

<p><b>Process Groups</b></p> <p>Initiation, Planning, Executing, Monitor &amp; Control, Closing</p> <p><b>Integration Management</b></p> <p>1. Develop Project Charter</p> <p>2. Develop Project Management Plan</p> <p>3. Direct &amp; Manage Project Work</p> <p>4. Monitor &amp; Control Project Work</p> <p>5. Perform Integrated Change Control</p> <p>6. Close Project or Phase</p> <p><b>Scope Management</b></p> <p>1. Plan Scope Management</p> <p>2. Collect Requirements</p> <p>3. Define Scope</p> <p>4. Create WBS</p> <p>5. Validate Scope</p> <p>6. Control Scope</p> <p><b>Time Management</b></p> <p>1. Plan Schedule Management</p> <p>2. Define Activities</p> <p>3. Sequence Activities</p> <p>4. Estimate Activity Resources</p> <p>5. Estimate Activity Durations</p> <p>6. Develop Schedule</p> <p>7. Control Schedule</p> <p><b>Cost Management</b></p> <p>1. Plan Cost Management</p> <p>2. Estimate Costs</p> <p>3. Determine Budget</p> <p>4. Control Costs</p> <p><b>Quality Management</b></p> <p>1. Plan Quality Management</p> <p>2. Perform Quality Assurance</p> <p>3. Control Quality</p> <p><b>Human Resource Management</b></p> <p>1. Plan Human Resource Management</p> <p>2. Acquire Project Team</p> <p>3. Develop Project Team</p> <p>4. Manage Project Team</p> <p><b>Communications Management</b></p> <p>1. Plan Communications Management</p> <p>2. Manage Communications</p> <p>3. Control Communications</p> <p><b>Risk Management</b></p> <p>1. Plan Risk Management</p> <p>2. Identify Risks</p> <p>3. Perform Qualitative Risk Analysis</p> <p>4. Perform Quantitative Risk Analysis</p> <p>5. Plan Risk Responses</p> <p>6. Control Risks</p> <p><b>Procurement Management</b></p> <p>1. Plan Procurement Management</p> <p>2. Conduct Procurements</p> <p>3. Control Procurements</p> <p>4. Close Procurements</p> <p><b>Stakeholder Management</b></p> <p>1. Identify Stakeholders</p> <p>2. Plan Stakeholder Management</p> <p>3. Manage Stakeholder Engagement</p> <p>4. Control Stakeholder Engagement</p>	<p><b>PMI Code of Ethics:</b> Respect, Fair, Honest.</p> <p><b>Organizational Structures:</b> Functional, weak/balanced/strong Matrix, Projectized, Composite</p> <p><b>Deming Cycle:</b> Plan, Do Check, Act.</p> <p><b>Contract Close:</b> Before project close; <b>Project or Phase Close:</b> Lessons Learned</p> <p><b>Change Request:</b> ? impact on Scope, Time, Cost, Quality, HR, Risk, Stakeholder, Contracts</p> <p><b>Change Control Systems:</b> Scope, Cost, Schedule, Procurement</p> <p><b>Cost Estimating Accuracy: ROM:</b> -25%/+75% <b>Budgetary:</b> -10%/+25%<b>Definitive:</b> -5%/+10%</p> <p><b>Cost Budget</b> = Mgt. Reserve + (<b>Cost Baseline</b> = Project Estimates + Contingency Reserve)</p> <p><b>Ishikawa</b> = Fishbone Diagram: cause and effect.</p> <p><b>Pareto Diagram:</b> Identify problems and frequency. 80/20 Rule.</p> <p><b>Flow Charts; Control Charts.</b></p> <p><b>Just in Time:</b> Reduces inventory; requires additional quality control.</p> <p><b>Quality Theories:</b> Kaizen (continuous improvement,) Six Sigma, TQM (total QM)</p> <p><b>Kaizen:</b> Small improvements to reduce costs and improve consistency.