

Chapter 1 : Quality Management Plan Template

The Quality Management Plan helps the project manager determine if deliverables are being produced to an acceptable quality level and if the project processes used to manage and create the deliverables are effective and properly applied.

Share 0 Shares Entering projects with little consideration to quality can be costly in numerous ways. Second, the cost of corrective action and defect repair may be higher than expected. Third, the cost of quality after the project may be higher and may decrease customer confidence. Fourth, project communication may be more challenging since people expect different things. Nobody likes missing deadlines due to rework resulting from the failure to understand the quality requirements. For many people, quality is a nebulous term. When you get a haircut, do you tell your hairdresser the style and length that you expect? If you get a different length than asked for, does it matter? You bet – the degree to which your requirements are met matters. What is a Quality Management Plan? It describes how the project management team plans to meet the quality requirements set for the project. For example, Nestle has a Quality Policy which includes: Wise project managers understand the benefits of discussing and defining the quality requirements for their projects. The quality management plan may be a simple one-page plan for small projects and a more robust plan for larger projects. Just the fact that you thought about it goes a long way. This is determined by the type of project that is being undertaken. The people involved in creating a quality management plan for the development of a nuclear power plant will be decidedly different from those helping with the development of an accounts receivable software package. With this in mind, here are some candidates: Project manager Selected team members Selected stakeholders from quality assurance, legal, and the operations to name a few Customer representatives if the project is being undertaken to create a product or service for a customer What Should Be Included? The Quality Management Plan should be fitting to each project. That is to say, only include the elements that are necessary and nothing more. The plan may include but not be limited to: Engage your stakeholders in the process to get their input and their buy-in. Click here to download a Template from Project Management Docs. She invited her sponsor, the QA manager, the lead developer, and business analyst to a meeting to discuss and develop the quality management plan. Susie asked the business analyst to share his recommended approach for developing and managing the requirements. Next, she asked the lead developer about the designs, unit testing, function testing, and integration testing. Susie invited the QA manager to help determine the testing plans including the individuals who would perform the tests, the order of the tests, the test environments, and the tracking of defects. Lastly, Susie said that the team would use a traceability matrix to trace the requirements through each phase of the project. All of this information was captured in a simple quality management plan. In your next project, think about your approach to quality management. What other tips do you have for creating a quality management plan? Click here to watch my YouTube video: I invite you to subscribe to my YouTube Channel for weekly videos. Make sure that you are including the right project baselines, subsidiary plans, and ancillary plans in your project management plans. Join 1, project managers today! Now check your email to confirm your subscription and download your checklist. There was an error submitting your subscription. First Name Email Address We use this field to detect spam bots. If you fill this in, you will be marked as a spammer.

Introduction. The Quality Management Plan is an integral part of any project management plan. The purpose of the Quality Management Plan is to describe how quality will be managed throughout the lifecycle of the project.

