

**PROJECT MANAGEMENT – AN ESSENTIAL TOOL FOR
ORGANIZATIONAL SUCCESS**Duimnda Weeraratne¹, Prof. Dr. Md Gapar Md Johar², Prof. Dr. Ali Khatibi³, Dr. S. M. Ferdous Azam⁴¹Management and Science University, Malaysia²Management and Science University, Malaysia³Management and Science University, Malaysia⁴Management and Science University, Malaysia

Abstract- *Project Management is a mandatory tool that helps organizations to overcome challenges posed by current businesses environment. The characteristics of project management structures and processes provide greater flexibility for organizations to respond to changes faster. Today, almost every organization undertakes projects in order to adapt to rapid changes in the environment and support existing processes. Unfortunately project failure rate has come to an unacceptable level in most of the industries and sectors that use project management. One main cause of failure is lack of good project management practices. Importance of applying good project management is not clearly understood by the management. Organizations do not have an understanding as to how project management framework be integrated with the existing business architecture. Organizations should first understand the drivers of project management and its importance to an organization. Then, a suitable project management framework should be created considering the nature and characteristic of the business activities. In order to assure step by step approach to project management, a appropriate methodology should be deployed. A methodology consists of a project management lifecycle and standard project management processes. Processes are applied to manager lifecycle phases. Well defined Project success evaluation criteria helps organization to evaluate project results in a rational manner and continuously improve the processes and the methodology.*

Key Words- *Project Success, Project Management Methodology, Project Management Framework, Project Management Processes, and Project Management Best Practices.*

1 INTRODUCTION

Project management has become an essential tool for business survival and competitive advantage today. It has been gaining wide publicity and popularity among the business professional and academia during the last 20 years. With the increasing changes in the business environment, project management has become mandatory tool in many firms' modus operandi. Today, organizations have to undertake large number of projects to support their business strategy. However with all these development in the project management discipline, project failure rate is reported to be very high in all industries that undertake project. Main negative impacts of failures are waste of resources, customer dissatisfaction and loss of profits. Causes of project failures are numerous. One main cause of failure is process related factors. Reference [1]. Reference [2] found that main causes of project failure is poor project management. Reference [3] concluded that project failure rate can be minimized by managing the project management process effectively and efficiently.

Lack of good project management is a common problem in most of the organizations that use project management. Though organizations undertake large no of projects, they are not recognized as projects. Most of these organizations do not know that they are undertaking projects. Projects are being executed alongside with routine operational work without applying project management tools, technique and best practices. Lack of structured approach to managing projects results in higher failure rate and does not provide a baseline for continuous improvement. The key reason for lack of methodology is lack of awareness about good project management practices, not having a methodology to set up projects, and lack of understanding as to how project management system should be integrated with the exiting enterprise architecture. Reference [4]. Further, the advantages and benefits of using project management is not known to most of the decision makers. Further, organizations do have clear success evaluation criteria to assess the performance of the project. Therefore there is a need to create awareness about the needs and advantageous of project management for business success. Key decision_makers in organizations should be educated on the elements of organizational project management framework. Finally, awareness is required as to how project management methodology could be applied to an organization and what are the major approaches to managing project in organizations and what are the best practices available. There is limited literature that focuses on application of project management framework to organizations. This paper presents main drivers of project management, main facets of organizational project management approaches, best practices, and structures.

2 DRIVERS OF PROJECT MANAGEMENT

The executives of organizations in the first place should understand why project management is necessary for organizations to be successful. In view this; the management should recognize factors that induce adaption of project management in order to address challenges effectively and efficiently.

Today the executives are in agreement that solution to most of the corporate problems involves better control of resources and efficient use of resources. These development demands organizations to look inside and examine how activities are being managed. Project management is one of the techniques that can be applied to manage activities more effectively and efficiently and thereby decrease cost and increase profits.[5]

In the current business environment, organizations are sandwiched between the demands of two major stakeholder groups as explained in figure 1. Customers on one hand is looking for continuous reduction in prices and suppliers, employees and investors on the other hand are looking for increased prices, wages and return on investment respectively. Organization has to satisfy the conflicting expectations of all these stakeholder groups reasonably in order to remain competitive. The only way to achieve organizational objectives while satisfying the conflicting demands of these stakeholders is by increasing the efficiency of internal processes. This kind of strategy helps organizations to decrease wastes and convert them to profits whilst satisfying the needs of all the stakeholders. Reference [6] Project management is one of the tools that can be used to achieve these ends.

