AFRICAN INSTITUTE OF PROJECT PLANNING AND MANAGEMENT

P. O. BOX KENYA:

PROGRAM: POST GRADUATE DIPLOMA IN PROJECT PLANNING AND MANAGEMENT:

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AREAS OF CONCERN

- ***Definitions***
- ***Illustrations***
- ***Objectives***
- ***Aims***
- ***Conclusion***

References

I. *Massie, L. (1971). Essentials of Management, Practice Hall, Eaglewood Cliffs, N.J*

II. *Laurie M., (2007). Management and Organizational Behaviour, Pearson, New Delhi.*

III. *Rory burke. Project management ,planning and control techniques*

IV. *United Nations Industrial Development Organization (UNIDO).(1972). Guidelines for Project*

V. *Evaluation. New York. United Nations.*

Welheiser, J. G., &Gwin N. E. (2005) Preparing for the Worst, Planning for the Best. München: K. G. Saur

SOLUTIONS FOR ASSIGNMENT SIX

1. *Discuss the methods available in budgeting for the project*
   Budget is defined as rough estimation of the project figure dedicated to a specific purpose or objective.
   Meanwhile:

A project is an organization of people dedicated to a specific purpose or objective. Projects generally involve large, expensive, unique, or high risk undertakings which have to be completed by a certain date, for a certain amount of money, within some expected level of performance. At a minimum, all projects need to have well defined objectives and sufficient resources to carry out all the required tasks.

Or

A project is a combination of human and non-human resources pulled together in a temporary organization to achieve a specified purpose

Therefore the following are the methods available in budgeting for the project objectives:

in its simplest terms, project success can be thought of as incorporating four basic facets. A project is generally considered to be successfully implemented if it

- *comes in on-schedule (time criterion).*
- *comes in on-budget (monetary criterion).*
- *achieves basically all the goals originally set for it (effectiveness criterion).*
- *is accepted and used by the clients for whom the project is intended (client satisfaction criterion).*

By its basic definition, a project comprises a defined time frame to completion, a limited budget, and a specified set of performance characteristics. Further, the project is usually targeted for use by some client, either internal or external to the organization and its project team. It seems reasonable; therefore, that any assessment of project implementation success should include These four measures.

1. **The Project Life Cycle**

One method that has been used with some regularity in order to help managers conceptualize the work and budgetary requirements of a project is to make use of the idea of the project life cycle.

The concept of the life cycle is familiar to most modern managers. Life cycles are used to Explain the rise and demise of organizations, phases in the sales life of a product, etc. In a similar fashion, managers often make use of the life-cycle concept as a valuable tool for better understanding the stages in a project and the likely materials requirements for the project through

each distinct phase.

A project's life cycle has been divided into four distinct stages:

l. Conceptualization; the initial project stage. At this stage a project is determined as being necessary. Preliminary goals and alternatives are specified, as well as the possible means to accomplish those goals.

2. Planning; this stage involves the establishment of a more formalized set of plans to accomplish the initially developed goals. Among planning activities are scheduling,

3. Execution; the getting, and the allocation of other specific tasks and resources.
Third stage involves the actual "work" of the project. Materials and resources are procured, the project is produced, and performance capabilities are verified.

4. Termination; once the project is completed, there are several final activities that must be performed..

2. *What are the roles of the multi-disciplinary teams in planning and budgeting for a project?*
   Team is defined as the group of people

1. ***Think Strategically Early in the Project Life Cycle***

   Another important implication in our discussion of project strategy and tactics is the breakdown of the ten critical factors into two distinct sub-dimensions, relating to the concepts of strategy and tactics. Further, it was shown that it is important to consider the "strategic" factors early in the project life cycle, during the Conceptualization and Planning stages when they become most important. As a result, it is necessary to accentuate the strategy factors (Mission, Top Management Support, and Schedule/Plans) during these early stages. It is argued that at this
   time, these factors are the most significant predictors of project success.

