

# **MODULE 4: IMPLEMENTATION OF PROJECTS**

NEPAD

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# Project Implementation

*Plans are only good intentions unless they immediately degenerate into hard work.*

—Peter F. Drucker

## 1.0 Introduction.

Implementation of a project is the step where all the proper planned activities are put into action. Usually project implementation process involves preparing, deployment, maintaining and use of the final product of the project. Project managers and sometimes project team members are committed to controlling and monitoring project implementation process. Project team helps run project evaluation process which precedes project implementation process. Project evaluation process includes performing a complete analysis of customer's needs and requirements and results in forming the definition of one or more projects to be implemented.

Project Implementation process may be effective if some very important factors are kept in mind that are urgent in a project management system.

The Project implementation process

Project implementation process entails creation of a *customizable framework* that helps project managers to set up and manage project implementation stages. Customization of project implementation process framework lets leverage the use of management standards, policies and procedures and ensures that management expectations and plans for project implementation stages are properly outlined and applied. When project implementation process is structured, customized and organized into consistent project implementation steps, all conditions required for creation of a responsive project management environment are met, and project manager can start implementing a project. If there are several projects to be implemented, project implementation steps should be adjusted with all projects involved to start common project implementation process. If project implementation steps are not adjusted and not coordinated, several project implementation processes will be launched simultaneously.

## 2. MANAGING PROJECT START-UP

The project start is the most important project management sub-process, because in it the bases for the other project management sub-processes, such as the project plans, the project communication structures, the relationships to relevant environments, are established.

A successful project is difficult to achieve. Starting the project in the right way is another step closer to avoiding the likely outcome of project failure. Ensure that the project proposal focuses on the business problem to be solved and the benefits of solving that problem. That focus will help to define an approvable project with a clearly defined objective and scope - a major step in the right direction.

### [Project Definition at project start-up](#)

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Here are the fundamental things that should be clearly agreed at the commencement of a project. They form the basis upon which the project will be defined and measured. That means they also form the basis upon which the Project Manager will be judged!

<b>Mandate</b>	<p>Is there a clear, reliable mandate for this project, i.e.:</p> <ul style="list-style-type: none"> <li>▪ Can the sponsors provide all the resources that may be required (funding, people, time, etc)?</li> <li>▪ Are there other people or bodies (internally or externally) who need to agree?</li> </ul>
<b>Purpose and objectives</b>	<p>Is it clear, what is the purpose of the project?</p> <ul style="list-style-type: none"> <li>▪ Are we able to define clear, measurable objectives that identify what is to be achieved?</li> <li>▪ Are the objectives reasonable, achievable and measurable?</li> <li>▪ Do the sponsors and other stakeholders all understand and agree?</li> </ul>
<b>Scope</b>	<p>What is the scope of the project, for example:</p> <ul style="list-style-type: none"> <li>▪ Is it clear what other projects or initiatives are in planned or in progress that could impact upon this project? Will they compete for resources?</li> </ul>
<b>Benefit</b>	<p>At the earliest stages of a project it will be very difficult to establish a solid benefit case for the project. It is still possible to identify the types of benefit that are expected. During the project startup, the Project Manager will work with the sponsors to define and agree a full model of anticipated benefits. These benefits would not normally be limited to the financial bottom line. They would include all types of benefit that are sought - measurable / unquantifiable, financial / non-financial, internally focused / externally focused.</p> <p>The benefit model would normally be used to justify commencement of the work. Beyond that, it forms an important yardstick against which the project can be assessed. It may form:</p> <ul style="list-style-type: none"> <li>▪ the basis for change decisions during the project,</li> <li>▪ a way of measuring the anticipated success of the project,</li> <li>▪ the final assessment of the success of the completed project</li> </ul>
<b>Timescales</b>	<p>In what timescale should the benefit be delivered?</p> <ul style="list-style-type: none"> <li>▪ Are there specific external requirements for timing, e.g. new legislation, contracts with third parties?</li> <li>▪ When do we expect to be able to commence?</li> <li>▪ What is the initial expectation for the duration of the project (and any intermediate stages or phases)?</li> <li>▪ Over what period of time should benefit be assessed for the purposes of prioritisation and the benefit case?</li> </ul>
<b>Control</b>	<p>How will the project be managed and controlled?</p> <ul style="list-style-type: none"> <li>▪ Who has ultimate responsibility, accountability and authority for the project?</li> <li>▪ Who handles day-to-day Project Management?</li> <li>▪ Which people form the executive control body (e.g. steering committee) such that they can deliver the full stewardship, decision making, resourcing, and funding that is required for or on behalf of the sponsors?</li> <li>▪ How do these participants expect to participate, e.g. frequency of meetings, format, formality, reports, minutes etc?</li> </ul>

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Prioritisation, sanity check and permission to proceed	<p>Do we definitely agree to start this project?</p> <ul style="list-style-type: none"><li>▪ Is it truly achievable? Can we get the people, resources, funding, and technology that it will take?</li><li>▪ Are the main risks in doing this understood and acceptable?</li><li>▪ Is it a good use of the organisation's limited resources when compared to other potential investments?</li><li>▪ Is there an absolute commitment from the organisation's leadership that this project should be initiated and that it will get the degree of support it needs to succeed?</li></ul>
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It is important that the Project Definition is fully understood and agreed by all persons concerned. The details should be incorporated into a document which should be formally agreed by the project sponsors and communicated to all interested parties. This document should also provide a good source for communicating the project's definition, purpose and intended approach to future participants and other stakeholders.



Many organisations have a standard name for such a document. You may hear it referred to as a "Project Initiation Document" or "Project Charter" or just "Project Definition".

Remember that things change. At any time when the project's purpose might be challenged or the anticipated outcome is significantly changed, the Project Definition should be re-examined to see in what ways it has changed or should be changed to reflect the new circumstances. Where this has an impact on the benefit case, approach, planning, timing, resourcing, or expected outcome, the Project Manager will need to review and re-calculate the detailed changes and present a revised definition for agreement by the project's sponsors and executive leaders.

In all good projects, the leadership and participants take time to reflect upon successes and failures. In particular, it is important to determine whether the defined project was successfully completed - both in terms of the most recent definition and against the original intentions.

### 2.1 Work Authorization

This is the receipt of authority to proceed. Project authorization usually means that the contractor has been instructed by the customer or client to proceed with the project on terms that have previously been negotiated and agreed. This authorization might be in the form of a special contract, a purchase order or a letter of intent. In-house projects are often authorized by an internal memorandum issued by the senior management to the department or project manager responsible.

The first step towards project implementation is the issue of an authorization document. Entitled 'project authorisation' or perhaps 'works order', this document carries all essential data that define the levels of expenditure, planned start and finish dates, pricing information, invoicing and delivery instructions, and so on. One important item on the project authorization is the signature of a member of the contractor's senior management. This is the signal that the project is properly authorized, that work can begin, and that the costs can be incurred or committed.

Project authorizations are usually summarized, often to the extent that all information can be printed on one side of an A4 page. This can be true even for large capital projects. Precise project definition is achieved by listing the relevant technical & commercial

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documents on the authorization form. If for example, the project has been won after in-depth negotiation of a detailed contract, coupled with the discussion of technical and commercial sales specifications, the project authorization must identify these documents without ambiguity by giving their serial numbers and all approved amendments or revision numbers.

Appendix I shows a works order form of the type which has been used for many years in manufacturing companies handling special projects. The information on budgets and schedules is necessarily brief, and is provided on the form only to allow outline planning and to place overall limits on the amount of expenditure authorized. Detailed budgets and work-to-do lists usually take some time to prepare, and may be delayed by a week or two after the works order issue.

Alternatively, a lengthy authorization procedure is the project charter mentioned above, followed by a contract. Once the charter has been approved, a separate and subsequent exercise is undertaken to translate it into a contract, which is a working document that establishes the project in the organization under the nominated project manager. The project manager is sometimes (misleadingly) called the 'project owner'.

Time is usually scarce in project management.

It is the responsibility of the project manager to ensure that all participants the project are made aware of project requirements in detail and in advance to enable them to make necessary preparations.

### 2.2 Preliminary organization of project

There are often many loose ends to be tied up before actual work can begin, even when a clear technical specification has been prepared. The extent and nature of these preliminary activities naturally depend on the type and size of the project.

One of the very first tasks is to appoint a project manager. When the project manager has been named, an organization chart should be drawn and published to show all the key people or agencies concerned with the project. It must include all senior members of external groups who are to have any responsibility in the project. If the project is large, the usual arrangement is to produce an overall summary chart, and then draw a series of smaller charts that allow some of the groups to be shown in more detail. Depending on the actual arrangements, an overall project organization chart might have to show:

- Key elements in the contractor's own organization, including the project manager.
- Management teams working away from the contractor's head office (especially site team on construction projects).
- Principal subcontractors
- External purchasing agent together with any external group responsible for expediting, equipment inspection and shipping arrangements.
- Independent consultants, acting either for the customer or contractor
- Representatives of the government or local government departments (if relevant)

**Responsibility matrix: Deciding who does what.**

A Responsibility Matrix is a tool which the project manager can use to allocate responsibilities to ensure that people know what is expected of them. (See Table 1 below). The job titles of key members of the organization are listed above the matrix columns, and various important task types are listed along the rows. Symbols are placed at the appropriate matrix intersections to show primary and secondary responsibility for each of the task types listed. The Responsibility Matrix is best suited to dealing with task categories rather than listing the detailed tasks themselves. For example, it can show the person responsible for approving new designs in general, but it is not the place in which to list all the drawings that carry those designs.

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*Table 1: Linear Responsibility Matrix*

Responsibility:	The client	Project Manager	Project Engineer	Purchasing Manager	Drawing Office	Construction Manager	Planning Engineer	Cost Engineer	Project Accountant		And so on
Task Type:											
Make Designs		†		•							
Approve Designs	•	Δ	†								
Purchase Enquiries		Δ	†	•							
Purchase Orders	Δ	Δ	†	•							
Planning	Δ	Δ	†	†	†	†	•	†			
Cost Control		•		†		†		†			
Progress Reports		•	†	†	†	†	†				
Cost Reports		•		†		†		†	†		
And so on											

• Principal responsibility (only one per task)

† Secondary responsibility

Δ Must be consulted

### *Correspondence & other documents.*

The contractor will be advised to take control of procedures for project correspondence and documents handling seriously. The contractor could easily be placed in a difficult position if the vital letters or other documents were lost. It is necessary to ensure that positive steps are taken to deal with the routing and control of documented information, both within the project office and between all external parts of the project organization.

Once all the planning, control and administrative procedures have been decided, all the associated forms, expected reports and other types of documents can be listed. This is because many projects generate a great deal of paper. It is then possible to consider each of these document types in turn and decide who needs to receive copies as a matter of routine. This should usually be on a 'need to know' rather than 'nice to have' basis.

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If the documents are to be made available in an electronic format, accessible over a network, then it might be necessary to impose different levels of access for security purposes, thus preventing unauthorized people from seeing sensitive or confidential data.

Once the regular distribution or availability of documents has been agreed, the decision can be depicted on a chart arranged as a matrix. This is of course secondary to the responsibility matrix shown in fig above. Each authorized recipient can be named and allocated a vertical column, and each category of documents can be allocated a horizontal row. A tick in the square at each grid intersection shows that the access is permissible. Alternatively, a number written at the intersection shows how many hard copies of the relevant documents each person should receive.