What is Project Quality Management? Project Quality Management Quality is the degree to which the project fulfils requirements. Let us now understand What is Project Quality Management? Project Quality Management is the process for ensuring that all project activities necessary to design, plan and implement a project are effective and efficient with respect to the purpose of the objective and its performance. Project Quality Management QM is not a separate, independent process that occurs at the end of an activity to measure the level of quality of the output. Important Points to remember that are as follows: Quality is all about meeting the expectations and requirements of the customer and stakeholders and creating a product that fulfil those needs and is fit for its intended use. Quality is achieved by planning, designing, and building it into a product or process from the inception. Quality is planned in, not inspected in. Quality management and process improvement relies on the ongoing plan-do-check-act cycle. This can be done using quality management improvement initiatives e. TQM, 6 sigma and using process improvement models; e. Grade versus Quality “ Definitions and Differences: Quality is conformance to the requirements. There is a big difference between the Quality and the Grade. A product can be a high grade high-end or a low grade low-end. It is perfectly acceptable for a product to be a low grade as long as it fulfil its stated requirements. On the other hand, a low quality product is always a problem. Every product must be of high quality regardless of its grade. A low quality product is never desired. Accuracy and Precision in Quality Management: The project management team should determine the appropriate levels of accuracy and precision for use in the quality management plan. It is an assessment of correctness. Accuracy means the measured values are very close to the true value. If somebody says that measurements are accurate, then you should know that those measurements are very near the target, or true value. The scatter of accurate measurements may, or may not be dense. It is a measure of exactness. Precision in project quality management means the values of repeated measurements are clustered and have little scatter. They may or may not be near the target value. Precision is about how the measured values are close to one another. If the scatter is lesser, measurements are said to have a high precision. Quality Management in Project Management: Project Quality Management includes the processes and activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. Project Quality Management works to ensure that the project requirements, including product requirements, are met and validated. Project Cost Management Processes: An overview of the Project Cost Management processes are as follows: Plan the Project Quality Management. The key benefit of this process is that it provides guidance and direction on how quality will be managed and validated throughout the project. Perform Quality Assurance is the process of auditing the quality requirements and the results from quality control measurements to ensure that appropriate quality standards and operational definitions are used. The key benefit of this process is that it facilitates the improvement of project quality management processes. Control Quality is the process of monitoring and recording results of executing the quality activities to assess performance and recommend necessary changes. The key benefits of this process quality management include: Quality Management Tools and Techniques: The Seven basic tools of project quality management is a designation given to a fixed set of graphical techniques identified as being most helpful in troubleshooting issues related to quality. Kaoru Ishikawa developed seven basic visual tools of quality. They are called basic because they are suitable for people with little formal training in statistics. And because they can be used to solve the vast majority of quality-related issues. The seven tools are: It is also known as fishbone diagrams or as Ishikawa diagrams. This tool helps you explore the causes that might be producing the problem. It is very important for you to know the real cause of the problem before you start thinking about any possible solution. The fish-bone diagram gives you a comprehensive list of possible causes to identify the root cause of the problem. The fish-bone diagram uses a brainstorming technique to collect the causes and come up with a kind of mind map

which shows you all identified causes graphically. Sometimes it happens that the most obvious cause turns out to be minor and the cause thought to be a minor one was causing the issue. This diagram gives you an opportunity to think more thoroughly about the root cause of the problem, which leads to a robust resolution. The fishbone diagram forces you to consider all possible causes of a problem instead of focusing on the most obvious one as it is explained in the online project management courses, which are a part of project management diploma and online mba project management programs offered by AIMS, UK. Here causes are grouped into several categories to easily identify the correct source of the variation. A flowchart graphically depicts the relationships between and among steps. They typically show activities, decision points, and the flow or order of steps in a process. Flowcharts may prove useful in understanding and estimating the cost of quality in a process. This is obtained by using the workflow branching logic and associated relative frequencies to estimate expected monetary value for the conformance and non-conformance work required to deliver the expected conforming output. It is also known as tally sheets and may be used as a checklist when gathering data. Checksheets are used to organize facts in a manner that will facilitate the effective collection of useful data about a potential quality problem. In project quality management, they are especially useful for gathering attributes data while performing inspections to identify defects. For example, data about the frequencies or consequences of defects collected in check-sheets are often displayed using Pareto diagrams. Control charts measure the results of processes over time and display the results in graph form. Control charts are a way to measure variances to determine whether process variances are in control or out of control. A control chart is based on sample variance measurements. From the samples chosen and measured, the mean and standard deviation are determined. In control chart, there is a centre line called the mean or goal which is surrounded by other lines called limits. These lines are again surrounded by two other lines known as the upper specification limit and lower specification limit. Upper and lower specification limits are provided in the contract and you cannot cross them. This is your final limit. The upper and lower control limit are determined by the project manager so that specific limits are not crossed, and if the process goes above this limit, a corrective action must be taken. Pareto charts are used to identify and prioritize problems to be solved. His theory is that you get the most benefit if you spend the majority of your time fixing the most important problems. Pareto charts are displayed as histograms that rank-order the most important factors—such as delays, costs, and defects, for example—by their frequency over time. It is a special form of bar chart and are used to describe the central tendency, dispersion, and shape of a statistical distribution. A histogram is a bar graph that shows frequency data. Histograms provide the easiest way to evaluate the distribution of data. Histograms can be used to determine distribution of errors. Scatter diagrams in project quality management use two variables, one called an independent variable, which is an input, and one called a dependent variable, which is an output. Scatter diagrams display the relationship between these two elements as points on a graph. This relationship is typically analyzed to prove or disprove cause-and-effect relationships. As an example, maybe your scatter diagram plots the ability of your employees to perform a certain task. The length of time in months they have performed this task is plotted as the independent variable on the X axis, and the accuracy they achieve in performing this task, which is expressed as a score—the dependent variable—is plotted on the Y axis. The scatter diagram can then help you determine whether cause-and-effect in this case, increased experience over time versus accuracy can be proved. Scatter diagrams can also help you look for and analyze root causes of problems. The important point to remember about scatter diagrams is that they plot the dependent and independent variables, and the closer the points resemble a diagonal line, the closer these variables are related.