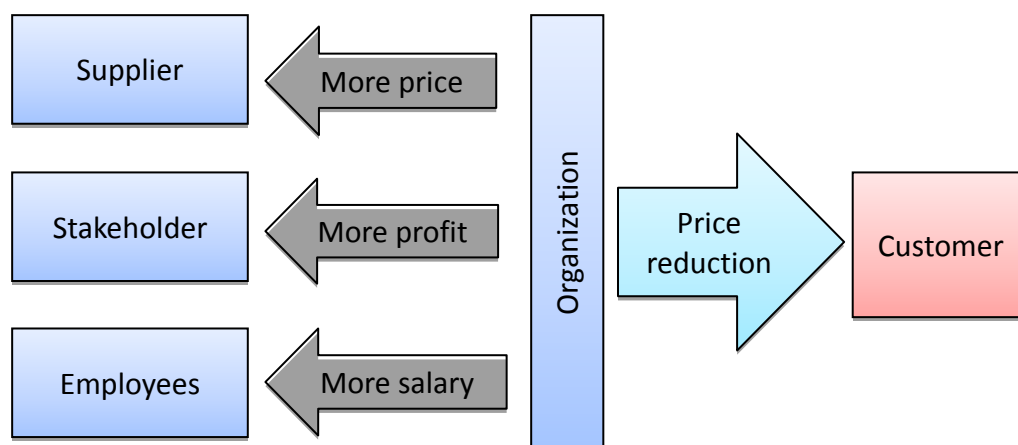


Figure 1. Organizational pressure

Although People have undertaken projects since the beginning of the recorded history, the characteristics of projects and project environment has changed tremendously. Organizations are challenged by rapidly changing technology, rising cost, increasing competition, frequent resource shortages and pressure from interest groups with opposing views. Hence, modern projects are dynamic, complex, and uncertain and they demand diverse set of skills from many disciplines. [7]

Rapid change in business environment and technology demand organizations to adapt fast. Organizations should be very flexible in order to change fast. Traditional functional organizations are rigid and bureaucratic and cannot support rapid change. Hence there is a demand to replace traditional structure with project structures which are organic in nature and able to support change very quickly. Flexible nature of the project management methodology allows organizations to tailor project management tools and processes to suit different environments. Therefore project management is a necessity in good and bad economic conditions. [5]

In organizational environments, where market and technology is predictable, outcomes are less uncertain, and can be anticipated, mechanistic organizational forms with centralized decision making and hierarchy may work. However, dynamic business environments which demand rapid response to change due changing technology, market, economic and social factors, need organic forms of management systems. Project management is one of the forms that is flexible enough to overcome the challenges of these new development in the business environment.[7]

Today project management is applied in almost every industry; defence, construction, banking, IT, health care, pharmaceutical, chemical, accounting, advertising, law ,state and local government and non-governmental organizations. Microsoft, IBM and Hewlett Plackard has recognized project management as a strategic competency. [5]

Project management is critical to sustainable economic growth. Generation of new jobs and gaining of competitive advantages are achieved by continuous innovation, creating new products and services, and enhancing quality of products and productivity of processes. Project management is a management approach equipped with powerful set of tools that

enhances ability to plan, execute and monitor organizational activities to achieve specific objective. Up to a recent time, project management was restricted to few industries like defence, construction, engineering, and film and consulting. Today the methodology is being used by all sectors and fields. Project management is not restricted to private sector; it is also a methodology that is applied in solving government and social problems. [8]

Traditional functional organizations focus on vertical flow of work. However, work cannot be completed without good horizontal coordination between departments. As shown in figure 2) traditional functional organizations are department oriented and creates a vertical hierarchy in which main focus is on vertical flow of work and instructions. This kind of approach to management naturally creates functional gaps between departments. Moreover, due to the hierarchical nature of these functional structures, class gaps are created between management levels. These two gaps together create operational islands, which induce employees to operate in isolation. Project management structures helps organizations to overcome this constraint.

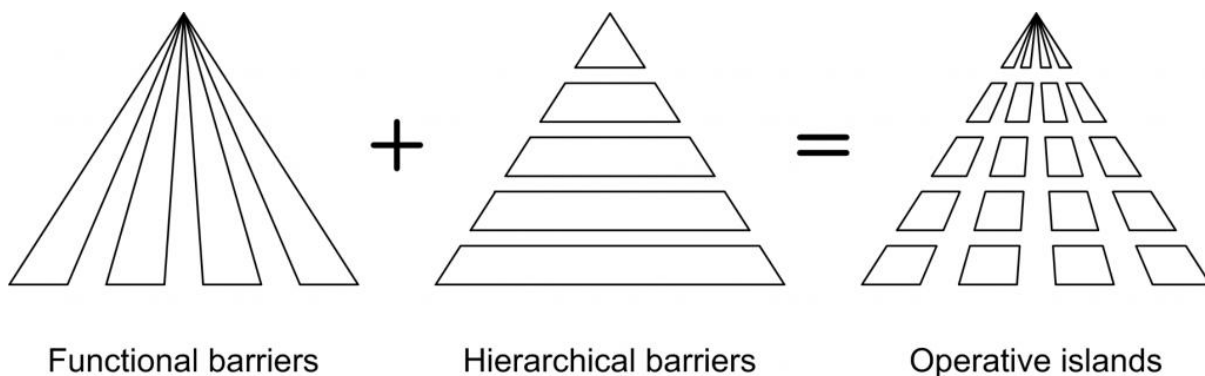


Figure 2 . Drawback of functional structures

Reference [8] identified Shorter product life cycles, expansion of knowledge, triple bottom-line focus, corporate re-engineering, increased customer orientation, and small projects deals with big problems, as the current drivers of project management. Today people from various disciplines; marketers, lawyers, accountants, human capital developers, administrators, scientists teachers, doctors, and community workers undertake projects as a part of their day to day work, though they do not hold the title of project manager. Success of their career mainly depends on how successfully they complete these projects. All professions and careers need these skills to accomplish their challenging objectives. Project management skills set are transferable across most businesses and professions. Project management fundamentals are universal. Since an average person is experiencing three to four career changes, this universal skill is worth acquiring. [8]

