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LIFECED

LIFELONG AND CULTURAL INCLUSIVE EDUCATION ON THE ROMANIAN-UKRAINIAN BORDER

Training: PROJECT MANAGEMENT

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Project management

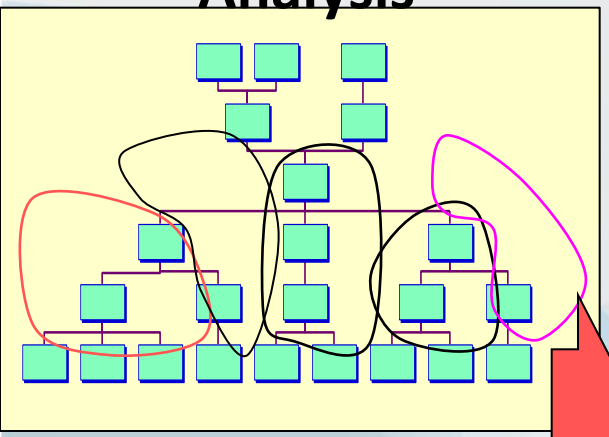
Module 5. Work Breakdown Structure (WBS), GANTT, Sheduling & Human Resources Management

LIFECED Project

PCM – Workstages

- Step 1. Situation analysis & stakeholder analysis
- Step 2. Problem analysis (tree diagram/problem tree)
- Step 3. Strategy Analysis
- Step 4. Objectives Identification
- Step 5. Project planning
- Step 6. Activity Planning
- Step 7. Resource Planning

④ Alternatives Analysis



⑤ Project Design Matrix (PDM)

プロジェクトの要約	指標	指標データ入手手段	外部条件
上位目標			
プロジェクト目標			
成果			
活動	投入:		
			前提条件

Planning Stage

⑥ Plan of activities

Activities	Results	Objectives	Resources			Important assumptions
			HR	Material	Financial	



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Activities planning
Working Packages (WP)

Planning

- Dividing the project into sub-projects and work packages
- Setting for each sub-project, time and other resources required for achieving
- Establishing interdependencies and logical order to implement sub-projects
- Making a Plan / Chart, to track the progress of sub-projects and of the project through the establishment of critical points (milestones) where you can see if the project is on schedule or not

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Activities planning
(WBS – Work Breakdown Structure)

WBS – Work Breakdown Structure

- An alternative for identifying the sub-activities is to decompose the activities after the "Work Breakdown Structure" (WBS) method. Activities (Work Elements) are grouped into logical sets / Work Packages (Work Package - WPs) with each division in the" Activities / Phases "
- Each activity has the following main features:

  - well defined role;
  - consumes natural resources and human well - determined time;
  - has a start time and end time.

WBS – guidelines

When you prepare a structure for breaking down certain activities are some lines to follow:

- ✓ WBS is represented as an tree structure, hierarchy (it is not represented neither as any form of a list nor a Gantt chart).
- ✓ Decomposition of activities in main "packages" must be logical and compatible with the decomposition used for cost control and reporting.
- ✓ It should be possible to test whether a “working package" is complete.
- ✓ At the lowest level, activitie’s elements must be well defined as tasks that a person has to acomplish in a reasonable period of time.
- ✓ There is no clear rule about how big or small should be the working packages or work tasks. (although PMBOK has a statement to this effect: duration of an activity must fit between 8 and 80 hours.)

WBS: ...“Precious advice“

- 6-8 phases, 6-8 working packages per each phase
- Unitary terminology
- Not very detailed