Quality Management Planning Template This template is provided as a guide to help the project leader/manager plan quality management activities for the project. Please send questions and feedback about the use of this template to it-project-management@calendrierdelascience.com

It is important to perform quality planning during the Planning Process and should be done alongside the other project planning processes i. Time Planning, Risk Planning, etc. It is important to remember that quality should be planned, designed, then built in, not added on after the fact. Inputs[edit] Enterprise Environmental Factors Factors which are related to the type of business the project is being produced for can have an effect on its quality. Such factors include government or industry standards, marketplace conditions and stakeholder risk tolerances. They include quality policies, procedures and guidelines, historical databases and lessons learned from previous projects. The project management team is also responsible for making sure the stakeholders are aware of quality policy. Project Scope Statement The project scope statement details the deliverables, objectives, thresholds and acceptance criteria that the project must meet. This makes it very important to quality planning. Acceptance criteria describe the requirements and conditions that must be achieved before deliverables will be accepted. The acceptance criteria can drastically increase or decrease the costs of project quality. In addition, the product scope statement may contain a scope description which contains issues that may affect quality planning. Tools and Techniques[edit] Cost-Benefit Analysis During the quality planning process it is important to consider cost-benefits trade-offs. The key benefit of meeting sufficient quality requirements is that it results in less rework, which in turn results in higher productivity, lower costs, and greater satisfaction from the stakeholder. The main cost of achieving such quality requirements is the expense that comes with activities relating to Project Quality Management. Benchmarking The process of benchmarking compares planned or existing project practices to the practices set in place for other projects in order to generate ideas as to which areas of the project could be improved upon. Furthermore, it is also used to provide a basis for measuring overall performance. The projects used for comparison can be from within the performing organization or from a source outside of it, and do not necessarily have to be from within the same application area to be used. Design of Experiments DOE Design of Experiments DOE is a method used to identify factors which may influence certain aspects of a product or process during the time it is under development or in production. An organization would use DOE to reduce the sensitivity of product performance to factors caused by differences in manufacturing or the environment. The main benefit of DOE is that it provides the organization with a framework to systematically change all of the important factors associated with a project, rather than changing them one at a time. Failure costs are divided into internal and external costs. Failure costs are also known as cost of poor quality. Additional Quality Planning Tools Additional quality planning tools are often used to better define the situation and assist in planning effective and efficient quality management activities. These include brainstorming, affinity diagrams, nominal group techniques, matrix diagrams, flowcharts, and prioritization matrices. Perform Quality Assurance [1] [2] [edit] Project Quality Assurance is an executing process concerned with overall process improvement of the activities and processes undertaken to achieve quality. In other words, project managers take all of the outputs from Plan Quality Management and Control Quality and look at them to see if projects are using the correct and most efficient processes to meet their requirements. If the quality of both process and activities improves, then the quality of deliverables should improve as well, bringing also positive implications to the other five project constraints time, scope, cost, resources, and risk. The Project Quality Assurance process is iterative in nature. A project manager starts performing quality assurance after the other quality processes are complete and continues throughout the life of the project. Control Quality[edit] Control Quality process inspects and reviews work products to find defects. In case of mismatches between work performance information and quality plan and metrics, a project manager recommends a change. This way, the problem is either fixed or prevented from happening again. Control Quality process guarantees that every product and project deliverable meets quality standards. Indeed, deliverables can go through the Validate Scope process for