   A practical suggestion for organizations implementing projects would be to bring the project manager and his team on board early in the project life cycle (preferably during the Conceptualization phase). Many managers make the mistake of not involving members of their project teams in early planning and conceptual meetings, perhaps under the assumption that the

team members should only concern themselves with their specific jobs. In fact, it is very important at an early stage that both the project manager and the project team members "buy in" to the goals of the project and the means to achieve those goals. The more project team members are aware of these goals, the greater the likelihood of their taking active part in the monitoring and troubleshooting of the project and, consequently, the higher the quality of those activities for the project implementation.

2. ***Think More Tactically as the Project Moves Forward in Time***

By the later "work" stages of execution and termination, strategy and tactics are of almost equal importance to project implementation success. Consequently, it is important that the project manager shift the emphasis in the project from "What do we want to do?" to ' 'How do we want to do it?" The specific critical success factors associated with project tactics tend to reemphasize the importance of focusing on the "How" instead of the "What." Factors such as Personnel, Client Consultation, Communication, Monitoring, etc., are more concerned with attempts to better manage the specific action steps in the project implementation process. While we argue that it is important to bring the project team on board during the initial strategy phase in the project, it is equally important to manage their shift into a tactical, action mode in which their specific project team duties are performed to help the project toward completion.

3. ***Make Strategy and Tactics Work for You and Your Project Team***

One of the points we have attempted to reinforce in this chapter is that either strong strategy or strong tactics by themselves will not ensure project success. When strategy is strong and tactics are weak, there is a great potential for creating strong, well-intended projects that never get off the ground. Cost and schedule overruns, along with general frustration, are often the side effects from projects which encounter such "errors of inaction." On the other hand, a project which starts off with a weak or poorly conceived strategy and receives strong subsequent tactical operationalization has the likelihood of being successfully implemented, but solves the wrong problem (Type Ill error). New York advertising agencies can tell horror stories of ad campaigns which were poorly conceived but still implemented, sometimes costing millions of dollars, and were subsequently assessed a disaster and scrubbed.

In addition to having project strategy and tactics working together, it is important to remember (again following the diagram in Figure 20-4) that initially conceived strategy should be used to "drive" tactics. Strategy and tactics are not independent of each other, but should be used together in sequence. Hence, strategy, which is developed in the earliest stages of the project, should be made known to all project team members during the entire implementation process. At no point do the strategic factors become unimportant to project success, but instead they must be continually assessed and reassessed over the life of the project. Using the example of a military scenario, tactics must be used in constant support of the overall strategy. Strategy contains the goals that were initially set and are of paramount importance to any operation.

4. ***Consciously Plan for and Manage Your Project Team's Transition from Strategy to Tactics***

   The project team leader needs to actively monitor his or her project through its life cycle. Important to the monitoring process is the attempt to accurately assess the position of the project in its life cycle at several different points throughout the implementation process. For the project manager, it is important to remember that the transition between strategy and tactics involves the inclusion of an additional set of critical success factors. Instead of concentrating on the set of three factors associated with project strategy, the project manager must also include the second set of factors, thus making use of all the ten factors relating to both strategy and tactics.

   An important but often overlooked method to help the project leader manage the transition from strategy to tactics is to make efforts to continually communicate the changing status of the project to the other members of the project team. Communication reemphasizes the importance of a joint, team effort in implementing the project. Further, it reinforces the status of the project relative to its life cycle. The project team is kept aware of the specific stage in which the project resides as well as the degree of strategic versus tactical activities necessary to successfully sequence the project from its current stage to the next phase in its life cycle. Finally, communication helps the project manager keep track of the various activities performed by his

or her project team, making it easier to verify that strategic vision is not lost in the later phases of tactical operationalization.

3. *Why is risk tracking important?*

Risk is a measure of future uncertainties in achieving program performance goals and objectives within defined cost, schedule and performance constraints.

Risk can be associated with all aspects of a program (e.g., threat, technology maturity, supplier capability, design maturation, performance against plan,) as these aspects relate across the Work Breakdown Structure (WBS) and Integrated Master Schedule (IMS).

