

Summer Training Report
On
Diploma In Project Management

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Course Dispersion:

Project Management (Diploma) This program is 4 days alison online course designed for students pursuing a career within the field of project management. The coursework gives students an understanding of the processes and techniques required in project management,

Course Objectives:

project management diploma objectives are the successful development of the project's procedures of initiation, planning, execution, regulation and closure as well as the guidance of the project team's operations towards achieving all the agreed upon goals within the set scope, time, quality and budget standards.

Course Content:

Day1 1: Project Management History and characteristics

In the first of Project Management diploma, I got the chance to know about what projects are and describe how they arise. In This Project Management reading material I got knowledge about: what a project is, and how it can arise as a part of a planning process, as a response to a changing environment, as a business opportunity, as a problem or as a newly identified requirement.

Chapter 1 History of Project Management

In the first Chapter, I came to know about the concept of project management and the history of project management and its development.

The concept of project management has been around since the beginning of history. It has enabled leaders to plan bold and massive projects and manage funding, materials and labor within a designated time frame. For example: Stonehenge was erected between 3,000 BC and 1,600 BC by no less than three different cultures and its orientation on the rising and setting sun has always been one of its remarkable features.

late 19th century, in the United States, large-scale government projects were the impetus for making important decisions that became the basis for project management methodology such as the transcontinental railroad, which began construction in the 1860s. Near the turn of the century, Frederick Taylor began his detailed studies of work. Taylor's associate, Henry Gantt , studied in great detail the order of operations in work and is most famous for developing the Gantt Chart in the 1910s. A Gantt chart is a popular type of bar chart that illustrates a project schedule and have become a common technique for representing the phases and activities of a project work breakdown structure, so they can be understood by a wide audience .

Although now considered a common charting technique, Gantt charts were considered quite revolutionary at the time they were introduced. During that time, the Manhattan project was initiated and its complexity was only possible because of project management methods. The

Manhattan project was the codename given to the Allied effort to develop the first nuclear weapons during World War II. The 1950s marked the beginning of the modern Project Management era.

The Critical Path Method developed in a joint venture by both DuPont Corporation and Project management in its present form began to take root a few decades ago. The Project

Management Institute was founded in 1969 by five volunteers. Their initial goal was to establish an organization where members could share their experiences in project management and to discuss issues. Today, PMI is a non-profit project management professional association and the most widely recognized organization in terms of promoting project management best practices.

PMI was formed to serve the interests of the project management industry. The premise of PMI is that the tools and techniques of project management are common even among the widespread application of projects from the software to the construction industry.

Chapter 2 What is a Project?

In the second Chapter I cover about the nature of project, what is a Project? definition of a project. a project has distinctive attributes, which distinguish it from ongoing work or business operations. Projects are temporary in nature. They are not an everyday business process and have definitive start dates and end dates. In this sense, a project is unique.

Unique means that this is new, this has never been done before. In contrast with projects, operations are ongoing and repetitive. The purpose of operations is to keep the organization functioning while the purpose of a project is to meet its goals and to conclude. Therefore, operations are ongoing while projects are unique and temporary.

The project is completed when its goals and objectives are accomplished. It is these goals that drive the project and all the planning and implementation reports are undertaken to achieve them. Sometimes projects end when it's determined that the goals and objectives cannot be accomplished or when the product or service of the project is no longer needed and the project is cancelled.

A formal definition of a project:

There are many write definition of a project, however, all of them contain the key elements described above. For those looking for a formal definition of a project the Project Management Body of Knowledge defines a project as a temporary endeavor undertaken to create a unique product, service or result. The temporary nature of projects indicates a definite beginning and end.

Chapter 3 Project Characteristics

This topic gives me idea of project characteristics: Scope, Resource, Time, Quality, Risk with THE example of kiosks local grocery stores.

Projects are temporary in nature and have a definite beginning and ending date. A successful project is one that meets or exceeds the expectations of your stakeholders. He wants to set up kiosks in local grocery stores as mini odes.

These ones will offer our customers the ability to sign up for car and home insurance services as well as make their bill payments. He believes that the exposure in grocery

stores will increase awareness of the company's offerings. He wants the new kiosks in place in 12 selected stores in a major city by the end of the year.

Yes, because the kiosks don't exist in the local grocery stores. This is a new way of offering the company's services to its customer base. While the service the company is offering isn't new, the way it is presenting its services is. Yes, the kiosks will be installed, and the services will be offered from them.

Once all the kiosks are intact and operating, the project will come to a close. Yes, the expectations of the stakeholders will be documented in the form of requirements during the planning processes

DAY 2: The Project Manager and Area of Expertise

On the second day of my diploma I know about Project Stakeholders, The Politics of Projects, what is Project Management? Project Management Areas of Expertise I have for project.

An assignment is made, and the project team members jump directly into the development of the product or service requested. In the end the delivered product doesn't meet the expectations of the customer. Unfortunately, many projects follow this poorly constructed path and that is a primary contributor to why a large percentage of projects don't meet their original objectives defined by performance, schedule, and budget. In order for me as the project manager to manage the competing project constraints and to manage the project as a whole, there are some areas of expertise that I should bring onto the project team - Let's take a look at each of these areas in more detail.

Chapter 5 Project Stakeholders:

Day:2 in chapter:5 I learn about THE Project Stakeholders: top management (dealing with top management), project team(dealing with project team members), manager(how to deal with a boss), Peers (how to build relationships with peers), Resource managers(facts about resource manager), Internal customer, External customer, Government, Contractors, subcontractors, and suppliers.