Reference [9] found that during the last several decades the use of project management as a means of achieving organizational goals has rapidly grown. Project management equips organizations with powerful tools that enhance its ability to manage its activities effectively and efficiently as well as to optimize resource utilization. The latest development in the society demands use of new methods of management. They are; the exponential growth of the human knowledge, increasing demand for wide variety of complex, sophisticated customized goods and services, and increasing global completion. These forces together increases the complexity of the goods and services produced and the processes used to produce them. To address these challenges there is a demand to create cross functional teams including external experts to solve problems that were traditionally solved by single person. This in turn creates a need for more sophisticated and flexible structures to manage activities. The project management has emerged to solve this problem.

3. IMPORTANCE OF GOOD PROJECT MANAGEMENT

Project management is one of the primary techniques used to deliver results in organizations. The current business context leaders are expected to complete projects faster, cheaper and better. [10]. The business manager should be aware of the importance of project management so that decisions can be made to use the methodology as and when required. Managing projects effectively will bring benefits to individuals, groups, and public and private organizations to: [10]

- Achieve organizational objectives
- Meet stakeholder needs
- Predict results
- Guarantee results
- Deliver outputs timely manner
- solve problems and resolve issues timely manner
- manage risks effectively

- utilize organizational resources effectively
- deal with failing projects timely manner
- complete within the given constraints (e.g., scope, quality, schedule, costs, risk);
- trade off conflicting constraints (e.g., adding resource to compress schedule may increase cost);
- implement changes effectively

Organizations should be aware of the draw backs of poor project management. Lack of good project management hinders achievement of organisational objectives and waste valuable organizational resources. Some effects of poor project management are: [10]

- Schedule overrun
- Missed budget
- Defects
- Repairing cost
- Expanding scope
- Undermine organizational reputation
- Stakeholder expectations are not met
- Inability to achieve project objectives.

There are many research findings that support the argument of good Project Management increases project success. Project success rate can be increased by applying good project management practices [11]; [12]; [13]; [14]; [15]; [16];[17] [18]. Project management positively affect project time, cost, effort and outcome [19]. Project management provides an organization with powerful tools that enhance the ability to plan, execute and control activities, people and all the involved resources [20]. Reference [21] reported that projects are the primary ingredient used in executing strategies; therefore, business success greatly depends on project success. According to Reference [10], projects should be selected after assessing their alignment with organizational objectives. Successful execution of projects generates short and long term positive impacts on organizational performance. Together these studies highlight the importance of project management for organizations.

4. ORGANIZATIONAL PROJECT MANAGEMENT FRAMEWORK

Organizations achieve their objectives by producing goods and services that satisfy the needs of the stakeholders. Conversion process transforms inputs in to out puts. Management techniques namely planning& decision making, organizing, leading and controlling are applied to transform inputs in to out puts. In the current businesses environment this process has to be carried out efficiently, effectively and flexibly. The two management approaches used by organizations are projects management and operations management. Operations generate core products of the business and projects support operations or help address business needs. [4]. Organizations are classified in to three types according to project management utilization. They are, non-project driven, hybrid and project driven. In non-project driven organizations the main source of revenue is through products and services. Therefore primary value creation methodology is operations management. Projects are very rare and, in the event projects are being launched, they are implemented using the resources of the functional departments. The hybrid organizations are also product based organizations and projects are undertaken to support products or to address business needs. Such organizations undertake two types of activities to achieve business objectives namely; operations management and project management. In this type of organizations Projects support three types of organizational needs. They are; projects that support routine operations of the organization, projects deployed to address business needs of the organization and project undertaken to help organizations to adapt to changes in the external environment. Figure 3 describes how projects support routine operations and business needs which flow from organizational objectives.