Risk addresses the potential variation in the planned approach and its expected outcome. While such variation could include positive as well as negative effects, this guide will only address negative future effects since programs have typically experienced difficulty in this area during the acquisition process.

Therefore risk tracing is very important especially in the project planning and execution of the project objectives.

And since the risk management involves the following objectives:

- *PMs have a wide range of supporting data and processes to help them integrate and balance programmatic constraints against risk.*
- *The Acquisition Program Baseline (APB) for each program defines the top-level cost, schedule, and technical performance parameters for that program.*
- *Additionally, acquisition planning documents such as Life-Cycle Cost Estimates (LCCE), Systems Engineering Plans (SEP), IMS, Integrated Master Plans (IMP), Test and Evaluation Master Plans (TEMP) and Technology Readiness Assessment (TRA) provide detailed cost, schedule, and technical performance measures for program management efforts.*
- *Since effective risk management requires a stable and recognized baseline from which to access, mitigate, and manage program risk it is critical that the program use an IMP/IMS.*
- *Processes managed by the contractor, such as the IMP, contractor IMS, and Earned Value Management (EVM), provide the PM with additional insight into balancing program requirements and constraints against cost, schedule, or technical risk.*
- *The objective of a well-managed risk management program is to provide a repeatable process for balancing cost, schedule, and performance goals within program funding, especially on programs with designs that approach or exceed the state-of-the-art or have tightly constrained or optimistic cost, schedule, and performance goals.*
- *Without effective risk management the program office may find itself doing crisis management, a resource-intensive process that is typically constrained by a restricted set of available options.*

- *Successful risk management depends on the knowledge gleaned from assessments of all aspects of the program coupled with appropriate mitigations applied to the specific root causes and consequences.*
- *A key concept here is that the government shares the risk with the development, production, or support contractor (if commercial support is chosen), and does not transfer all risks to the contractor. The program office always has a responsibility to the system user to develop a capable and supportable system and cannot absolve itself of that responsibility.*
- *Therefore, all program risks, whether primarily managed by the program office or by the development/support contractor, are of concern and must be assessed and managed by the program office. Once the program office has determined which risks and how much of each risk to share with the contractor, it must then assess the total risk assumed by the developing contractor (including subcontractors).*

Hence the importance as follow:

Risk Tracking

The intent of risk tracking is to ensure successful risk mitigation. It answers the question "How are things going?" by:

- *Communicating risks to all affected stakeholders,*
- *Monitoring risk mitigation plans,*
- *Reviewing regular status updates,*
- *Displaying risk management dynamics by tracking risk status within the Risk Reporting Matrix and*
- *Alerting management as to when risk mitigation plans should be implemented or adjusted.*

Risk tracking activities are integral to good program management. At a top level, periodic program management reviews and technical reviews provide much of the information used to identify any performance, schedule, readiness, and cost barriers to meeting program objectives and milestones.

Risk tracking documents may include: program metrics, technical reports, earned value reports, watch lists, schedule performance reports, technical review minutes/reports, and critical risk processes reports.

An event's likelihood and consequences may change as the acquisition process proceeds and updated information becomes available. Therefore, throughout the program, a program office should reevaluate known risks on a periodic basis and examine the program for new root causes. Successful risk management programs include timely, specific reporting procedures tied to effective communication among the program team.

Tasks

Risk tracking is the activity of systematically tracking and evaluating the performance of risk mitigation actions against established metrics throughout the acquisition process. It feeds information back into the other risk activities of identification, analysis, mitigation planning, and mitigation plan implementation as shown in Figure 1.

The key to the tracking activity is to establish a management indicator system over the entire program. The PM uses this indicator system to evaluate the status of the program throughout the life cycle. It should be designed to provide early warning when the likelihood of occurrence or the severity of consequence exceeds pre-established thresholds/limits or is trending toward exceeding pre-set thresholds/limits so timely management actions to mitigate these problems can be taken.

