
- Rationalisation of the office organisation is rationalised and **saving € 5000/week**



Project Organisation I



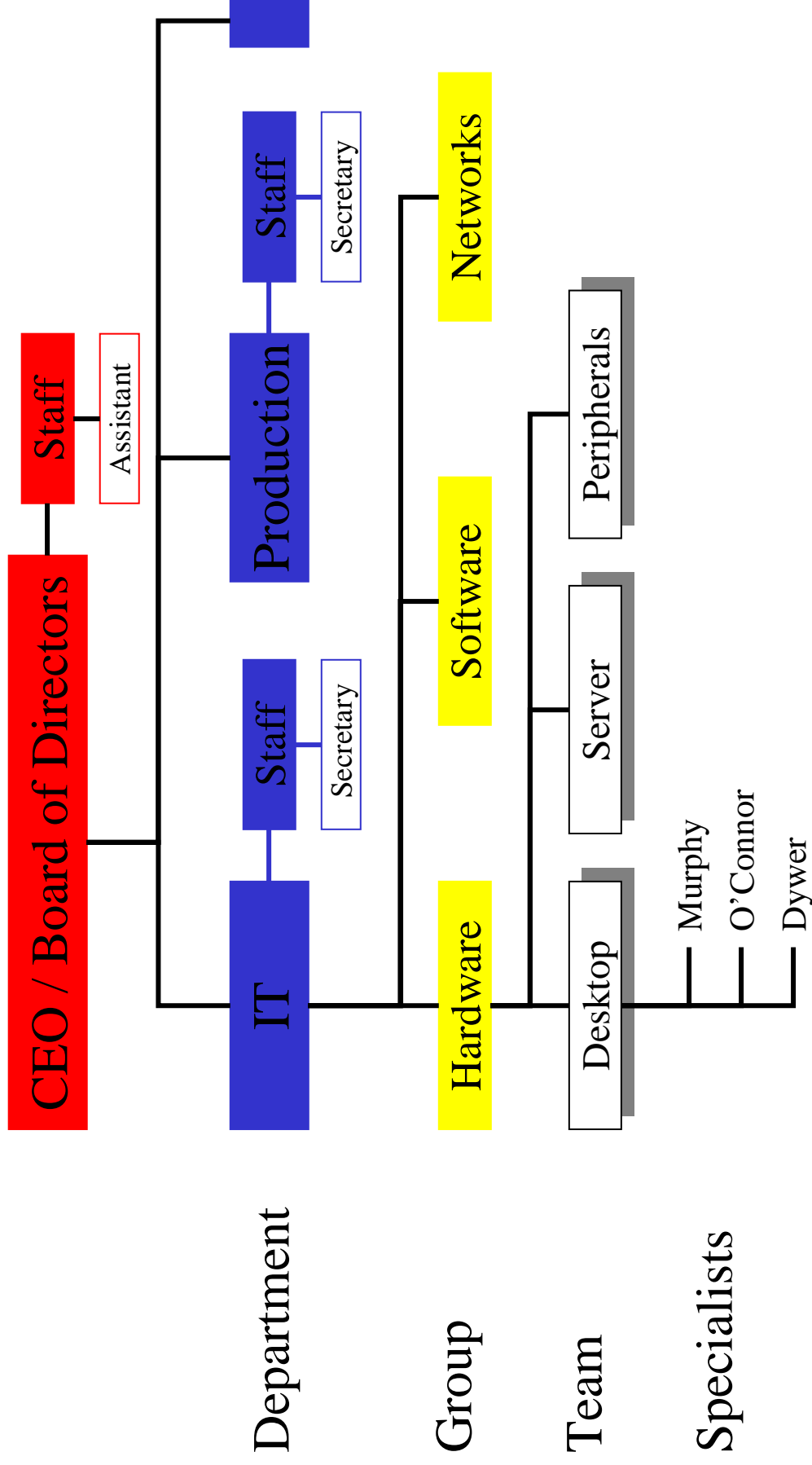
- Required to ensure efficient project implementation
- Key Members
 - Client [Auftraggeber]
 - Contractor [Auftragnehmer]
 - Project Manager
 - Project Team
- Other decision-making and control instances, as required