Key stakeholders can make or break the success of a project. Even if all the deliverables are met and the objectives are satisfied, if your key stakeholders aren't happy, nobody's happy.

A project is successful when it achieves its objectives and meets or exceeds the expectations of the stakeholders. Stakeholders are individuals who either care about or have a vested interest in your project. When you manage a project to add lanes to a highway, motorists are stakeholders who are positively affected.

project team members and the managers from other departments in the organization are stakeholders as well. It's important to identify all the stakeholders in your project upfront.

Top

management:

Top management may include the president of the company, vice presidents, directors, division managers, the corporate operating committee, and others. These people direct the strategy and development of the organization. On the plus side, you more likely to have top management support, which means it will be easier to recruit the best state to carry out the project, and to acquire needed material and resources; also visibility can enhance PM's professional standing in the company. Some suggestions in dealing with top management are:

- Develop in-depth plans and major milestones that must be approved by top management during the design phase of the project.
- Ask top management associated with your project for their information reporting needs and frequency.

project team:

available to project managers on their project or borrowed rather than assigned to the project on a full-time basis. As project manager you need to provide leadership, direction and above all, the support to team members as they go about accomplishing their tasks. Working closely with the team to solve problems can help you learn from the team and build rapport.

Some difficulties in dealing with project team members include:

- Since project team members are borrowed and they don't report to you, their priorities may be elsewhere.
- They may be juggling many projects as well as their full-time job and have difficulty meeting any deadline.
- Personality conflicts may arise. These may be caused by differences in social style or values or they may be the result of some bad experience when people worked together in the past.
- You may run out about missed deadlines when it is too late to recover. Managing

project team members require interpersonal skills. Here are some suggestions that can help:

- Involve team members in project planning.
- Arrange to meet privately and informally with each team member at several points in the project, perhaps for lunch
- Be available to hear team members concerns at any time.
- Encourage team members to pitch in and help others when needed.

- Complete a project performance review for team members

Manager:

Typically, the boss decides what our assignment is and who can work with us on our projects. Keeping your manager informed will help ensure that you get the necessary resources to complete your project.

- If things go wrong on a project, it is nice to have an understanding and supportive boss to go to bat for us if necessary.
- Find out exactly how your performance will be measured.
- When unclear about directions, ask for clarification.
- Develop a reporting schedule that is acceptable to your boss.

Peers:

Peers are people on the project team who are at the same level in the organization as you. These people will, in fact, also have a vested interest in the product. However, they will have neither the leadership responsibilities nor the accountability for the success or failure of the project that you have.

relationship with peers can be impeded by:

- Inadequate control over peers.
- Political maneuvering or sabotage.
- Personality.

Resource managers:

project managers are in the position of borrowing resources; other managers control their resources. So, their relationships with people are especially important. If their relationship is good, they may be able to consistently acquire the best staff and the best equipment for their projects. If relations aren't so good, they may and themselves, not able to get good people or equipment needed for the project.

Internal

customer

Internal customers are individuals within the organization who have projects that meet the needs of internal demands. The customer holds the power to accept or reject your work. Common stumbling blocks when dealing with customers include:

- A lack of clarity about precisely what is wanted by the customer.
- A lack of documentation for what is wanted.
- A lack of knowledge of the customer's organization and operating characteristics.

- Unrealistic deadlines, budgets, or specifications.
- Hesitancy to sign on the project or accept responsibility for decisions.
- Changes in project scope.

To meet the needs of the customer, client or owner, be sure to do the following:

- Learn the client's organization's buzzwords, culture, and business.
- Clarify all project requirements and specifications in a written agreement.
- Specify a change procedure.
- Establish the project manager as the focal point of communications in the project organization.

External customer:

External customers are the customers when projects could be marketed to outside customers. In the case of Ford Motor Company for example, the external customers would be the buyers of the automobiles.

Contractors, subcontractors, and suppliers:

There are times when organizations don't have the expertise in house or available resources and work is farmed out to contractors or subcontractors. This can be a construction management firm, network consultants, electricians, carpenters, architects, and in general anyone who is not an employee. Managing contractors or suppliers requires many of the skills needed to manage full-time project team members. Any number of problems can arise with contractors or subcontractors:

- Quality of the work.
- Cost overruns.
- Schedule slippage.

Many projects heavily depend on goods provided by outside suppliers. This is true for example of construction projects where lumber, nails, brick and mortar come from outside suppliers.

Chapter 6 The Politics of Projects

with the help of this chapter Develop skills of political analysis of project through an understanding of events and processes. Many times, project stakeholders have conflicting interests. It's the project manager's responsibility to understand these conflicts and try to resolve them. Be certain to identify and meet with all key stakeholders early in the project to understand all their needs and constraints. Project managers are somewhat like politicians. Like politicians, if they are to get their way, they must exercise influence effectively over others. On projects, project managers have direct control over very few things; therefore, their ability to influence others- to be a good politician- may be very important Assess the environment Identify all the relevant stakeholders. Because each of these stakeholders could derail the project, we need to consider their interest in the project.

- Once all relevant stakeholders are indentured, we try to determine where the power lies.

- In the vast cast of characters, we confront, who counts most?
- Whose actions will have the greatest impact.

Identify goals After determining whom the stakeholders are, we should identify their goals.

