

PMstudy Process Chart

Process	Initiating	Planning	Executing	Monitoring & Controlling	Closing
Integration	Develop Project Charter	Develop Project Management Plan	Direct and Manage Project Execution <i>Deliverables</i>	Monitor and Control Project Work Perform Integrated Change Control	Close Project or Phase <i>Final product, service, or result transition</i>
Scope		Collect Requirements Define Scope Create WBS		Verify Scope Control Scope	
Time		Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Durations Develop Schedule		Control Schedule	
Cost		Estimate Costs Determine Budget	<i>Cost performance baseline</i>	Control Costs	
Quality		Plan Quality	Perform Quality Assurance	Perform Quality Control	
Human Resource		Develop Human Resource Plan	Acquire Project Team Develop Project Team Manage Project Team	<i>Staff Assignments Team Performance Assessments</i>	
Communications	Identify Stakeholders	Plan Communications	Distribute Information Manage Stakeholder Expectations	Report Performance	
Risk		Plan Risk Management Identify Risks Perform Qualitative Risk Analysis Perform Quantitative Risk Analysis Plan Risk Responses		Monitor and Control Risks	
Procurement		Plan Procurements	Conduct Procurements <i>-Procurement SOW -Procurement Documents</i>	Administer Procurements <i>Contract</i>	Close Procurements <i>Procurement Documentation Closed Procurements</i>

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Earned Value Formula		
Acronym	Term Definitions (Only for reference. Do not reproduce in PMP® Exam)	Formula
PV	Planned Value	
EV	Earned Value	
AC	Actual Cost	
BAC	Budget at Completion	
SV	Schedule Variance	$EV - PV$
CV	Cost Variance	$EV - AC$
SPI	Schedule Performance Index	EV / PV
CPI	Cost Performance Index	EV / AC
% Complete	Percentage Complete	$(EV / BAC) \times 100$
EAC (Estimate at Completion)	1. Estimating Assumptions not valid 2. Current Variances are atypical 3. Current Variances are typical (DEFAULT)	1. $AC + ETC$ 2. $AC + BAC - EV$ 3. BAC / CPI
ETC	Estimate to Complete	$EAC - AC$
VAC	Variance at Completion	$BAC - EAC$
TCPI	To-Complete Performance Index (Based on BAC)	$(BAC - EV) / (BAC - AC)$
	To-Complete Performance Index (Based on EAC)	$(BAC - EV) / (EAC - AC)$

$PERT = \{P + (4M + O)\} / 6$
 Std Deviation = $(P - O) / 6$
 Variance = $\{(P - O) / 6\}^2$
 Project PERT = sum of PERT values of individual tasks
 Project Variance = sum of variance of individual tasks

Normal Distribution
 6 sigma = 99.99 %
 3 sigma = 99.73 %
 2 sigma = 95.46 %
 1 sigma = 68.26%

Communication Channels =
 $N * (N - 1) / 2$

EMV = Probability * Impact

Float = $LF - EF$
 $= LS - ES$

Procurement Formula		
Acronym	Term Definitions (Only for reference. Do not reproduce in PMP® Exam)	Formula
AF	AF = Actual Fee; TC = Target Cost AC = Actual Cost; SSR = Seller's Share Ratio; TF = Target Fee	$\{(TC - AC) * SSR\} + TF$

Hints for PMstudy Process Chart (no need to reproduce in final PMP® exam)

- The PMstudy Process Chart should be dumped from memory in 15 minutes before you start answering questions in PMP® exam. So, practice and abbreviate as much as possible.
- You do not need to write down the Term Definitions in the final PMP® exam (i.e. black text in this page).
- For Earned Value calculations,
 - Formula for SV, CV have EV as first term. Positive Variances (e.g. SV, CV) are good.
 - All ratios have EV as first term and ratios greater than 1 (e.g. CPI, SPI) are good.
- : Shows plans (how to) for the process. Primary output is "... Management Plan" for all marked processes.
- All processes which begin with "Develop" or "Create" have the main output same as what is mentioned in the process. E.g. Main output of "Develop Project Charter" is "Project Charter". Similarly, main output of "Create WBS" is "WBS".
- For most Monitoring and Controlling Processes, inputs include WPI (Work Performance Information) and relevant plan documents. Outputs typically include Change Requests (1. Preventive Action, 2. Corrective Action, 3. Defect Repair, 4. Other Requested Changes).