Project Organisation II



- Structure is specific and temporary
 - organised around project goals
 - dissolved after project completion
- Co-exists with standard company structure
- Requires clearly defined responsibilities and authority to reduce politics
- Team is usually multi-disciplinary

Company Organisation I



Company Organisation II



- Also referred to as “line organisation”
- Always there, seldom changed
- Addresses standard tasks and subjects
- Groups similar skills into teams
- Line organisations are **not suited** to project management tasks

Project Organisation Framework



- Every good company has one!
- Applies for all projects within the company
- Define the roles
 - Tasks
 - Responsibilities
 - Authorityof each project team member
- Reduces / avoids political conflict

3 Types of Framework



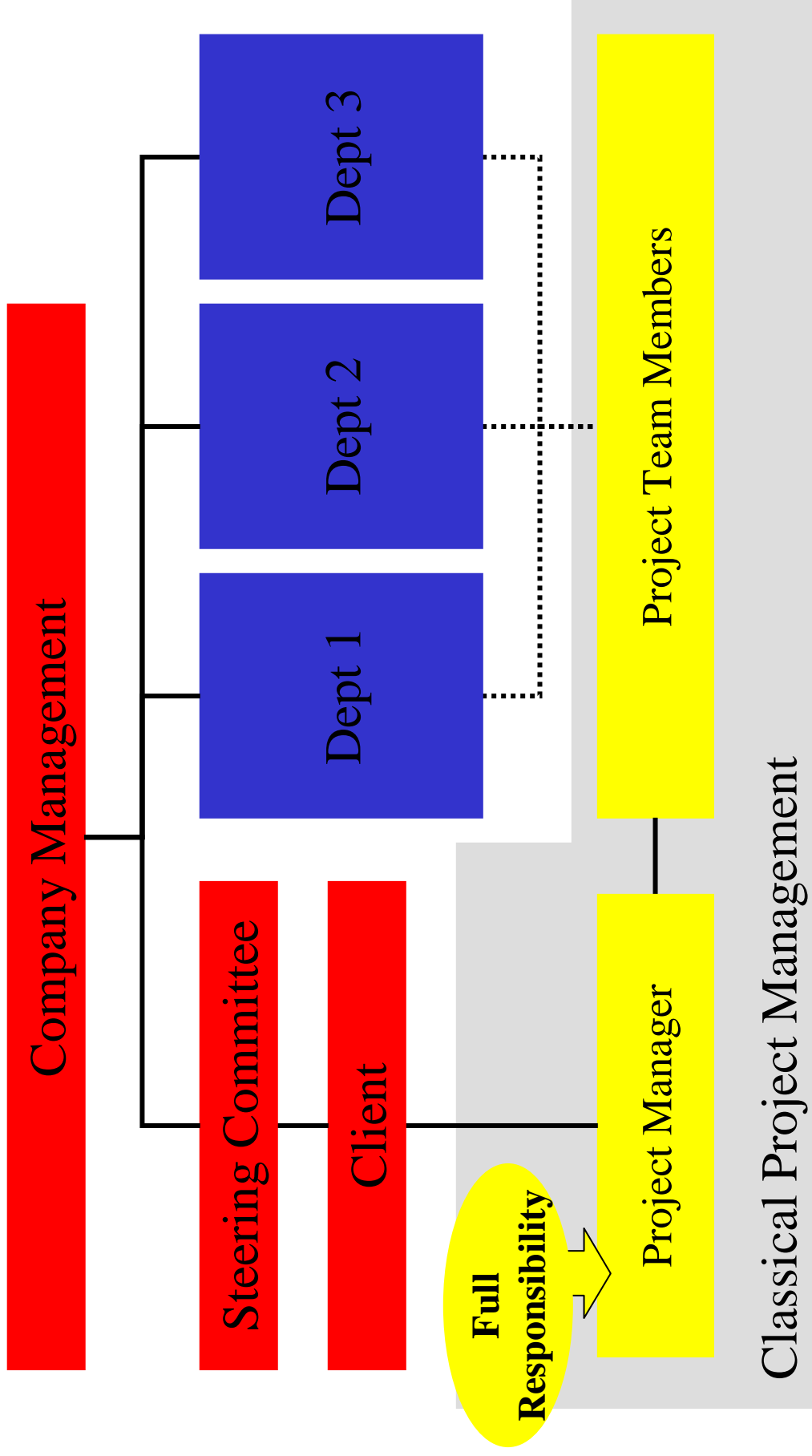
- Classical project management
 - The project manager carries full responsibility for the project results
- Matrix
 - The departments involved and the project manager share the responsibility
- Project co-ordination
 - The client carries the responsibility and is kept informed by a project co-ordinator

Which Type, When?