Recipients:	The customer	General manager	Project Manager	Project Engineer	Works Manager	Production Control	Buyer	Quality Manager
<b>Document Type:</b>								
Bought out parts lists				1		1	2	
Material Specifications				1			1	
Purchase requisitions				1			1*	
Purchase orders							1	
Shortage Lists			1			1	1	
Committed cost reports		1	1	1			1	
Drawing List			1	1	1			
Drawings for Approval	1			1*				
and so on								

1    Number of copies per recipient  
 \*    Retains original signed document

### 2.3 Project engineering standards & procedures

It is important to investigate whether or not the project calls for any special design standards, safety requirements, or compliance with government or other statutory regulations. Companies accustomed to carrying out large projects may have at their disposal a considerable range of planning and control procedures. These need to be reviewed to see which are appropriate for a particular project. Factors affecting the choice are the size and complexity of the project, the degree of difficulty and risk expected in meeting the end objectives etc.

For some projects, contractors will compile a project manual also known as a procedures manual or project handbook. This will list the particular procedures that will apply to the project like method of project planning and scheduling to be used, type and frequency of project cost & progress reports to be produced, linear responsibility matrix, document distribution matrix etc.

### 2.4 Physical preparations & organizations

The requirements of every project depend on the nature of the project and the practices of its contractor. However, physical preparations must be made for any project that requires accommodation, plant, equipment, services such as gas, electric power, water etc. in very big and complex projects, making physical preparations for the main project is in itself, a collection of very large sub-projects.

Regardless of the nature of the project, some things are general. The importance of checklists can not be overemphasized. It is frustrating to the project manager during the initial days and weeks when, keen to start, and with deadlines to meet, real work has to wait because there is no information, no staff, and there is a general lack of facilities. Lack of information is often the worst of these

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problems – not necessarily about the main objectives and features of the intended project, but more likely about a hundred-and-one annoying details which have to be resolved before work can start. Hence the importance of checklists. The best checklists are developed and refined gradually through experience, so that lessons learned on one project are remembered, added to those already learned and then put to use on projects which follow.

An instance where a checklist is particularly useful is when a construction site has to be established, this can be enormous. All sorts of questions have to be asked and answered from the proposal stage. Now as the project becomes real, the questions and answers are of a more definite and detailed nature.

*Example:*

- How many people are going to be needed on site?
- How many of these will be: Sub-contractors & their staff? Local recruits? Will they need training?
- What accommodation will be required? Who is responsible for providing it?
- Local employment laws and practices?
- Insurances?
- Climate?
- Site access?

These questions need to be answered as completely and as early as possible. The better the checklist, the earlier and more completely the answers will be obtained.

### **2.5 Getting work started**

Once the project manager has collected his/her information on project specification, the most urgent job is to mobilize all the project resources and tell the key participants what is expected of them. This process takes place in different stages and by a variety of methods. The first is to call an initial meeting, often called the 'kick-off meeting' which gives the project manager an opportunity to outline the main features of the project to managers from various sections of the project and other key people. The skilled manager will make the best of the initial meeting to get the project off to a good start. At the end of the meeting, every participant should leave with a clear picture of the project's objectives, the part that they are expected to play in achieving them, and a sense of keenness and motivation to get on with the job.

At this moment, plans and schedules are already there; hence the project manager must make sure that the contents of these schedules are made known to every key person in the project, preferably using well-targeted work-to do lists. It is unlikely, though, at this early stage that the plans exist in sufficient detail for issuing and controlling work on mainstream activities. An important plan to be available at this time is a summary plan giving committed dates for the whole project.

### **2.6 Issuing detailed planning & work instructions**

Detailed planning is very crucial for big and complex and significant projects. This should involve input from at least one senior representative from every key project function. The involvement may mean full attendance at an intensive network brainstorming session or it could mean asking these key representatives to view, review and approve a network produced automatically from templates. Each key participant must therefore have some share in formulating and agreeing the detailed plan. This is crucial since no plan can be imposed successfully in isolation, it must carry the acceptance and support of those who are to be bound by it.

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# 3.PROJECT ORGANIZATION: STRUCTURES AND TEAMS

### Effective Project Team and Resource Allocation

Effective project teams are made by combining skills, experience, motivation, teamwork and sense of urgency into a clear project structure and set of accountabilities.

Forming a project team should be a deliberate act where people are considered in terms of the skills and experience they bring and their motivation to participate and contribute to the project as an active member of the team. In addition, they must be committed to the project objectives and have a clear sense of urgency and accountability to get things done as and when needed.

### Organise Project Structure

Building a project team is a combination of selecting individuals and assigning them to project roles within an overall project structure. A project manager must ensure that:

- Project roles and responsibilities must be clearly defined, preferably with no overlap of accountabilities. Only one person should be accountable for one thing or multiple things, although any number of people may contribute towards it. Two or more people should never be accountable for the same thing as this leads to confusion and potential problems
- Roles must be organised into a project structure with clear lines of accountabilities and if appropriate who reports to whom or who are the leaders with sub teams within the overall project structure
- Individuals must be assigned to the roles, with the ideal being 100% resource allocation. As the level of resource committed to the project falls the project manager must compensate for the time-splitting and therefore reduced level of productivity due to task switching or, worse, conflicting priorities. Usually, one individual is assigned to one role but it is possible for one role to be performed by multiple people
- A clear and current project organogram is created of the project team. It must be updated if the project team changes
- Extended or external project team relationships should be drawn in relation to the project team as a single entity and includes other entities such as vendors or third-party suppliers. In essence this is drawing the lines of communication between the project team and all stakeholders and is useful as an aid to transparency

### Project Resource and Project Team Size

It is recommended that the project team should be kept as small if you can - preferably fewer than 20 members, according to Steven R. Meier in *Building and Managing an Effective Project Team*<sup>1</sup>. It is well known that as the number of project resources increases so does the communication complexity. Large teams may be necessary so again the project manager should ensure that detailed project planning compensates for the increased need for communication and coordination between the team members.

### Effective Project Team and Resource Allocation

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<sup>1</sup> [http://www.dau.mil/pubs/dam/2008\\_09\\_10/meie\\_so08.pdf](http://www.dau.mil/pubs/dam/2008_09_10/meie_so08.pdf)

Effective project teams are based on the right people being organised into a good project structure. Project resource allocation can contribute towards success by having dedicated project team members that are not matrix managed or split between multiple projects or responsibilities. If practical realities mean that resource allocation is less than 100% then the project manager must compensate for this as part of the detailed planning and time allocation.

### 3.1 Building Successful Project Teams

Building and developing a performing project team often goes through group development stages identified by Bruce Tuckman<sup>2</sup>: forming, storming, norming and performing. Project managers must use models like this to help achieve a high performance project team.

#### Forming

The project manager must first form the project team either at the project initiation stage or leading up to the project start of the project. Sometimes this can extend throughout the project's life as a project resource specific stages is engaged and released during specific stages is such as testing. This forming stage is characterised by:

- Introduction of new team members meeting other team members for the first time
- People starting to understand in more detail the project objectives and challenges and their role but unsure of how well they will work with other team members or their ability to get the job done
- Understanding team relationships and people's authority (position, expertise, personality...)
- Project manager often directs or tells people what to do at this stage as the project team orients itself

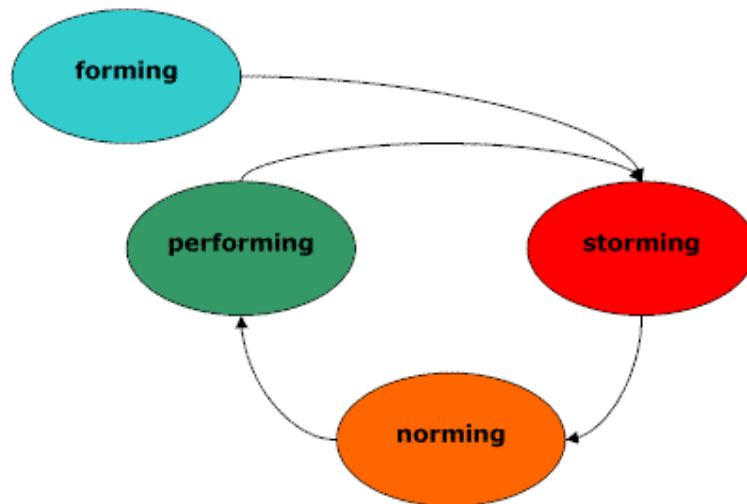
#### Storming

After the initial optimism and polite engagement of meeting people for the first time comes the storming stage where people are getting to work together and potentially finding issues:

- Ideas compete for attention or implementation
- Disagreement on goals, expectations, roles or responsibilities
- People clash over how to do things, the right way to perform tasks or processes and standards to be used
- Individuals may display their real levels of motivation, ability to interact with others or get their job done
- Project manager must lead by example and put out these fires using a variety of techniques appropriate to each situation. This stage often results in slow project progress

#### Norming

Project team rules, acceptable behaviour, role accountabilities and responsibilities are finalised, processes and standards to be used are established. This norming stage is:



form the project initiation stage or leading up to the project start of the project. Sometimes this can extend throughout the project's life as a project resource specific stages is engaged and released during specific stages is such as testing. This forming stage is characterised by:

members meeting other team members for the first time

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<sup>2</sup> These concepts were first explained in *Developmental sequence in small groups*, published in 1965. Smith, M. K. (2005) in [Bruce W. Tuckman - forming, storming, norming and performing in groups](#)

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- Team starts to become productive and working well together to achieve project objectives
- People are listening to each other and building on collective ideas. Meetings are more positive in tone and focused on outcomes and helping each other to get the job done
- Project manager should use a facilitation and participative style to build on nascent teamwork

### Performing

Project teams are working well together and getting things done. The performing stage is:

- Highly productive with people able to discuss issues and find collective solutions
- People are able to rely on others to do their part to get the job and help others when needed
- Project team cohesion, optimism and morale is high and with a sense of team identity
- Team is task and people oriented
- Project manager can use a delegating style and focus on factors external to the project team and more on the project objectives, risks and its impact

### Adjourning

The project comes to a natural conclusion, the project team disperses and in the adjourning stage it is important to:

- Celebrate project success
- Team has a sense of closure about the project and meeting its objectives
- People feel able to move on to next challenge
- Project manager must formally close the project

### Project Team

Whilst each stage is not always distinct it is important for the project manager to recognise the team's group development stage and act accordingly. Handling this progression well will lead to a high performance team increasing the chance of a successful project.

Regardless of how well you manage the schedule and the resources, there is one more critical element - managing the budget.

## 4. MANAGING COSTS

Cost management is not a separate function of project management. While it is true that some people specialize in the cost aspects of project management, possibly holding the titles such as 'cost and planning engineer' or even the more specialized 'cost engineer'; their roles are part of a far wider framework of project cost control, which must involve many working throughout the project organization.

Cost management means far more than the control of expenditure. It also includes the control of revenue, making sure that all possible and justifiable management involves ensuring not only that the amount of money spent and received are in accordance with budgets, but also that the timing of each transaction is appropriate.