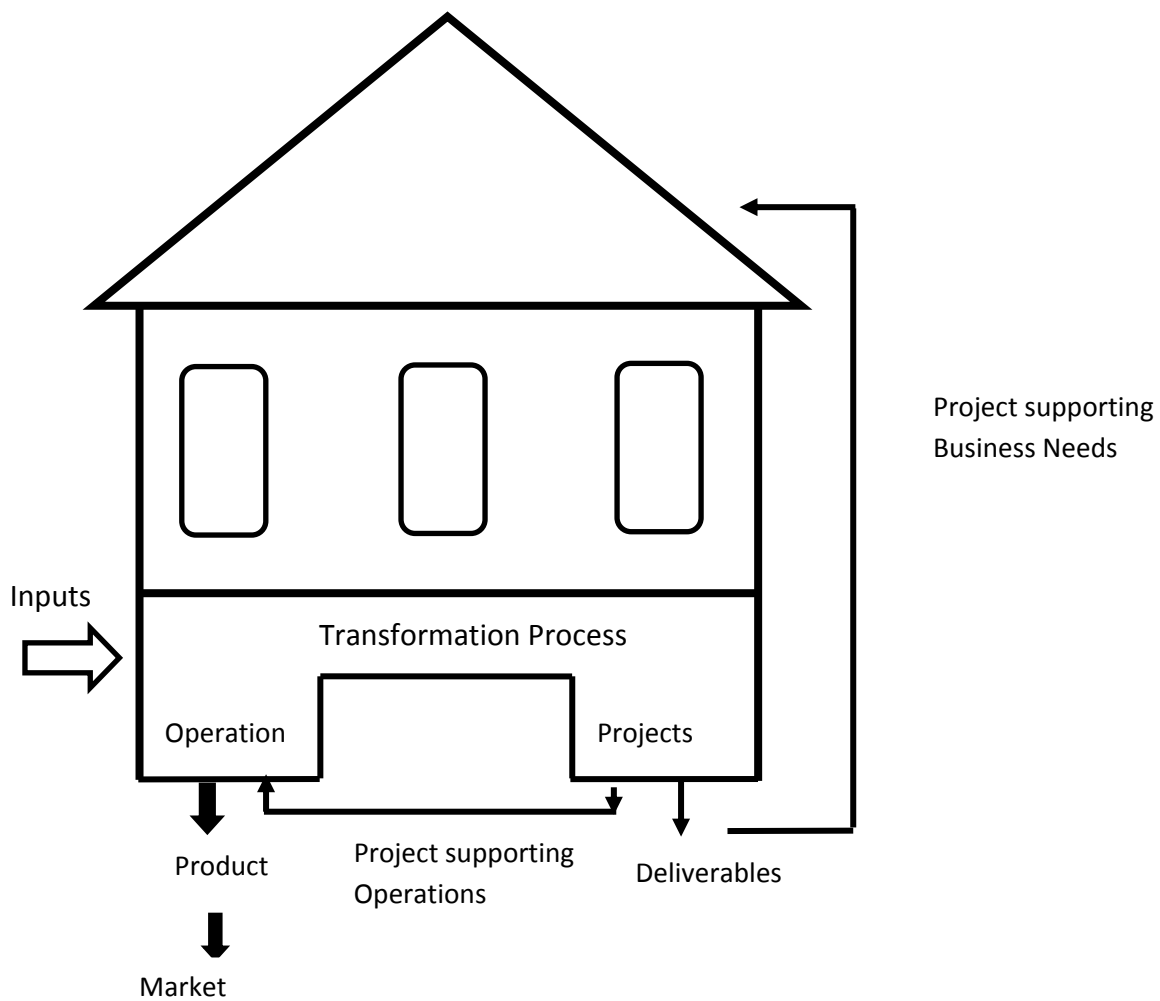


Figure 3. Elements of hybrid organizations

Figure 4 describes the outline project management process in a hybrid organization where business problem or opportunity is identified by an internal customer and submitted to the management for approval. The management assesses the request and assigns a sponsor who would be in charge of the new initiative. The sponsor assigns a suitable project manager who will plan and execute the project. The deliverables or the solutions are deployed in the organization to solve problems or exploit opportunities.