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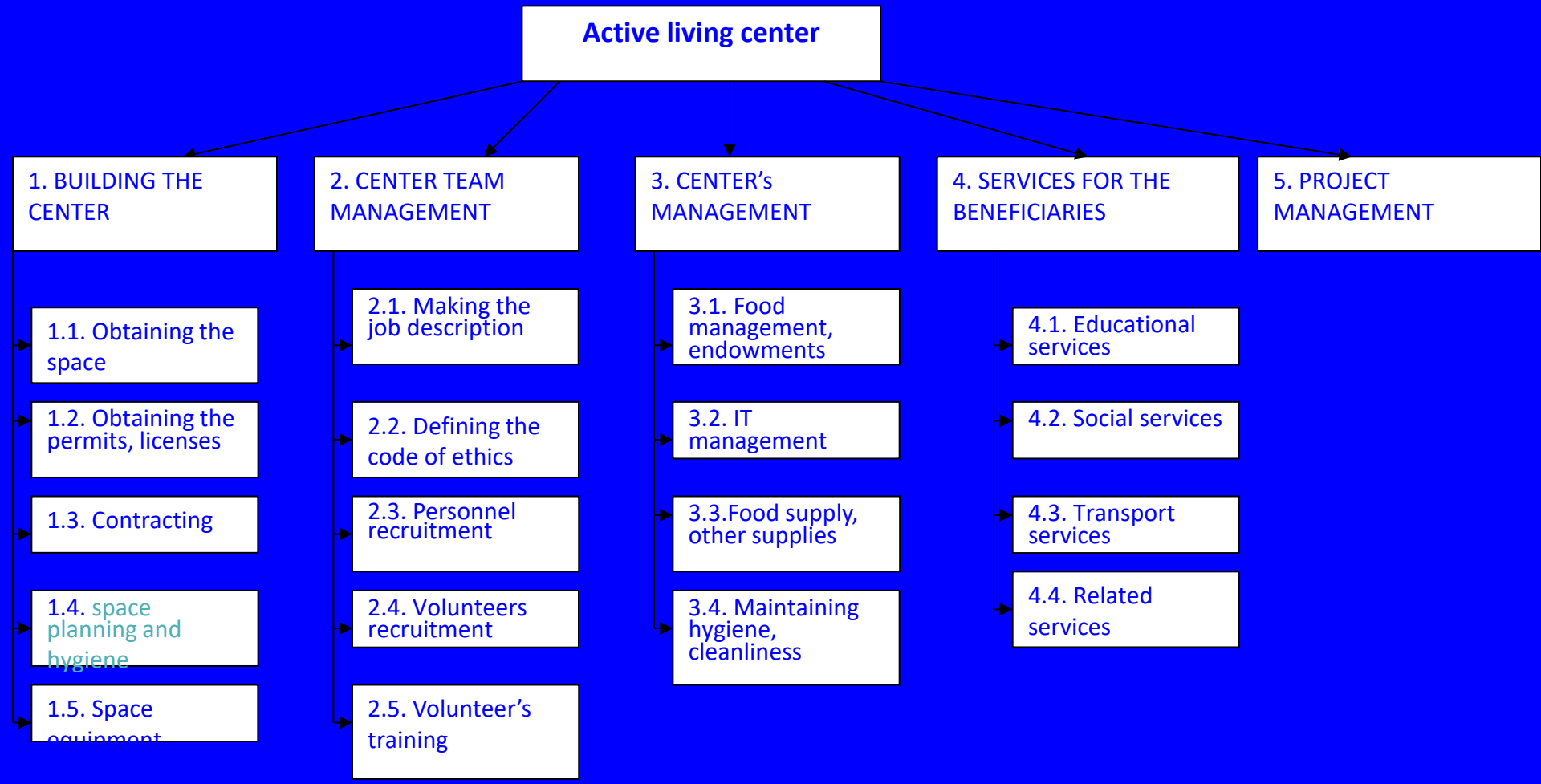
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Work Breakdown Structure

Making the OIL instalation /Facilities — 1

Project management	Design	Aquisitions, financing and insurrance	Producing the equipment	Transport of the components	Construire si instalare	Implementing, personnel and authorisation	Pilot test
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
Project start — 1.1.1	Design of the building — 1.2.1	Subcontracting the construction work — 1.3.1	Production equipment — 1.4.1	Transport of the components — 1.5.1	Construction and Instalation Plan — 1.6.1	Training and authorisation plan — 1.7.1	Pilot test plan — 1.8.1
Project coordination — 1.1.2	Production equipment design — 1.2.2	Planning the component's aquisition — 1.3.2	Storage equipment production — 1.4.2	Preparing the transport to Austria — 1.5.2	Preparing the construction — 1.6.2	Preparing the training — 1.7.2	Pilot test implementation — 1.8.2
Project administration — 1.1.3	Storage equipment design — 1.2.3	Production equipment aquisition — 1.3.3	Service equipment production — 1.4.3	Preparing the transport in Europa — 1.5.3	Designing the construction — 1.6.3	Training session — 1.7.3	Adjustments after the pilot test phase — 1.8.3
Project Control — 1.1.4	Service equipment design — 1.2.4	Storage equipment aquisition — 1.3.4		Preparing the shipping — 1.5.4	Installing the production equipment — 1.6.4	Preparing organisation — 1.7.4	
Project end — 1.1.5	...	Service equipment aquisition — 1.3.5		Transport to Austria — 1.5.5	Installing the storage equipment — 1.6.5	Preparing and auhorisation — 1.7.5	
		Aquisition financing — 1.3.6		... — ...	Installing the service equipment — 1.6.6	... — ...	

WBS - example


Active living center
1. BUILDING THE CENTER
2. CENTER TEAM MANAGEMENT
3. CENTER's MANAGEMENT
4. SERVICES FOR THE BENEFICIARIES
5. PROJECT MANAGEMENT
1.1. Obtaining the space
1.2. Obtaining the permits, licenses
1.3. Contracting
1.4. space planning and hygiene
1.5. Space equipment
2.1. Making the job description
2.2. Defining the code of ethics
2.3. Personnel recruitment
2.4. Volunteers recruitment
2.5. Volunteer's training
3.1. Food management, endowments
3.2. IT management
3.3.Food supply, other supplies
3.4. Maintaining hygiene, cleanliness
4.1. Educational services
4.2. Social services
4.3. Transport services
4.4. Related services

