CMMI Standard:

p.349 -> Risk Management ( level 3 process area - Maturity ) ( Defined )

Presented in 22 process areas in the category of Project Management

Project Planning process area is “Refer to the Risk Management process area for more information about identifying and analyzing risks and mitigating risks.”

A defined process that is characteristic of a maturity level 3 organization can be placed at great risk if maturity level 2 management practices are deficient. For example, management may commit to a poorly planned schedule or fail to control changes to baselined requirements. Similarly, many organizations prematurely collect the detailed data characteristic of maturity level 4 only to find the data uninterpretable because of inconsistencies in processes and measurement definitions.

p.57 Advanced Project Management Process Areas:

Although risk identification and monitoring are covered in the Project Planning and Project Monitoring and Control process areas,

GG.2 Managed

Gg2.1 ( Organizational Policy)

This policy establishes organizational expectations for defining a risk management strategy and identifying, analyzing, and mitigating risks.

Gg2.2 (plan the process )

This plan for performing the risk management process can be included in (or referenced by) the project plan, which is described in the Project Planning process area. The plan called for in this generic practice addresses the comprehensive planning for all of the specific practices in this process area. In particular, this plan provides the overall approach for risk mitigation, but is distinct from mitigation plans (including contingency plans) for specific risks. In contrast, the risk mitigation plans called for in the specific practices of this process area addresses more focused items such as the levels that trigger risk handling activities.

Gg2.3 ( provide resources )

Examples of resources provided include the following:

* Risk management databases
* Risk mitigation tools
* Prototyping tools
* Modeling and simulation tools

Gg2.5 ( Train People )

**PMC Elaboration:**

* Risk management

**PP Elaboration:**

* Identifying and analyzing risks

**RSKM Elaboration:**

Examples of training topics include the following:

* Risk management concepts and activities (e.g., risk identification, evaluation, monitoring, mitigation)
* Measure selection for risk mitigation

**Gg2.6 ( Control work products )**

**RSKM Elaboration:**

Examples of work products placed under control include the following:

* Risk management strategy
* Identified risk items
* Risk mitigation plans

**Gg2.7 ( identify relevant stakeholders )**

**PMC Elaboration:**

* Reviewing project risks

**PP Elaboration:**

* Reviewing and resolving issues on the completeness and correctness of the project risks

**QPM Elaboration:**

* Identifying and managing the risks in achieving the project’s quality and process performance objectives

**RD Elaboration:**

* Assessing product cost, schedule, and risk

**RSKM Elaboration:**

* Establishing a collaborative environment for free and open discussion of risk
* Reviewing the risk management strategy and risk mitigation plans
* Participating in risk identification, analysis, and mitigation activities
* Communicating and reporting risk management status

**Gg2.8 ( Monitor & Control the process )**

**RSKM Elaboration:**

* Number of risks identified, managed, tracked, and controlled
* Risk exposure and changes to the risk exposure for each assessed risk, and as a summary percentage of management reserve
* Change activity for risk mitigation plans (e.g., processes, schedule, funding) Occurrence of unanticipated risks
* Risk categorization volatility
* Comparison of estimated versus actual risk mitigation effort and impact
* Schedule for risk analysis activities
* Schedule of actions for a specific mitigation

**Gg2.9 (Objectively Evaluate Adherence)**

**RSKM Elaboration:**

**Examples of activities reviewed:**

* Establishing and maintaining a risk management strategy
* Identifying and analyzing risks
* Mitigating risks

**Examples of work products reviewed:**

* Risk management strategy
* Risk mitigation plans

**Gg2.10 (Review Status with Higher Level Management)**

**RSKM Elaboration:**

Reviews of the project risk status are held on a periodic and event driven basis, with appropriate levels of management, to provide visibility into the potential for project risk exposure and appropriate corrective action. Typically, these reviews include a summary of the most critical risks, key risk parameters (such as likelihood and consequence of the risks), and the status of risk mitigation efforts.

**Gg3.2 (Collect Process Related Experiences)**

**PP Elaboration:**

Examples of process related experiences:

* Risk impacts and probability of occurrence

**RSKM Elaboration:**

Examples of process related experiences

* Risk parameters
* Risk categories
* Risk status reports

**Risk Management ( CMMI )**

**Risk handling Strategy:**

**Mitigate**

**Avoid**

Do a plan with actions to lower the impact and probability

**Risk**

**Accept**

**Transfer**

To a third Party

Live with it

**Accept & Mitigate (Plan B) : has Contingency plan**

* If choosing accept or mitigate its necessary to introduce a plan B.

Estimates: used to decrease risk occurrences بقلل حدوث ال

Estimation is associated with risks.

Risk handling cost (risk mitigation): لو البروجكت هياخد يومين.. زود يوم كمان

لو البروجكت كوست 100 دولار زود 10%