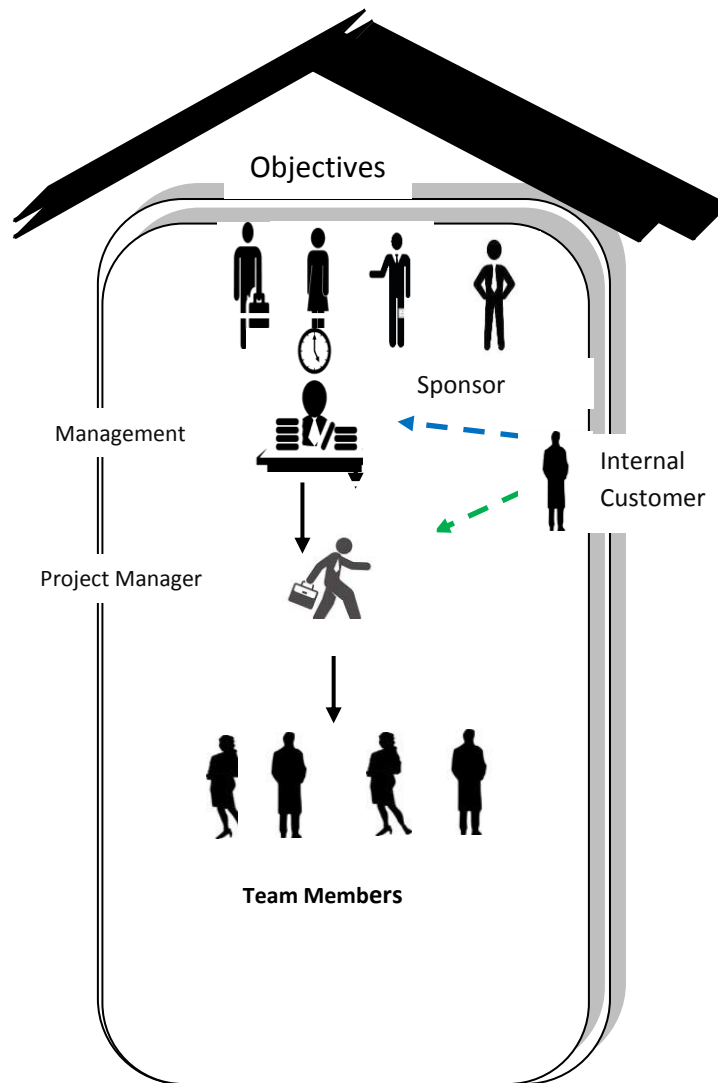


Figure: 4. High-level project management process of a hybrid organization

In a hybrid organization projects should be integrated with the existing business structure to obtain required resource and technological support. Managers and team members from different unit and levels should interact directly with each other. In traditional vertical flow focused organization this kind of coordination is difficult. Therefore, there is a demand to bypass formal lines of authority and communication channels and interact directly with other players. Therefore, a suitable structure is required to integrate projects with existing departments. Projects are superimposed on the top of the functional structure to create a horizontal hierarchy which facilitates cross functional communication and coordination. In this approach, vertical work flow becomes the responsibility of the line manager and horizontal work flow becomes the responsibility of the project manager. [5]. This type of cross functional coordination can be achieved by using a matrix structure. Figure 5 presents a matrix structure deployed in a hybrid organization. In this type of a structure, projects are super imposed on the top of the functional structure. Project manager negotiate with line manager and get the resources assigned to the projects as and when required.

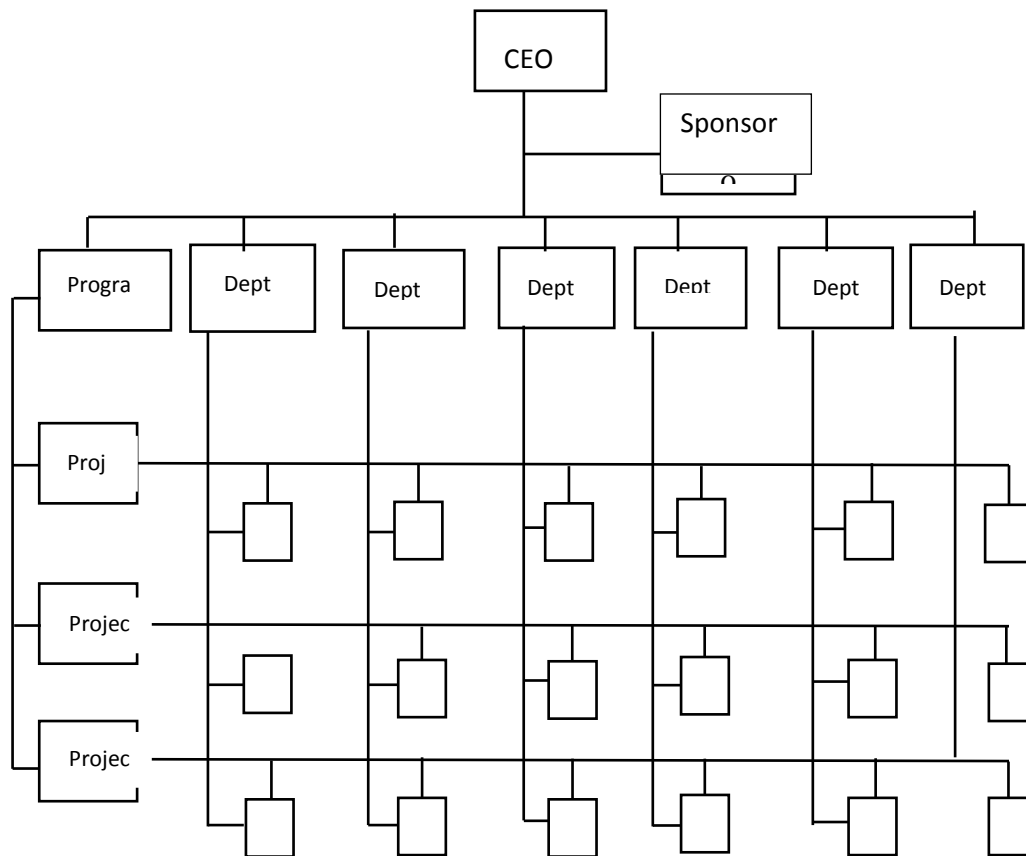


Figure : 5 Matrix structure

Projects that are undertaken to adapt to the changes in the environment are aimed to address a problem or opportunity. Projects provide flexibility required to change fast and remain competitive. [10].Fig 6 describes deployment of projects to adapt to changes in the business environment.

