

INTRODUCTION OF 9 KNOWLEDGE AREAS

Project Cost Management

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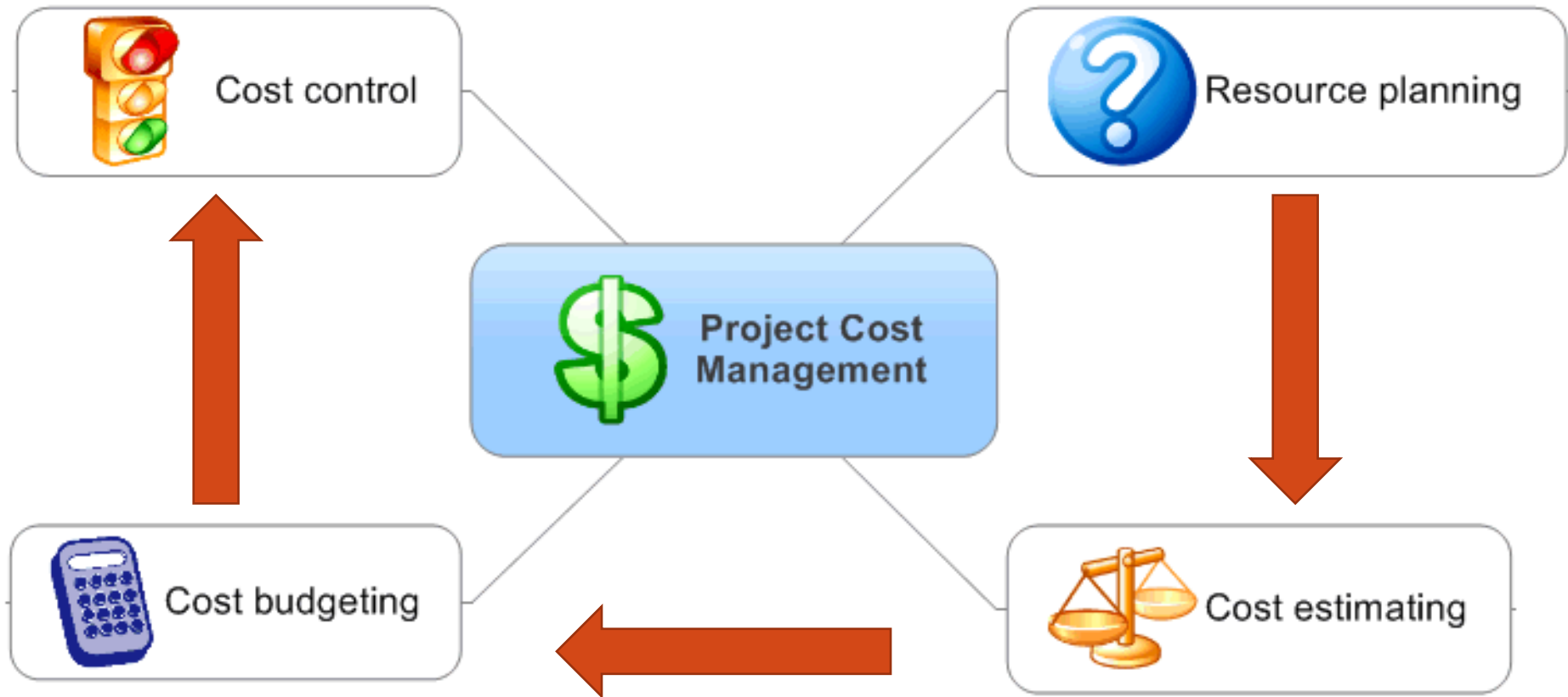
- Definition
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Definition

- **Cost** is a resource sacrificed or foregone to achieve a specific objective or something given up in exchange. It is usually measured in monetary units.
- **Project Cost Management** describes the processes involved in planning, estimating, budgeting and controlling cost to ensure that the project is completed within the approval budget.



Project Cost Management Processes



Project Cost Management Processes

- **Resource planning:**
 - determine what resources and quantities of them should be used.
- **Cost estimating:**
 - developing an estimate of costs resources needed to complete a project.