Detailed Work Packages

WP code:	1.2.7	WP name:	Organize and conduct the project manager training

Goal of the WP: Specialization of at least 18 people in project management within a training program for 4 days

WP content (Sub-activities):

- Promotion of the training course and selection of the participants
- Organizing training logistics
- Contracting trainers
- Running training
- Training Evaluation
- Final Examination

WP – Results: 18 people trained in PM, within a training program for 4 days

WP – Outputs: 30 hand-outs, 3 banners, 1 selection progress organised

Detailed Work Packages

- Goal: Using the WBS method:
- Activities
  - Structure focus on the project processes (3 levels)
  - 7-8 phases, defining the working packages for each phase
  - Aplying a WBS code, allocating human, material and financial resources
- How: Team-working: 30 minutes
- Handout: Blank Detailed WP

Project schedule

Planning techniques:

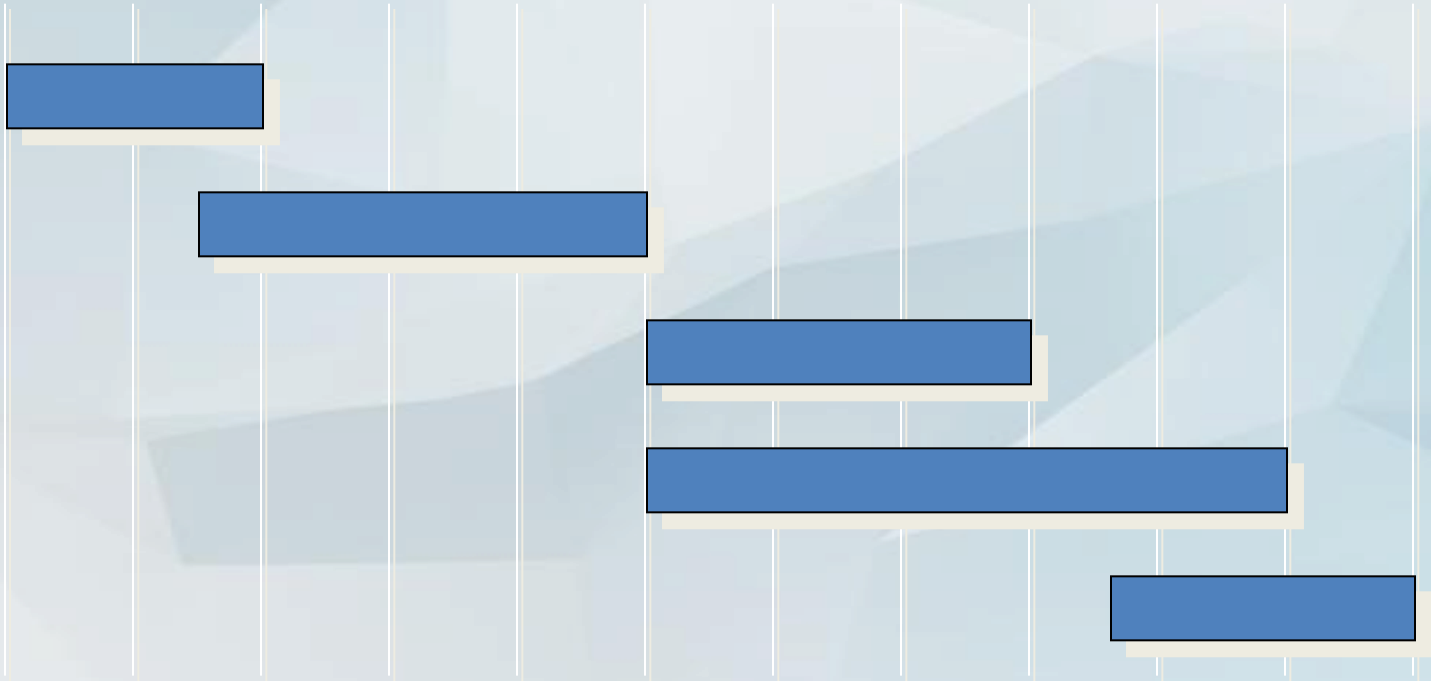
- Bar charts – Gantt chart
- Key moments chart – milestones
- Planning networks – PERT, CPM
- Graphical analysis and evaluation method

Bar chart (GANTT)

- Working packages represented by bars (bar length is proportional to the length of the working packages)
- Positioning is according to a temporal scale
- Bar chart as a communication tool
  Bar chart with relations = CPM planning (Critical Path Method)

Gantt chart – principles

- Shows the development of project activities within a period
- It is created at the level of working packages and / or activity level
- The starting point is the WBS;
- Sometimes, it may indicate the interdependencies between activities and the critical path of the project.



This is the bar chart !!

