



The Project Authority

FUNDAMENTALS
OF
PROJECT MANAGEMENT



The Project Authority

About The Project Authority, Inc.

The Project Authority, Inc. is a firm based in Indianapolis, Indiana that specializes in project management consulting services. It provides their business partners with professional project management resources and access to training and educational services that enables them to succeed in their projects or develop their own project management resources.

Find out more about The Project Authority, Inc. by visiting the web at www.theprojectauthority.com or you may reach them by phone at (317) 490-7838 for additional information concerning their services.

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FUNDAMENTALS OF PROJECT MANAGEMENT

By definition, project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.¹

Simply stated, it's the methods, tools, and information that anyone can use to produce better results for a project or activity. Whether someone is managing a large software project, planning an event, or organizing a wedding, the concepts of project management can make it easier to coordinate all the efforts and details and help any project run more smoothly. Project management provides the game plan for how to achieve the best results possible for what you want to accomplish. It also provides a way to make sure things stay on track, solve any issues that should occur, and coordinate any changes that need to happen.

Project management starts with dividing the process into smaller activities, or phases, that are easier to understand and that share a unique set of characteristics and actions. These smaller activities, when put together, form the entire process from initial idea or concept to final result and evaluation.

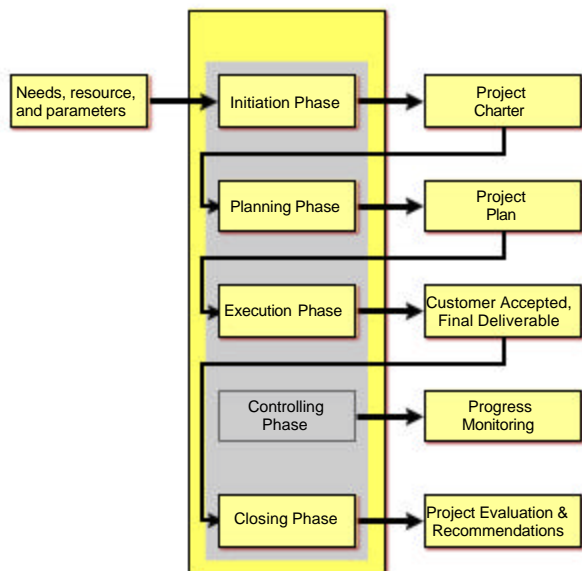
Five phases are common to virtually any project regardless of their complexity or size. These are the initiation, planning, execution, controlling, and closing phases.

Except for the controlling phase which occurs throughout the life of the project, each phase represents a unique milestone that must be completed before moving onto the next step. Maintaining this sequence of steps virtually guarantees good results, fewer delays, and less duplicate effort.

THE FIVE PHASES

Initiation
Planning
Execution
Controlling
Closing

¹A Guide to the Project Management Body of Knowledge, 2000 Edition



PROJECT VITAL SIGNS

There are six general guidelines that can impact the success of any project. These guidelines, called project vital signs, are inter-related and provide a measurement for whether or not a project is progressing as planned. Like a project health monitor, vital signs are checked regularly to ensure the project is meeting its intended plan and goals.

TIME: How long the project takes

COST: How much the project costs

SCOPE: The extent of the effort and what will be accomplished

QUALITY: The quality of the deliverables

RISK: The threats or potential issues that could be faced by the project

HUMAN RESOURCES: The people working on the project

VITALS

Measuring the health of the project is the goal of vital signs

Project vital signs are similar to a hospital patient's vital signs. A doctor may check a patient's pulse, blood pressure, and temperature to access the health of the patient. The project vital signs work in a similar manner. Over the course of the project, these need to be monitored to see if they are in balance and doing well.

Achieving balance is key when managing the affect of project vital signs. For example, concentrating too much on quality can have an adverse effect on cost, which may be too high to cover the level of quality desired. Likewise, if too much emphasis is placed on the schedule and *hitting* a delivery date, human resource may be overlooked causing longer working hours for project team members and added stress.

AT A GLANCE

A quick reference to Project Management can be found on Page 8

INITIATION PHASE

The purpose of the initiation phase is to provide objectives and parameters for the project and to set the groundwork for getting it done. The initiation phase is where the project is defined, setup, authorized, communicated, kicked off, and project parameters are set. It is the vision for the project.

The output of this phase is the creation of a project charter or document that answers all of the critical questions related to the project. What is the project about? What are the benefits? Who will benefit from the results? What's needed to accomplish it?

The development of the project charter serves several purposes. With the goals and reasons for the project defined, team members can *buy into* the project with a better understanding of their roles. The team gains the support and commitment of sponsors and management for the project.