### *Objectives of project cost management.*

#### *1. The cost control aspect*

Many things can happen during the life of a project to alter the expected rate and magnitude of expenditure. The direction of change is usually upwards. Some of the reasons may be unavoidable or unforeseen but, in many cases, the fault will lie somewhere within the

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project organization. The principal purpose of cost control is to ensure that no preventable wastage of money or unauthorized increase in costs is allowed to happen. A common misconception is to confuse cost reporting with cost control. Accurate and timely cost reporting is essential but, by itself, cost reporting is for cost control. By the time overspending is reported, the damage has been done. Cost control must be exercised before or when the costs are being committed.

In some cases budgets are the only cost consideration. There is no profit to be safeguarded, simply the need to keep spending within the amounts previously authorized. Where there is a profit objective, it must be remembered that profits are fragile and easily destroyed by overspending.

A checklist of cost management factors

1. Cost awareness by those responsible for design and engineering, preferably involving a 'total cost' approach.
2. Cost awareness by all other project participants throughout the life of the project.
3. A project work breakdown which yields work packages of manageable size.
4. A code of accounts system which can be aligned with the work breakdown structure.
5. Cost budgets divided so that each work package is given its own share of the total budget.
6. A cost accounting system that can collect and analyse costs as they are being incurred, and allocate them with minimum delay to their relevant cost codes.
7. A practicable work schedule
8. Effective management of well-motivated staff, to ensure that progress meets or beats the work schedule
9. A method for comparing expenditure with that planned for the work actually done
10. Effective supervision and quality control activities, with the aim of getting things right for the first time.
11. Proper drafting of specifications and contracts.
12. Investigation of all significant suppliers and subcontractors new to the contractor's experience.
13. Effective use of competitive tendering for all purchases and subcontractors to ensure the lowest costs commensurate with quality and to avoid committing costs that would exceed budgets.
14. Avoidance, where possible, of unbudgeted dayworks on construction contracts.
15. Strict control of payments to suppliers and subcontractors, to ensure that all invoices and claims for progress payments are neither overpaid nor paid too soon.
16. Occasional internal security audits to prevent losses through theft or fraud.
17. Effective and regular cost/progress reports highlighting potential schedule or budget overruns in time for corrective action to be taken.

The total cost approach

The total cost approach is a way of regarding costs holistically, solving logistical problems or otherwise planning to achieve the lowest overall cost. This approach can be used in a wide variety of situations.

In the context of project management, total cost considerations mean that managers in the project organization work together, each considering unselfishly how the work contribution is likely to affect the costs incurred by other sections. One example is where a suggested change in design difficulties and costs might save considerable time and money in the resulting production or construction methods. The total cost approach can therefore mean increasing the planned expenditure in one section in order to generate greater savings in the rest of the project.

*Budgets*

The initial project budgets should be derived from the cost estimates used when the tender or project proposal was prepared. If the target profits are to be achieved, the final version of these cost estimates must become the authorized levels of expenditure. The project workbreakdown structure should then allow these estimates to be allocated as budgets for all sections of the project.

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### *Budget Timing*

It is not only the top budget limits that are important, but also the rate at which expenditure is scheduled to take place.

### *Budget breakdown*

The total budget should spread over the project work breakdown structure so that there is a specified budget for each work package. The relationship between the work breakdown structure and the project cost coding system is very important. For true measurement and control, each budget element must correspond to an identifiable and measurable work package, and each budget element and its associated work package must share a control unique cost code.

In summary, it is important to come up with measures to establish a project budgeting and cost recording system as a preliminary step towards implementing effective cost management. The next step is then to decide how to make use of cost measurements, and how to analyse and compare these with the work schedules and budgets in order to effect cost control. To do that, Earned value Analysis and Milestone Analysis are very useful<sup>3</sup>.

## 5. MANAGING TIME

### Managing Time

Time management is a critically important skill for any successful project manager. Project Managers who succeed in meeting their project schedule have a good chance of staying within their project budget. The most common cause of blown project budgets is lack of schedule management. Fortunately there is a lot of software on the market today to help you manage your project schedule or timeline.



- Tasks: Duration, resources, dependencies
- Schedule: Tasks, predecessors, successors
- Critical Path: Changeable, often multiple, float

Any project can be broken down into a number of tasks that have to be performed. To prepare the project schedule, the project manager has to figure out what the tasks are, how long they will take, what resources they require, and in what order they should be done. Each of these elements has a direct bearing on the schedule. If you omit a task, the project won't be completed. If you underestimate the length of time or the amount of resources required for the task, you may miss your schedule. The schedule can also be blown if you make a mistake in the sequencing of the tasks.

Build the project schedule by listing, in order, all the tasks that need to be completed. Assign a duration to each task. Allocate the required resources. Determine predecessors (what tasks must be completed before) and successors (tasks that can't start until after) each task. It's pretty simple and straightforward. For instance, think of a project called "Getting Dressed in the Morning". The task "put on shirt" may have a longer duration if it is a buttoned dress shirt than if it's a pullover. It doesn't matter which order you complete the tasks "put on right shoe" and "put on left shoe", but it is important to complete the "put on pants" task before starting the "put on shoes" task.

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<sup>3</sup> These are discussed fully under Module 5: Project Monitoring & Evaluation

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The difficulty in managing a project schedule is that there are seldom enough resources and enough time to complete the tasks sequentially. Therefore, tasks have to be overlapped so several happen at the same time. Project management software greatly simplifies the task of creating and managing the project schedule by handling the iterations in the schedule logic for you.

When all tasks have been listed, resourced, and sequenced, you will see that some tasks have a little flexibility in their required start and finish date. This is called float. Other tasks have no flexibility, zero float. A line through all the tasks with zero float is called the critical path. All tasks on this path, and there can be multiple, parallel paths, must be completed on time if the project is to be completed on time. The Project Manager's key time management task is to manage the critical path.

Be aware, that items can be added to or removed from the critical path as circumstances change during the execution of the project. Installation of security cameras may not be on the critical path, but if the shipment is delayed, it may become part of the critical path. Conversely, pouring the concrete foundation may be on the critical path, but if the project manager obtains an addition crew and the pour is completed early it could come off the critical path (or reduce the length of the critical path).

### **Six Time Management Tips for Project Managers**

To be a successful project manager you must be able to manage your time well. The best project managers ensure they are productive for most of their time and avoid time-wasters at all costs. Here are some tips that can help you manage your time more effectively.

#### **Create the Plan**

What does this have to do with time management? If everyone knows what they are doing and have a plan with regular milestones to focus on, you as project manager will spend a lot less time dealing with issues brought about through a lack of clarity.

#### **Remember the 80/20 Rule**

The 80/20 rule (or the Pareto Principle) is the idea that by doing 20% of the work you can produce 80% of the benefit of doing the whole job. The value of this for a project manager is that it reminds you to focus on the 20 per cent of activities that matter. Of the activities you do during your project, only 20 per cent are important. Those 20 per cent produce 80 per cent of your results. Identify and focus on those activities.

#### **Not Just Status Updates**

It's best to avoid team meetings where you go round the room asking each person to give a status update. These meetings have little value and waste time. Instead, spend that time focusing on risks, issues and opportunities. Use the team to brainstorm solutions and create ideas.

Team meetings should have an agreed agenda that you stick to. If you schedule an hour for the meeting, make sure it lasts for an hour and no longer. Take big issues off-line if they are likely to cause a meeting overrun. Don't make everyone sit through lengthy technical discussions that don't involve them. Setup a working group to focus on the issues and report to the team at a future meeting.

### **Stop Micro Managing**

Avoid delving into the detail of the work. You've selected the right team for the job. Let them get on with what they are best at, while you concentrate on steering the project to a successful conclusion.

### **Don't do the Work**

Many project managers make the mistake of getting involved in "doing the work." Avoid this at all costs. Managing projects is a full-time job and taking your eye off the ball (even for a short period) can lead to problems. It may be tempting to carryout a few tasks when a deadline is looming, but leave this to others while you get on with managing the project.

### **Create a To-do List**

E-mail fixation is a modern-day problem that can distract you from doing the tasks you need or plan to. Creating a daily to-do list keeps you focused on achieving your objectives. Scratching tasks from your list creates a real sense of achievement and drives further activity.

### **Summary**

Time management is a basic skill for project managers. If you can't manage your own time, how can you expect to manage your team's? Ask each day what you did to move the project forward. Plan your next day, what will you do to ensure your project continues along the straight and narrow. Plan your time, manage your resources with a light touch and communicate effectively. With a little time management, project success should come easier.

## **6. MANAGEMENT & LEADERSHIP IN PROJECTS**

The leadership development level of a project manager is important to a successful project. Effective leadership skills must be used as needed over the project lifecycle. Project managers are responsible for project delivery and consequently are uniquely placed to make a positive or negative impact. Whilst understanding project management methodologies, tools and techniques is important, the critical test is being able to apply them in practice. This is where leadership skills and behaviours become critical -- as the project manager leads the project team to meet the objectives.

### **Project Manager Leadership Skills**

The project manager must continuously develop effective leadership skills and employ them as needed during the project cycle. The visible expression of leadership skills for the project team and stakeholders is via leadership behaviours. These leadership behaviours are used as needed when building the project team as well as during the project lifecycle.

The project manager must develop their leadership skills and use leadership styles and behaviours as needed during the course of a project. Leadership is very much about getting things done through others and leaders must use a wide array of tools and techniques to fit the situation and the desired outcome. It is the same for project managers to deliver a successful project.

### **Develop Effective Leadership Skills**

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Managers must develop effective leadership skills to lead teams and achieve set objectives. Understand basic leadership styles and action-centred leadership for results. Many business leaders, consultants, practitioners and academics have written about leadership and being a good leader and that wealth of material is both a boon and bane. On the one hand information is readily available. On the other hand there are so many different definitions and interpretations that it can easily become confusing. Since there is more than one way to be a good leader developing leadership skills is about selecting ideas that are personally effective.