GANTT Chart

	Activitatea	Durata	Luna 1 Dec.2004	2 Ian.2005	3 Feb.	4 Mart.	5 Apr.	6 Mai	7 Iun.	8 Iul.	9 Aug.	10 Sep.	Cine este responsabil de implementare
1	Pregătirea procedurilor de achiziție de echipamente	1 lună											Solicitant
2	Realizarea procedurilor de achiziție de echipamente	2 luni											Solicitant
3	Pregătirea realizarii website-ului	1 lună											Solicitant
4	Implementarea website-ului	1 lună											Solicitant
5	Intretinerea web – site -ului	8 luni											Solicitant
6	Pregătirea strategiei de promovare	3 luni											Solicitant
7	Realizarea strategiei de promovare	7 luni											Partener
8	Realizare evaluare intermediară 1	1 lună											Solicitant
9	Pregătirea materialelor de curs	1 lună											Solicitant
10	Realizarea suporturilor de curs	1 lună											Solicitant
11	Pregătirea implementarii cursurilor in teritoriu	1 lună											Partener
12	Implementarea cursurilor in teritoriu	4 luni											Solicitant
13	Realizare evaluare finală 2	1 lună											Solicitant
14	Pregatirea selectiei celor 10 echipe pentru instruire practica aplicata	1 lună											Solicitant
15	Selectia celor 10 echipe pentru instruire practica aplicata	1 lună											Solicitant
16	Pregatirea instruirii practice aplicate	1 lună											Solicitant
17	Implementarea instruirii practice aplicate	3 luni											Solicitant
18	Realizarea managementului proiectului	10 luni											Solicitant
19	Realizarea evaluării finale a proiectului	1 lună											Solicitant

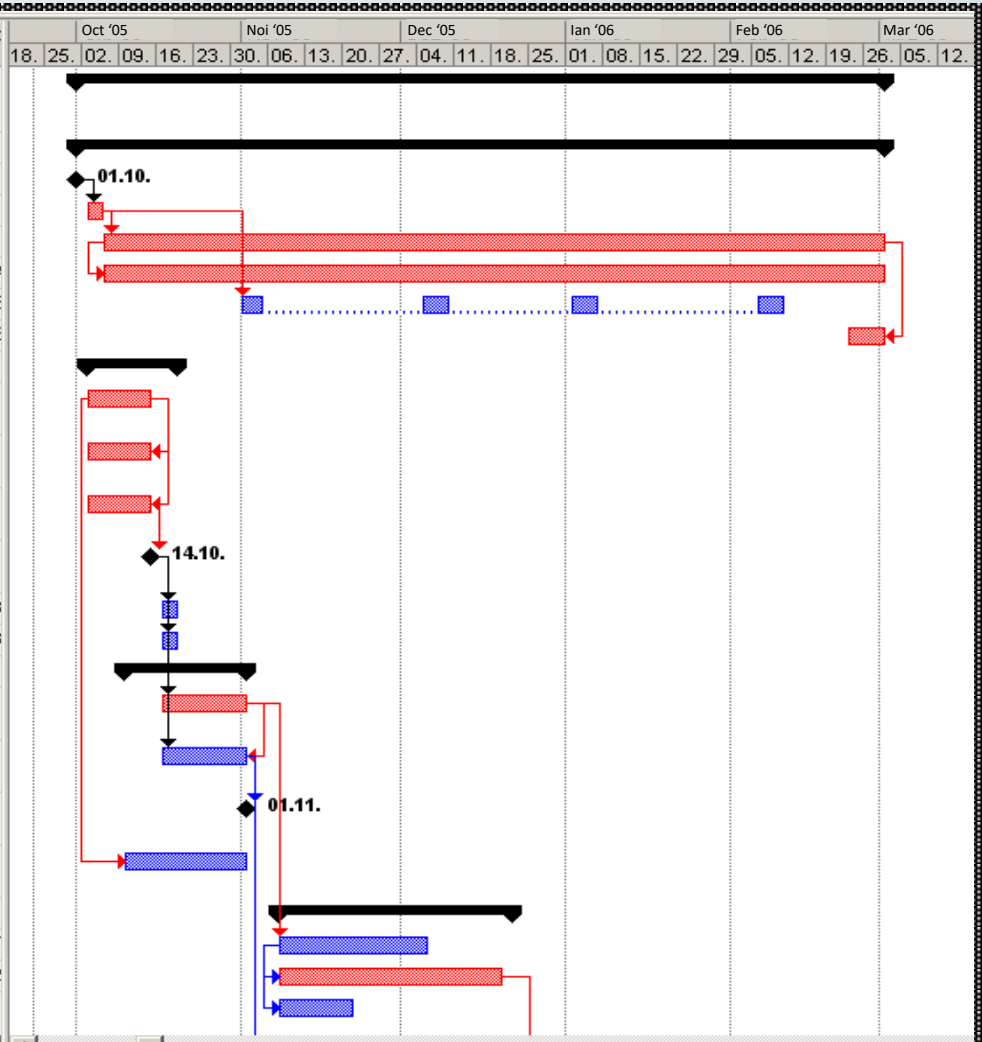
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Project GANTT Diagram