- **Project Management**
 - Often with external contractors / consultants
 - Rescuing failed projects
 - Software development
- **Matrix**
 - Standard Framework for in-house projects
- **Project Co-ordination**
 - Suited for small, well-defined projects
 - Requires good company culture to work

Classical PjMt - Structure



Classical PjMt - Features



- Project Manager has directive authority [Weisungsbefugnis]
 - often limited and insufficient
- Project organisation behaves as “company within company”
- PjM has unlimited control over project budget
- PjM can award external (sub-)contracts

Classical PjMt - Advantages

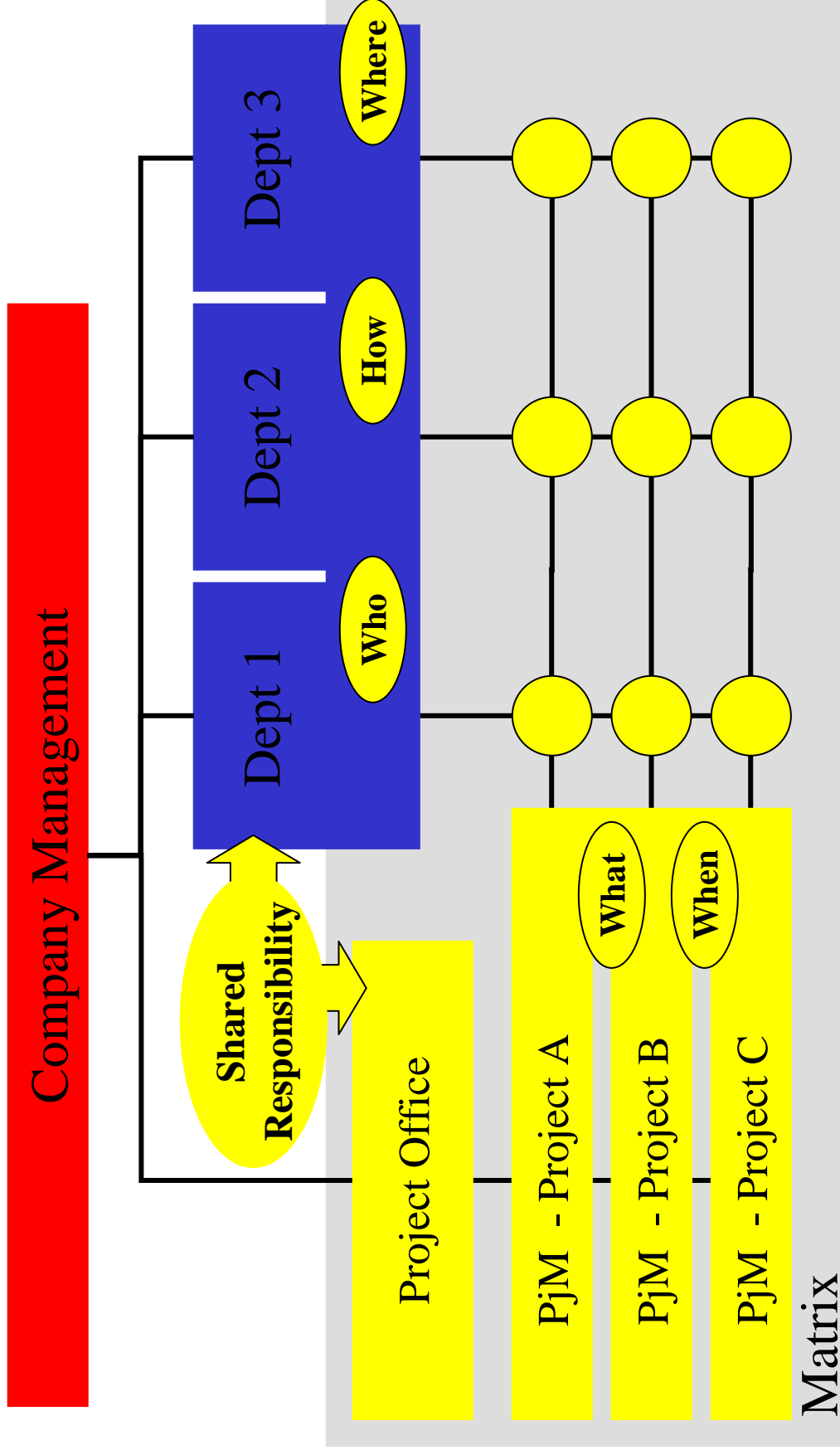
- PjM has all the authority necessary to successfully complete project
- Project responsibilities are clearly defined
- Project team works closely together
 - Fast reactions for problems and surprises
- Team members identify with project
 - Increased motivation