### Action-Centred Leadership

John Adair's<sup>4</sup> Action-Centred Leadership provides a simple and straightforward approach that focuses on task, team and individual. These are usually represented as three overlapping circles of competence. The leader uses each circle as needed according to circumstance:

1. Achieving the Task
2. Managing the Team
3. Managing Individuals

#### Achieving the Task

- Identify vision, purpose, direction and objectives
- Develop the plan and individual tasks to achieve the objectives including deliverables, measures and schedule
- Establish roles, accountabilities and success criteria or measures
- Identify and allocate resources, people, systems and tools to fulfil the plan
- Set quality standards and reporting methods
- Control and maintain activities, monitor and manage risks and issues
- Review and reassess the plan as needed

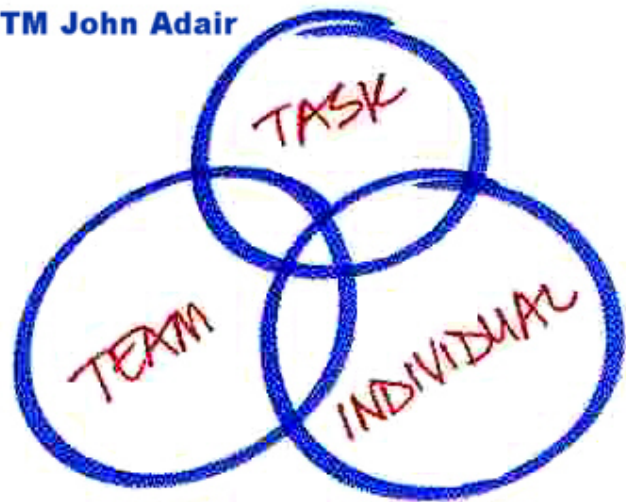
#### Managing the Team

- Agree on standards of conduct, behaviour and methods of working
- Set expectations and objectives for performance, delegation and teamworking
- Understand and work through team development
- Anticipate and resolve team issues and disagreements
- Assess and change as necessary the skills, experience and personality blend of the team
- Identify team development and training needs
- Provide feedback on team performance, coordination and collaboration
- Ensure effective internal and external communication

#### Managing Individuals

- Understand individual strengths and weaknesses, hopes and fears
- Assess, assist and support individuals, coach and develop them

TM John Adair



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<sup>4</sup> Refer [www.businessball.com/action.htm](http://www.businessball.com/action.htm) or <http://www.johnadair.co.uk/>

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- Agree, set and track individual performance and development objectives
- Give recognition and/or reward when appropriate

### Complement Action-Centred Leadership by Using Leadership Styles

Leadership styles are effectively different ways to interact with individuals and teams to get the job done. A good leader will use these like a toolkit, using the right tool at the right time:

- *Autocratic* -- tell people what to do, needs to be used sparingly and in the right circumstances
- *Bureaucratic* -- follow rules, using established procedures and processes
- *Charismatic* -- persuade and charm people, lead by motivating people's enthusiasm and drive
- *Democratic* -- invite contributions to decision making and then make final decision
- *Laissez-Faire* -- leave people to get on with it using a very light touch to monitor progress
- *People-Oriented* -- focused on organising, supporting and developing people and managing relationships
- *Servant* -- meeting the needs of the team, solving their problems or removing barriers
- *Task-Oriented* -- focus on plan, tasks, roles and getting the job done
- *Transactional* -- people are paid to do the work to a set standard
- *Transformational* -- inspire people with shared vision

### Develop Effective Leadership Skills

Start with something simple - like action-centred leadership and employing various leadership styles according to situation. Over time a good leader will integrate many different leadership skills, styles and behaviours into their own leadership qualities and consequently develop effective leadership.

Leadership skills must be complemented by positive leadership behaviours. Anyone can show effective leadership behaviours but they are essential skills for good leaders.

### Effective Leadership Behaviours

Different leadership studies highlight the importance of effective leadership behaviours for managers at every level in an organisation. In short, there are commonalities that emerge from this research time and again, which characterise positive behaviours and negative behaviours. Whilst there may be significant differences at the detailed level there seems to be a broad consensus of positive leadership behaviours:

- Conducts regular, effective meetings to set objectives, allocate tasks and review performance
- Effective project planning and management
- Identifying the right person for the right role
- Appropriate delegation of responsibility whilst retaining accountability
- Consults and includes others in decision-making
- Shows an interest in others and responding to their needs whether that is for more information, guidance, support, personal development, positive feedback or reward and recognition
- Takes ownership and shows commitment for solving problems or difficult/sensitive issues
- Leads by example, showing a contagious passion and enthusiasm, engaging and motivating others
- Direct, clear, open style of communication
- Considers impact before action

### Ineffective or Negative Behaviours

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Similarly, there is a broad consensus on ineffective or negative leadership behaviours:

- Does not demonstrate accountability, commitment or ownership to objectives, tasks or problems
- Does not communicate clearly or well
- Does not manage, support or develop others very well
- Does not provide timely positive feedback as appropriate
- Does not recognise or reward contribution
- Avoids conflict or difficult problems
- Acts before considering impact
- Allows poor performance to continue or low quality deliverables to be produced
- Becomes emotional, irrational or temperamental
- Fails to agree objectives and clarify expectations
- Inadequate preparation or planning
- Willingness to not mention or conceal important facts about a situation
- Focuses on negatives and tends to reduce morale and motivation of others
- Is not open to new or alternative ideas

### Leadership Skills and Leadership Behaviours

A good leader will develop their leadership skills and work to demonstrate many positive leadership behaviours and to eliminate all of the negative leadership behaviours. These positive behaviours must be demonstrated at all times in all situations so that it is simply how the good leader operates. Leadership development is a continuous process of personal development.

The following project phases are indicated with leadership styles and behaviours as a starting point for the project manager to consider for their approach with the stakeholders.

### Project Initiation and Scope

Whilst the business case is being developed the project manager is often asked to explore what is possible and to define a high level plan with an indication of project costs. This is very much about making a contribution by meeting others' needs and removing their barriers -- servant leadership.

### Project Planning

Take ownership and a task orientation towards project planning. Engage key stakeholders in a democratic, participative style to develop effective plans with accurate estimates. Identify the right people for the right role. Bureaucratically establish the project control mechanisms and the standards for the project team. Delegate as needed key components of the project such as:

- Business change management
- Test cycle
- Training
- Infrastructure deployment

### Requirements and Analysis

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Manage effective meetings and focus on people-orientation to ensure that awareness, engagement and positive support is built with a wider set of stakeholders. Consult with others as needed for decision-making using autocratic or democratic approaches as needed. Understand the impact of changes and lead by example with a clear view of the transformation required and engage people with that vision.

### Build, Test, Delivery and Closure

Focus on task-orientation and leaving the project team to get things done. Use a laissez-faire approach but stay in touch and support people as needed. Ensure that multiple tasks, priorities and risks are effectively managed and clearly communicated. Take a bureaucratic approach to preparation for testing, deployment and closure, doing each stage properly -- producing the appropriate deliverables at the desired level of quality.

## 6.1 Problem solving & Decision Making in Project Management

Decision-making is an integral part of project management. Every key person in any organization faces situations on a daily basis where a decision will help resolve problems. Every problem has multiple solutions but the trick is to decide which is the right or the best solution to choose.

Project managers play a pivotal role in the success of a project implementation. Their decisions dictate the flow of the project, as well as the role each team member will play at different intervals. Various project management practices can help these leaders determine potential obstacles before a project launch. Making decisions in advance reduces the amount of time spent on unexpected problems, keeping a project on deadline and within budget.

There are few basic steps that can be followed to simplify a situation. It is necessary to first identify the problem and then work on it. If a situation has several related problems it is necessary to prioritize it so that the most hankering issue can be immediately addressed and solved. It is essential to be aware of all the options that are available before making any decision. Finally, effective implementation of the decision taken is what makes the decision-maker a true leader.

### 1. Identify risks

One of the most important things a project manager can do is to identify risks associated with a project before work begins. Mapping out several outcomes that could potentially impede progress ensures that decisions can be made quickly should the project veer off course. Risk management planning includes identifying potential risks, determining their possible impact, devising a response to the risk and continually reviewing new risks until the project is completed.

### 2. Follow a process

Project managers should never make decisions based on gut instinct, which tends to be biased based on past experience. Rather, they should follow a decision analysis process that ensures decisions remain consistent among similar projects and all business situations are deeply analyzed and assessed before work begins. Decisions should also be continually evaluated and refined through the course of the project as needed.

### 3. Communicate

Project management often involves presiding over work teams that don't typically collaborate and may not even reside in the same country. At the start of each project, the project manager must determine how frequently, and via what medium, team members will be expected to communicate with one another. Effective and efficient communication will ensure that all team members are aware of decisions as soon as they are made, leaving no room for uncertainty in terms of individual responsibilities and goals.

### 4. Allocate resources

Cost versus benefit analysis is a popular project management method used to determine the worthiness of an investment in the project. It involves calculating the money required to make a particular change, like increasing staff or adding another component to a product. Those costs are then compared to the potential benefits of making that change, which can include improving product performance or possible longevity. Once the return on investment is determined, the project manager can decide whether or not to make the investment.

### 5. Expert insight

The three most important things a project manager needs to know are: *when a decision is required, how quickly the decision needs to be made, and that he or she must accept responsibility for all decisions, regardless of the outcome.* Project managers should seek the opinion of key stakeholders often and make sure to consider as many options as possible before making a final project decision.

## 7. MANAGING PROJECT CHANGES

Change is inevitable because we live in a changing world. No project of any significance can be expected to run from start to finish without at least one change. During a project there will be many good reasons why things need to change. There will also be a few bad reasons - bad, but unavoidable.

A project change can be defined as a departure from the approved project scope or design as indicated by a change to any contract, drawing or specification after its approval and issue of action. Changes can arise from a customer's request that changes the project scope or specification, a self-inflicted engineering design modification, or through some reason during work on the project that causes the finished result to differ in some respect from the specifications or other formal instructions.

### Scope Change Control

Why is there a distinction between scope change and other changes? In general, Project Managers should pay a great deal of attention to managing scope. Allowing the project's scope to change mid-course usually means added costs, greater risks and longer duration. Many projects fail due to poor scope management. Very often it is a large number of small scope changes that do the damage, rather than the big, obvious ones. The successful Project Manager has learned that rigorous scope control is essential to deliver projects on time and on budget.

The world-class Project Manager would not express this imperative in the same terms. The prime focus for the Project Manager should not be to deliver the agreed scope on time and on budget, but to optimise the benefit that is generated by the project. If that means allowing the scope to change then that scope change is a good thing, not a bad thing. It is wrong to resist all scope change. Where a scope change generates improved benefit, it should be proposed to the project's decision making body. Make clear the positive and negative impacts of allowing the change. Make sure the impact is fully reflected in the project's definition and performance criteria.

Watch out for the use of "scope change" as an aggressive behaviour. Sub-contractors may intentionally try to expand the size of their contract by establishing scope changes that lead them to do additional work outside the original agreement.

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Some contractors under-bid the cost of the work to gain the contract, in the belief that they will be able to make their profit out of scope changes.

As your project progresses the temptation to deviate from the plan will become irresistible. Stakeholders will come up with new and 'interesting' ideas, your team will bolt down all kinds of rat holes and your original goal will have all the permanence of a snowflake in quicksand. Scope creep or drift is a major source of project failure and you need to manage or control changes if you want to succeed.

This doesn't imply that there should be single, immutable plan which is written down and all other ideas must be stifled. You need to build a flexible approach that allows you to accommodate changes as they arise. It's a happy medium you're striving for - if you are too flexible your project will meander like a horse without a rider and if you are too rigid your project will shatter like a pane of glass the first time a stakeholder tosses you a new requirement.

The best way to handle this is to have a plan, to update it regularly and make sure everyone is following it and pointing in the same direction.

### 7.1 The Change Management Process

An initial project agreement (Project Charter) was created for the effort that defines the project's vision, scope, objectives and strategies. As the project progresses, this agreement must be modified due to new realities and approved changes. Additionally, any technical needs should be captured in formal specification documents. A Change Management process will control any revisions to that original agreement.

Change Management is used throughout the life of the project. The amount of use should be in direct proportion to the number and significance of the changes to the project. In general, a Change Management process is appropriate anytime significant modification is needed to a pre-existing agreement with the Project Owner.

Change Management is specifically needed when a requested revision alters the...

- Baseline project agreement (Project Charter)
- Technical specifications for project products
- Tactical strategy for accomplishing the goals of the project (Project Plan)
- Financial requirements for the project
- Vision for project deliverables
- Impact on the business organization
- Risk of failure
- Political implications

Change Management is typically not required when...