Project Cost Management Processes

- **Cost budgeting:**

- allocating the overall cost estimate to individual work items to establish a baseline for measuring performance.

- **Cost control:**

- controlling changes to the project budget and influencing the factor that create variances.



Resource Planning

INITIATION
PLANNING
EXECUTION
MONITORING & CONTROL
CLOSING

Some questions to be considered:

- what task is involve to complete the project & how difficult it will be;
- is there anything unique in this project that will effect the resources;
- what is the organisational history in doing similar task;
- does the organisation have or can acquire people, equipment and material that are capable and available for performing the work.

Resource Planning

INITIATION

PLANNING

EXECUTION

MONITORING & CONTROL

CLOSING

Example :

1.0 specialist salary	1 x RM	70,000.00	x	4 /Month	=	RM	280,000.00
2.0 Staff a) J54	1 x RM	9,000.00	x	20 /Month	=	RM	180,000.00
b) J52	1 x RM	7,000.00	x	20 /Month	=	RM	140,000.00
c) J48	2 x RM	5,000.00	x	20 /Month	=	RM	200,000.00
d) J41	2 x RM	3,000.00	x	20 /Month	=	RM	120,000.00
3.0 Workshop							
Nos of people attend	10 x RM	250.00			=	RM	2,500.00
Fesilitator	4 x RM	200.00	x	8 /Jam	=	RM	800.00
Venue	2 x RM	500.00			=	RM	1,000.00
Refreshment	14 x RM	50.00			=	RM	700.00
4.0 Meeting	10 x RM	350.00			=	RM	3,500.00
5.0 Documentation Submission	5 x RM	2,500.00			=	RM	12,500.00
6.0 Training							
a) Top Management	1 x RM	15,000.00			=	RM	15,000.00
b) Project Team	4 x RM	1,000.00			=	RM	4,000.00
c) Project Manager	1 x RM	10,000.00			=	RM	10,000.00
d) JKR's Profesional	2 x RM	3,000.00			=	RM	6,000.00
e) JKR's Supporting Staff	2 x RM	6,000.00			=	RM	12,000.00
TOTAL					=	RM	988,000.00

Cost Estimating

INITIATION

PLANNING

EXECUTION

MONITORING & CONTROL

CLOSING

- Estimating cost involves developing approximation of the cost of the resource to complete each schedule activity.



Cost Estimating

INITIATION

PLANNING

EXECUTION

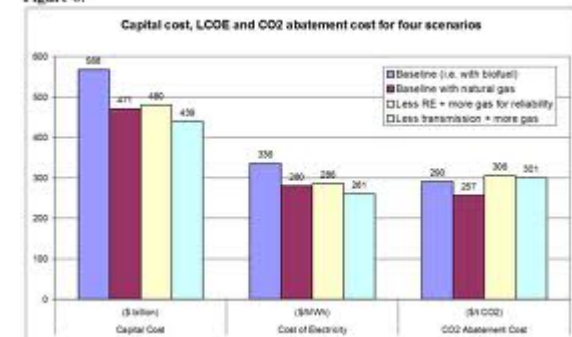
MONITORING & CONTROL

CLOSING

Four common estimating style:

- Subjective – personal experience
- Statistical – comprehensive historical data
- Comparative – similar projects
- Empirical – base on real data, including quotes, tender, etc.

Figure 6:



Cost Estimating

INITIATION

PLANNING

EXECUTION

MONITORING & CONTROL

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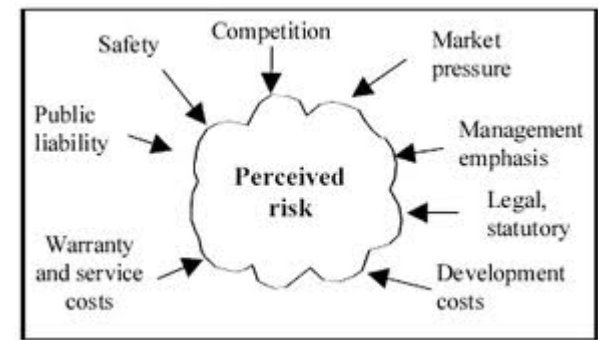
Factor to consider – cost of risks.