The program office should re-examine risk assessments and risk mitigation approaches concurrently. As the system design matures, more information becomes available to assess the degree of risk inherent in the effort.
If the risk changes significantly, the risk mitigation approaches should be adjusted accordingly.
\If the risks are found to be lower than previously assessed, then specific risk mitigation actions may be reduced or canceled and the funds reprogrammed for other uses.
If they are higher, or new root causes are found, appropriate risk mitigation efforts should be implemented.

In addition to reassessing (identifying and analyzing) risks, the program office should look for new risk mitigation options. Alternative technologies may mature, new products may become available in the market place, or may be information found in unexpected places. All of these

May be of use to the program office for risk mitigation.

4. Discuss the risk mitigation plan

The intent of risk mitigation planning is to answer the question "What is the program approach for addressing this potential unfavorable consequence?" One or more of these mitigation options may apply:

Avoiding risk by eliminating the root cause and/or the consequence,

Controlling the cause or consequence,

Transferring the risk, and/

Assuming the level of risk and continuing on the current program plan.

Risk mitigation planning is the activity that identifies, evaluates, and selects options to set risk at acceptable levels given program constraints and objectives. Risk mitigation planning is intended to enable program success. It includes the specifics of ***what*** *should be done,* ***when*** *it should be accomplished,* ***who*** *is responsible, and the* ***funding*** *required to implement the risk mitigation plan. The most appropriate program approach is selected from the mitigation options listed above and documented in a risk mitigation plan.*

The level of detail depends on the program life-cycle phase and the nature of the need to be addressed. However, there must be enough detail to allow a general estimate of the effort required and technological capabilities needed based on system complexity.

Tasks

For each root cause or risk, the type of mitigation must be determined and the details of the mitigation described.

Once alternatives have been analyzed, the selected mitigation option should be incorporated into program planning, either into existing program plans or documented separately as a risk mitigation plan (not to be confused with the risk management plan). The risk mitigation plan needs to be realistic, achievable, measurable, and documented and address the following topics:

- *A descriptive title for the identified risk;*
- *The date of the plan;*
- *The point of contact responsible for controlling the identified root cause;*
- *A short description of the risk (including a summary of the performance, schedule, and resource impacts, likelihood of occurrence, consequence, whether the risk is within the control of the program);*
- *Why the risk exists (root causes leading to the risk);*
- *The options for mitigation (possible alternatives to alleviate the risk);*

- *Definition of events and activities intended to reduce the risk, success criteria for each plan event, and subsequent "risk level if successful" values;*
- *Risk status (discuss briefly);*
- *The fallback approach (describe the approach and expected decision date for considering implementation);*
- *A management recommendation (whether budget or time is to be allocated, and whether or not the risk mitigation is incorporated in the estimate at completion or in other program plans);*
- *Appropriate approval levels(IPT leader, higher-level Product Manager, Systems Engineer, PM); and*
- *Identified resource needs.*

Risk Mitigation Plan Implementation

The intent of risk mitigation (plan) execution is to ensure successful risk mitigation occurs. It answers the question "How can the planned risk mitigation be implemented?" It:

- *Determines what planning, budget, and requirements and contractual changes are needed,*
- *Provides a coordination vehicle with management and other stakeholders,*
- *Directs the teams to execute the defined and approved risk mitigation plans,*
- *Outlines the risk reporting requirements for on-going monitoring, and*
- *Documents the change history.*

Tasks

Risk assessment (identification and analysis) is accomplished by risk category. Each risk category (e.g., performance, schedule, and cost) includes a core set of assessment tasks and is related to the other two categories. These interrelationships require supportive analysis among

areas to ensure the integration of the assessment. Implementing risk mitigation should also be accomplished by risk category, and it is important for this process to be worked through the IPT structure, requiring the IPTs at each WBS level to scrub and endorse the risk mitigations of lower levels. It is important to mitigate risk where possible before passing it up to the next WBS level. In addition, each IPT must communicate potential cost or schedule growth to all levels of management. It is imperative that the Systems Engineer and PM understand and approve the mitigation plan and examine the plan in terms of secondary, unforeseen impacts to other elements of the program outside of the risk owning IPT. As part of this effort, the IPTs should ensure effective mitigation plans are implemented and ongoing results of the risk management process are formally documented and briefed, as appropriate, during program and technical reviews.