- A team must choose between two or more similar paths
- The proposed change will not require additional cost or time
- The issues of the change may be completely addressed at the team level
- Schedule changes fall within the usual re-forecasting required for normal project planning
- The effect of change on cost and time falls within a predefined rate (+/- \_\_\_\_\_ %) established with the Project Owner

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- The effect of change on cost falls within a specific dollar limit (\$\_\_\_\_\_) established with the Project Owner.

### Process Flow

1. **Recognize Potential for Project Change** – The Change Management process begins with the recognition that the current scope or direction of the project is no longer valid. This may be the result of...
  - New business process that must be included in the project
  - Major revisions to the project deliverables' functionality
  - Something significant that was unintentionally excluded
  - Additional work required of the project team
  - Work or scope being reduced to fit within a shorter time period
  - New technology directions needed
  - New technology obtained
  - New organizations wishing to participate in the project

These changes may be suggested by the Project Owner, end customers (users), other associated management or members of the Project Team. For these issues to become legitimate targets for Change Management, they must reflect a significant shift from the documented intent and content of the current project agreement and associated specifications. Before the project is started, the Project Owner should reach an agreement with the Project Manager as to what is a significant change. Based on predefined criteria, if a potential change is not deemed significant, it should be recorded in a Project Issues Log.

2. **Document the Project Change** – The Project Manager is responsible for capturing pertinent information about the proposed change using a Project Change Request. This may include a description of the change, the cause of the change (omission from original scope, a new business opportunity or scope reduction), the source of the change (who asked for it), the impact to the project (cost, benefit, schedule, risk, technology, etc.), any known alternatives, a suggested change date and a required decision date.
3. **Review With Non-Owner Organizations** – If a proposed change will influence a segment of the business organization that is not directly represented in the project ownership, the Project Change Request should be certified by these organizations to insure compatibility with the current environment and future plans. Any concerns expressed by these organizations should be documented on the Project Change Request before it is submitted to the Project Owner. It is important to note that this review is not an approval or disapproval of the proposed change. It is intended to validate that a change is viable and legitimate.
4. **Submit Proposed Change to Owner** – The Project Change Request should now be presented to the Project Owner for action. The most likely timing for submitting a proposed change is during a scheduled project (Checkpoint) review. After reviewing the proposed change, the Project Owner may...
  - 4.1 *Approve the Proposed Change* – If the Project Owner elects to approve the proposed change, the change becomes an official part of the current project's scope and should be included in the existing agreement (Project Charter). Unless otherwise stated, the associated impacts of the change are automatically included as well. Any necessary changes to plans or specifications should now be made. When approving a change, the Project Owner may request that the change be accommodated at a different time than was listed on the Project Change Request. The Project Owner's actions should be recorded on the Project Change Request.
  - 4.2 *Table the Proposed Change* – The Project Owner may also choose to table the proposed change to a later date. This may allow time to obtain additional information or to give the Project Owner time to review the proposed change in greater detail. Any critical Decision Date should be communicated to the Project Owner. The Project Manager should record these actions.
  - 4.3 *Reject the Proposed Change* – If the Project Owner does not believe the proposed change is in the best interest of the project, they may reject the Project Change Request. Their reason for taking this action should be filed with the request information.
5. **Record Action in Project Issues Log** – Each proposed change should have an entry in the Project Issues Log. Actions against this proposed change should be recorded as they occur.

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6. Update Project Documents – If a proposed change has been approved by the Project Owner, the Project Manager will document the effects to the change on all appropriate project documents. This may include components of the Project Charter, Project Plan, related specifications and physical products. These revised documents should be submitted to the Project Owner.
7. Notify Original Requester – The person or organization that originally requested the change should now be notified of any action by the Project Owner.

### Change Control vs Issue Management

There are many similarities and much overlap between Issue Management and Change Control. A large percentage of "issues" will directly or indirectly be asking for something to change. Conversely, most changes reflect and generate issues.

Some Project Management approaches combine these into a single process, which can scare people away from communicating issues. Some others treat them as separate processes, which can cause practical difficulties, inefficiency and misunderstandings. Clearly there needs to be some linkage. The best scenario is to present Issues Management as separate but related processes whereby an issue can evolve into a change request where appropriate.

### Basis of decision

The decision whether to accept or reject a change would be based on a number of rules. The fundamental logic should be:

Is the change unavoidable (e.g. legislative changes, etc)?

or

Does the change increase the overall benefit to the organisation (taking into account any impact on the costs, benefits, timescales and risks)?

and

Is the Project Team able to make such a change?

and

Is the change best done now, or would it be more beneficial to defer it until the current work is complete?

### Starting up the Change Control Process

The Change Control process will involve a combination of procedures, responsibilities and systems. The key to success is to have a well-controlled but efficient process. Define and agree:

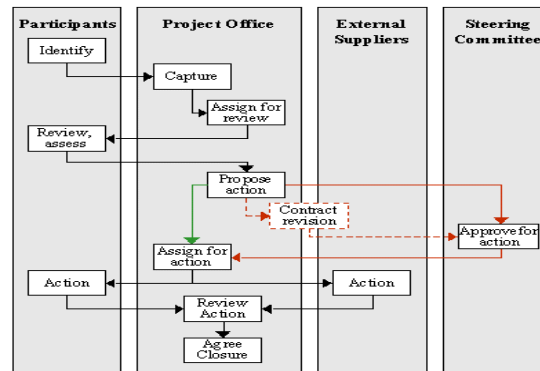
- on what basis changes should be approved,
- who does what,
- the membership of the Change Control Board(s),
- the detailed procedures, forms, etc,
- protocols for levels of authority, eg what types of change can be approved without reference to the project's business owners,
- linkage to other management procedures, eg the issue management process, configuration management,
- which tools will be used to support and manage the process,
- how to communicate and promote the process and its importance to all participants.

Here is an example process for dealing with issues:

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### Example Scope and Change Control Process



Any participant or other concerned party may raise Change Requests. The Project Office team and Project Manager will ensure they are captured and proactively manage them to conclusion.

An initial review should be made to examine the need for the change, how it could be achieved and what the consequences would be. The most appropriate member of the Project Team would normally perform this review. Based on those conclusions, the recommended action would be proposed.

In this example, there are three possible courses for the approval of the change:

- Minor changes within scope can be approved by the Project Manager.
- Any change affecting an external sub-contractor would need to be reviewed with that contractor who would agree any necessary contract revisions or payments etc.
- Changes of scope and contract revisions would require the approval of the Steering Committee (or it might have been a Change Control Board).

In making the decision, the Project Manager, Change Control Board or Steering Committee would be guided by the pre-established principles for making change decisions.

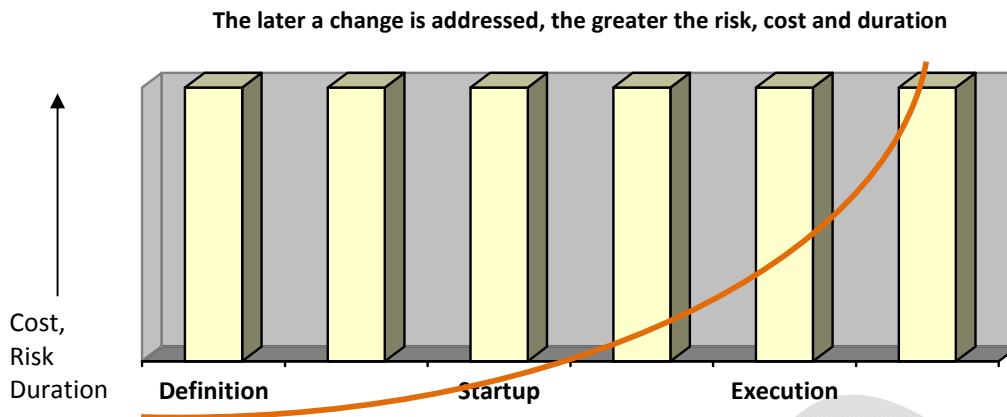
### Scope Management at Project Start

Scope should be clearly defined as part of the Project Definition. Much of the work at that time is directed at agreeing the optimum definition of the project - both in terms of its deliverables and in terms of how it will operate. This scope definition will form the baseline against which potential changes are assessed and against which the project's performance is measured.

In defining how the project will operate, the Project Manager should try to influence those factors that could lead to subsequent scope change. The importance of a sound Project Definition should be emphasised. Make clear the dangers and potential costs of subsequent changes of direction, but, equally, encourage the leadership to allow change where that would be beneficial. In the dynamic world, rapid change is the norm.

All participants should understand that the later in the project that a change is addressed, the greater the likely impact in terms of costs, risks, and timescale. It is wise to surface potential changes as early as possible. The change control process should make it easy to do so.

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An efficient Scope & Change Control process should be defined. There needs to be a balance between flexibility and control. If the process is too onerous, either valuable changes will be lost or the participants will ignore the rules - leading to uncontrolled scope and configuration. If the process is too easy, then many changes may be applied with insufficient thought given to their merits and consequences.

It is common to define various responsibilities and authority levels so that routine changes can be dealt with efficiently but significant changes receive due management attention. Where a proposed change affects the scope of the project it should be seen as a business decision requiring approval from the business owners of the project (e.g. Project Sponsor, senior leadership, Steering Committee). Where scope is not affected, it may be agreed that the Project Manager has the power to approve the change within certain authority limits. In some projects, Change Control Boards are defined and convened to consider and approve change requests on a regular basis, say every two to four weeks. Different panels might be appropriate for handling different types of change request. For example, a technical panel might look at technology issues, departmental leaders might look at the business processes, and the HR managers might examine organisational issues. Above a certain level of impact, the request would normally be referred to the overall Steering Committee.

The basis of decision for Change Requests should be agreed as part of the Project Definition work. It should define how the Project Manager is allowed to exercise the power to approve minor changes, and should provide guidance for the decisions of the Change Control Board(s) and Steering Committee.

Particular considerations occur where the change impacts the relationship with an external sub-contractor. Each time the work content increases the contractor might reasonably demand further time, resources and fees. If the change is due to the contractor's own fault, then, arguably, there should be no allowance made.

### Case Study

A European public sector organisation had sub-contracted the development of a major new system to a software house. Progress was slow and both sides were raising many concerns. We were asked to investigate various problems that had been building up.

One area of concern was raised by the sub-contracting software house:

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*Changes - we have been inundated with changes. We've had to make thousands of changes to the design and it's almost impossible to get the client organisation to recognise them or to allow for them in the planning and performance criteria.*

The client organisation had a different view:

*Changes - yes, there's been one change so far; and we're working on a second. It's not really a problem at all.*

To the client organisation, a change meant, in effect, a formal re-negotiation of the contract - subject to the same extensive procedures as the original procurement contract. It would take months to approve a change request. To the software house, a change meant every instance where they were forced to change any completed element of the work due to some unavoidable problem with the original specifications. Given the enormous weight of the formal change approval process, it would be unrealistic to wait for formal approval except in the largest cases. What is worse, they probably would not get paid for those thousands of minor but essential changes.

Although it is not required for the Project Definition, this is a good time to establish the mechanism that will be used, particularly if it involves a system that needs to be selected, acquired and implemented. The Change Control system would normally be part of the same overall set of procedures and tools that will be used to support the other project management activities.