CONTINGENCY

- Something unforeseen
- Something that may occur at future date
- Cost involve for carrying the risk

*Shift / transfer **some** of the risk?*

*Shift / transfer **all** of the risk?*



Cost Estimation Tools & Techniques

INITIATION
PLANNING
EXECUTION
MONITORING & CONTROL
CLOSING

5 basic tool & techniques:

- **Analogous** : use the actual cost of a previous, similar project as the basis for the new estimate
e.g.: project with standard design
- **Bottom-up** : estimate individual work items and sum the to get total estimate
e.g.: 1 no. of hose reel should be provided for every 30sq.m area,
1500sq.m area requires; $1500/30 = 50$ nos. of hose reel
estimate cost = 50 hose reel x RM..... per hose reel (set)
- **Parametric** : use project characteristics in mathematic model to estimate
e.g.: total floor area 3050 m²; total cost sprinkler system is
RM 30,000.00. Therefore, 1 m² of sprinkler system = RM9.84.
- **Resource cost rates**
- **Vendor bid analysis**

Cost Budgeting

INITIATION
PLANNING
EXECUTION
MONITORING & CONTROL
CLOSING

- Cost budgeting involves allocating the project cost estimate to individual work items and providing a cost baseline covering the whole project life cycle.
- E.g.: Planning cost, feasibility study, construction cost, project management cost, value management cost, etc.
- These amount were allocated to appropriate budgets.

Cost Budgeting

PROJECT: KOLEJ KOMUNITI BEAUFORT, SABAH

PROJECT MANAGER:

DATE OF PREPARATION: 24/8/2010

WBS No	Phase/Activity/Task	Resource Allocated/Cost	Incidentals and other costs	TOTAL COST (RM)
1.1	PERANCANGAN			
1.1.3	Menyediakan dokumen data ruang bersama pengguna dan pelanggan	12 SET		500.00
1.1.5	Dokumen pra tawaran/needs statement	2 JILID X 3 SET		900.00
1.1.6	Bengkel dan latihan			
	- Bengkel pengurusan risiko	RM 350 x 3 x 30		31500.00
	- Bengkel project scheduling	RM 350 x 3 x 30		31500.00
	- Bengkel soft skill	RM 350 x 3 x 30		31500.00
1.2	PEROLEHAN			
1.2.3	Penyediaan Dokumen Pre Bid	2 JILID X 12 SET		4800.00
1.2.7	Mesuarat Penyelarasan Rekabentuk Konsep	RM 5 X 30 ORG X 5		750.00
1.2.11.1	Pra Rundingan Harga	RM 5 X 30 ORG X 2		300.00
1.2.11.2	Rundingan Harga Akhir	RM 5 X 30 ORG X 1		150.00

Notes: Significant assistance and research will be required to arrive the estimates, reviews by experts and levels of management will be necessary if the figure are to be realistic.

Cost Control

INITIATION

PLANNING

EXECUTION

MONITORING & CONTROL

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- Project cost control includes:
 - monitoring cost performance.
 - ensuring that only appropriate project changes are included in a revised cost baseline.
 - informing project stakeholders of authorized changes to the project that will affect costs.



Cost Management Table

COST MANAGEMENT

PROJECT:	PREPARED BY:
	REVIEWED:
PROJECT MANAGER :	DATE OF PREPARATION:

Budget	Costs to Date	Forecast Costs
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Period	Approved Budget	Approved Variations	Total Budget	Payments	Additional Committed	Total Obligation	Budget to Complete	Forecast to Complete	Variance with Budget
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									

Summary

- Project Cost Management is a primary concerned with the cost of the resources needed to complete project activities.
- Project cost management should also consider the effect of project decisions on cost of using the project product (O&M) and the information needs of the project stakeholders.

THANK YOU