Denumirea activităţii	Durata	Început	Sfârşit	Vc
1.Evaluarea câmpului SALACEA	**108 days**	**Sa 01.10.05**	**Mi 01.03.06**	
1.1 Planul managementului proiectului	**108 days**	**Sa 01.10.05**	**Mi 01.03.06**	
J1 Project atributed	0 days	Sa 01.10.05	Sa 01.10.05	
1.1.1 Start	3 days	Lu 03.10.05	Mi 05.10.05	3
1.1.2 Project coordination	105 days	Jo 06.10.05	Mi 01.03.06	4
1.1.3 Project administration	105 days	Jo 06.10.05	Mi 01.03.06	5A
1.1.4 Project control	19 days	Ma 01.11.05	Vi 10.02.06	4E
1.1.5 End of the project	5 days	Jo 23.02.06	Mi 01.03.06	5E
1.2 Planning	**13 days**	**Lu 03.10.05**	**Mi 19.10.05**	
1.2.1 Geological standards	10 days	Lu 03.10.05	Vi 14.10.05	
1.2.2 Subsoil standard achievement	10 days	Lu 03.10.05	Vi 14.10.05	10
1.2.3 Economic evaluation	10 days	Lu 03.10.05	Vi 14.10.05	10
J2 Standards to evaluate the achieved alternatives	0 days	Vi 14.10.05	Vi 14.10.05	12
1.2.4 Planning the alternatives	3 days	Lu 17.10.05	Mi 19.10.05	13
1.2.5 Planning report form	3 days	Lu 17.10.05	Mi 19.10.05	13
1.3 Acquisitions	**17 days**	**Lu 10.10.05**	**Mi 01.11.05**	
1.3.1 Geological evaluation contract purchase	12 days	Lu 17.10.05	Ma 01.11.05	13
1.3.2 Subsoil evaluation contract purchaise	12 days	Lu 17.10.05	Ma 01.11.05	13
J3 Contracts with all the experts	0 days	Ma 01.11.05	Ma 01.11.05	18
1.3.3 Expertise evaluation contract purchaise	17 days	Lu 10.10.05	Ma 01.11.05	10 Ta
1.4 Geological expertise	**32 days**	**Ma 08.11.05**	**Mi 21.12.05**	
1.4.1 Litological analysis	20 days	Ma 08.11.05	Lu 05.12.05	17
1.4.2 Tectonic analysis	30 days	Ma 08.11.05	Lu 19.12.05	22
1.4.3 Set the type of subsoil	10 zile	Ma 08.11.05	Lu 21.11.05	22



