

PMP Cheat Sheet and Study Notes

Based on PMBOK V4

The reader is responsible to verify and confirm all information presented herein.

<p>Processes</p> <p>Initiation Planning Execution Monitor and Control Closing</p> <p>Knowledge Areas</p> <p>Integration Scope Management Time Management Cost Management Quality Management HR Management Communications Management Procurement Management Risk Management Professional Responsibility</p>	<p>Human Resource Management</p> <p>Organizational Structures: Functional, Matrix (weak, balanced, strong) , Projectized, Composite</p> <p>Maslow's Hierarchy of Needs: Physiological, Safety, Social, Self-esteem, Self-actualization.</p> <p>McGregor: Theory X, Theory Y.</p> <p>Ouchi: Theory Z. Motivated by commitment, opportunity advancement.</p> <p>Herzberg's Theory of Motivation: Hygiene factors, Motivating Agents.</p> <p>Leadership Styles: Directing, Facilitating, Coaching, Supporting, Autocratic, Consultative, Consensus.</p> <p>Project Manager Powers: Formal (legitimate,) Reward, Penalty (coercive), Expert, Referent.</p> <p>Conflict Management: Withdraw (avoid), Smooth (accommodate), Compromise, Force, Collaborate, Confront (problem solving.)</p> <p>Quality Management</p> <p>Ishikawa = Fishbone Diagram: cause and effect.</p> <p>Pareto Diagram: Identify problems and frequency. 80/20 Rule.</p> <p>Flow Charts; Control Charts.</p> <p>Just in Time: Reduces inventory; requires additional quality control.</p> <p>Quality Theories: Kaizen (continuous improvement,) Six Sigma, TQM (total quality management.)</p> <p>Kaizen: Small improvements to reduce costs and improve consistency.</p> <p>Deming Cycle: Plan, Do Check, Act.</p> <p>Cost Management</p> <p>Cost Estimating - Accuracy</p> <p>Rough Order of Magnitude (ROM): -50% to +100%</p> <p>Budgetary: -10% to +25%</p> <p>Definitive: -5% to + 10%</p> <p>Risk Management</p> <p>Risk Strategies (threats): Avoid, Transfer, Mitigate, Accept.</p> <p>Risk Strategies (opportunities): Exploit, Share, Enhance, Accept.</p> <p>Qualitative Risk Analysis: Chance and impact of risk occurrence Results in prioritized list of risks; risk ranking.</p> <p>Quantitative Risk Analysis: Numerical analysis of probability and impact.</p> <p>Tools: Interviews, Sensitivity Analysis, Decision Tree Analysis, Simulation, Monte Carlo Analysis.</p> <p>Closing</p> <p>Contract Close: Before project close</p> <p>Project or Phase Close: Lessons Learned</p> <p>PMI Code of Ethics: Respect, Fair, Honest.</p>	
<p>Earned Value Management</p> <p>BAC = Budget At Completion</p> <p>EV = Actual % * BAC</p> <p>PV = Planned % * BAC</p> <p>AC = Sum of all incurred costs</p> <p>CV = EV - AC</p> <p>SV = EV - PV</p> <p>CPI = EV / AC</p> <p>< 1 = Over Budget</p> <p>> 1 = Under Budget</p> <p>SPI = EV / PV</p> <p>< 1 = Behind Schedule</p> <p>> 1 = Ahead of Schedule</p> <p>EAC = BAC / CPI</p> <p>EAC = AC + ETC</p> <p>EAC = AC + (BAC + EV) / CPI</p> <p>ETC = EAC - AC</p> <p>VAC = BAC - EAC</p> <p>BCWS = PV</p> <p>BCWP = EV</p> <p>ACWP = AC</p> <p>Tips:</p> <p>Negative is bad</p> <p>Positive is good</p> <p>If Variance: EV - Something</p> <p>If Index: EV / Something</p> <p>If Cost related use AC</p> <p>If Time related use PV</p> <p>Most formulas start with EV</p>	<p>Key Formulas</p> <p>Standard Deviation = (P - O) / 6</p> <p>PERT = (O + 4M + P) / 6</p> <p>Total Float = LS—ES or LF —EF</p> <p>Comm Channels = N (N-1) / 2</p> <p>Where:</p> <p>P = Pessimistic</p> <p>O = Optimistic</p> <p>M = Most likely; Realistic</p> <p>N = # Project Members</p> <p>Benefit Cost Ratio = Cost / Benefits</p> <p>BCR < 1 Unfavorable</p> <p>BCR > 1 Higher is Better</p> <p>Net Present Value = $FV / (1 + r)^n$</p> <p>Future Value = $PV (1 + i)^n$</p> <p>Internal Rate of Return</p> <p>Higher is better</p> <p>Six Sigma: 99.99% defect free</p>	<p>Time Management</p> <p>Precedence Diagramming Method</p> <p>PDM: Activity-on-Node (AON)</p> <p>Arrow Diagram Method</p> <p>ADM: Activity-on-Arrow (AOA)</p> <p>Conditional Diagram Method</p> <p>Graphical Evaluation and Review Technique (GERT): Allows loop</p> <p>Crashing: Add more resources</p> <p>Fast Tracking: Tasks in parallel</p> <p>Forward Pass: Early start, early finish</p> <p>Backward Pass: Late start, late finish</p> <p>Float; Slack: activity margin off critical path</p> <p>Free Float: activity margin not impacting early start of next pendant activity</p> <p>Project Float</p>
<p>Rules Based on Numbers</p> <p>80 Hour Rule = Max size of work packages</p> <p>80/20 Rule = Pareto's Law</p> <p>20% of causes responsible for 80% of problems</p> <p>0/50/100 = Work package completion. No credit until 50% complete. No additional credit until 100% complete.</p>	<p>42 Project Management Processes</p> <p>Project Integration Management</p> <ol style="list-style-type: none"> Develop Project Charter Develop Project Management Plan Direct / Manage Project Execution Monitor / Control Project Work Perform Integrated Change Control Close Project or Phase <p>Project Scope Management</p> <ol style="list-style-type: none"> Collect Requirements Define Scope Create WBS Verify Scope Control Scope <p>Project Time Management</p> <ol style="list-style-type: none"> Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Durations Develop Schedule Control Schedule <p>Project Cost Management</p> <ol style="list-style-type: none"> Estimate Costs Determine Budget Control Costs <p>Project Quality Management</p> <ol style="list-style-type: none"> Plan Quality Perform Quality Assurance Perform Quality Control <p>Project Human Resource Management</p> <ol style="list-style-type: none"> Develop Human Resource Plan Acquire Project Team Develop Project Team Manage Project Team <p>Project Communications Management</p> <ol style="list-style-type: none"> Identify Stakeholders Plan Communications Distribute Information Manage Stakeholder Expectations Report Performance <p>Project Risk Management</p> <ol style="list-style-type: none"> Plan Risk Management Identify Risks Perform Qualitative Risk Analysis Perform Quantitative Risk Analysis Plan Risk Responses Monitor and Control Risks <p>Project Procurement Management</p> <ol style="list-style-type: none"> Plan Procurements Conduct Procurements Administer Procurements Close Procurements <p>Copyright © 2009 PMServicesNW All rights reserved www.PMServicesNW.com</p>	