- What is it that drives them?
- What is each after?
- We should also be aware of hidden agendas of goals that are not openly articulated.
- We need to pay special attention to the goals of the stakeholders who hold the power.

CHAPTER 7. WHAT IS PROJECT MANAGEMENT?

One of the first things I learned about project management is that I can't complete a project. I can only complete all the steps that are part of that project, and then mark the whole thing done. If I divide larger tasks into smaller ones, applying good project management discipline is the way to help reduce the risks. But i keep in mind, having good project management skills does not mean i have no problems, it does not mean that risks go away, or that there won't be any surprises. The value of good project management is that you have standard processes in place to deal with all contingencies. Managing a project includes identifying your project's requirements; writing down what everyone needs from the project. What are the objectives for your project? When everyone understands the goal, it's much easier to keep them all on the right path. They are cost, scope, quality, risk, resources and time:

- **Cost:** is budget approved for the project including all necessary expenses needed to deliver the project. Within organizations, project managers have to balance between not running out of money and not under spending because many projects receive funds or grants that have contract clauses with an use it or lose it approach to project funds. Poorly executed budget plans can result in a last minute rush to spend the allocated funds. For virtually all projects, cost is ultimately a limiting constraint; few projects can go over budget without eventually requiring a corrective action.
- **Scope:** is what the project is trying to achieve, it entails all the work involved in delivering the projects outcomes and the processes used to produce them. Quality on a project is controlled through quality assurance that is the process of evaluating overall project's performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards.
- **Risk:** is denied by potential external events that will have a negative impact on your project if they occur. Risk refers to the combination of the probability the event will occur and the impact on the project if the event occurs. If the combination of the probability of the occurrence and the impact to the project is too high, you should identify the potential event as a risk and put a proactive plan in place to manage the risk.
- **Resources** are required to carry out the project tasks.

CHAPTER 8. PROJECT MANAGEMENT AREAS OF EXPERTISE:

as the project manager to manage the competing project constraints and to manage the project, there are some areas of expertise that you should bring onto the project team. They are the application area of knowledge; standards and regulations in your industry, understanding the project environment, and i must have general management knowledge and interpersonal skills. It should be noted that the industry expertise is not in a certain led but the expertise in order to run the project.

Understanding the project environment:

The project environment is made up of internal and external factors (cultural, social, political, international, physical) that influence a project. When managing a project, the project manager must consider more than just the project itself. Proactively managing a project involves understanding the environment in which the project must function.

Management knowledge & skills:

As the project manager I have to rely on my project management knowledge and my general management skills. There is more to project management than just getting the work done. In some respects, managing a project is similar to running a business: there are risk and rewards, nonce and accounting activities, human resource issues, time management, stress management, and a purpose for the project to exist.

Interpersonal skills:

Communication, Influence, Leadership, Motivation, Negotiation, Problem solving.

Communication:

Communication Skills for Project Managers

- Active Listening. In first place is our ability to listen to and understand others
- Building Relationships Based on Trust and Respect. Trust and respect are the cornerstones of personal relationships.
- Setting Clear Priorities.
- Enabling Collaboration. .
- Conveying the Organization's Vision.

Influence:

Project Manager Role and Sphere of Influence. The project manager is responsible for results of the project team and must have related project management and technical knowledge and experience. Leadership, planning, coordination and communications play an important role.

Leadership:

Great Leadership Skills of Project Management

- Excellent communication and interpersonal **skills**.

- The ability to share a clear vision and inspire others.
- Positive attitude and enthusiasm.
- Integrity.
- Competence.
- Cool, calm disposition.
- Problem solver.
- Team builder.

Motivation:

motivation is not designated by the project manager to a team member, instead motivation is internal to each team member and derived from a team member's desire to achieve a goal, accomplish a task, or work toward expectations.

Negotiation:

Negotiation is a process that involves activities needed to resolve different kinds of disputes by conducting consultations between the involved parties to reach a consensus. Negotiations can happen at any time within the project management life cycle and it can be either formal or non-formal.

Problem solving

Problem solving is a basic task for the project management. It is a process for developing and applying a solution for the occurred problems. The probability of the success rises, if a particular method is implemented to the project work.

Day:3 Projects: the life cycle, the project manager and success:

In the third day of my diploma I learned about phases of the project management life cycle. The project management life cycle is usually broken down into four phases: initiation, planning, execution, and closure. These phases make up the path that takes your project from the beginning to the end. And I learn about the Project Planning, Project Execution, Project Closeout.

CHAPTER 9: the project “life cycle:

A standard project typically has the following four major phases (each with its own agenda of tasks and issues): initiation, planning, implementation, and closure. Taken together, these phases represent the path a project takes from the beginning to its end and are generally referred to as the project “life cycle.”

Initiation phase: an appropriate response to the need is documented in a business case with recommended solution options. A feasibility study is conducted to investigate whether each option addresses the project objective and a nil recommended solution is determined. Once the recommended solution is approved, a project is initiated to deliver the approved solution and a project manager is appointed.

Planning phase: Once the project team has identified the work, prepared the schedule and estimated the costs, the three fundamental components of the planning process are complete. This is called

risk management. In risk management, high-threat potential problems are identified along with the action that is to be taken on each high threat potential problem, either to reduce the probability that the problem will occur or to reduce the impact on the project if it does occur.