</p> <p><b>Crosby:</b> zero defects</p> <p><b>Variables Sampling:</b> rated degree of conformity, <b>Attribute Sampling:</b> accepted or not</p> <p><b>Maslow's Hierarchy of Needs:</b> Physiological, Safety, Social, Self -esteem, Self-actualization.</p> <p><b>McClelland's Theory of Needs:</b> over time, achievement, affiliation, power, Apperception test</p> <p><b>McGregor's X &amp; Y:</b> X: bad, lazy-&gt; micromanagement; Y: self-directed</p> <p><b>Ouchi's Theo. Z:</b> People are X + Y, motivated by commitment, opportunity advancement.</p> <p><b>Herzberg's Theory of Motivation:</b> Hygiene factors, Motivating Agents.</p> <p><b>Vroom's Expectancy Theory:</b> People behave based on their belief on what will be the result.</p> <p><b>Halo Effect:</b> all opinions formed by one component, good engineer must be a good manager.</p> <p><b>Leadership:</b> Directing, Facilitating, Coaching, Supporting, Autocratic, Consultative, Consensus.</p> <p><b>Team Roles:</b> Initiator, Information Seeker, Information Giver, Encourager, Clarifier, Gate Keeper, Harmonizer, Summarizer</p> <p><b>Manager Powers:</b> Formal (legitimate,) Reward, Penalty (coercive), Expert, Referent.</p> <p><b>Conflict Management:</b> <b>win-win:</b> Confront/Collaborate (problem solving); <b>win-lose:</b> Force</p> <p><b>yield-lose:</b> Withdraw (avoid); <b>lose-lose:</b> Smooth (accommodate), Compromise</p> <p><b>Risk Mgt. Strategies:</b> Avoid, Transfer, Mitigate, Accept, Exploit, Share, Enhance, Accept.</p> <p><b>Qualitative Risk Analysis:</b> Chance and impact of occurrence, prioritized list; ranking.</p> <p><b>Quantitative Risk Analysis:</b> Numerical analysis of probability and impact.</p> <p><b>Tools:</b> Interviews, Sensitivity Analysis, Decision Tree Analysis, Simulation, Monte Carlo.</p> <p><b>Expected Monetary Value</b> = probability * impact; <b>Contingency Reserve</b> = <math>\sum(p * i)</math></p> <p><b>Risks: Pure:</b> negative impact only, injury, theft, fire, destruction</p> <p><b>Secondary:</b> risk response creates another risk; <b>Residual:</b> small generally accepted risk</p> <p><b>Utility Function = Risk Tolerance:</b> willingness to accept risk</p> <p>Sender, Encoder, Medium, Noise, Decoder, Receiver; Message sent; Info transferred.</p> <p><b>Paralingual:</b> pitch, tone, inflection; 55% of communication is nonverbal</p> <p><b>Written: formal:</b> plan, contract, resource requests, <b>informal:</b> notes, memos, email</p> <p><b>Verbal: formal:</b> presentation, bidder conf., <b>informal:</b> conversation, 1<sup>st</sup> poor performance notice</p> <p><b>Effective listening:</b> interpreting nonverbals, questions, feedback</p> <p><b>Active listening:</b> participation with verbal + nonverbal signs of message receipt</p> <p><b>Cost Reimbursable:</b> Cost + award/incentive/fixed Fee, <b>Time and Material, Fixed Price</b></p> <p><b>Purchase order:</b> unilateral, <b>Letter of intent:</b> not binding,</p> <p><b>Letter contract:</b> short-term, stopgap or emergency response</p> <p><b>Bidder-Conference:</b> questions about SOW, <b>Bid/Quote:</b> price, <b>Proposal:</b> ideas</p> <p><b>Stakeholder classification:</b> Power vs. Interest / Influence / Impact Matrix</p> <p><b>Salience model:</b> power, urgency, legitimacy</p>			
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