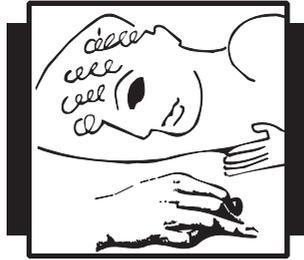


Appendix A: Project Characteristics



Tool Sheet: The Project Portrait

What

The project portrait is a starting point for identification and analysis of the characteristics and challenges of a project, a basis for understanding the specific conditions for approach and management, and a basis for identification of points of attention.

Large projects involve many persons – either directly in the project work or indirectly as future users of the project product. A common understanding of the project is needed – not just the expected result, but also the nature of the project and its critical elements and conditions (points of special attention). The portrait may be a means of creating a common understanding.

The project portrait illustrates the character and importance of the points of attention and is the basis for a focused management effort.

Use – Where and When

The portrait is usually drawn already at the project beginning and contributes to defining scope, approach, and organization. It is normally revised at the beginning of new phases.

Method

Four Pictures of the Project

The portrait consists of four perspectives, each shedding light on central aspects of the project, and leading to four pictures:

- The entrepreneurial picture – Illustrating the degree of clearness of benefits, of goals, of costs, and of opportunities for business success.
- The technical picture – Illustrating the clearness of the technical area of the project result (solution) and of the effect of technical approach and methods.
- The organizational picture – Illustrating the degree of understanding of the project importance and consequences in the organization and the will to complete the project.
- The political picture – Illustrating the conflicting interests around the project.

Each picture is structured according to the five elements of the five-by-five model – see [Figure A1](#). The degree of difficulty (uncertainty, opaqueness, etc.) is described on a scale from 0 to 5. The actual project is analyzed and evaluated according to the scale, and a score is assigned. The idea is to direct project management effort to the most challenging elements in the project.

The Portrait

In [Figure A2](#) the four scores for the actual project from [Figure A1](#) may be plotted on the frame forming a rectangle. [Figure A3](#) shows five examples of portraits indicating that projects call for different kinds of attention.

Some projects have most of the weight in one axis, but usually the project picture will include all four axes. The points on the axes indicate the degree of difficulty. A small shaded area represents an easy project and a large area represents a difficult project.

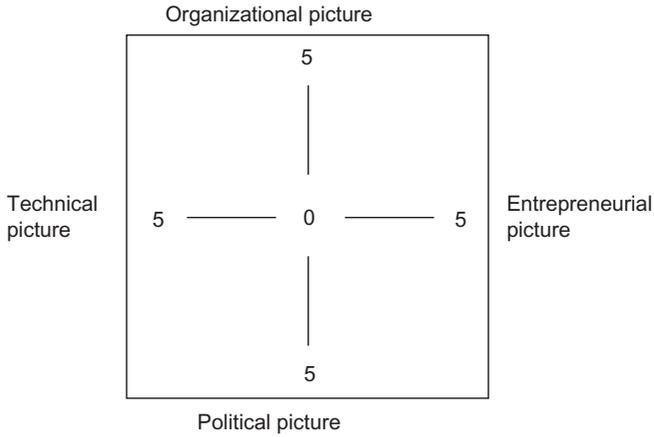


Figure A1. Four Pictures.

The organizational aspect	
0 ←	Scale → 5
<p>Project task The project task and the solutions/products are understood by the users and other interested parties.</p>	The degree of new development and complexity makes it difficult for the users and other interested parties to understand and evaluate consequences.
<p>Environment It is possible to explain connections between project products and their environment.</p>	It is difficult to describe and understand how project results will influence the environment – and vice versa.
<p>Interested parties Users' understanding, knowledge and acceptance will be achieved through information and training.</p>	It is a comprehensive and challenging task to obtain understanding, knowledge and willpower from important stakeholders – especially users.
<p>Resources The project can be managed as a 'pull' project. The user organization is committed and will provide resources.</p>	To some extent the project must be managed as a 'push' project. The user organization must be encouraged to participate.
<p>Course of action Anchoring will be achieved by involvement in the project work and by user training.</p>	Step-wise approach, visualization, test and new versions will be necessary to ensure anchoring.