Execution phase: During the third phase, the execution phase, the project plan is put into motion and performs the work of the project. It is important to maintain control and communicate as needed during execution. Progress is continuously monitored and appropriate adjustments are made and recorded as variances from the original plan. During project execution, people are carrying out the tasks and progress information is being reported through regular team meetings. to return it to the original plan. If that cannot happen, the team should record variations from the original plan and record and publish modifications to the plan.

Closure phase: During the closeout phase, the emphasis is on releasing the nil deliverables to the customer, handing over project documentation to the business, terminating supplier contracts, releasing project resources and communicating the closure of the project to all stakeholders.

CHAPTER 11. AN EXAMPLE OF A PROJECT CHARTER

In this chapter I got brief details about project charter. A project charter is a formal, typically short document that describes your project in its entirety — including what the objectives are, how it will be carried out, and who the stakeholders are. It is a crucial ingredient in planning out the project because it is used throughout the project lifecycle.

Purpose of the Project Charter This Project Charter outlines the purpose, objectives, and scope of the project.

The purpose of a Project Charter is:

- to provide an understanding of the project, the reason it is being conducted and its justification
- to establish early in the project the general scope.
- to establish the project manager and his or her authority level A note of who will review and approve the Project Charter needs to be included.

Project Objective and Scope: Objective The objective of the project should clearly state and contain a measure of how to assess whether they have been achieved. It should be realistic and include the objectives.

It should follow the SMART protocol:

Specific (get into the details).

Measurable (use quantitative language so that you know when you are finished).

Acceptable (to stakeholders).

Realistic (given project constraints).

For Example: The Project Charter will be reviewed by the project team and approved. The approval will be the Dean of Undergraduate Studies.

Scope

The scope of the project should be listed.

Example: The scope of the Rice's school supplies store project includes the activities listed below:

- Determine what supplies will be sold in the store.
- Establish competitive prices for the computer supplies.
- Source and secure supply vendors.
- Establish marketing, procurement, operations and any other necessary departments, schools, centres and institutes.

It is equally important to include in the scope what is not included in the project.

Example: The scope of the project does not include:

- Development of any other school store departments.
- Store design or construction.

Major: Milestones A list of the milestones that are needed.

Example;

- All vendors selected.
- Contracts or orders complete with all vendors.
- Supplies delivered to the store.
- Pricing determined.

Major Deliverables

A list of the major deliverables that will result from the project are described.

Example:

- Procurement of supplies.
- Establishment of operations, procurement, marketing and other teams.
- Store supplies stocked and displayed.
- Store stinging completed, including work schedules.
- Establishment of store operations policies, including hours of operation.

Assumptions

The assumptions in creating the project are to be outlined.

Example;

- Only computer supplies will be sold in the store.
- Supplies customers will be the Rice University student body and faculty • Rice University students will manage the project and be responsible for ongoing operations.
- . • A store sponsor from the University faculty or will be assigned to mentor students and to provide oversight.
- Store hours of operation will be approved by the Rice University students or store sponsor.
- Supply deliveries will be arranged, or the store sponsor will pick them up with students
- . • Students will be empowered to contact vendors for order placement and inquiries via telephone.

Constraints

It is important to define all constraints on the project or those working on the project Example:

- Student availability to meet for project planning is limited to school hours.
- The Rice University Student Association will be responsible for the creation and operation of the store.
- Software is not available for project planning and control.

Preliminary Cost for the Project:

A statement is to be provided indicating how the cost of the project will be dened and controlled.

Example: The procurement team will assemble a proposal based on expected costs for review by the Dean of Undergraduate Studies.

CHAPTER 12. PROJECT PLANNING

Project planning refers to everything you do to set up your project for success. It is the process i go through to establish the steps required to define project objectives, clarify the scope of what needs to be done and develop the task list to do it. creating a set of plans to help guide your team through the execution and closure phases of the project. The project planning phase is often the most challenging phase for a project manager, as you need to make an educated guess of the sat, resources and equipment needed to complete your project.

The purpose of the project planning phase is:

- Establish business requirements.
- Establish cost, schedule, list of deliverables and delivery dates.
- Establish resource plan.

- Get management approval and proceed to the next phase.

The basic processes of the project planning are:

- Scope planning specifies the in-scope requirements for the project and facilitates creating the work breakdown structure.
- Preparing the work breakdown structure specifies the breakdown of the project into tasks and sub tasks.
- Project schedule development specifies the entire schedule of the activities detailing their sequence of execution.
- Resource planning specifies who will do what work at which time of the project and if any special skills are needed to accomplish the project tasks.
- Budget planning specifies the budgeted cost to be incurred in the completion of the project.
- Procurement planning focuses on dealing with vendors outside of your company
- Risk management planning charts the risks, contingency plan and mitigation strategies.
- Quality planning for quality assurance to be applied to the project.
- Communication planning on the communication strategy with all project stakeholders.

Scope planning:

The scope planning process is the very first thing you do to manage your scope. The whole idea here is that when you start the project, you need to have a clear picture of all the work that needs to happen on your project, and as the project progresses, you need to keep that scope up to date and written down in the project's scope management plan.

How do you define the scope?

a head start on running the project's objectives in quantifiable terms, but now you need to go a lot further and write down all of the deliverables that you and your team are going to produce over the course of the project. Project deliverables are measurable outcomes, measurable results, or specific items that must be produced to consider the project or project phase completed. Deliverables like objectives must be specific and variable.

