

How QSM Products Support PMI's Project Management Knowledge Areas

QSM – PMI Project Management Knowledge Area Support Matrix

| KEY KNOWLEDGE AREA | MAJOR PROCESSES | EXAMPLES OF MEASUREMENTS OR CRITERIA TO FULFILL KEY KNOWLEDGE AREA PROCESSES | APPLICABLE QSM TOOLS AND METHODS |
|--------------------------------|--|---|--|
| Project Integration Management | <ul style="list-style-type: none"> • Project Plan Development • Project Plan Execution • Integrated Change Control | <ul style="list-style-type: none"> • Project plans, Scope Definition, WBS • Work result metrics, change requests • Configuration Management Performance Reports • Replanning & Rebaselining | SLIM-Estimate for project plans & SLIM-Control: for performance measurement and replanning |
| Project Scope Management | <ul style="list-style-type: none"> • Scope Planning • Scope Definition • Scope Verification • Scope Change Control | <ul style="list-style-type: none"> • Lines of code • Function points • Object counts • Number of requirements • Number of pages • Number of modules • Number of subsystems | SLIM-Estimate size calculator & size range estimating technique SLIM-Control: Tracking actual size vs. estimates Code counting tools: Automating standard definitions |
| Project Time Management | <ul style="list-style-type: none"> • Activity Definition • Activity Sequencing • Activity Duration Estimating • Schedule Development • Schedule Control | <ul style="list-style-type: none"> • Estimated schedule & milestones • Expected values & high probability values • Task level work breakdown schedule | SLIM-Estimate - WBS supports Phase, milestone and task level scheduling with integration to 3 rd party detailed scheduling tools. SLIM-Control supports tracking actual schedule accomplishment vs. plan |
| Project Cost Management | <ul style="list-style-type: none"> • Resource Planning • Cost Estimating | <ul style="list-style-type: none"> • Project roles and skill sets and labor rates identified | SLIM-Estimate WBS supports custom skill |

| | | | |
|----------------------------------|--|---|--|
| | <ul style="list-style-type: none"> • Cost Budgeting • Cost Control | <ul style="list-style-type: none"> • Roles and skills allocated by task • Cost allocation by task and skill category • Cumulative Cash Flow • Expected values & high probability values (management reserve) | <p>categories and labor rates and allocation by task with integration to 3rd party detailed resource and time management tools. SLIM-Control supports actual vs. planned cost expenditure analysis.</p> |
| Project Quality Management | <ul style="list-style-type: none"> • Quality Planning • Quality Assurance • Quality Control | <ul style="list-style-type: none"> • Quality Management Plan • Operational Reliability Defined • Inspection & Test Procedures • Defect Control Charts and Trend Analysis | <p>SLIM-Estimate integrated reliability model to predict defects and reliability at delivery. SLIM-Control monitors actual defects and forecast reliability at delivery.</p> |
| Human Resource Management | <ul style="list-style-type: none"> • Organizational Planning • Staff Acquisition • Team Development | <ul style="list-style-type: none"> • Assigning Project Roles & Responsibilities • Develop a Project Staffing Plan • Resource Pool Allocation | <p>SLIM-Estimate generates a integrated staffing plan with skill allocation by WBS task</p> |
| Project Communication Management | <ul style="list-style-type: none"> • Communications Planning • Information Distribution • Performance Reporting • Administrative Closure | <ul style="list-style-type: none"> • Project Organization & Stakeholder Responsibilities • Communication Management Plan • Status & Progress Reporting • Forecasting & Earned Value Analysis • Project Closure & Lessons Learned | <p>SLIM-Control provides plan & actual variance analysis and adaptive forecasting as well as EVM. SLIM –Control supports communication via it customizable control charts and project snapshot summary analysis. SLIM-Metrics/DataManager support capture of historic data and lessons learned at project closure.</p> |

| | | | |
|------------------------------|---|---|---|
| Project Risk management | <ul style="list-style-type: none"> • Risk Management Planning • Risk Information • Qualitative Risk Analysis • Quantitative Risk Analysis • Risk Reponse Planning • Risk Monitoring & Control | <ul style="list-style-type: none"> • Risk Management Plan • Stakeholder Tolerances and Thresholds • Risk and Probability Analysis • Risk Based What-if Analysis | <p>SLIM-Estimate provides a simulation based capability to statistically map the project input uncertainties through to associated uncertainties on schedule, cost & quality. SLIM-Control continuously monitors project risk and provides an automated project forecast and what-if analysis.</p> |
| Project Procurement Planning | <ul style="list-style-type: none"> • Procurement Planning • Solicitation Planning • Source Selection • Contract Administration • Contract Closeout | <ul style="list-style-type: none"> • Scope Statement • Constraints & Assumptions • Make or Buy Analysis • Statement of Work • Evaluation Criteria • Solicitation and Procurement Documents • Proposal Evaluation and Source Selection • Baseline Project Plan • Performance reporting and Change Control | <p>SLIM-DataManager provides historic data that should be submitted along with Bids from contractors. SLIM-Metrics provides analytical capabilities of comparing contractor bids with their historic performance. SLIM-Estimate will generate an independent project cost & schedule estimate and constraint analysis. SLIM-Control provides performance reporting and change control analysis.</p> |