The political aspect	
0 ←	Scale → 5
<p>Project task Project goals are reasonable coherent – or a few superior goals are dominant.</p>	There are several conflicting project goals – difficult to prioritize.
<p>Environment There are several considerations related to the environment - but they are managed through standards, regulations, and economy.</p>	There are several considerations related to the environment – not coherent and difficult to prioritize.
<p>Interested parties There is a strong coalition of stakeholders around the project. Potential conflicts will be solved by mutual agreement.</p>	There are essential conflicting interests around the project related to its relevance, scope and level of ambition. There are several powerful stakeholders.
<p>Resources Stakeholders are willing to contribute resources – provided that the project will fulfill the goals.</p>	Stakeholders have divergent opinions on best use of resources. Opinion formers influence the motivation to participate.
<p>Course of action The project plan will be realistic – but must be based on influence from important stakeholders.</p>	Power struggle, negotiations, degree of loyalty will influence the process.

Figure A1. (Continued)



Reasons for the picture:
(Special characteristics and challenges)

Figure A2. A Frame for the Portrait.

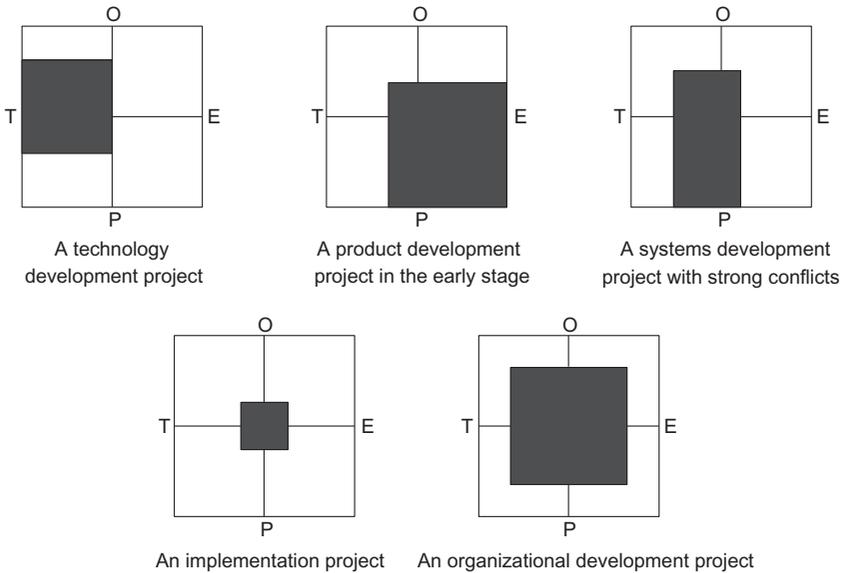


Figure A3. Examples of Project Portraits.

Understanding and Insight



Do not go on board on large projects with small ideas.

The portrait may be created in two ways – in a systematic-analytical way or in an intuitive-holistic way.

Figure A1 suggests a systematic way of creating a collective picture. Each participating person marks his evaluation of the five elements in each of the four pictures in the figure. The reasons for the evaluation should be noted, e.g., particular circumstances and characteristics. The participants compare their pictures and discuss differences. The discussion leads to a common picture and a list of challenges and points of special attention.

Figure A2 is used in the intuitive way. The participants draw a shaded rectangle directly – and explain the reasons. However, what you see depends on the seer, so the participants should discuss the pictures and draw a common picture.

Points of Special Attention

Each picture has a set of challenges and points of attention:

- *The entrepreneurial picture:* Attention to clarifying and elucidating the benefits and how the resource effort will lead to profit. Activities include visibility, internal marketing, lobbyism, enlisting sponsors/advocates, and on contribution agreements.
- *The technical picture:* Attention to unclear elements and uncertainties and challenges in the technical part of the project. Focus is on research, test, and specification.
- *The organizational picture:* Attention to understanding, competencies and confidence in the project and its scope. Focus on information, training, learning, and involvement.
- *The political picture.* Attention to powerful interested parties and their balancing of contribution and rewards. Focus on negotiation, adaptations, and persuasion.

The challenges may point to certain approaches, countermeasures and management actions. The portrait clarifies requirements to management of a complex project.

Connections Between the Pictures

The four pictures are basically complementary, but their management requirements are linked. Understanding this creates synergy. For example:

- Focus on the project task may contribute to better conflict handling (the entrepreneurial picture and the political picture). Making the project visible to interested parties – especially by emphasizing its benefits – enables each party to see its own contribution and benefit. It clarifies possible coalitions.
- A well-planned technical structure contributes to arranging a correspondingly clear project organization structure (the technical and the organizational picture). An unclear and complex technical structure, on the other hand, will lead to an effort for common clarification.
- A starting point in the entrepreneurial picture and the political picture with subsequent understanding of uncertainties, opaqueness, and counteractive elements may lead to better concept development (the technical picture).