Classical PjMt - Disadvantages



- Information exchange with other projects is limited
 - project teams work independently
- Know-how and experience gained can be lost when project team disbands
- Internal team members must be re-integrated into line organisation
- Long term goals may be neglected
 - Training, staff development etc

Matrix - Structure



Matrix - Features



- Directive authority shared between project and line organisations
- Project organisation extends existing line organisation
- Staff work for both projects and departments

Matrix - Advantages



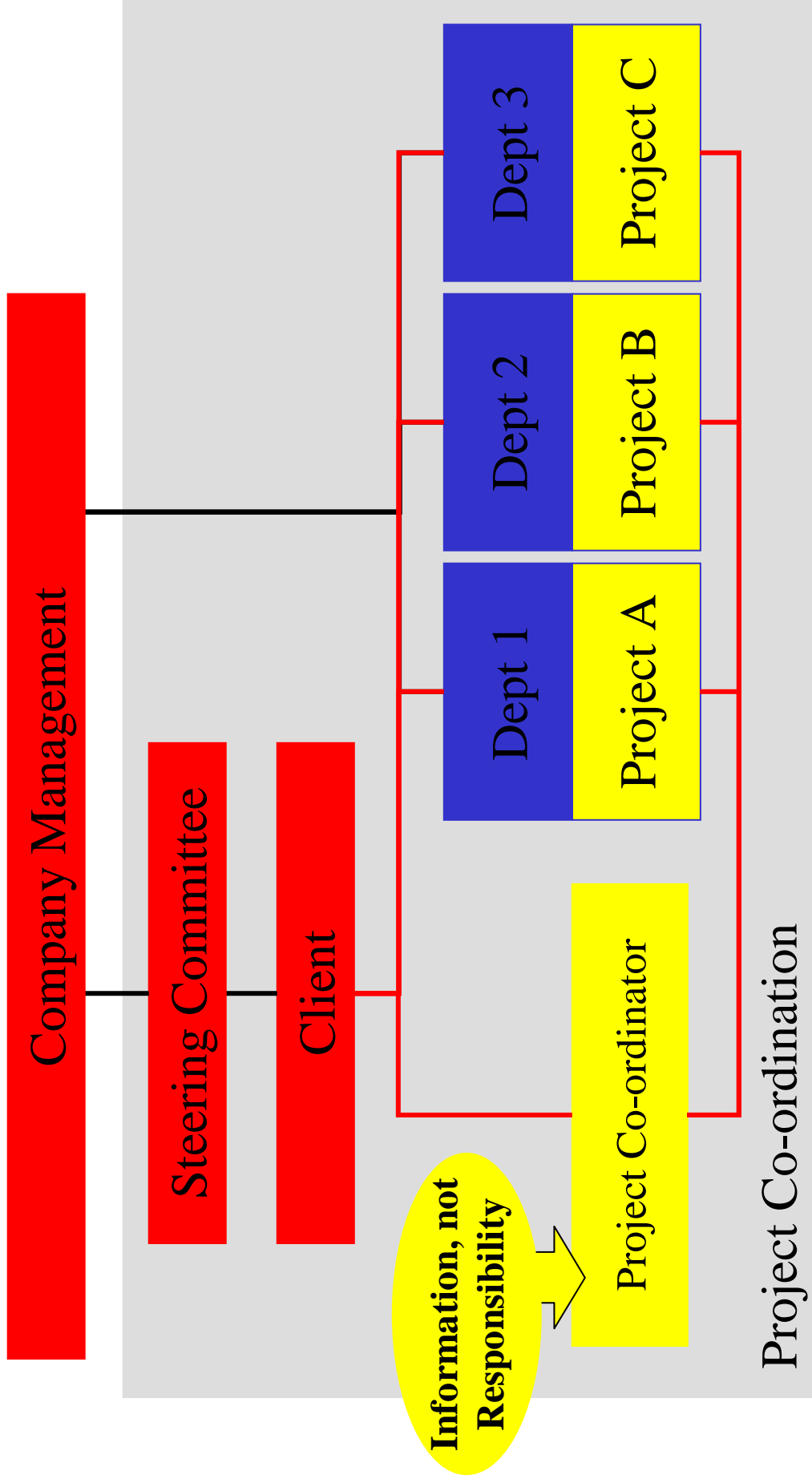
- Single person responsible for each project
- Expert knowledge is available to multiple projects
- Staff development and training managed by the appropriate department
- Re-integration of team members after project completion is simplified