All deliverables must be described in enough detail so that they can be differentiated from related deliverables

. For example

- A twin-engine plane versus a single engine plane.
- A red marker versus a green marker.
- A daily report versus a weekly report.

- A departmental solution versus an enterprise solution.

Project

requirements

Requirements describe the characteristics of the deliverable. They may also describe functionality that the deliverable must have or specific conditions the deliverable must meet in order to satisfy the objective of the project. The project requirements defined in the scope plan describe what a project is supposed to accomplish and how the project is supposed to be created and implemented. Requirements may include things like dimensions, ease of use, colour, specific ingredients, and so on. They can be divided into six basic categories, functional, non-functional, technical, user, business, and regulatory requirements.

Functional requirements:

Functional requirements describe the characteristics of the deliverable, what emerges from the project in ordinary non-technical language. Functional requirements are what you want the deliverable to do.

Non-functional

requirements:

Non-functional requirements specify criteria that can be used to judge the product or service that your project delivers. They are restrictions or constraints to be placed on the deliverable and how to build it. Their purpose is to restrict the number of solutions that will meet a set of requirements.

CHAPTER 13. PROJECT EXECUTION

Project Execution

The project execution phase, the third phase of the project management life cycle. The execution phase involves putting the project plan into action. The execution phase is where you and your project team actually do the project work to produce the deliverables. The word deliverable means anything your project delivers. The steps undertaken to build each deliverable will vary depending on the type of project you are undertaking and cannot therefore be described here in any real detail. For instance, engineering and telecommunications projects will focus on using equipment, resources and materials to construct each project deliverable, whereas computer software projects may require the development and implementation of software code routines to produce each project deliverable. The activities required to build each deliverable will be clearly specified within the project requirements document and project plan accordingly. The executing phase keeps the project plan on track with careful monitoring and control processes to ensure the final deliverable meets the acceptance criteria set by the customer.

Change control

The change control process in project management ensures that each change proposed during a project is adequately defined, reviewed and approved before implementation. The change control process helps avoid unnecessary changes that might disrupt services and also ensures the efficient use of resources.

CHAPTER 14. PROJECT CLOSEOUT

project needs to end and that's what project closeout is all about in the last phase of the project lifecycle. By making sure I delivered everything I said you would, I make sure that all stakeholders are satisfied, and all acceptance criteria has been met. Project closeout is often the most often neglected phase of all the project lifecycle. The key activity in project closeout is gathering project records and disseminating information to formalize acceptance of the product, service or project as well as to perform project closure. Once the project outcomes are documented, you'll request formal acceptance from the stakeholders or customer. They're interested in knowing if the product or service of the project meets the objectives the project set out to accomplish.

Lessons learned:

Lessons learned are used to document the successes and failures of the project. As an example, lessons learned document the reasons why specific corrective actions were taken, their outcomes, the causes of performance variances, unplanned risks that occurred, mistakes that were made and could have been avoided and so on. Lessons learned can be some of the most valuable information you'll take away from any project.

Project Closure:

The Project Closure Phase is the fourth and last phase in the project life cycle. Project Closure involves handing over the deliverables to your customer, passing the documentation to the business, cancelling supplier contracts, releasing staff and equipment, and informing stakeholders of the closure of the project.

Releasing the Project Team

Releasing project team members is not an official process. However, it should be noted that at the conclusion of the project, you will release your project team members, and they will go back to their functional managers or get assigned to a new project.

Steps

1. Write Performance Feedback for all **project team** members.
2. Review Performance Feedback with **Team** Member.
3. Provide feedback to **team** member's **manager**.
4. Ensure all **project** accounting is complete.
5. Assist with personnel reassignment if required.

Day 4: Glossary and attribution

4th day is last day of my project management diploma course and I learned about the vocabulary of project management and project management is no exception.

CHAPTER 15. A GLOSSARY OF PROJECT MANAGEMENT TERMS

Every discipline has its own vocabulary, and project management is no exception. Part of the process of successfully deploying project management in your organization is to standardize the terminology. That Way, when one person talks about risks, scope, issues, requirements, and other project management concerns, everyone else knows what he or she is referring to. This glossary contains common terms used in project management and can help start the standardization process.

A Glossary of Project Management Terms: Every discipline has its own vocabulary, and project management is no exception. Part of the process of successfully deploying project management in your organization is to standardize the terminology.

Assumption: There may be external circumstances or events that must occur for the project to be successful. If you believe that the probability of the event occurring is acceptable, you could list it as an assumption. An assumption has a probability between 0 and 100%. That is, it is not impossible that the event will occur, and it is not a fact.

Budget at completion (BAC) is the sum of all budgets allocated to a project.

Bar chart A view of the project schedule that uses horizontal bars on a time scale to depict activity information; frequently called a Gantt chart.

Baseline The value or condition against which all future measurements will be compared.

Baseline cost The amount of money an activity was intended to cost when the baseline plan was established.

Baseline dates Original planned start and finished dates for an activity. Used to compare with current planned dates to determine any delays. Also used to calculate budgeted cost of work scheduled in earned value analysis.

Baseline plan The original plan (for a project, a work package, or an activity), plus or minus approved changes. Usually used with a moodier, e.g., cost baseline, schedule baseline, performance measurement baseline, etc.

Best practices Techniques that agencies may use to help detect problems in the acquisition, management, and administration of service contracts. Best practices are practical techniques gained from experience that have been shown to produce best results.