### Managing Scope and Change Requests during the Project

Not all changes follow the approved process. Often team members will be persuaded to make a change without using the approved procedure where it seems necessary but minor. Although this can seem practical to those concerned, it represents a risk to the project. The Project Manager and Project Office team should be alert for uncontrolled changes. Where necessary, changes should be painlessly re-directed into the correct procedure.

The Change Control process will run continuously during the project, and potentially beyond that into live running. The Project Office team and the Project Manager will administer and control the process.

Specific attention is paid to the cost and implications, identifying where work will be required and what its impact will be in terms of cost, risk and timescale. In particular, a benefit case will be prepared to summarise why the change should be made.

The Project Manager, Change Control Board or Steering Committee will use this Benefit Case in making a decision, in line with the pre-established guiding principles. The status of the Change Request and its approval level should be tracked. In addition to the database of Change Requests, there would be logs and various management reports to allow the project leadership to track and control the changes.

### [Managing Scope and Change Requests](#) at the End of the Project

Some Change Requests may have been deferred for processing after the project is complete. This can be an easier option than disrupting the interrelated development and testing during the initial project. It might also be non-beneficial to delay the entire project to accommodate a change that could wait until benefit from the main functionality has been generated. At the end of the project, it is important that any outstanding actions are reviewed and the appropriate procedure is initiated to get them addressed. (It is easy to forget those promises after the project has finished.)

The Project Office should ensure all changes have been properly finalised. All Change Requests should either have been completed or passed onwards for subsequent processing. The permanent documentation and other deliverables (e.g. training) should have been updated to reflect the changes.

Change Requests may often reflect lessons to be learned for future projects. It is always worthwhile reviewing what can be learned and submitting any new knowledge or wisdom into the various knowledge repositories. Note, in particular, any situations where existing approaches or sample plans should be updated.

## 8. RISK MANAGEMENT

Risk is inevitable in everything we do. There may be commonplace risks that are almost inevitable, for example, the risk that a member of the team is sick for part of the project.

Projects often encounter risks during implementation. Managing risks by recognizing and preparing for a range of possible future outcomes is an integral part of project management. Risks arise out of uncertainty, both from internal and external sources. They could include:

- Adverse changes in economic factors;
- Incorrect assumptions regarding project logic or sustainability considerations;
- Dissatisfaction on the part of target beneficiaries;
- A breach of legal or contractual responsibility by the implementing agencies;
- Changes in the political and bureaucratic structure of the partner Governments;
- Failure of the partner Governments to meet their obligations to the project;
- Fiscal fraud and deficiencies in financial controls and reporting;
- A threat to physical safety of the personnel or breach of security; and
- Mismanagement.

During project implementation, the implementing agencies and project managers should update and refine their risk assessment and formulate a risk management plan. When contingencies arise, risk management strategies should be implemented.

Risk management should start as early as possible. The goal is to identify and record the major issues that may affect the project including uncertainties and assumptions. As the project progresses, the list of risks should be reviewed to ensure it remains comprehensive. Some items will disappear while others will need to be added.

The project objectives are a critical reference for the project. They act as the definition of success for the project manager and the goals for the people involved in the project. This document also serves to summarize the contract with the customer and therefore can be used with the change control process to address new requests. The objectives document should contain the project goal statement and a list of project deliverables.

The good Project Manager will constantly assess the risks and take action as needed. There are three possible outcomes for each risk:

- take action now to avoid the risk, to reduce its likelihood, or to reduce its impact,
- make contingency plans so that the team is ready to deal with the impact and mitigate the risk should it occur,
- Agree that it is an acceptable business risk to take no action and hope that the risk does not occur.

The process for managing risks is:

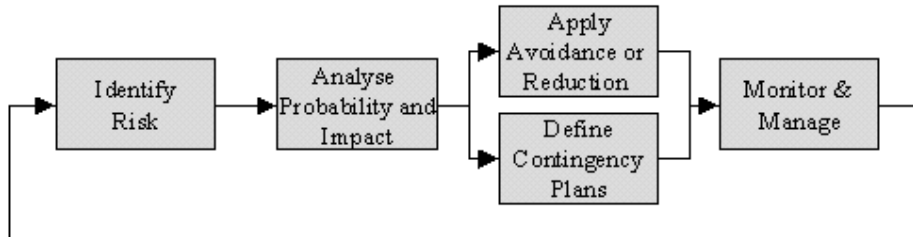
- Identify all realistic risks

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- Analyse their probability and potential impact
- Decide whether action should be taken now to avoid or reduce the risk and to reduce the impact if it does occur

### Risk Management

is



or changes in the assessment of existing risks.

- Where appropriate, make plans now so that the organisation prepared to deal with the risk should it occur
- Constantly monitor the situation to watch for risks occurring, new risks emerging,

Why is it hard to believe you could personally destroy the organisation?

#### Case Study

A European retail and wholesale bank replaced its core operational systems following their "Rapid Implementation Plan" (RIP). Their previous systems were obsolete and inadequate. As they needed the space for the new hardware when it was ready, they physically removed and scrapped the old hardware to switch over immediately to the new system.

Very soon, major problems were found with the new system. It did not correctly calculate interest and consequently was misstating customers' balances. Very large amounts of money were vanishing in the accounts. There was no possibility of reverting to the previous system.

The review identified the problems and external teams were brought in to fix the system and to correct the accounts. The one thing that could not be fixed was their reputation. The bank was no longer a viable profit-making entity, but, thanks to the consultant's work, it was able to cease retail trading in an orderly fashion.

#### Assessing risks

Statisticians love to play with the mathematics of risk. The basic formula is simple:

probability of the risk	times	costs if it happens	equals	expected cost from this risk
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Equally simple is the rationale to apply when considering avoiding actions: if the cost of the avoiding action is less than the reduction in the expected cost of the risk then it is worthwhile.

#### Quantifying Risks and Justifying Avoidance Actions

Probability	.5
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x Financial impact	£10,000 x		
= Expectation of losses	£5,000	£5,000	
Cost of avoidance or risk reduction	£2,000	£2,000	-
Probability after effect of avoidance / reduction actions	.1		
x Financial impact after effect of avoidance / reduction actions	£10,000 x		
= Revised expectation of losses	£1,000	£1,000	-
Net benefit from actions		£2,000	

Note that you can reduce the expected cost of a risk either by reducing its probability, or by reducing its impact.

This guidance is mathematically sound, but there are several practical problems with relying solely upon such logic, for example:

- The expected cost of a risk is, in effect, an average cost over a large number of projects, but in any one project a given risk either occurs or it does not. You either lose £10,000 or nothing - you never lose the "expected" £5,000.
- How much value do we place upon such things as survival of the business, visible quality of the solution, and the reputation of the organisation?
- How do we value human life and suffering (some of you will be building systems that keep aircraft in the sky, or patients alive)?
- What if the risk does not affect you but affects someone else such as a third party contractor?
- How do we deal with very big and very small numbers?

Suppose you tell the Project Sponsor that there is a 1 in 10,000 chance that you might destroy the organisation. Assuming you are not fired immediately, how much would it be worth to reduce that risk to 1 in a million? How much would they pay to reduce it to zero (assuming that could ever be possible)?

Suppose that the risk would not damage the project or its planned benefits but it would damage your third party contractors. This is not uncommon where a fixed price contract has been agreed. The risk might be that the availability of departmental resources fails to meet the planned level. When the contractor runs late and has to put in more resources - it is probably the organisation's fault but it may be the contractor's risk and to the contractor's cost.

### Assessing risks at the start of the project

During the Project Definition, the headline risks should be considered as part of the overall benefit model. At this stage, you will not be dealing with a full catalogue of risks, consequences and actions. You will focus on the main areas that affect either the justification of the project or the manner in which it will be carried out.

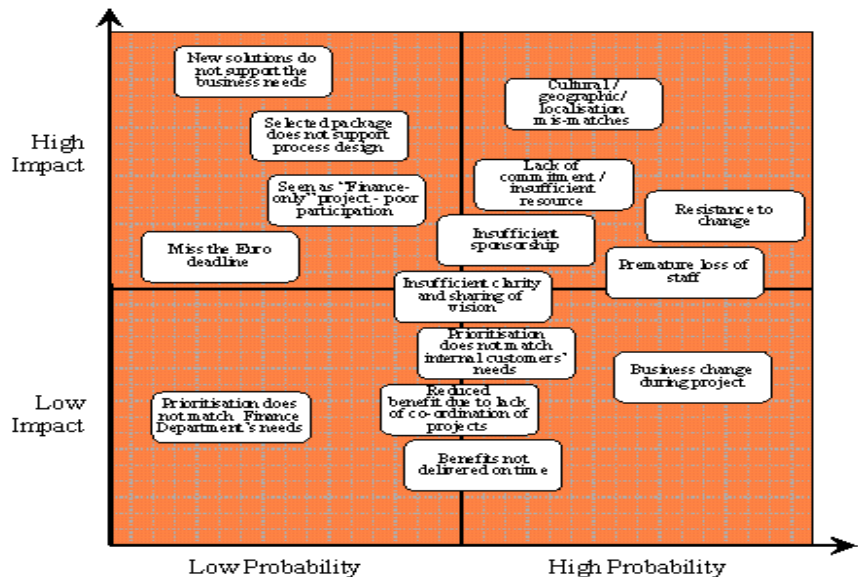
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It is unwise to rely solely on your own judgement. You would normally include some questions about risk when talking to the various participants about the project's scope and objectives. You might also instigate some specific activities to examine risk, for example additional interviews, workshops and brainstorming sessions. Where there is a specialist area involved, you should consult with an appropriate expert, e.g. web-server sizing, change management, etc.

A good technique for presenting these issues is to use a risk matrix showing the probability of different headline risks in comparison with their relative impact on the project's goals.

This focuses attention on the areas where the project plan will need to address key issues and where specific actions and techniques may be required. Note how this example suggests that the biggest area of concern tends to be with the "people issues". The human element of a solution is often the most overlooked aspect.

The other thing you should do early on is to decide upon the procedures and technology for managing risk. In most cases you will use some form of technology, preferably as part of a set of integrated Project Office tools. The procedures should make it easy for all participants to submit their thoughts and concerns. Always capture the thought. You may dismiss it later if appropriate, but you should always consider and assess the input.



### Assessing risks at the start of each phase

When you prepare in detail for each phase of work you should look at the risks in detail. Try to identify all realistic risks that should be considered. In most cases, it will be worth capturing the information electronically in a risk register. It should show:

- a description of the risk
- the probability of the risk occurring
- a description of the potential impact of the risk
- the likely cost to the project or organisation if that risk occurs
- what actions should be taken now and by whom
- What contingency plans should be formulated now so that the organisation is ready to act if the risk occurs.

Here are some examples of risks and what you might do about them.

Risk	Probability	Impact	Response
Team members leave or become sick	High	Low	Ensure the plan has contingency built into it to allow for less than expected resource availability.