customer acceptance only once verified by Control Quality. The first product deliverable marks the beginning of the Control Quality process, then carried on throughout much of the project. Summary[edit] By keeping the benchmarks for required levels of quality in mind, such as Enterprise Environmental Factors and Organizational Process Assets, projects will be much more likely to satisfy end-user requirements. In addition, by utilizing the tools listed above, the costs incurred for assuring quality can be minimized, while ensuring project success. While all PMBOK areas are an important part of a project, quality controls are what shape the final product. By holding the project itself to high standards of quality, that project will produce results of similar worth.

Chapter 4 : How to Develop a Quality Management Plan - Project Risk Coach

Plan quality management is the process of identifying quality requirements and/or standards for the project deliverables, and documenting how the project will demonstrate compliance with quality requirements and/or standards.

This template guides you through the production of a quality management plan that communicates to your stakeholders, project team and third parties the importance you place on producing quality products and services. This plan ensures that you prepare a detailed and well thought out approach to quality management. It enables you to clearly indicate the quality requirements and boundaries of acceptance for all products and shows how you plan to implement quality assurance and quality control. Quality is no longer a poor relation in terms of organizational concerns. In fact it is now seen as a key part of retaining market share and improving ones competitive advantages. Quality management is a significant part on any project planning and formulates the boundaries of acceptance your team will tolerate for the deliverables, products and services they must use during the project. Poor managed quality or substandard resources cause severe problems and the repercussions can be felt outside the project team as well as within it. Quality affects every aspect of the project and emphasizes the need for it to be properly measured, managed and controlled at all times. Many successful project managers ensure that the quality aspects of their project have their own plan that defines the procedures, policies and processes to be used for the duration of the project. This quality plan explicitly explains how it will be implemented for this project. The depth of this explanation will vary according to the individual project requirements. As a component of the project plan its importance cannot be overstated and there are three key issues it addresses. Within the plan all the processes and procedures that will be used for the project life cycle are defined to ensure that the team has a clear plan to follow in this area and that measures for assessing quality control and assurance are in place. It is important that the project manager gets the approval from all stakeholders and they become familiar with all quality facets. The approach to quality management will match the needs of the organization and the project and a full description is included in this plan. One of its main purposes is to minimize the amount of rework and wastage both in terms of cost and time. Many projects appoint a quality group manager to work with the project team and be responsible for defining what metrics will be used to assess quality, when and how these measures will be taken and how the results will be analyzed and reported. Once this has all been agreed approval from the project sponsor can be sought. It is important to ensure that everyone involved on the project team and the quality group understands that they can highlight quality issues that will follow a predefined review process to judge whether the improvement adds more value to the project than its implementation cost. To ensure all lessons are learnt within this area, the plan makes specific reference as to how such issues are documented throughout this submission and evaluation processes. Within the world of project management there are a variety of proven procedures to help them to plan for and manage quality. They are mainly statistically based so a project manager will need a working understanding of statistics, but he can call on experts to help him or her out if they are unfamiliar with some techniques. This is extremely useful to the project manager because they take an industry or organizational standard as their point of reference. This enables her or him to take planned practices they want to use in the project and compare them to other similar projects to gain an understanding of best practices, provide a measurement base and to help the formulation of new ways to improve quality. It can also be used during the project to compare actual performance with these standards to assess quality levels. Successful project managers understand the importance quality management plays in communications with their stakeholders and see this plan as a significant tool in engaging this group of key people in the quality management process. Quality reviews for a key part of assessing and managing quality control and this management plan will define the essential individuals who must take part in such meetings. Quality control systems often include the use of external audits and inspections as a cost effective way to achieve quality assurance.

Chapter 5 : What is Project Quality Management? | AIMS Lecture

Sample Quality Management Plan professional standards, laws, and codes which must be incorporated into the project Monitoring the quality of their own work.