Sample Tracking Gantt Chart

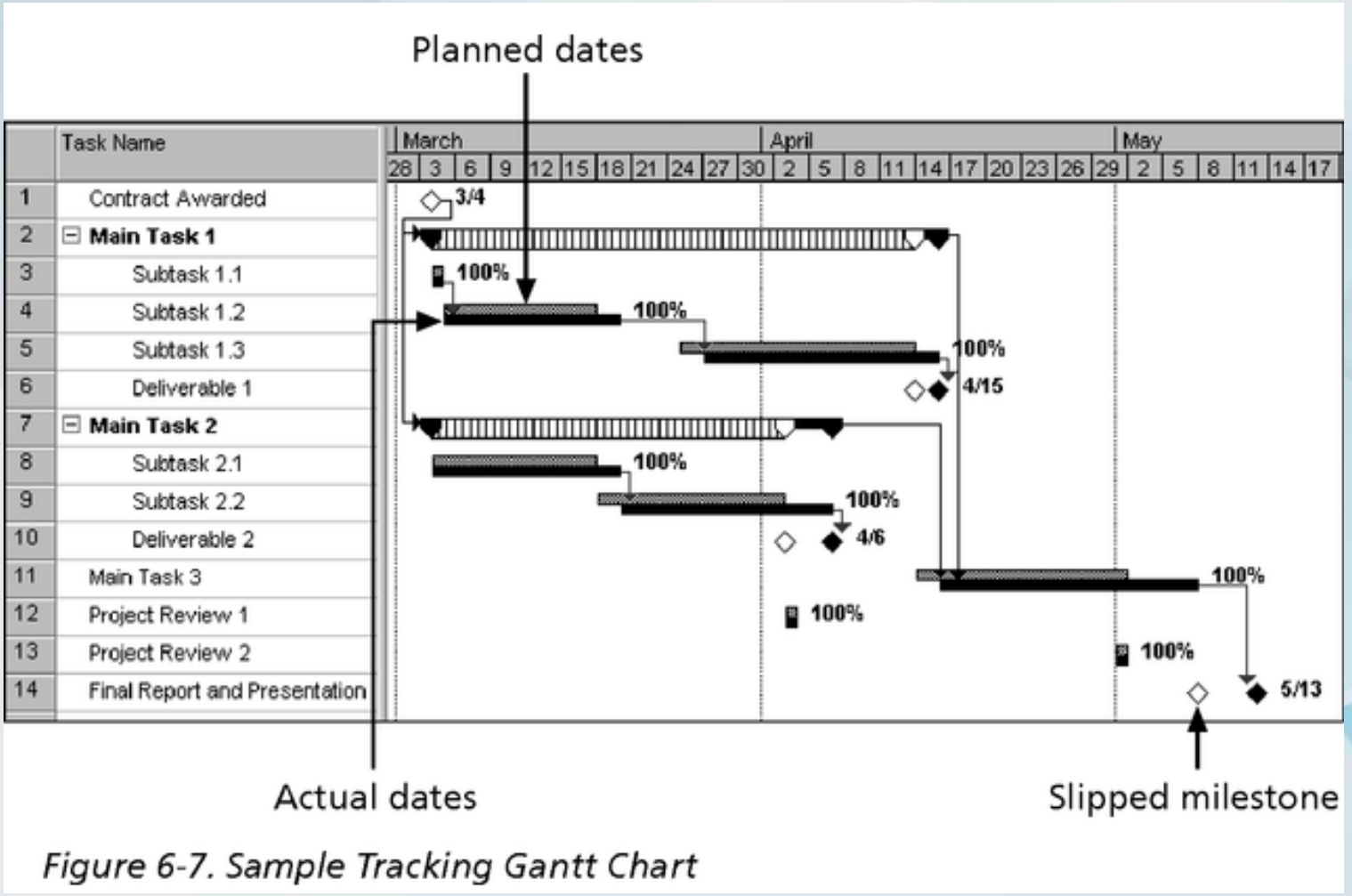
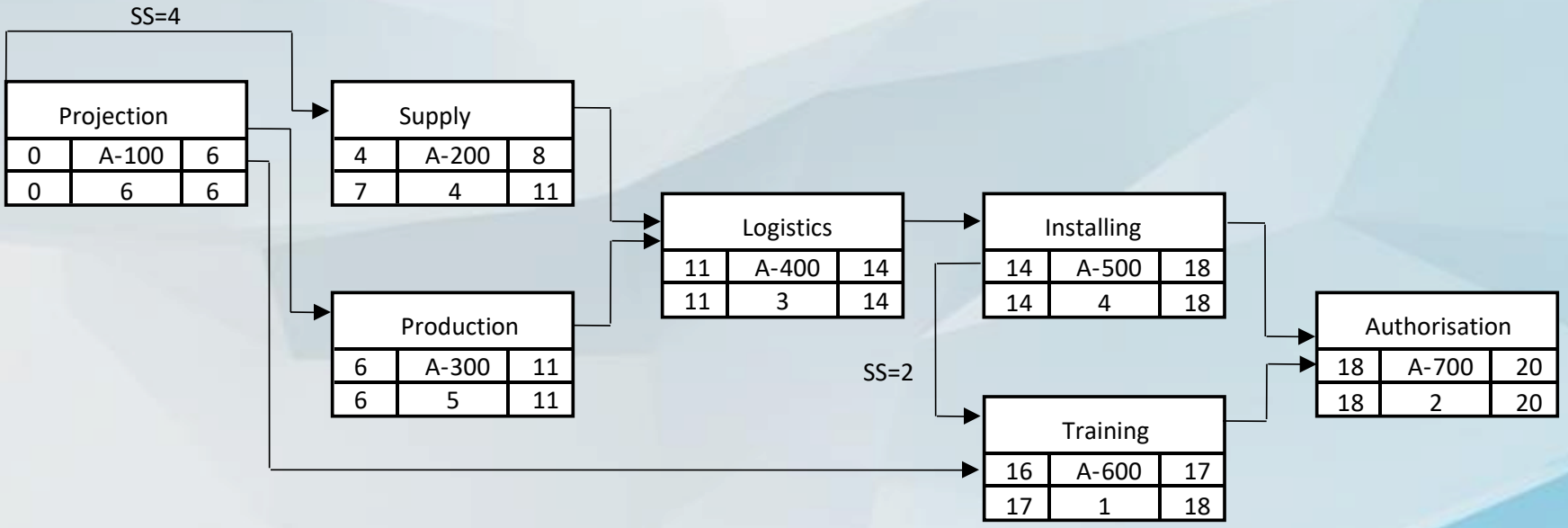


Figure 6-7. Sample Tracking Gantt Chart

PERT Diagramm

- PERT – a planning and controlling tool
- Are often built from the end to the beginning
- Presents the time necessary to finish the project
- Very useful in complex projects

Pert diagramm and critical path



Pert diagramm and critical path

- What activity is preceding the activity we plan
- What activities are coming afterwards
- What activities can be undertaken in parallel

Differences between project management and organization management



- Absence of a permanent management structure
- (these persons can be hired temporarily or consultants can be used)
- Absence of permanent roles of team members
- (people involved in the project may have different roles at different times, and hierarchies are not always very clear)

Core Functions of HR Management in Projects

Human Resources Management in project management encompasses all processes required to make the most effective use of the people involved in a project. From initial planning to project closure, HR management guides how teams are assembled, developed, led, and evaluated.