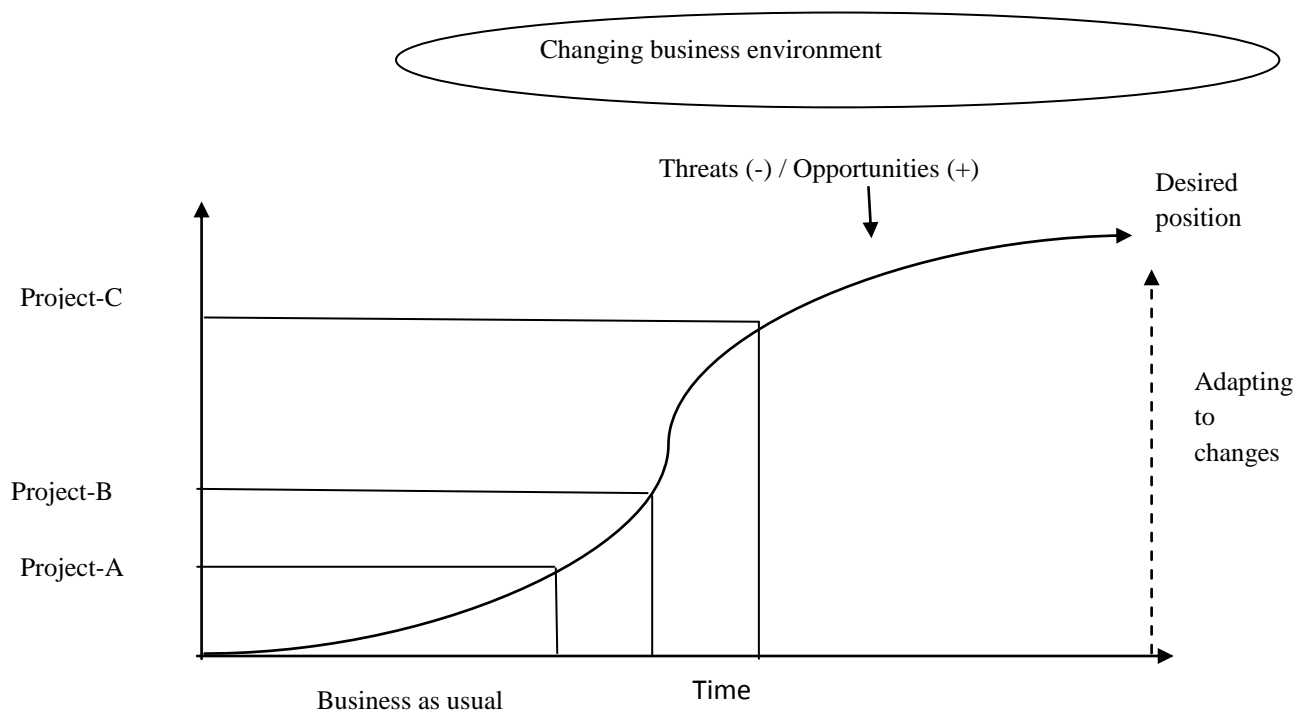


Figure: 6 Projects undertaken with the view of adapting to changes

In project driven organizations all the business activities are undertaken as projects and project managers are responsible for profits and losses. Projects generate revenue for the organizations and project management is considered as a profession. Reference [5] these organizations generally undertake projects to satisfy the needs of external clients. Eg; construction, software development, architectural firms. Figure 7 describes the outline project management process in a project driven organizations. Initiating projects takes place when an external client selects contractors through a competitive bidding process. The senior management of the contractor organization assign a sponsor who would be in charge of the project. The sponsor assigns a suitable person to manage the project. The project manager plan and execute the project and hands over deliverables to the customer.