The charter also provides direction for the team. The well-defined roles for each team member eliminates duplication of effort. It helps to create a sense of ownership in the project for the entire team and fosters more contributions to improvements and the project's success.

THE INITIATION PHASE SETS THE GROUNDWORK, DEFINES BUSINESS NEEDS, RESOURCES AND PARAMETERS FOR THE PROJECT...



COMMON INITIATION STEPS:

✓ CHECKPOINT

- Conduct kick-off meeting to explain project, discuss objectives, build team, and estimate schedule
- Create initial project team
- Create list of high-level activities needed to produce project deliverable
- Formulate the project Charter
- Gain stakeholder (those with a vested interest) approval to move forward

POTENTIAL RISKS IF THE PHASE IS MISSED:

- Project could lack buy in from project team and support from stakeholders and management team
- Project team may not have a common direction or focus for decisions and effort
- Team participation and motivation could suffer without a well-defined plan and an understanding of its purpose

PLANNING PHASE



KEY COMPONENTS OF A PROJECT PLAN:

- Project scope
- Budget projections
- Project schedule
- Risk plan
- Quality plan
- Change management plan
- Communications plan
- Test plan
- Organizational change plan

The planning phase of a project is often confused with creating schedules, task lists, and work assignments. Many will create a project schedule, output from applications such as Microsoft Project, and feel that this is sufficient. Although these are important components to successful project management, the planning phase is much more. It must answer all the necessary details, like "who," "how," "when," and "how much," that are involved in the project.

The planning phase is a complete roadmap of the project and includes the preparation for anything that can influence the results of a project. It is where the project is planned, scope is defined, schedule is determined, and detailed project activities are documented and assigned. The planning phase also accounts for how problems are handled, what

SCHEDULES AND TASK LISTS ARE SUBSETS OF THE PLANNING STAGE. THE COMPLETE PLAN INCLUDES ACCOUNTABILITY, PROBLEM-SOLVING, MANAGING CHANGE, AND QUALITY.

✓ CHECKPOINT

COMMON PLANNING STEPS:

- Define project scope, finalize charter
- Determine activities needed to complete the project deliverable
- Estimate workload and create schedule
- Assign tasks, communicate expectations
- Create quality, test, change management, and communication plans

POTENTIAL RISKS IF THE PHASE IS MISSED:

- Team members, stakeholders may lose confidence in project success if direction is not clearly defined
- Detail-level actions are missed when a project is not broken down into tasks
- Lack of change management can result in inefficiencies, delays, and duplicate effort
- Opportunities to improve the process are missed if quality assurance does not occur

standards of quality are needed, and how to coordinate and track changes to the plan. It keeps everyone informed and up-to-date, helps to measure the results to ensure they meet the requirements, and determines how to best manage resource within the organization.

Project team members and stakeholders are

the key contributors to the planning phase and are responsible for the creation of a project plan. They develop the scope, budget, schedules, and a variety of planning tools that account for risk, quality, testing, communications, and change. Once completed, the project plan is communicated to the team and project stakeholders.

Whether a project, activity or event runs smoothly depends on upfront planning. If a loosely defined plan is created or team members are allowed to go off and do what they feel is best, independent of others or of the plan, chances are great that important pieces will be missed. These oversights can result in greater expenses, longer completion times, additional rework, and unnecessary frustration. Each one of these issues can be easily avoided with proper planning.

Defining the project scope in adequate detail provides consistent direction for all activity and eliminates any uncertainty. “Firefighting” and reactionary decisions are greatly reduced when risk planning is performed. The creation of a quality plan improves the project deliverable, while test plans ensure a way to measure project results against their predetermined requirements. Each planning step helps in developing a thorough plan that can be executed with success and saves a project substantial costs in time, money, and resources.

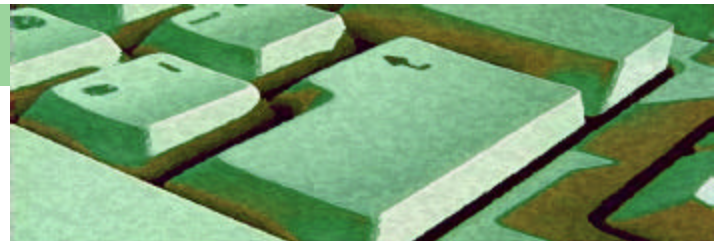
EXECUTION PHASE

In this stage, the project plan that was created in the planning phase is executed. This includes execution of the schedule, detailed project activities, risk plan, quality plan, change management plan, communication plan, test plan, and organizational change management plan.