HR Planning

HÑÑŌRÒŅŘĊŌŅ MŌÑ ÑŎÑÞÖ ÑŌRÒŌŅ ÓŹŎĆÑÑNPØĆŌÑĊŒŒØÑĊEÓÖŌĊŒÒŅÒŒŌÑĊŒE MŌÑ ØÑØÞÒŹØÑÑ ÑŎÖ ŐÑPÑŌRÓÑĊŒBĘÞĊŌÑĊŌŅ MĊEPMŅŅŌŅ ÖMŌMŅÑÖ ÑŌPÓŹŎĆÑÑNPÖŌÑĊŒB

Team Acquisition

Ï ÑŌÑÑŔŔŌŌŅ MŌÑ ŎŌNŎMØÑĊŌŅ POÑØŌŅOPPÑMÖ Ö ÑÖ NÑØŒà R OÑPOÑŹĊŌPÑŹŌMŌŒEPMŅŒÑŔPÑŹŌMŌÑŎŌŔPØMÑPŎØŒEŎØÑŹĊŒEŹÑŎØÑÑØ ŐMØPŌÑØŒà PŎ ŅÞŌÑŅŌŌÑÑŅŌŌÑÑ ŐŹŎĆÑÑNPØĆŌÑĊŒB

Team Development

Improving team competencies, fostering interaction, and creating an creating an environment that supports high performance through through training, coaching, and team-building activities.

Team Management

Tracking performance, resolving conflicts, providing feedback, and coordinating changes to optimize project outcomes across the project lifecycle.

HŌÑŹŎĆŒEŹÑŎØÑÑØĜ¦ÆŅÞŌÑÑÑ ŐŹŎĆÑÑNPŒEĢÏ ÖMŌMŅÑÖ ÑŌPÖ ÞŒEPMŌŒĐMÑÑŎÞŌPŅŎØÑÞŌPPØMÕÑŎŌQÑØŒÒŔÆÖ ÞÕRŌŌŌŅÞMÕÑŎÖ Ö ÞĊŌÑMŔŌŎŌÆ MŌÑ ÑŎÖ ŐŌŌMŌÑÑ RÒPO NŎPOĪ ŎÖMĊŌMŌMŌÑ ¦ ŌØMŌŌŌMŌŌĊŒŔÒPÞŔŌŎŌMŌÑØMÖ ÑR ŎØŌŒB



Ė ŐŐŘŘŌŅŒĘØÞŃPÞØŃŃ ÇĪ ÖMŌMŅŃÖ ŃŌP ŐØMŃĘŌŒŒÑŒŒÑŌĘMŌPÖ ÔŃŃŐŒŌŅ ŐØŒŐŃŃNP PÑMVÖŒ Ö ŎĘŌŒMPÑŃĘMŌŌŅŌÑŃMŃŃÖÞŌPMVŃŌÑ à ŐMØĘŌŃPŌMØŐŘŌŌ ŃŐÖ ŐŌŃĘÆÖ ÞŌĘŌÆ ŌŒĘĘŌPÞŌŌŌMŌŃŌŒØŐŌÖ ÑŌŒBİ OÑ IHĞĜFĜG ŐØŒŐŃŃPĘŃÖÁĘÞŌÑŃÑ NŘ POÑ ĜÞØŌŐŃMŌ Ļ ŌŒŌŌ ÞŌÑŃØPOÑHŌPÑØØÑŅ IJHÁĖ Í ĜĴ İ Ī ŎÖMŒŌMÁĘ ÔØMŌŌÑĪØŌŅØMÖ Ö Ñ ČĆČĈaČĆČĐÆ ÑŘÑÖ ŐŒŌŅŒPOÑŒÖ ŐŌØPMŌŃÑ ŌŅPOÑŒÑ ŐØŒŌŃŒŐŐÑŒŒŌM ŃØŒŒĘÁNŌØÑŃØÑÞŃMŘŒŌMŌŃŌŌPÑŘPB

Define Clear Roles

Use a RACI matrix to assign responsibilities and avoid ambiguity. Every team member should know their deliverables and decision-making authority from day one.

Coammunicate Consistently

Establish regular check-ins, status reports, and open feedback channels. In multilingual or multicultural teams, clear and culturally sensitive communication is non-negotiable.

Recognize & Motivate

Ė ŃÔŌŌŘŌÑŃŃŅŃ ŃŌŌPØŒŌŒEMŌÑ ŃÑŌÑŃŅØMPÑ ÖŒŌÑŒEPŌŌŌÑŒBÌ ŎŘŒŒQVPÑŃ PÑMVÖŒ ŐØŒŌÑPŃÑ NÑPPÑØŌÞPŃŌÖ ÑŒà ØÑŃŌŅŒŒŒŒMŌŎŘ ÑØŅPŌÆŒŌRÆŃŒŒP ÖMŌMŅŃÖ ÑŌP PŌŒŌB