Matrix - Disadvantages



- Project manager has full responsibility, but limited authority
- Projects must be **very carefully** planned (Work Packages) to ensure success
- Planning must be co-ordinated between project and line organisations
- Conflict potential (projects and line)
- Difficulties with team members' priorities

Co-ordination - Structure



Co-ordination - Features



- Project co-ordinator has no directive or decision-making authority
- Co-ordinator is (internal) consultant and reports to the line organisation
- Line organisation is unchanged
- Project tasks are carried out with the line organisation
- Suited for simple projects with low risk

Co-ordination - Advantages



- Personnel changes not required
- No changes in intra-departmental relationships
- Resources not tied to project
- Specialist information flow is maintained
- Involvement (and commitment) of departments is high

Co-ordination - Disadvantages



- Client can not always assume responsibility
- Team members not motivated (line priorities more important than project)
- Project status is harder to monitor
- Decision-making processes within the departments
 - slower response to problems and difficulties



Project Documentation



- Needed to provide project transparency
- Maintained in **Project File**
- Provides **up-to-date** status information
- Records **decisions** made
- Facilitates **Final Report** and re-use of project **experience** and **know-how** gained

Project File - Contents



- Project Brief
- [Projektauftrag]
- Project Definition
- Project Organisation
- Agreements / Contracts
- Correspondence
- Project Plan(s)
 - Work Breakdown
 - Milestones
 - Dates / Deadlines
 - Resources
 - Budgets / Costs
- Minutes [Protokolle]
- Reports
- Contact Information
- Presentations



Project Pre-Requisites I



- The **Project Goal(s)** is/are clearly defined
 - The PjM has a **client contact** for issues relating to
 - subject matter, organisation, inter-personal relationships
 - The project **roles**
 - tasks, responsibilities and authority
- and **rules** are clearly defined **in writing**

Project Pre-Requisites II



- **Team members** are chosen
 - availability, qualifications and motivation
- Project **Kick-Off** is conducted
- Each team member's **tasks** are **continuously** defined, **in writing**
 - contents, dates, deliverables (constraints)
- **Project File** has been created
- **Project organisation** is in place
 - infrastructure, tools, **PjMt-software**, people

The Project Manager (PjM)



- Project Management is an integral [ganzheitlich] activity
 - Interesting
 - Difficult
 - Decisions, decisions, decisions
- “The Project Manager **lives** the project”

A Good Project Manager...



- Understands the project subject matter
- Possesses excellent inter-personal skills
- Exhibits entrepreneurial and business talents
- Accepts responsibility
- Can lead a (heterogeneous) team
- Has an integrative spirit

PjM Personality



- Open, extrovert, communicative
- Determined, hard-working, goal oriented
- Socially competent
 - Lead, motivate and harass the team
 - Not afraid of conflict
 - Understands “win/win” and how to achieve

... and then some!



- In depth knowledge of subject matter
- Project Management training
- Training-on-the-job
 - Successes
 - Failures
 - Learning from others
 - Mentors and coaching
- and about 20 years experience!

Contact Information



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