Extension of the Portrait

The portrait may be supplemented by the tool ‘Project challenges’ – see tool sheet C.1. It presents more cues to identifying difficulties.

Example

Figure A3 shows examples of portraits.

Tool Sheet: Models of Project Management Functions

Well-known models of the typical functions in project management exist – most of them developed by project management associations. For inspiration, we will show models from the Project Management Institute (PMI): Project management body of knowledge (PMBOK); The British Association for Project Management: APM BOK; The European association, IPMA: Competences in Project Management; and from PRINCE2.

PMBOK Project Management		
Project Integration Management	Project Scope Management	Project Time Management
Project plan development	Initiation	Activity definition
Project plan execution	Scope planning	Activity sequencing
Overall change control	Scope definition	Activity duration estimating
	Scope verification	Schedule development
	Scope change control	Schedule control
Project Cost Management	Project Quality Management	Project Human Resource Management
Resource management	Quality management	Organizational planning
Cost estimating	Quality assurance	Staff acquisition
Cost budgeting	Quality control	Team development
Cost control		

(Continued)

PMBOK Project Management		
Project Communications Management	Project Risk Management	Project Procurement Management
Communications planning	Risk identification	Procurement planning
Information distribution	Risk quantification	Solicitation planning
Performance reporting	Risk response development	Solicitation
Administrative closure	Risk response control	Source selection
		Contract administration
		Contract close-out

APM BOK (UK) Project Management		
Planning the Strategy	Executing the Strategy	Organization and Governance
Project success criteria and benefits management	Scope management	Project life cycles concept
Stakeholder management	Scheduling	Definition
Value management	Resource management	Implementation
Risk management	Budgeting and cost management	Hand-over and close-out
Quality management	Change control	Project reviews
Health, safety, and environment	Earned value management	Organization structure
Project management plan	Information management and reporting	Organizational roles
	Issue management	Methods and procedures
		Governance

(Continued)

APM BOK (UK) Project Management		
Business and Commercial	People and the Profession	Techniques
Business case	Communication	Requirements management
Marketing and sales	Teamwork	Development management
Financial management	Leadership	Estimating
Procurement	Conflict management	Technology management
Legal awareness	Negotiation	Value engineering
	Human resource management	Modeling and testing
	Behavioral characteristics	Configuration management
	Learning and development	
	Professionalism and ethics	

IPMA Competence Baseline

Plan and Evaluate the Project Management	Organize the Project Management Phases	Perform Overall Project Management
Characterize project and project management	Organize the project preparation phase	Analyze the project process and management
Apply models for project management	Organize the project start-up phase	Handle anchoring with the determining parties
Plan the specific project management effort	Organize the management of project execution	Develop the project objectives
Evaluate the performed project management	Organize the project close-out phase	Structure the project task and clarify scope

(Continued)

IPMA Competence Baseline		
Plan and Evaluate the Project Management	Organize the Project Management Phases	Perform Overall Project Management
Facilitate the project management processes		Develop the approach and master schedule Design the project organization structure Provide staffing to the project organization Plan the project economy Perform procurement and enter into contracts Supervise overall plans and manage changes
Perform Ongoing Project Management	Manage Corporate Project Processes	
Plan detailed time schedule and resources	Characterize corporate project processes	
Plan the project quality control	Handle the strategic management processes	
Monitor quality, time, resources, and costs	Handle project-oriented management functions	
Establish infrastructure for communication	Handle portfolio management processes	
Develop project team cooperation	Handle the management of a program	
Promote personnel competences and learning	Develop project management professionalism	

(Continued)

Perform Ongoing Project Management

Manage Corporate Project Processes

Manage project meetings and correspondence

Perform personal leadership and coaching

Support handling of project execution tasks

PRINCE2

The structure of PRINCE2 has three elements:

- Processes (management processes)
- Components
- Techniques.

Project management is described as eight processes – from start to completion. Each process describes what to do and when:

- Directing a project
- Starting up a project
- Initiating a project
- Controlling a stage
- Managing product delivery
- Managing stage boundaries
- Closing a project
- Planning.

Eight core components describe the PRINCE2 understanding of project management. The components are in the processes:

- Business case
- Organization
- Plans
- Controls
- Management of risk
- Quality in a project environment
- Configuration management
- Change control.

PRINCE2 offers a number of tools to be selected and adapted to each project