Each step of the planning phase is carried out. Individually assigned action items are reviewed and members are held accountable for their fulfillment. The progress of the execution phase is monitored and weighed against deliverable requirements, schedules, issues that arise, and proposed changes. Stakeholders and team members participate in the process by exchange and distributing information through periodic status and review meetings.

The final result of the execution phase is a deliverable that is accepted by the stakeholders and customers of the project.

THE EXECUTION PHASE WILL CONSUME THE MOST TIME, MONEY AND EFFORT. A GOOD PLAN AND ABILITY TO TAKE ACTION WILL HELP ENSURE SUCCESS.



✓ CHECKPOINT

COMMON EXECUTION STEPS:

- Complete documented deliverables
- Distribute information to keep members and stakeholders informed
- Test quality and gain deliverable acceptance from stakeholders and customers
- Facilitate team participation to encourage engagement and career development

POTENTIAL RISKS IF THE PHASE IS MISSED:

- Incomplete testing and lack of thorough execution will undermine the deliverable
- Ability to properly manage the project is threaten by weak communication of info
- If team development does not occur, overall success and performance suffers

CONTROLLING PHASE

The controlling phase is responsible for monitoring the progress of the project throughout its life cycle. It starts at the beginning of the project and continues until the entire process is completed. In this phase, the project plan is compared to actual results, and variances are identified and managed. It provides the *checks and balances* necessary to keep the project on track, account for any changes, and provide the criteria for future decision-making.

Similar to an autopilot system, the controlling phase helps to continually adjust the course of the project to meet the requirements of the project charter and plan.

LIKE AN AUTOPILOT SYSTEM, THIS PHASE CONTINUALLY ADJUSTS THE COURSE OF THE PROJECT TO MEET THE REQUIREMENTS OF THE PROJECT CHARTER AND PROJECT PLAN.

These controls not only exist within each phase in order to monitor their progression, but are involved in the transition between each phase.

For example, the execution phase should not be started without making sure that all the criteria for the planning phase has

been met. Similarly, unexpected changes may be needed that will drive the costs of implementation above the original budget projections. In this case, a control can help with the decision-making process as to whether or not the project is reevaluated, abandoned or allowed to proceed.

The controlling phase keeps everyone in-the-loop and working towards the same objective. As each contribution is made to the project, controls help keep everyone's efforts moving in the same direction. For example, team members and



stakeholders maintain confidence in the project through the use of status memos and regular team meetings. Using the project scope as the primary guideline, change management reduces the effects on any or all vital signs. Each control plays a vital role in how the project runs.



COMMON CONTROL STEPS:

✓ CHECKPOINT

- Create regular status reports to keep everyone informed
- Monitor project vital signs to ensure the project is on track
- Conduct regular status reviews meetings to resolve issues and update progress
- Use change control to manage modifications to the project scope
- Perform quality control to ensure execution of project deliverables

POTENTIAL RISKS IF THE PHASE IS MISSED:

- Mismanaged vital signs could put the project behind schedule, over budget, effect quality, or duplicate effort and resource
- Acceptance of the final product may be compromised if quality control and testing is not satisfied
- The opportunity to improve the project management process is missed without a quality assurance review

HEADS-UP!



The controlling phase also gets neglected most often in a project. The reason is that it spans the entire project cycle and is not necessarily tied to creating a deliverable or reaching a milestone.

A common situation that can put a project into jeopardy occurs when a project builds momentum and becomes more hectic. One of the first things to be decreased or stopped entirely is the monitoring and tracking of the project. Team members become so involved in their own tasks that tracking overall progress becomes a lower priority and is not given adequate attention.

This can be serious, particularly when issues and problems arise. Without status and tracking, decisions often become reactionary, team members resort to fire-fighting, and crisis management begins. Since many individual tasks are intertwined with other deliverables, proper monitoring can avoid throwing the entire project into disarray.

CLOSING PHASE

There is considerable knowledge and lessons that can be learned at the end of any project. The closing phase not only marks the end of the project, but also provides the opportunity to evaluate performance and to make recommendations on improving the overall process. The value of this phase is in taking a look at the project to see how future projects can benefit from the lesson learned on this project.

For example, if the project work papers have been improved and finalized, they can also be used on similar future projects. It also provides an opportunity for the customer to evaluate their satisfaction with the project and gives the project team closure and the ability to celebrate their hard work.

Unfortunately, the closing phase is another stage that is seldom completed. Being over budget, behind in the project schedule, or not allocating the time are common reasons why this stage is often bypassed. Despite the additional time and effort needed to fulfill this stage of the process, there are many lessons and benefits that can be applied to all future projects.