Interfaces Definition Quality management is a discipline for ensuring that outputs, benefits, and the processes by which they are delivered, meet stakeholder requirements and are fit for purpose. General Quality management has four components: These include procedures, tools and techniques that are used to ensure that the outputs and benefits meet customer requirements. The first component, quality planning, involves the preparation of a quality management plan that describes the processes and metrics that will be used. The quality management plan needs to be agreed with relevant stakeholders to ensure that their expectations for quality are correctly identified. The processes described in the quality management plan should conform to the processes, culture and values of the host organisation. Quality assurance provides confidence to the host organisation that its projects, programmes and portfolios are being well managed. It validates the consistent use of procedures and standards, and ensures that staff have the correct knowledge, skills and attitudes to fulfil their project roles and responsibilities in a competent manner. Quality assurance must be independent of the project, programme or portfolio to which it applies. The next component, quality control, consists of inspection, testing and measurement. It verifies that the deliverables conform to specification, are fit for purpose and meet stakeholder expectations. Quality control activities determine whether acceptance criteria have, or have not, been met. For this to be effective, specifications must be under strict configuration control. It is possible that, once agreed, the specification may need to be modified. Commonly this is to accommodate change requests or issues, while maintaining acceptable time and cost constraints. Any consequent changes to acceptance criteria should be approved and communicated. The last component, continual improvement, is the generic term used by organisations to describe how information provided by quality assurance and quality control processes is used to drive improvements in efficiency and effectiveness. A P3 maturity model provides a framework against which continual improvement can be initiated and embedded in the organisation. Project Projects that are part of a programme may well have much of the quality management plan developed at programme level to ensure that standards are consistent with the rest of the programme. Stand-alone projects need to develop their own quality management plans, either from scratch or by adapting those from other similar projects. This may seem to be an administrative burden at the beginning of smaller projects, but is always worthwhile in the end. Projects deliver tangible outputs that are subject to many forms of quality control, depending upon the technical nature of the work and codes affecting particular industries. Inspection produces data and tools such as scatter diagrams, control charts, flowcharts and cause and effect diagrams, all of which help to understand the quality of work and how it may be improved. The main contribution to continual improvement that can be made within the timescale of a project is through lessons learned. Existing lessons learned should be consulted at the beginning of every project, and any relevant lessons used in the preparation of the project documentation. At the end of every project, the lessons learned should be documented as part of the post-project review and fed back into the knowledge database. Programme The responsibility of the programme management team is to develop a quality management plan that encompasses the varied contexts and technical requirements contained within the programme. This sets the standards for the project quality management plans and also acts as a plan for quality in the benefits realisation parts of the programme. A comprehensive quality management plan at programme level can greatly reduce the effort involved in preparing project-level quality management plans. Quality control of outputs is mainly handled at project level, but the programme may get involved where an output from one project is an input to another, or where additional inspection is needed when outputs from two or more projects are brought together. The programme is responsible for quality control of benefits. This is a complex task since the acceptance criteria of a benefit may cover subjective as well as measurable factors but benefits should be defined in measurable terms so that quality control can be applied. The typical scale of programmes means that they have a very useful role to play in continual improvement. Programme assurance will ensure that projects do take existing

lessons learned into account and then capture their own lessons for addition to the knowledge database.

Portfolio The very nature of a portfolio means that it is unlikely to need a portfolio quality management plan. Quality management for the portfolio should be indistinguishable from the quality management policies of the host organisation as a whole. It may be necessary for the portfolio management team to provide guidance on the application of general policies or perhaps augment them where the portfolio creates special requirements. The portfolio is responsible for delivering strategic objectives. These may be expressed in very broad terms resulting in difficulty in applying quality control. When establishing the scope of a portfolio, attention should be given to defining acceptance criteria for strategic objectives so that they can be quality controlled. Continual improvement is very much a concern at portfolio level. The portfolio management team needs to ensure that the management of projects and programmes becomes more effective and efficient with the passage of time.

Chapter 6 : PMA - calendrierdelascience.com - Develop Quality Management Plan

The Project Quality Management Plan is created during the Planning Phase of the project. Its intended audience is the project manager, project team, project sponsor and any senior leaders whose support is needed to carry out the plan.