Manage Conflict Proactively

Ė ÑŃØÑŒEŒŌPÑØŌÑØŒŒŌMŌŌØR ŎØŒŌŌMÑ ŃŌŌŅŒŌÑRŒÑMØŌB Ļ ŒÑŒEPØÞŃPÞØÑÑ Ö ÑPOŌÑŒ ŒEÑOMŒŃŌŒŌMŃŌØMŒŒŌŒÑŌÖ ŐØŌÖŌŒŒÑÆŌØÖ Ö ÑŃŌMŒŌŌ PŌØÑŒEPŌØÑ PÑMVÖ ŃŌOÑŌŒŌŌ ØÞŌŃŒŌPB

Best Practices & Key Takeaways

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Key Roles in Project Management

Ï ÞÑÑÑÑÐÐÐÞÕ ÓÓÖÖÓÑÑÑÞ ÑÑÖÖÐÑÝÓŘÓÑÖÖÑÐÐÞÕÖ Ō M ÑÒÐÑÝÓÐÑ PÑMÖ RÒPO NÓÑMÝÓŘ ÑÑ,ÐÖÑÑ ÓÑÐÐÓÖÓÐÐÑÒÖÐÐÐÐÞÐÐ
ĜMÑÓÓÓÖÑ ÑÖŌPÓÖÑÞPÑÐÐÞÒÖÓÞÑÓŘ PÖ POÑ ÓÓÖÓÑÑÑPĀÐÐÓÞÓÖÑŘÆĘÓÖ CEŘÓMPÑÑ,ÑÓÑ ÖÐÑÓÐÐÑ,ÑOP PÖ ÑMŘÁÉPÖÁÉÑMŘ ÑŘÑÑÞÒÖÖŌB

Project Manager

I ÑMÑÐÐEPOÑ ÓÕMŌÖÖÐÒÑ¥ÉÑŘÑÑÞÒÖÖÓÁEMŌÑ ÑÓÖÖÐÐÑ ÖÑM ÓÓÖÖÓÑÑÞB
Ï ÑÐÐÉÓÖÖÐÐÒÑÕÑ,ÑÓÓ ÖÖÐÑÓÓÐÑÓMÖÖÐÐÉÞÑÑÑÖÐÁEÑÞÑ,ÑÞÆÐÉÑÓÑÑÞÒÑÁEMŌÑ ÐÉÑÓÓÑB

Business Analyst

Analyzes business needs, identifies problems, and defines solutions to meet solutions to meet project objectives and requirements.

Risk Manager

HÑÑŌŘÒ,ÑÑÐÁEMÐÐÉÑÐÐÉÑÐÁEÓ ÖŌÐÒPÓÓÐÁEMŌÑ ÖÒŘÒÑ,MPÑÐÉÓÖPÑŌŘÒMÓÓÖÖÐÐÉPOMP ÑÖÞPÕÑÒÖÖ ÓMÑP ÓÓÖÖÓÑÑÞPÐÉÞÑÑÑÐÐÉB

Scrum Master

Facilitaates agile development processes, removes impediments, and coaches the team on Scrum principles and practices.

Stakeholder

Ė ŌŘÒŌÑÖÐÐÑÞMÖÖÓŘ,ÓÖÞŐ MÑ,ÑÑÞPÑÑ NŘ ÖÓŘ OMÐÐÑ,MŌÐÐPÑÓÑÐÉPÒŌ POÑ ÓÓÖÖÓÑÑÞĀÐÉÖÞPÑÖÖ ÑÁER OÖÐÉÑÐÒÖQÐÐÖÑÖ ÑŌPÒÐÉÑÓÞÑÒMÖ,ÑÓÓÒŘÐÉÐÞÑÑÑÐÐÉB

Project Sponsor

Provides financial and political support, defines project objectives, and and champions the project within the organization.

Project Coordinator

Ï ÞÓŐÖÓŘÐÉPOÑ ÓÓÖÖÓÑÑÞ ÖMŌMÑJÑÓ RÒPO MÑ ÖÒÐÐŌÐÉŘÓMŘÐÒÑ PMÐÉÔÐÆ ÐÉÓÑÑÞÒÐÐÑ¥ÉÑÖÑÞÖ ÑŌPMŘÐÖÁEMŌÑ ÑÖÖ Ö ÞŌÐÑMŘÐÖŌMÑÓÖÐÉÐPÑMÖÐÉB

Quality Assurance Manager

Ensures that project deliverables meet specified quality standards and requirements throughout the project lifecycle.

HR Manager

ĖÕÐÐÑMPÑÐÉMŌÑ ÖMŌMÑJÑÐÉOÞÖMŌÓÑÐÉÖÞÓÑÑÐÉMÑÓÖÐÐÉÖ ÞÕŘÒÖÖÑ ÓÓÖÖÓÑÑŘÐÆÉ ÖÓŘÒÖÖÒ,ÒŌÑ,POÑÒÓÞŘÒÐÐ,MŘÐÖŌMÖÑ ÐÉÔÐÐÑÑQÑÖÖÓÖ ÑŌPB

Team Lead

Guides and mentors a specific project sub-team, ensuring their tasks are completed efficiently and effectively.

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