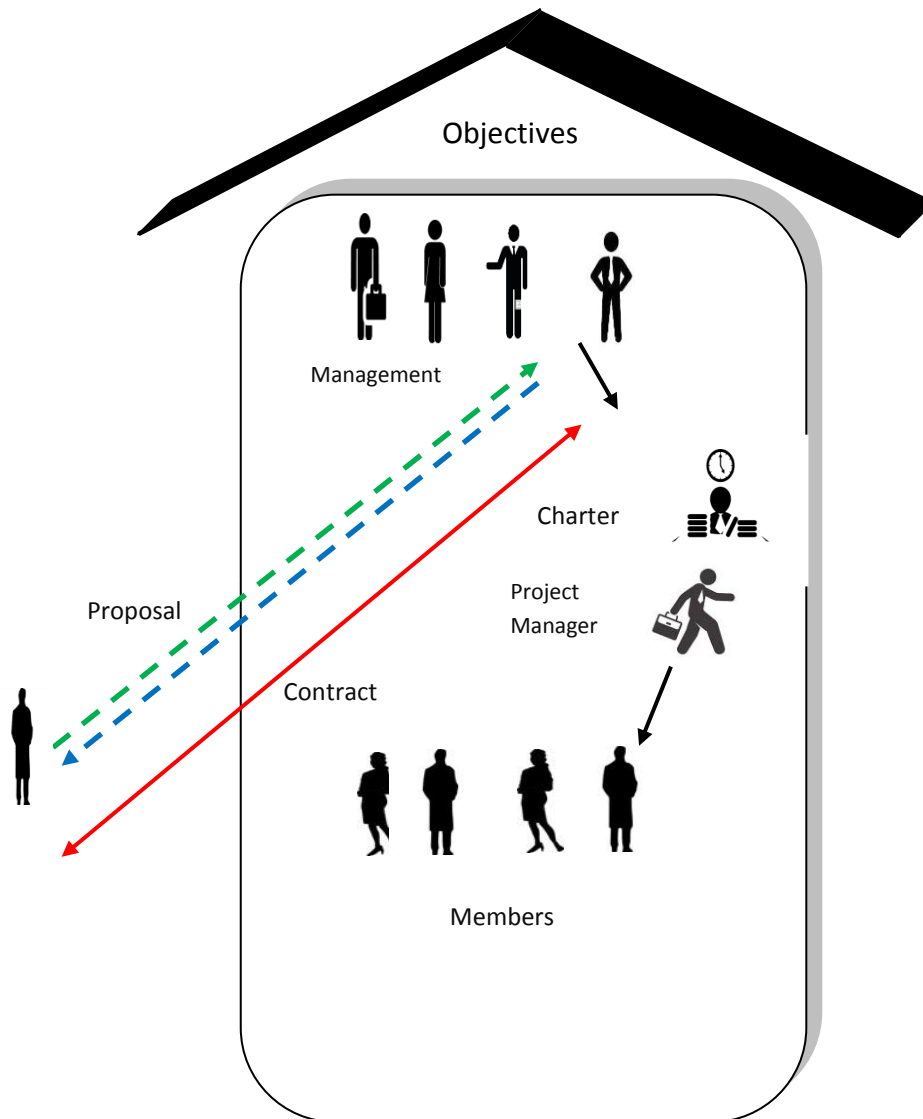


Figure 7 . Outline project management process of project driven organization

5 PROJECTS AND PROJECT MANAGEMENT.

The business professionals should have a clear understanding about basic definitions of projects and project management in order to apply methodology effectively. Several definitions on projects and project management were found in past literature.

“A project is a temporary endeavour undertaken to create a unique product, service, or result”. [10]

Reference[22] defines as “Project is temporary organization that is created for the purpose of delivering one or more business products according to an agreed business case”.

Project management is the “planning, delegating, monitoring and control of all aspects of the project, and the motivation of those involved, to achieve the project objectives within the expected performance targets for time, cost, quality, and scope, benefits and risks”[22].

According to the Reference [10] project management is defined as satisfying project requirement by applying project managed knowledge, skills, tools and techniques. Main steps of this process are;

- Gathering stakeholder requirements
- Ensuring that all the stakeholders' needs are considered during planning and execution
- Effective communication with stakeholders
- Managing stakeholders and completing activities
- Trading off competing constraints (cost, time, quality, scope, risk, resources)

Projects are managed using tools, techniques and best practices drawn from 10 knowledge areas namely Project coordination Management, Scope Management, Time Management, Cost Management, Quality Management, Resource Management, Communications Management, Risk Management, Procurement Management and Stakeholder Management. Each knowledge area consists of project management processes that can be applied to manage projects lifecycles. There are 49 processes and they are logically grouped into 5 process groups namely Initiating, Planning, Execution, Monitoring and Controlling, and Closing. These groups form the Project management life cycle. The 49 processes are developed based on the best practices and their application is most likely to guarantee success in most of the situations. Project management methodology is created incorporating these processes. The diagram 8 below shows the Project Management lifecycle phases interaction over the project duration, [10].