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Key team member becomes available	Medium	Medium	Ensure project procedures include good knowledge sharing and documentation so that the thought process, designs and decisions are not lost.
Solution does not meet the business needs	Low	High	Ensure good participation and collaboration involving representatives and resources from all concerned areas of the business (and external parties where appropriate).
Insufficient participation from the business units and users	High	Medium	Ensure the Project Sponsor and supporting sponsors are aware of the importance of promoting and rewarding participation. Agree how they will convey that message.
Significant change in the business and its consequent needs (eg restructuring, mergers etc)	Medium	High	Business needs frequently change, so plan the project so that it could adjust rapidly at relatively low cost, for example, a number of short incremental steps towards the goal could be easier and cheaper to re-direct than one enormously long delivery project.
Technical solution has major flaws	Low	High	Invest in appropriate levels of testing. Consider a period of parallel running. Have a fallback contingency plan to revert to a previous system if necessary.
Technical solution has operational flaws	High	Low	Put in place an "early care" programme to deal with immediate snags. Ensure processes, resources and responsibilities for on-going maintenance are established well before live date.
System failures	High	Medium	Invest now in fault tolerant components and adequate redundant contingency resources. Ensure the plan includes appropriate backup, recovery, and disaster recovery procedures (and tests them).
Hardware, network or system sizings inadequate to meet live demands.	Medium	Medium	Sizing calculations are always difficult. Many successful eSolutions have been swamped by demand. Make sure the systems you use can be scaled up by a significant factor before any need to move to a different technological platform.
Users fail to use the new system effectively and efficiently	Medium	Medium	Plan for a detailed Training Needs Analysis and put in place an appropriate training programme. Consider how to coach and support users after live date.
Users resist the changes	High	High	Use change management experts to assess the issues and create a change programme. Co-ordinate communications and sponsorship activities to convey the message. Confront big issues early in the project (not just before live operation).

These example risks are common to most projects. Also, consider the specific risks for your project, for example:

- whether the business solution is viable
- what dependencies there are with other projects
- which project elements are unproven
- to what extent the workforce will be supportive
- Whether you have the degree of executive support that will be required to succeed.

Needless to say, the results of the risk assessment are not for your eyes only. The risks and implications should be discussed with the relevant leaders and participants. Planned responses to those risks should be agreed by the Project Sponsor and Steering Committee.

### Managing the risk

Risk management should be seen as a continuous process throughout the project. Once the initial risk register and procedures have been established the Project Manager, Project Office staff, and all project participants should be alert for new, changing or occurring risks. Participants should be briefed on the importance of this and the specific procedures. Procedures for reporting risk should be as easy as possible. Feedback from all participants should be encouraged and rewarded.

The Project Office would normally review the risk register proactively on a regular basis. They would check the status of potential issues, for example, by calling the responsible party and checking if there has been any change in status. The Project Manager should also review the register on a regular basis and take action as required. Headline information on risks would be reported to the leadership along with the other project performance data.

As risks actually occur they need to be managed. Where a contingency plan had already been formulated, the Project Manager should be able to take immediate action to mitigate the impact.

### Case Study

During the construction of the spectacular Oresund bridge and tunnel, which connects Sweden to Denmark, risk analysis showed that the project was unlikely to meet its planned opening date upon which its financial viability was calculated. Mitigating actions and alternative scenarios were considered leading to significant changes in approach. After the mitigating actions were applied, the risk analysis showed high confidence that Oresund could be opened three months early - which it was. Early opening easily paid for the specialist risk management work.



## 8.1 Methods for dealing with risk

When all the known risks have been listed, assessed and ranked, it is time to consider what might be done about them. The manager has a range of options.

### 1. *Avoid the risk*

The only way to avoid a risk is to abandon the possible causes, which could even mean deciding not to undertake the project at all.

### 2. *Take precautions to prevent or mitigate risk impact*

This is a more important part of risk management, requiring the active participation of managers and staff. It needs a high-level risk prevention strategy combined with executive determination to ensure that all preventive measures are always followed throughout all parts of the project organization. It requires the creation of a risk prevention culture, covering all aspects of project tasks, health and safety, and consideration of the environment.

### 3. *Accept the risk*

There are numerous small things that can go wrong during the course of any project, and most of these risks can be accepted in the knowledge that their effect is not likely to be serious, and that they can be overcome by corrective measures or re-planning.

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### 4. Share the risk

If a project, or a substantial part of it appears to carry very high risk, the contractor might seek one or more partners to undertake the work as a joint venture. Then the impact of any failure would be shared among the partners. Sharing a risk big enough to ruin one company might reduce its impact to little more than a temporary inconvenience.

### 5. Limit the risk

There are occasions when project risks should only be accepted with safeguards in place to limit their potential effect. The usual solution to starting an ill-defined project is to limit the risk by authorizing work step by step. It may be possible to divide the project into a number of stages for this purpose (stage gating). The stages might be determined by:

- The occurrence of significant events in the project that can easily be recognized when they happen
- The imposition of a time limit for each stage
- A budgetary limit for each stage

Funding or authorization of expenditure on each stage of the project would depend on a critical review of the work carried out up to the review date, coupled with a fresh appraisal of the value of continuing with the project. This approach has the advantage of limiting the committed risk.

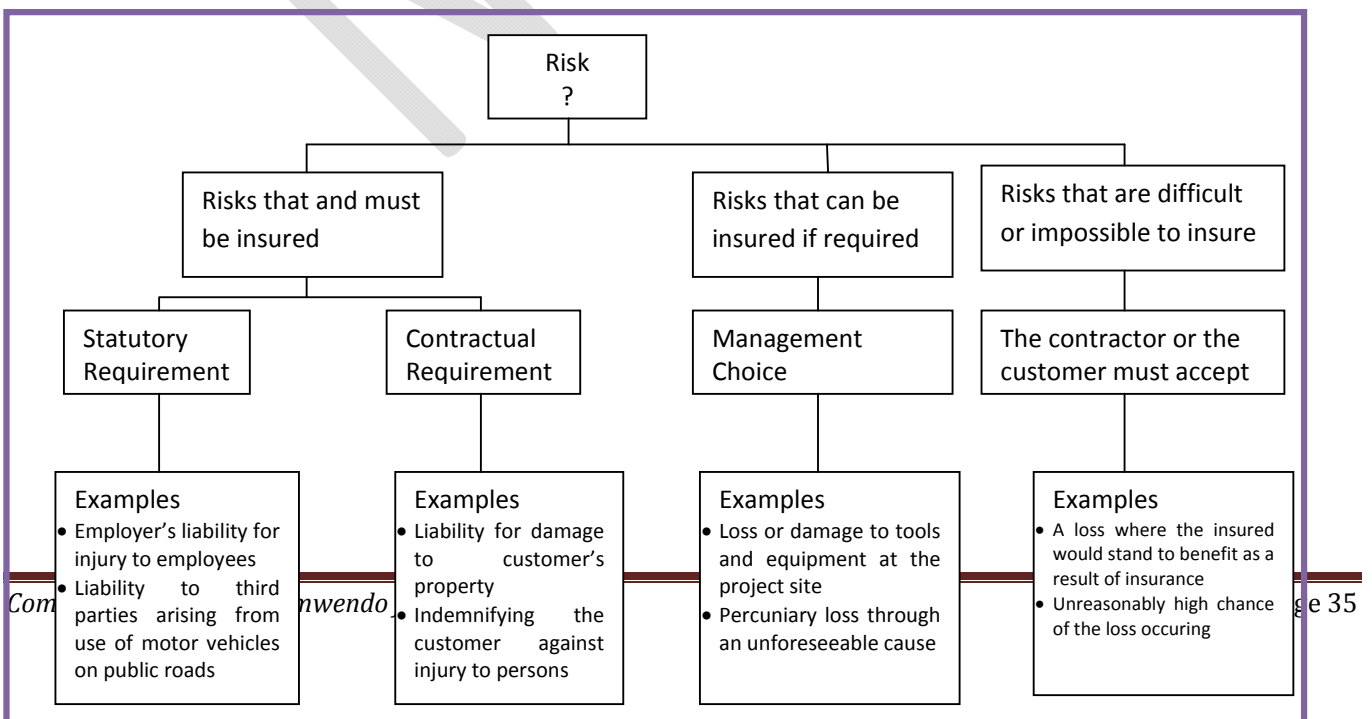
In the step-by-step or stage gating approach, it must always be borne in mind that it might become necessary to abandon the project at any stage and write off the expenditure already incurred.

### 6. Transfer the risk

Some risks, or substantial parts of them, can be transferred to another party on payment of a fee or premium. This leads to the important subject of insurance.

### Insurance

The financial impact of many risks can be offset by insuring against them. It is crucial to protect work in progress against such risks like fire, storm damage, theft and malicious damage. Every organization or professional person with project responsibility (including architects, consultants, surveyors, designers and project management organizations) must make certain that they have adequate professional liability insurance to cover any liability that they might incur in the course of their work. Legal requirements oblige companies to obtain adequate insurance cover against some risks. These obligations arise either from various government laws and regulations, or from conditions contained in a binding commercial contract.



### 8.2 Planning for a crisis

Some risk events can have such a potential impact on a project that special crisis management contingency plans must be made. Such contingency plans can extend to projects that would need to be set up specially and rapidly to deal with a sudden crisis for example in areas that are particularly liable to epidemic diseases, famine, flooding, hurricanes, or other natural disasters. Crisis contingency plans could also be put in place for operations which, if they go wrong, could be hazardous for people and the environment beyond the project area. One can't say when or where a disaster will strike but at least plans can be put in place to be implemented immediately if the need arises.

Once the possibility of a crisis has been established, the first step in devising a contingency plan is to identify the key people who will take charge of the crisis management project. These people will constitute a sleeping organization, ready to awake at a moment's notice in case of need. The core organization might include senior representatives of local and national government, the emergency services, relief organizations etc. this group of key people might be called the Crisis Action Committee. Once the key people have been elected or selected to serve on the Action Committee, they must meet to design appropriate contingency plans and then meet again at regular intervals to ensure that the plans are kept up to date.

One thing that the Action Committee will need to do as early as possible is to assess what might happen should the crisis arise, and use their collective imagination to consider and be prepared in advance for as many of the problems as possible. A role playing exercise can be used to consider as precisely as possible what might happen and what the members of the Action Committee and their subordinates might do should a crisis happen.

When the plans have been made and tested, they must be documented, incorporating all the lessons learned from role-playing and field exercises so that they are ready to put into action effectively and with minimum delay. This is in effect creating a project handbook or project manual for a project that might never happen. When a crisis does cross from imagination to reality, however, contingency planning can save time and many lives.

## 9. Nature of NEPAD projects (Regional/Cross boundary issues)

NEPAD Projects span the African region crossing various regions, countries and cultures. As such, managing them is not as straight forward as managing any other projects. It is therefore important to view them in that way – challenging projects which need consideration of various cross-boundary issues. This is however not an isolated case as many projects these days span regions due to globalization. With organisations moving towards global multi-site projects, multicultural teams are becoming a way of life. Members of multicultural teams differ in how they perceive information and have different norms

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guiding team interaction. Insufficient knowledge of team members' cultural norms and values can make a project leader's job frustrating and often result in delays and even project failure. There are also special challenges associated with managing from a distance.

### CROSS CULTURAL DIFFERENCES AND THEIR IMPLICATIONS FOR MANAGING INTERNATIONAL PROJECTS.

Cultural differences can interfere with the successful completion of projects in today's multicultural global business community. To achieve project goals and avoid cultural misunderstandings, project managers should be culturally sensitive and promote creativity and motivation through flexible leadership. Culture can be defined as a set of learned core values, beliefs, standards, knowledge, morals, laws, and [behaviors/behaviours](#) shared by individuals and societies that determines how an individual acts, feels, and views oneself and others.

