Software Process Capability Questionnaire

Requirement Management
1. Are system requirements allocated to software used to establish a baseline for software engineering and management use?

Comments:

2. As the systems requirements allocated to software change, are the necessary adjustments to software plans, work products, and activities made?

Comments:

3. Does the project follow a written organizational policy for managing the system requirements allocated to software?

Comments:

4. Are the people in the project who are charged with management responsibilities for allocated requirements trained in the procedures for managing allocated requirements?

Comments:
5. Are measurements used to determine the status of the activities performed for managing the allocated requirements (e.g., total number of requirements changes that are proposed, open, approved, and incorporated into the baseline)?

Comments:

6. Are the activities for managing allocated requirements on the project subject to SQA review?

Comments:

Software Project Planning

1. Are estimates (e.g., size, cost, and schedule) documented for use in planning and tracking the software project?

Comments:

2. Do the software plans document the activities to be performed and the commitments made for the software project?

Comments:

3. Do all affected groups and individuals agree to their commitments related to the software project?

Comments:

4. Does the project follow a written organization policy for planning a software project?

Comments:

5. Are adequate resources provided for planning the software project (e.g., funding and experienced individuals)?

Comments:

6. Are measurements used to determine the status of the activities for planning the software project (e.g., completion of milestones for the project planning activities)?

Comments:
7. Does the project manager review the activities for planning the software on both a periodic and event-driven basis?

Comments:
Software Project Tracking and Oversight

1. Are the project's actual results (e.g., schedule, size, and cost) compared with estimates in the software plans?

Comments:

2. Is corrective action taken when actual results differ significantly from the project's software plans?

Comments:

3. Are changes in the software commitments agreed to by all affected groups and individuals?

Comments:

4. Does the project follow a written organizational policy for both tracking and controlling its software development activities?

Comments:

5. Is someone on the project assigned specific responsibilities for tracking software work products and activities (e.g., effort, schedule, and budget)?

Comments:

6. Are measurements used to determine the status of the activities for software tracking and oversight (e.g., total effort expended in performing tracking and oversight activities)?

Comments:

7. Are the activities for software project tracking and oversight reviewed with senior management on a periodic basis (e.g., project performance, open issues, risks, and action items)?

Comments:

Software Subcontract Management

1. Is a documented procedure used for selecting subcontractors based on their ability to perform the work?
Comments:

2. Are changes to subcontracts made with the agreement of both the prime contractor and the subcontractor?

Comments:

3. Are periodic technical interchanges held with subcontractors?

Comments:

4. Are the results and performance of the software subcontractor tracked against their commitments?

Comments:

5. Does the project follow a written organizational policy for managing software subcontracts?

Comments:

6. Are the people responsible for managing software subcontracts trained in managing software subcontracts?

Comments:

7. Are measurements used to determine the status of the activities for managing software subcontracts (e.g., schedule status with respect to planned delivery dates and effort expended for managing the subcontracts)?

Comments:

8. Are the software subcontract activities reviewed with the project manager on both a periodic and event-driven basis?

Comments:

Software Quality Assurance (SQA)

1. Are SQA activities planned?

Comments:

2. Do SQA activities provide objective verification that software products and activities adhere to applicable standards, procedures, and requirements?

Comments:

3. Are the results of SQA reviews and audits provided to affected groups and individuals (e.g., those who performed the work and those who are responsible for the work)?

Comments:
4. Are issues of noncompliance that are not resolved within the software project addressed by senior management (e.g., deviations from applicable standards)?

Comments:

5. Does the project follow a written organization policy for implementing SQA activities?

Comments:

6. Are adequate resources provided for performing SQA activities (e.g., funding and a designated manager who will receive and act on software noncompliance items)?

Comments:
7. Are measurements used to determine the cost and schedule status of the activities performed for SQA (e.g., work completed, effort and funds expended compared to the plan)?

Comments:

8. Are activities for SQA reviewed with senior management on a periodic basis?

Comments:
Software Configuration Management (SCM)

1. Are software configuration management activities planned for the project?
   Comments:

2. Has the project identified, controlled and made available the software work products to be placed under configuration management?
   Comments:

3. Does the project follow a documented procedure to control changes to configuration items/units?
   Comments:

4. Are standard reports on software baselines (e.g., software configuration control board minutes and change request summary and status reports) distributed to affected groups and individuals?
   Comments:

5. Does the project follow a written organizational policy for implementing software configuration management activities?
   Comments:

6. Are project personnel trained to perform the software configuration management activities for which they are responsible?
   Comments:

7. Are measurements used to determine the status of activities for software configuration management (e.g., effort and funds expended for software configuration management activities)?
   Comments:

8. Are periodic audits performed to verify that software baselines conform to the documentation that defines them (e.g., by the SCM group)?
   Comments:

Organization Process Focus

1. Are the activities for developing and improving the organization's and project's software processes coordinated across the organization (e.g., via a software engineering process group)?
   Comments:

2. Is your organization's software process assessed periodically?
   Comments:
3. Does your organization's follow a documented plan for developing and improving its software process?

Comments:

4. Does senior management sponsor the organization's activities for software process development and improvements (e.g., by establishing long-term plans, and by committing resources and funding)?

Comments:

5. Do one or more individuals have full-time or part-time responsibility for the organization's software process activities (e.g., a software process engineering group)?