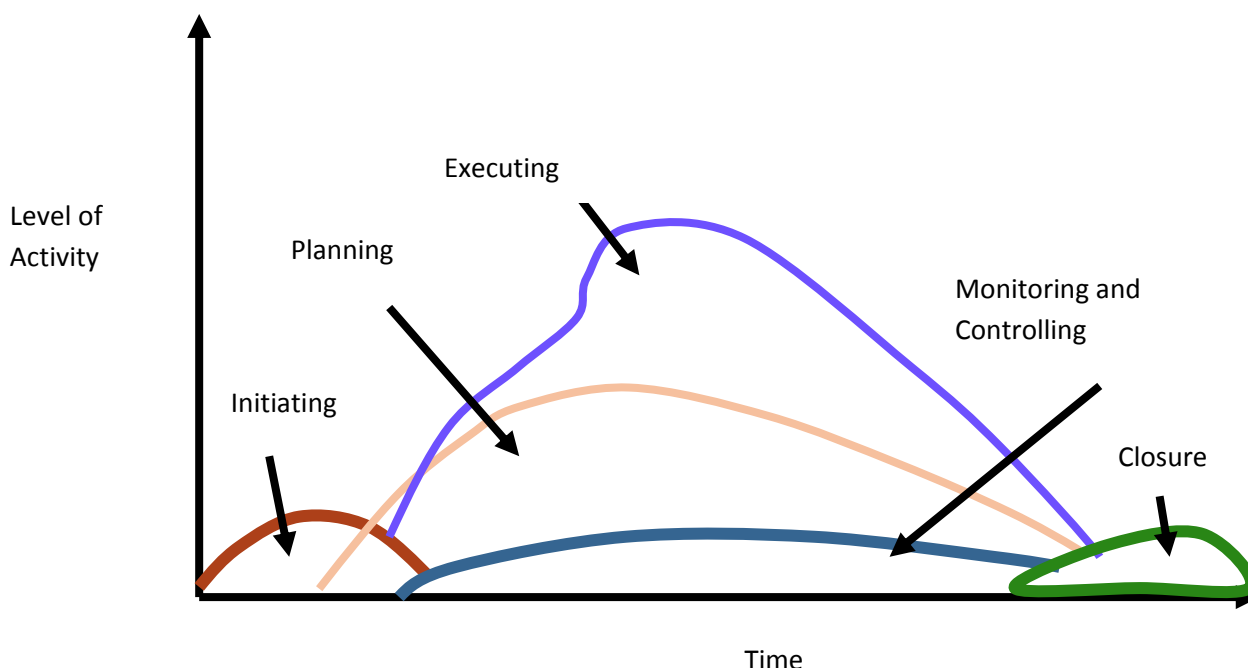


Figure 8. Project management process group interactions.

When managing projects, organizations should choose required processes and use them during each phase of the project management lifecycle. Major activities undertaken under each process group are as described below.

Initiating: stakeholder analysis, feasibility study, assigning a project manager, creating a business case, writing project proposals, and signing agreements etc.

Planning: develop scope baseline, schedule baseline, cost baseline, quality plan, resource plan, communication plan, risk management plan, procurement plan, and stakeholder management plan etc.

Execution: completing project activities, managing changes, quality assurance, distributing project information, hiring, and training people, implementing risk responses, and contracting supplier etc.

Monitoring and Controlling: reporting progress, status and forecasts, quality controlling, and monitoring risks etc.

Closure: Hand over deliverable to stakeholders, closure meeting, closure report, and lessons learned documentation etc.

6. METHODOLOGICAL APPROACH

Project management methodology is a set of methods, techniques, procedures, rules, templates, and best practices used on a project.[10] Reference[23], project management methodology is a framework for program and project management. It contains definition, guidelines,, templates, standards and processes necessary to carry out project effectively and efficiently.

Use of project management methodology enhances project performance. Organizations that do not make use of a methodology experience lower level of performance in projects, [24]. Therefore there is a demand for organizations to create a project management methodology using processes and process groups referred in the previous section. The methodology should be tailored to suits the business architecture of the organization and characteristics of the projects it undertakes, in order to enhance he effectiveness of the methodology.

7. PROJECT SUCCESS AND FAILURE

Due to lack of clear success evaluation criterion, organizations are not aware how well projects are being completed in the organization. This hampers constructive continuous improvement process. Modern definition of success criteria go beyond traditional measures like achieving scope, time, cost and quality and looks at many additional factors both qualitative and quantitative [10] These factors are;

- Delivering the agreed benefits
- Achieving financial adjectives
- Achieving business case non-financial objectives
- Making desired organizational transformation
- Meeting contractual obligations
- Satisfying the needs of the stakeholders
- Achieving quality targets

There are many success evaluation criterion found in the literature. Project success can be measured using two factors namely primary and secondary factors. Primary factors are completing on schedule, within budget and delivering quality out puts. Secondary factors are customer acceptance and customer's willingness to give reference [5] According to De Wit project success and project management success are two different concepts [25]. Reference [26] has distinguished between Project performance and project success. According to him project success can be measured once the project is completed and project performance can be measured during the project life cycle. Reference [27], proposes a definition similar to that of [26]. Project success can be measured in two areas namely product and process. For this purpose he suggests that measuring the success of projects should be on factors like cost, time, and quality and customer satisfaction.

The definition of project failure is the opposite version of the project success criteria. When projects fail to achieve one of the success criterion mentioned in the previous paragraph, project is considered as a failure [10]. Reference [5] defined failure from two different perspectives. Firstly; planning failure which is the gap between what was planned to be achieved and what was generated at the end. Secondly; actual failure which is the gap between what was achievable and what was actually generated.

Clear project success and failure evaluation criteria help organizations to organise and manage projects in a very objective manner form the beginning. Once the projects are completed, the results can be evaluated against the success evaluation criterion and necessary corrective and preventive actions can be taken to improve perforce of projects continuously.

8. CONCLUSION

Rapid change in business environment demands organizations to adapt very fast. To change fast, organizations have to be very flexible. Conventional organizational structures are very rigid and bureaucratic and do not support rapid change. One sure way of achieving flexibility is use of project management to support operations and execute new initiatives. Project management is a very powerful tool that supports organizations to deal with current challenges. Therefore, projects management has become an mandatory tool for all most every organization. However if the methodologies not properly deployed, expected results cannot be gained. Majority of organizations do not use a structured approach to manage projects. Lack of good project management methodology, leads to higher failure rate. In the circumstances, the business managers should understand the importance, and benefits of good project management. In the meantime awareness is required as how projects should be integrated with the existing enterprise architecture. This paper proposed several frameworks for adapting project management. If they are applied properly, the effectiveness and efficiency of the projects can be enhanced.

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