Beta testing Pre-release testing in which a sampling of the intended customer base tries out the product.

Bottom-up cost estimate The approach to making a cost estimate or plan in which detailed estimates are made for every task shown in the work breakdown structure and then summed to provide a total cost estimate or plan for the project.

Brainstorming The unstructured and dynamic generation of ideas by a group of people where anything and everything is acceptable, particularly useful in generating a list of potential project risks.

Budget Generally refers to a list of all planned expenses and revenues.

Budgeted cost of work performed (BCWP) Measures the budgeted cost of work that has actually been performed, rather than the cost of work scheduled.

Business analysis Is the set of tasks, knowledge, and techniques required to identify business needs and determine solutions to business problems. Solutions often include a systems development component but may also consist of process improvement or organizational change.

Business area The part of the organization containing the business operations affected by a program or project.

Business case A document developed towards the end of the concept phase, to establish the merits and desirability of the project and justification for further project definition.

Business needs The requirements of an enterprise to meet its goals and objectives.

Business operations The ongoing recurring activities involved in the running of a business for the purpose of producing value for the stakeholders. They are contrasted with project management and consist of business processes.

Business process A collection of related, structured activities or tasks that produce a specific service or product (serve a particular goal) for a particular customer or customers. There are three types of business processes: management processes, operational processes, and supporting processes.

Champion An end user representative, often seconded into a project team. Someone who acts as an advocate for a proposal or project.

Change control A general term describing the procedures used to ensure that changes (normally, but not necessarily, to IT systems) are introduced in a controlled and coordinated manner. Change control is a major aspect of the broader discipline of change management.

Change management The formal process through which changes to the project plan are approved and introduced.

Change order A document that authorizes a change in some aspect of the project.

Change request A request needed to obtain formal approval for changes to the scope, design, methods, costs, or planned aspects of a project. Change requests may arise through changes in the business or issues in the project. Change requests should be logged, assessed and agreed on before a change to the project can be made.

Child activity Subordinate task belonging to a parent task existing at a higher level in the work breakdown structure.

Constraints are limitations that are outside the control of the project team and need to be managed around. They are not necessarily problems. However, the project manager should be aware of constraints because they represent limitations that the project must execute within. Date constraints, for instance, imply that certain events (perhaps the end of the project) must occur by certain dates. Resources are almost always a constraint, since they are not available in an unlimited supply.

Critical path The critical path is the sequence of activities that must be completed on schedule for the entire project to be completed on schedule. It is the longest duration path through the workplan. If an activity on the critical path is delayed by one day, the entire project will be delayed by one day (unless another activity on the critical path can be accelerated by one day). 1

Closeout The completion of all work on a project.

Communication plan A statement of project's stakeholders' communication and information needs.

Concept phase The phase of a project in the generic project lifecycle, in which the need is examined, alternatives are assessed, the goals and objectives of the project are established and a sponsor is indentured.

Confidence level A level of confidence stated as a percentage, for a budget or schedule estimate. The higher the confidence level, the lower the risk.

Conflict management Handling of conflicts between project participants or groups in order to create optimal project results.

Conflict resolution To seek a solution to a problem, ve methods in particular have been proven through confrontations, compromise, smoothing, forcing and withdrawal.

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Contingencies A Contingency is the planned allotment of time and cost for unforeseeable elements with a project. Including contingencies will increase the condence of the overall project.

Control The process of comparing actual performance with planned performance, analyzing the differences, and taking the appropriate corrective action.

Costs The cost value of project activity.

Costs budgeting The allocation of cost estimates to individual project components.

Cost overrun The amount by which actual costs exceed the baseline or approved costs.

Crashing The process of reducing the time it takes to complete an activity by adding resources.

Critical An activity or event that, if delayed, will delay some other important event, commonly the completion of a project or a major milestone in a project.

Critical path method (CPM) A mathematically based modeling technique for scheduling a set of project activities, used in project management.

Critical chain project management (CCPM) A method of planning and managing projects that puts more emphasis on the resources required to execute project tasks.

Critical success factors The key factors that are deemed critical to the success of the project. The nature of these factors will govern the response to conflicts, risks and the setting of priorities.

Culture A person's attitudes arising out of their professional, religious, class, educational, gender, age and other backgrounds.

Deliverable A deliverable is any tangible outcome that is produced by the project. All projects create deliverables. These can be documents, plans, computer systems, buildings, aircraft, etc. Internal deliverables are produced because of executing the project and are usually needed only by the project team. External deliverables are those that are created for clients and stakeholders. Your project may create one or many deliverables.

Dependency Dependencies on a project are the relationships between activities whereby one activity must do something before another activity can do something .

Duration The duration of a project's terminal element is the number of calendar periods it takes from the time the execution of element starts to the moment it is completed.

Earned value management (EVM) A project management technique for measuring project progress in an objective manner, with a combination of measuring scope, schedule, and cost in a single integrated system.

Earned schedule (ES) An extension to earned value management (EVM), which renames two traditional measures, to indicate clearly they are in units of currency or quantity, not time.

Estimation In project management it is the processes of making accurate estimates using the appropriate techniques.

Event chain diagram A diagram that show the relationships between events and tasks and how the events affect each other.

Event chain methodology An uncertainty modeling and schedule network analysis technique that is focused on identifying and managing events and event chains that act project schedules.