Comments:

6. Are measurements used to determine the status of the activities performed to develop and improve the organization's software process (e.g., effort expended for software process assessment and improvement)?

Comments:

7. Are the activities performed for developing and improving software process reviewed periodically with senior management?

Comments:

Organization Process Definition

1. Has your organization developed, and does it maintain, a standard software process?

Comments:

2. Does the organization collect, review, and make available information related to the use of the organization's standard software process (e.g., estimates and actual data on software size, effort, and cost; productivity data; and quality measurements)?

Comments:

3. Does the organization follow a written policy for both developing and maintaining its standard software process and related process assets (e.g., descriptions of approved software life cycles)?

Comments:

4. Do individuals who develop and maintain the organization's standard software process receive the necessary training to do their job effectively?

Comments:

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required training to perform these activities?

Comments:

5. Are measurements used to determine the status of the activities performed to define and maintain the organization's standard software process (e.g., status of schedule milestones and the cost of process definition activities)?

Comments:

6. Are the activities and work products for developing and maintaining the organization's standard software process subjected to SQA review and audit?

Comments:

Training Program

1. Are training activities planned?

Comments:

2. Is training provided for developing the skills and knowledge needed to perform software managerial and technical roles?

Comments:

3. Do members of the software engineering group and other software groups receive the training necessary to perform their roles?

Comments:

4. Does your organization follow a written organizational policy to meet its training needs?

Comments:

5. Are adequate resources provided to implement the organization's training program (e.g., funding, software tools, appropriate training facilities)?

Comments:

6. Are measurements used to determine the quality of the training program?

Comments:

7. Are training program activities reviewed with senior management on a periodic basis?

Comments:
1. Was the project's defined software process developed by tailoring the organization's standard software process? 

   Comments:

2. Is the project planned and managed in accordance with the project's defined software process? 

   Comments:

3. Does the project follow a written organizational policy requiring that the software project be planned and managed using the organization's standard software process? 

   Comments:

4. Is training required for individuals tasked to tailor the organization's standard software process to define a software process for a new project? 

   Comments:

5. Are measurements used to determine the effectiveness of the integrated software management activities (e.g., frequency, causes and magnitude of re-planning efforts)? 

   Comments:

6. Are the activities and work products used to manage the software project subjected to SQA review and audit? 

   Comments:
1. Are the software work products produced according to the project's defined software process?

Comments:

2. Is consistency maintained across software work products (e.g., is the documentation tracing requirements through software requirements, design, code, and test cases maintained)?

Comments:

3. Does the project follow a written organizational policy for performing the software engineering activities (e.g., a policy which requires the use of appropriate methods and tools for building and maintaining software products)?

Comments:

4. Are adequate resources provided for performing the software engineering tasks (e.g., funding, skilled individuals, and appropriate tools)?

Comments:

5. Are measurements used to determine the functionality and quality of the software products (e.g., numbers, types, and severity of defects identified)?

Comments:

6. Are the activities and work products for engineering software subjected to SQA reviews and audits (e.g., is required testing performed, are allocated requirements traced through the software requirements, design, code and test cases)?

Comments:
1. On the project, do the software engineering group and other engineering groups collaborate with the customer to establish system requirements?

Comments:

2. Do the engineering groups agree to the commitments as represented in the overall project plan?

Comments:

3. Do the engineering groups identify, track, and resolve intergroup issues (e.g., incompatible schedules, technical risks, or system-level problems)?

Comments:

4. Is there a written organizational policy that guides the establishment of interdisciplinary engineering teams?

Comments:

5. Do the support tools used by different engineering groups enable effective communication and coordination (e.g., compatible word processing systems, database systems, and problem tracking systems)?

Comments:

6. Are measures used to determine the status of the intergroup coordination activities (e.g., effort expended by the software engineering group to support other groups)?

Comments:

7. Are the activities for intergroup coordination reviewed with the project manager on both a periodic and event-driven basis?

Comments:

Peer Reviews

1. Are peer reviews planned?

Comments:

2. Are actions associated with defects that are identified during peer reviews tracked until they are resolved?

Comments:
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<tr>
<td>3. Does the project follow a written organizational policy for performing peer reviews?</td>
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<tr>
<td>هل تلتزم منظمتك بسياسة مكتوبة لآداء عمليات المراجعة والفحص؟</td>
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<td>4. Do participants of peer reviews receive the training required to perform their roles?</td>
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<td>هل المشاركين في عمليات المراجعة والفحص يلقون التربة اللازمة لآداء أدوارهم؟</td>
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<td>5. Are measurements used to determine the status of peer review activities (e.g., number of peer reviews performed, effort expended on peer reviews, and number of work products reviewed compared to the plan)?</td>
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<td>هل تستخدم المقاييس لتحديد عمليات المراجعة والفحص (مثل عدد الاجتماعات التي وقعت لإجراء عمليات الفحص والمراجعة، عدد المنتجات التي تم مراجعتها ومقارنتها بالخطة)؟</td>
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<td>6. Are peer review activities and work products subjected to SQA review and audit (e.g., planned reviews are conducted and follow-up actions are tracked)?</td>
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<td>هل تجرب المنتجات المراجعة والإحصاءات التي تقوم بفحص وراثة المنتجات تحتوي على عمليات ضمان الجودة (مثل لائحة الإحصاءات المنفصلة وعمليات متابعة لأخطاء يتم تفعيلها بالتفصيل)؟</td>
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