Next Page Introduction Every project delivers something at the end of the project execution. When it comes to the project initiation, the project management and the client collaboratively define the objectives and the deliveries of the project together with the completion timelines. During the project execution, there are a number of project deliveries made. All these deliveries should adhere to certain quality standards industry standards as well as specific client requirements. Therefore, each of these deliveries should be validated and verified before delivering to the client. For that, there should be a quality assurance function, which runs from start to the end of the project. When it comes to the quality, not only the quality of the deliveries that matter the most. The processes or activities that produce deliverables should also adhere to certain quality guidelines as well. As a principle, if the processes and activities that produce the deliverables do not adhere to their own quality standards process quality standards, then there is a high probability that deliverables not meeting the delivery quality standards. This plan acts as the quality bible for the project and all the stakeholders of the project should adhere to the project quality plan. The Components of a Project Quality Plan Depending on the nature of the industry and the nature of the project, the components or the areas addressed by a quality plan may vary. However, there are some components that can be found in any type of quality plan. Responsibility of Management This describes how the management is responsible for achieving the project quality. Since management is the controlling and monitoring function for the project, project quality is mainly a management responsibility. Document Management and Control Documents are the main method of communication in project management. Documents are used for communication between the team members, project management, senior management and the client. Therefore, the project quality plan should describe a way to manage and control the documents used in the project. Usually, there can be a common documentation repository with controlled access in order to store and retrieve the documents. Requirements Scope The correct requirements to be implemented are listed here. This is an abstraction of the requirements sign-off document. Having requirements noted in the project quality plan helps the quality assurance team to correctly validate them. This way, quality assurance function knows what exactly to test and what exactly to leave out from the scope. Testing the requirements that are not in the scope may be a waste for the service provider. Design Control This specifies the controls and procedures used for the design phase of the project. Usually, there should be design reviews in order to analyse the correctness of the proposed technical design. For fruitful design reviews, senior designers or the architects of the respective domain should get involved. Once the designs are reviewed and agreed, they are signed-off with the client. With the time, the client may come up with changes to the requirements or new requirements. In such cases, design may be changed. Every time the design changes, the changes should be reviewed and signed-off. Development Control and Rigor Once the construction of the project starts, all the processes, procedures and activities should be closely monitored and measured. By this type of control, the project management can make sure that the project is progressing in the correct path. Testing and Quality Assurance This component of the project quality plan takes precedence over other components. This is the element, which describes the main quality assurance functions of the project. This section should clearly identify the quality objectives for the project and the approach to achieve them. Then, the project management team should come up with appropriate mitigation plans in order to address each quality risk. Quality Audits For every project, regardless of its size or the nature, there should be periodic quality audits to measure the adherence to the quality standards. These audits can be done by an internal team or an external team. Sometimes, the client may employ external audit teams to measure the compliance to standards and procedures of the project processes and activities. Defect Management During testing and quality assurance, defects are usually caught. This is quite common when it comes to software development projects. The project quality plan should have guidelines and instructions on how to manage the defects. Training Requirements Every project team requires some kind of training before the project commences. For

this, a skill gap analysis is done to identify the training requirements at the project initiation phase. The project quality plan should indicate these training requirements and necessary steps to get the staff trained. Conclusion Project quality plan is one of the mandatory documents for any type of project. As long as a project has defined objectives and deliverables, there should be a project quality plan to measure the delivery and process quality.

Chapter 7 : What is quality management? | APM

The Project Management Body of Knowledge (PMBOK) says, "The quality management plan is a component of the project management plan that describes how the organization's quality policies will be implemented.

Chapter 8 : Project Quality Plan

Plan Quality involves identifying the quality requirements for both the project and the product and documenting how the project can show it is meeting the quality requirements. The outputs of this process include a Quality Management Plan, quality metrics, quality checklists and a Process Improvement Plan.

Chapter 9 : Download FREE Project Quality Management Plan Template PMBOK®

Quality management is the process for ensuring that all project activities necessary to design, plan and implement a project are effective and efficient with respect to the purpose of the objective and.