Without proper documentation of what was learned, a valuable knowledge base is lost and the potential for making similar mistakes and resolving the same issues in future projects is increased. This can result in increased time and costs for any new project. Documenting these lessons and building upon an existing knowledge base helps to build successful project teams. And with any project that has involved team resource and effort, celebration of a project's success adds to the value and perception of the project management process as a whole.

THE CLOSING PHASE NOT ONLY COMPLETES THE PROJECT, BUT GIVES PROJECT TEAMS AN OPPORTUNITY TO DOCUMENT THE KNOWLEDGE AND LESSONS LEARNED IN THE PROCESS.



✓ CHECKPOINT

COMMON CLOSING STEPS:

- Conduct meetings to communicate project completion to team members and stakeholders
- Finalize the deliverables and work papers so that they're ready for similar projects
- Document and communicate lessons learned for others who may encounter the same issues in their projects
- Perform quality assurance review
- Celebrate the project success

POTENTIAL RISKS IF THE PHASE IS MISSED:

- New projects could repeat the same issues or mistakes if the lessons learned are not documented for others
- The efficiency and success of future projects could be impacted if project work papers are not archived for reference
- Lack of a quality assurance review creates a missed opportunity to improve future projects and to document the lessons learned
- Motivation and the opportunity to create team participation may suffer by not taking the time to celebrate a project's completion

PROJECT MANAGEMENT - AT A GLANCE

What is Project Management?

Project management is the combination of methods, tools, and information that anyone can use to produce better results for a project or activity. It's a process that is divided into five smaller activities or phases that share a unique set of characteristics.

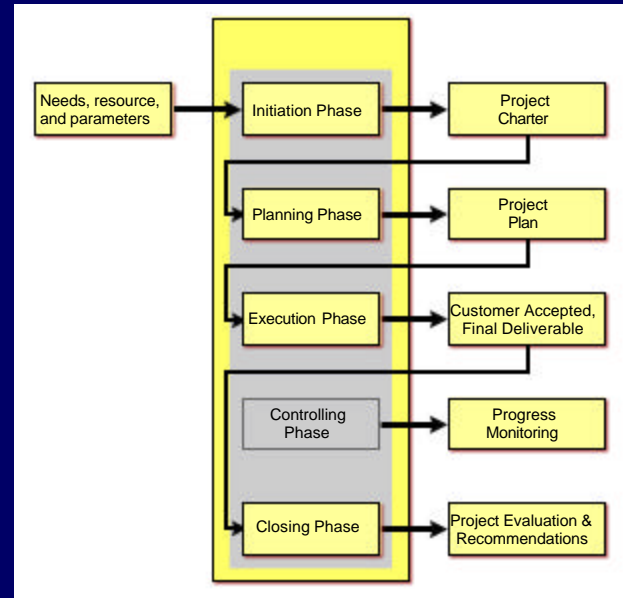
THE FIVE PHASES

Initiation
Planning
Execution
Controlling
Closing

Project Vital Signs

Project vital signs are the general guidelines that impact the success of any project.

- Time:** How long the project takes
- Cost:** How much it costs
- Scope:** Extent of effort, what will be accomplished
- Quality:** Quality of the deliverables
- Risk:** Threats or issues that could be faced
- Human:** People working on the project
- Resource**



PROCESS SNAPSHOT

GOOD PROJECT MANAGEMENT IS A RESULT OF PRACTICE AND CONTINUED IMPROVEMENT OF THE PROCESS. THE TABLE PROVIDES A SNAPSHOT OF THE KEY INGREDIENTS FOR SUCCESS.

PHASE	MAIN OUTPUT	PRIMARY BENEFITS	KEY COMPONENTS
Initiation	Project Charter	Defines purpose of project, provides direction, gains support from team and stakeholders, builds team participation, fosters contribution	Defines business needs, resources and parameters for the project
Planning	Project Plan	Provides a detailed roadmap of project, schedules, assignments, accountability, issue handling, quality criteria, tracking and coordination of changes to the plan	Project scope, budget projections, project schedule, risk plan, quality plan, change management plan, communications plan, test plan, organizational change plan
Execution	Project Deliverables	Delivery of customer-driven results, promotes team participation, information exchange, better-informed stakeholders	Follow-through on the execution of the project plan
Controlling	Monitoring Reports	Ensures project meets criteria defined, avoids reactionary decision-making and crisis management, helps to keep project on track, schedule and budget	Regular status reports and meetings, use of change control and quality control procedures
Closing	Project Evaluations	Opportunity to improve future projects, learn from issues, update work papers and process, build internal moral	Evaluation meetings, finalized work papers, communication of lessons learned, quality review, celebration