**Cultural Insensitivity:** The inability of a person to accept or to become aware of cultural differences. Insensitivity leads to miscommunications, increased stress for all parties involved, and an increased risk of unsuccessful business outcomes.

This section describes the most well known and accepted cross cultural management theories. These theories consider relations between people, motivational orientation, orientation toward risk, definition of self and others, attitudes to time, and attitudes to the environment. It is important to consider motivation of multicultural project teams and relevant implications for project management. We can conclude that global project management can succeed through culturally-aware leadership, cross cultural communication, and mutual respect. Without them, it is destined to fail.

### 2. MOTIVATION OF MULTI-CULTURAL PROJECT TEAMS

Traditional projects, as national projects, may be affected by personality conflicts. Cultural differences among project team members may create additional misunderstanding throughout the project life cycle. The impact of cultural factors such as language barriers, time differences, and socio-economic, political, and religious diversity may result in a normative pattern prescribing a range of permissible actions so as to encourage self-interest. Motivating project team members may encounter significant barriers in multi-cultural project communications.

Two leading studies of cross-cultural management have been conducted by Geert Hofstede<sup>5</sup> and Fons Trompenaars<sup>6</sup>. Both approaches propose a set of cultural dimensions along which dominant value systems can be ordered.

These value systems affect human thinking, feeling, and acting, and the behavior of organizations and institutions in predictable ways. The two sets of dimensions reflect basic problems that any society has to cope with but for which solutions differ. The dimensions can be grouped into several categories:

1. **Relations between people.** Two main cultural differences have been identified. Hofstede distinguishes between *individualism and collectivism*. Trompenaars breaks down this distinction into two dimensions: *universalism versus particularism* and *individualism versus communitarianism*.

2. **Motivational orientation.** Societies choose ways to cope with the inherent uncertainty of living. In this category Hofstede identifies three dimensions: *masculinity versus femininity*, amount of *uncertainty avoidance*, and *power distance*.

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<sup>5</sup> Hofstede, G. Culture's consequences: comparing values, behaviors, institutions, and organizations across nations.

<sup>6</sup> Trompenaars, F., Hampden-Turner, C. Riding the waves of culture: understanding diversity in global business.

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3. **Attitudes toward time.** Hofstede distinguishes between *a long-term* versus *a short-term orientation*. Trompenaars identifies two dimensions: *sequential versus synchronic* and *inner versus outer time*.

Two additional categories called **socio-cultural dimensions** were proposed by Aycan et. al.: *paternalism* and *fatalism*. In a paternalistic relationship, the role of the superior is to provide guidance, protection, nurturing and care to the subordinate, and the role of the subordinate, in return, is to be loyal and deferential to the superior. Fatalism is the belief that it is not possible to fully control the outcomes of one's actions and, therefore, trying too hard to achieve something and making long-term plans are not worthwhile exercises.

Below is a brief description of the most relevant dimensions and some cultural problems that might arise when managing an international project.

**Power distance** is the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally. The basic problem involved is the degree of human inequality that underlies the functioning of each particular society. In Hofstede's research, power distance is measured in a Power Distance Index (PDI). The values and attitudes found at the national level contrast "low-PDI countries" with "high-PDI countries", with some countries placed in between. High PDI countries include Malaysia and Mexico. Low PDI countries include Austria and Denmark.

**Uncertainty avoidance** refers to the extent to which a culture programs its members to feel either uncomfortable or comfortable in unstructured situations. Unstructured situations are novel, unknown, surprising, and different from usual. The basic problem involved is the degree to which a society tries to control the uncontrollable.

**Individualism**, versus its opposite, **collectivism**, is the degree to which individuals are supposed to look after themselves or remain integrated into groups, usually around the family. Positioning itself between these poles is a very basic problem all societies face. Individualism stands for a society in which the ties between individuals are loose: Everyone is expected to look after him/herself and her/his immediate family only. Collectivism stands for a society in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty.

**Masculinity** versus its opposite, **femininity**, refers to the distribution of emotional roles between the genders, which is another fundamental problem for any society. This distinction opposes "tough" masculine and "tender" feminine societies. The duality of the sexes is a fundamental fact with which different societies cope in different ways. Surveys on the importance of work goals show that almost universally women attach more importance to social goals such as relationships, helping others, and the physical environment, and men attach more importance to ego goals such as careers and money. However, Hofstede's data revealed that the importance respondents attached to such "feminine" versus "masculine" work varied across countries as well as across occupations.

Masculinity stands for a society in which gender roles are clearly distinct. Men are supposed to be assertive, tough, and focused on material success. Women are supposed to be more modest, tender, and concerned with the quality of life. Femininity stands for a society in which gender roles overlap. Both men and women are supposed to be modest, tender, and concerned with the quality of life. Because the respondents were mostly men, Hofstede suggested calling this dimension the Masculinity Index (MAS). Low MAS countries are characterized by cooperation at work and a good relationship with the boss, belief in group decisions, promotion by merit, lower job stress, and preference for smaller

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companies. High MAS countries are characterized by challenge and recognition in jobs, belief in individual decisions, higher job stress, and preference for large corporations.

*Long-term versus short-term orientation* refers to the extent to which a culture programs its members to accept delayed gratification of their material, social, and emotional needs. Business people in long-term oriented cultures are accustomed to working toward building strong positions in their markets and do not expect immediate results. Managers (often family members) are allowed time and resources to make their own contributions. In short-term oriented cultures the “bottom line” (the results of the past month, quarter, or year) is a major concern; control systems are focused on it and managers are constantly judged by it. This state of affairs is supported by arguments that are assumed to be rational, but the cultural distinction reminds us of the fact that this entire rationality rests on cultural – that is, pre-rational – choices.

From these results, implications for the applicability of project management methods are elaborated.

### IMPLICATIONS FOR PROJECT MANAGEMENT

Cultural patterns at work reflect cultural patterns in the wider society. Project managers share the cultures of their society and of their organization with their project teams. For instance, project management techniques and training packages have been developed almost exclusively in individualist countries, first of all in the USA, and are based on cultural assumptions that may not hold in collectivist cultures. For instance, the ability to communicate “bad news” and to manage performance are considered key skills for a successful project manager.

However, in managing international projects involving partners from collectivist societies, one has to bear in mind that discussing a person’s performance or abilities openly with him or her is likely to clash head-on with the society’s harmony norm and may be felt by the subordinate as an unacceptable loss of face. Such societies have more subtle, indirect ways of communicating feedback, such as through the withdrawal of a normal favor or verbally via a mutually trusted intermediary.

In collectivist/particularistic/communitarian cultures greater attention is also given to the obligations of relationships and to unique circumstances. Friendship has special obligations and hence may come first. Accordingly, less attention is given to abstract legal codes. In individualist/universalist cultures, the law and social norms may take precedence over friendships. The key concept of *guanxi* in Asian business is by now known worldwide. It refers to personal connections; it links the family sphere to the business sphere. Having a personal network of acquaintances is extremely important in these societies. This is an evident consequence of collectivism (relationships before task), but it also contributes to a long-term orientation and paternalism. One’s capital of *guanxi* lasts a lifetime, and one would not want to destroy it for short-term,

bottom-line reasons

**FIGURE 1: VALUE DIFFERENCES BETWEEN WESTERN AND NON-WESTERN CULTURES**

<i>Western Cultural Values</i>	<i>Non-Western Cultural Values</i>	<i>Impact on Project Management.</i>
Individualism	Collectivism/Group	+
Achievement	Modesty	X
Equality/Egalitarianism	Hierarchy	-
Winning	Collaboration/Harmony	+
Guilt (internal self-control)	Shame (external control)	X
Pride	Saving face	X
Respect for results	Respect for status/Ascription	+
Respect for competence	Respect for elders	-
Time is money	Time is life	-
Action/Doing	Being/Acceptance	-
Systematic/Mechanic	Humanistic	-
Tasks	Relationship/Loyalty	-
Informal	Formal	-
Directness/Assertiveness	Indirectness	-
Future/Change	Past/Tradition	-
Control	Fate	-
Specific/Linear	Holistic	+
Verbal	Non-verbal	+

Corr.

(+) = Positive impact of combining both values on outcomes

(-) = Negative impact of combining both values on outcomes (culture clash)

(X) = No direct impact on outcomes

*Adapted from Kohls (1981); Marquardt and Kearsley (1999)*

### *Conclusions*

To ensure successful project implementation, there are some important tips that you need to make use of. The project should have people who are dedicated more to create the situations of the successful project implementation. Before the project implementation process starts, ensure you have all factors of project process written or recorded on paper. This will make the project implementation process easier to manage, and they can be of used for the projects that are the same as the current project.

Global project management can succeed through effective leadership, cross-cultural communication, and mutual respect. Without them, it is destined to fail.

International projects that use effective cross-cultural teams can provide a source of experience and innovative thinking to enhance the competitive position of their companies, and to resolve potential communication barriers.

Multi-cultural projects are becoming the norm. More and more projects are being executed successfully using multicultural teams. To achieve project goals and avoid potential risks, project managers should be culturally sensitive and promote creativity and motivation through flexible leadership.

## **9.1 IMPLEMENTING (EXECUTING) NEPAD PROJECTS,**

It has been shown throughout this module that Project implementation process entails creation of a *customizable framework* that helps project managers to set up and manage project implementation stages. Due to the peculiarity of NEPAD Projects and programmes, it is therefore important to formulate of a Framework customised to NEPAD Projects and programmes. Customization of project implementation process framework lets leverage the use of management standards, policies and procedures and ensures that management expectations and plans for project implementation stages are properly outlined and applied. When project implementation process is structured, customized and organized into consistent project implementation steps, all conditions required for creation of a responsive project management environment are met, and project manager can start implementing a project.

*ACTION: Group Work*

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NEPAD Projects need to have a similar implementing standard procedure. Hence the participants are to be grouped to come up with suggestions for these. These should include procedures for:

- *Start-Up Phase:* Contract issuing, Partnership Agreement, Setting-up project structures, Start-up report, Preparation Costs report
- *Project Reporting and Payment:* Reporting periods, Submission of reports, The activity report, The financial report, Processing of reports, Payment
- *Communication, Dissemination and Knowledge Management:* Guidelines, Publicity obligations
- *Changes in approved Projects:* Changes in the partnership, Budget flexibility, Modification of activities, Extension of duration, Overview on the procedure
- *Financial Focus:* Decommitment of project funds, Recovery of unduly paid out funds, Sharing of costs
- *Project Closure:* Final report, Costs for project closure, Durability of projects, Ownership and use of outputs, Revenues after project closure, Retention of documents

### References

- Fangel, M.* 1998, Best Practice of Project Start-up, in: Proceedings of the 14<sup>th</sup> World Congress on Project Management, IPMA, Ljubiana, pg 354-361.
- Frame, J. D.* The new project management: Tools for an age of rapid change, corporate reengineering, and other business realities . San Francisco: Jossey-Bass Publishers, 1996.
- Hofstede, G.* Culture's consequences: comparing values, behaviors, institutions, and organizations across nations. 2nd ed. Thousand Oaks: Sage Publications, 2000.
- Trompenaars, F., Hampden-Turner, C.* Riding the waves of culture: understanding diversity in global business. 2nd ed. New York: McGraw Hill, 1998.