When determining that it may be appropriate to lower the consequence of a risk, careful consideration should be given to the justification for doing so, including identifying exactly what about the risk has changed between the time of the original consequence assessment and the current risk state to justify such a reassessment.

5. *Discuss in detail the importance of risk management boards*

   A risk management is tool used on many programs is the Risk Management Board (RMB). This board is chartered as the senior program group that evaluates all program risks and their root causes, unfavorable event indications, and planned risk mitigations. In concept, it acts similar to a configuration control board. It is an advisory board to the PM and provides a forum for all affected parties to discuss their concerns. RMBs can be structured in a variety of ways, but share the following characteristics:

- *They should be formally chartered by the PM and have a defined area of responsibility and authority. Note that RMBs may be organized as program office only, program office with other Government offices (such as PEO Systems Engineer, User, Defense Contract Management Agency, test organizations, SMEs), or as combined government- contractor-subcontractor. The structure should be adapted to each program office's needs.*

•Working relationships between the board and the program office staff functional support team should be defined.

- *The process flow for the RMB should be defined.*

•The frequency of the RMB meetings should be often enough to provide a thorough and timely understanding of the risk status, but not too frequent to interfere with the execution of the program plan. Frequency may depend on the phase of the program; e.g., a development program may require monthly RMBs, while a production or support program may hold quarterly RMBs.

•Interfaces with other program office management elements (such as the various working groups and the configuration control board) should be formally defined.

- *On programs with many significant root causes, the RMB provides an effective vehicle to ensure each root cause is properly and completely addressed during the program life cycle.*
- *It is important to remember that successful risk tracking is dependent on the emphasis it receives during the planning process. Further, successful program execution requires the continual tracking of the effectiveness of the risk mitigation plans.*

The program management team can assign the risk management responsibility to individual IPTs or to a separate risk management team.

In addition, the program office should establish the working structure for risk identification and risk analysis and appoint experienced Government and industry personnel as well as outside help from SMEs, as appropriate.

Therefore the following are the importance of the risk management boards

- *Assess impacts of risk during proposal and baseline development. Use projected consequences of high probability risks to help establish the level of management reserve and schedule reserve.*
- *Jointly conduct IBRs with the Government team to reach mutual understanding of risks inherent in the program baseline plans.*
- *Conduct schedule risk analyses at key points during all phases of the program, including proposal development.*
- *Incorporate risk mitigation activities into IMS and program budgets as appropriate.*
- *Use IMS and EVM information (trends and metrics) to monitor and track newly identified risks and monitor progress against risk plans. Identify new risk items, and report status against risk mitigation plans to company management and the Government*

program office.

- *Assess impact of identified performance, schedule and costs risks to estimate at completion, and include in the estimate as appropriate. Develop a range of estimates (best case, most likely, worst case).*
- *Synthesize and correlate the status of new and ongoing risk elements in the IMS, CPR, risk mitigation plans, technical status documentation, program status reviews, and other sources of program status.*
- *Assign responsibility for risk mitigation activities, and monitor progress through a formal tracking system.*
- *Once risks have been realized (100% probability) and turn into an issue, incorporate the issue into work planning documents, IMS, and earned value budgets, and ensure integration with ongoing work to minimize impacts.*

6. Explain the roles and responsibilities as well as selection of a project manager

The process of project implementation, involving the successful development and Introduction of projects in the organization, presents an ongoing challenge for managers. The project implementation process is complex, usually requiring simultaneous roles which is played by project managers as follows:

- *Attention to a wide variety of human, budgetary, and technical variables. As a result, the organizational project manager is faced with a difficult job characterized by role overload, frenetic activity, fragmentation, and superficiality.*
- *Often the typical project manager has responsibility for successful project outcomes without sufficient power, budget, or people to handle all of the elements essential for project success. In addition, projects are often initiated in the context of a turbulent, unpredictable, and dynamic environment.*
- *Consequently, the project manager would be well served by more information about those specific factors critical to project success.*
- *The project manager requires the necessary tools to help him or her focus attention on important areas and set differential priorities across different project elements.*
- *If it can be demonstrated that a set of factors under the project manager's control can have a significant impact on project implementation success, the project manager will be better able to effectively deal with the many demands created by his job, channeling his energy more efficiently in attempting to successfully implement the project under development*

7. Elaborate on the methods of project budgeting

The following are methods which is considered when handling the project budgeting.

1. *Project Mission- initial clearly defined goals and general directions.*
2. *Top Management Support- Willingness of top management to provide the necessary resources and authority/power for project success.*
3. *Project Schedule/Plan-A detailed specification of the individual actions steps for project implementation.*
4. *Client Consultation- Communication, consultation, and active listening to all impacted parties.*
5. *Personnel- Recruitment, selection, and training of the necessary personnel for the project team.*
6. *Technical Tasks- Availability of the required technology and expertise to accomplish the specific technical action steps.*
7. *Client Acceptance- The act of "selling" the final project to its ultimate intended users.*

8. *Monitoring and Feedback- Timely provision of comprehensive control information at each stage in the implementation process.*
9. *Communication- The provision of an appropriate network and necessary data to all key actors in the project implementation.*
10. *Troubleshooting- Ability to handle unexpected crises and deviations from plan.*

It is important that the implementation be well managed by people who understand the project. In addition, there must exist adequate technology to support the project. Technical Tasks refers to the necessity of not only having the necessary personnel for the, implementation team, but ensuring that they possess the necessary technical skills and have adequate technology to perform their tasks. Steven Alter (1983), writing on implementation risk analysis, identifies two of the eight risk factors as being caused by technical incompatibility: the user's unfamiliarity with the systems or technology, and cost ineffectiveness.

In addition to Client Consultation at an earlier stage in the project implementation process, it remains of ultimate importance to determine whether the clients for whom the project has been initiated will accept it. Client Acceptance refers to the final stage in the implementation process, at which time the ultimate efficacy of the project is to be determined. Too often project managers make the mistake of believing that if they handle the other stages of the implementation process well, the client (either internal or external to the organization) will accept the resulting project. In fact, as several writers have shown, client acceptance is a stage in project implementation that must be managed like any other. As an implementation strategy, Lucas discusses the importance of user participation in the early stages of system development as a way of improving the likelihood of later acceptance. Bean and Radnor examine the use of 'intermediaries" to act as a liaison between the designer, or implementation team, and the project's potential users as a method to aid in client acceptance.

The eighth factor to be considered is that of Monitoring and Feedback. Monitoring and Feedback refer to the project control processes by which at each stage of the project implementation, key personnel receive feedback on how the project is comparing to initial projections. Making allowances for adequate monitoring and feedback mechanisms gives the project manager the ability to anticipate problems, to oversee corrective measures, and to ensure that no deficiencies are overlooked. Schultz and Slevin demonstrate the evolving nature of implementation and model building paradigms to have reached the state including formal

8. *List down the reasons for project termination. Explain each of them with an appropriate example.*
    - *Poorly defined project scope*
    - *Inadequate risk management*
    - *Failure to identify the key assumption*
    - *Project managers who lack experience and training*
    - *No use of formal methods and strategic*
    - *Lack of effectives communication at all levels*
    - *Key staffs leaving the project/ or company*
    - *Poor management of expectation in effective leadership*
    - *Lack of detailed documentation*
    - *Failure to track requirement*
    - *Failure to track progress*
    - *Lack of details in the project plans*
    - *In currency time and effort estimates*