Float In a project network is the amount of time that a task in a project network can be delayed without causing a delay to subsequent tasks and or the project completion date. .

Functional manager The functional manager is the person you report to within your functional organization. Typically, this is the person who does your performance review. The project manager may also be a functional manager, but he or she does not have to be. If your project manager is

different from your functional manager, your organization is probably utilizing matrix management.

Gantt, Henry An American mechanical engineer and management consultant, who developed the Gantt chart in the 1910s.

Gantt chart A Gantt chart is a bar chart that depicts activities as blocks over time. The beginning and end of the block correspond to the beginning and end-date of the activity.

Goal An objective that consists of a projected state of affairs which a person or a system plans or intends to achieve or bring about a personal or organizational desired end-point in some sort of assumed development. Many people endeavor to reach goals within a time by setting deadlines.

Goal setting Involves establishing specific, measurable and time targeted objectives.

Graphical evaluation and review technique (GERT) A network analysis technique that allows probabilistic treatment of both network logic and activity duration estimated.

Hammock activity A schedule (project management) or project planning term for a grouping of subtasks that hangs between two end dates it is tied to. or the two end events to.

ISO 10006 A guideline for quality management in projects, is an international standard developed by the International Organization for Standardization

Issue An issue is a major problem that will impede the progress of the project and that can't be resolved by the project manager and project team without outside help. Project managers should proactively deal with issues through a defined issues management process.

Kick off meeting The meeting with the project team and the client of the project.

Level of effort (LOE) Is qualified as a support type activity which doesn't lend itself to measurement of a discrete accomplishment. Examples of such an activity may be project budget accounting, customer liaison, etc.

Life cycle Life cycle refers to the process used to build the deliverables produced by the project. Every project has an inception, a period during which activities move the project toward completion, and a termination (either successful or unsuccessful). Taken together, these phases represent the path a project takes from the beginning to its end and are generally referred to as the project life cycle. The project life cycle is often formally divided into phases that describe common activities as the project matures.

Management In business and human organization activity is simply the act of getting people together to accomplish desired goals. Management comprises planning, organizing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal.

Management process A process of planning and controlling the performance or execution of any type of activity.

Motivation Is the set of reasons that determines one to engage in a particular behavior.

Milestone A milestone is a scheduling event that signifies the completion of a major deliverable or a set of related deliverables. A milestone, by definition, has duration of zero and no abort. There is no work associated with a milestone. It is in the work plan to signify that some other work has completed. Usually, a milestone is used as a project checkpoint to validate how the project is progressing. In many cases there is a decision, such as validating that the project is ready to proceed further, that needs to be made at a milestone.

Objective An objective is a concrete statement that describes what the project is trying to achieve. The objective should be written at a low level, so that it can be evaluated at the conclusion of a project to see whether it was achieved. Project success is determined based on whether the project objectives were achieved. A technique for writing an objective is to make sure it is measurable, acceptable, realistic, and time based (SMART).

Operations management An area of business that is concerned with the production of good quality goods and services, and involves the responsibility of ensuring that business operations are efficient and effective. It is the management of resources, the distribution of goods and services to customers, and the analysis of queue systems.

Organization A social arrangement which pursues collective goals, which controls its own performance, and which has a boundary separating it from its environment.

Planning in project management consists of processes that involve formulating and revising project goals and objectives and creating the project management plan that will be used to achieve the goals the project was undertaken to address. Planning involves determining alternative courses of action and selecting from among the best of those to produce the project's goals.

Process An ongoing collection of activities, with an input, outputs and the energy required to transform inputs to outputs.

Program A program is the umbrella structure established to manage a series of related projects. The program does not produce any project deliverables. The project teams produce them all. The purpose of the program is to provide overall direction and guidance, to make sure the related projects are communicating effectively, to provide a central point of contact and focus for the client and the project teams, and to determine how individual projects should be defined to ensure that all the work gets completed successfully.

Program management the process of managing multiple ongoing inter-dependent projects. An example would be that of designing, manufacturing and providing support infrastructure for an automobile manufacturer.

Project A project is a temporary endeavor undertaken to accomplish a unique product or service with a defined start and end point and specific objectives that, when attained, signify completion.

Project definition (project charter) Before you start a project, it is important to know the overall objectives of the project, as well as the scope, deliverables, risks, assumptions, project organization chart, etc. The project definition (or project charter) is the document that holds this relevant information. The project manager is responsible for creating the project definition. The document

should be approved by the sponsor to signify that the project manager and the sponsor agree on these important aspects of the project.

Project manager the project manager is the person with the authority to manage a project. The project manager is 100 percent responsible for the processes used to manage the project. He or she also has people management responsibilities for team members, although this is shared with the team member's functional manager. The processes used to manage the project include defining the work, building the work plan and budget, managing the work plan and budget, scope management, issues management, risk management, etc.

Project management Project management is the application of knowledge, skills, tools, and techniques applied to project activities in order to meet or exceed stakeholder needs and expectations from a project.

Project management body of knowledge (PMBOK) The sum of knowledge within the profession of project management that is standardized by ISO.

Project management professional A certificate professional in project management.

Project management software A type of software, including scheduling, cost control and budget management, resource allocation, collaboration software, communication, quality management and documentation or administration systems, which are used to deal with the complexity of large projects.

Project phase A phase is a major logical grouping of work on a project. It also represents the completion of a major deliverable or set of related deliverables. On an IT development project, logical phases might be planning, analysis, design, construct (including testing), and implementation.

Project plan A formal, approved document used to guide both project execution and project control. The primary uses of the project plan are to document planning assumptions and decisions, facilitate communication among stakeholders, and document approved scope, cost, and schedule baselines. A project plan may be summary or detailed.

Project planning A part of project management, which relates to the use of schedules such as Gantt charts to plan and subsequently report progress within the project environment.

Project team the project team consists of the full-time and part-time resources assigned to work on the deliverables of the project. They are responsible for understanding the work to be completed; completing assigned work within the budget, timeline, and quality expectations; informing the project manager of issues, scope changes, and risk and quality concerns; and proactively communicating status and managing expectations.

Quality The standards and criteria to which the project's products must be delivered for them to perform effectively. First, the product must perform to provide the functionality expected, and to solve the problem, and deliver the benefit and value expected of it. It must also meet other performance requirements, or service levels, such as availability, reliability and maintainability, and have acceptable and polish. Quality on a project is controlled through quality assurance (QA)

which is the process of evaluating overall project's performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards.

Requirements are descriptions of how a product or service should act, appear, or perform. Requirements generally refer to the features and functions of the deliverables you are building on your project. Requirements are considered to be a part of project scope. High-level scope is defined in your project definition (charter). The requirements form the detailed scope. After your requirements are approved, they can be changed through the scope change management process.

Resources are the people, equipment, and materials needed to complete the work of the project.

Risk There may be potential external events that will have a negative impact on your project if they occur. Risk refers to the combination of the probability the event will occur and the impact on the project if the event occurs. If the combination of the probability of the occurrence and the impact to the project is too high, you should identify the potential event as a risk and put a proactive plan in place to manage the risk.

Risk management planning the process that determines how risks will be managed for a project. It describes how risks are monitored and controlled throughout the project.

Scope is the way you describe the boundaries of the project. It defines what the project will deliver and what it will not deliver. High-level scope is set in your project definition (charter) and includes all of your deliverables and the boundaries of your project. The detailed scope is identified through your business requirements. Any changes to your project deliverables, boundaries, or requirements would require approval through scope change management.

Scope creep Refers to uncontrolled changes in a project's scope. This phenomenon can occur when the scope of a project is not properly defined, documented, or controlled. It is generally considered a negative occurrence that is to be avoided.

Six sigma A business management strategy, originally developed by Motorola, that today enjoys widespread application in many sectors of industry.

Sponsor (executive sponsor and project sponsor) The sponsor is the person who has ultimate authority over the project. The executive sponsor provides project funding, resolves issues and scope changes, approves major deliverables, and provides high-level direction. He or she also champions the project within the organization. Depending on the project and the organizational level of the executive sponsor, he or she may delegate day-to-day tactical management to a project sponsor. If assigned, the project sponsor represents the executive sponsor on a day-to-day basis and makes most of the decisions requiring sponsor approval. If the decision is large enough, the project sponsor will take it to the executive sponsor.

Stakeholder Specific people or groups who have a stake in the outcome of the project are stakeholders. Normally stakeholders are from within the company and may include internal clients, management, employees, administrators, etc. A project can also have external stakeholders, including suppliers, investors, community groups, and government organizations.

Steering committee A steering committee is usually a group of high-level stakeholders who are responsible for providing guidance on overall strategic direction. They don't take the place of a sponsor but help spread the strategic input and buy-in to a larger portion of the organization. The steering committee is especially valuable if your project has an impact in multiple organizations because it allows input from those organizations into decisions that affect them.

Systems development lifecycle (SDLC) Is any logical process used by a systems analyst to develop an information system, including requirements, validation, training, and user ownership. An SDLC should result in a high-quality system that meets or exceeds customer expectations, within time and cost estimates, works effectively and in the current and planned information technology (IT) infrastructure, and is cheap to maintain and cost-effective to enhance.

Task analysis the analysis or a breakdown of exactly how a task is accomplished, such as what sub-tasks are required.

Timeline A graphical representation of a chronological sequence of events also referred to as a chronology. It can also mean a schedule of activities, such as a timetable.

Triple constraint is called the scope triangle or the quality triangle. The triangle illustrates the relationship between three primary forces in a project. Project scope, time and cost Project quality is affected by balancing these three factors.

Work In project management is the amount of effort applied to produce a deliverable or to accomplish a task (a terminal element).

Work breakdown structure (WBS) A task-oriented family tree of activities which organizes, dense and graphically displays the total work to be accomplished in order to achieve the objectives of a project. It is a system for sub-dividing a project into manageable work packages.

Work package A deliverable at the lowest level of a work breakdown structure (WBS). They are a group of related tasks that are defined at the same level within the WBS.

Work plan (schedule) The project work plan tells you how you will complete the project. It describes the activities required, the sequence of the work, who is assigned to the work, an estimate of how much effort is required, when the work is due, and other information of interest to the project manager. The work plan allows the project manager to identify the work required to complete the project and allows the project manager to monitor the work to determine whether the project is on schedule.

key learnings:

During the project management diploma, I learn about the Project management skills, knowledge, processes and procedures to successfully take a project from start to finish. A project can include

any type of temporary initiative or goal, from developing a software program to putting an addition on a house. Project managers study the project scope and requirements and develop plans and systems to achieve project goals within specified parameters including time frame and budget. Skills required for project management include communications, leadership, risk management, time management, analytics and more.