

# The Way of Establishment of the Organization's Project Management Process<sup>1</sup>

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## Abstract

This paper delineates the way of establishment of an organization's project management process based on a Guide to the Project Management Body of Knowledge (PMBOK). It begins by introducing the current situation of organizations in today's changing world. The organizations have to be able to learn to be flexible, adapt quickly to the changing world and survive through achieving organizational strategy and objectives via portfolio management and project management. In order to manage portfolios and projects efficiently and effectively, the organizations should develop their own processes, their own portfolio management process. In the Project Management Institute's view, the project management process is stated as "the process ensures the effective flow of the project throughout its life cycle. This process encompasses the tools and techniques involved in applying the skills and capabilities." (PMBOK Guide, 2013, p.47) By developing their own project management process, the organizations take benefits as follows: Enhance the organizational ability to meet organizational strategies and objectives, obtain greater business value, provide a structural way, increase the project success rate, be the outcome significantly better, complete more projects on time and under budget, occur no surprises.

This paper focuses only on project management process. Before explaining it in detail the key terms are defined based on standards such as PMBOK, Projects In Controlled Environments version 2 (PRINCE2) and International Organization for Standardization (ISO). Next it describes the benefits and challenges of developing project management process. Finally, this paper proposes a new way for establishing of an organization's project management process.

**Key words:** *Establishment of an organization's project management process*

**JEL code:** Z00

## Introduction

The world has changed rapidly and dramatically due to globalization and advances in technology in the last few years. The world! Everything in the world! To be able to adapt to rapidly change, the organizations have to change themselves in order to survive and thrive in this changing world. They must develop new products, new services and new businesses,

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<sup>1</sup> *Second Editions are previously published papers that have continued relevance in today's project management world, or which were originally published in conference proceedings or in a language other than English. Original publication acknowledged; authors retain copyright. This paper was originally presented at the 4th Scientific Conference on Project Management in the Baltic States, University of Latvia, April 2015. It is republished here with the permission of the author and conference organizers.*

improve their business processes, design strategies to enter in the new markets, maximize their market sharing rate, increase their margin, decrease their cost, update their internal technology or be compliant with regulations.

In order to realize these aims, the organizations should select the right works and do the right works. In addition, doing the right work is not enough, doing the right works in the right manner is necessary. The organizations achieve these as using two tools: Portfolio management and project management. The portfolio management, a tool for doing the right works, is defined in the standard for portfolio management as “the coordinated management of one or more portfolios to achieve organizational strategies and objectives.” (The Standard for Portfolio Management, 2013, p.17) The focus of the portfolio management is to assure that the right projects or programs are selected, prioritized and done. According to the standard for portfolio management, the three process groups are defined as follows: Defining, Aligning, Authorizing and Controlling. In addition, there are five knowledge areas: Portfolio Strategic Management, Portfolio Governance Management, Portfolio Performance Management, Portfolio Communication Management and Portfolio Risk Management. (The Standard for Portfolio Management, 2013)

The project management is a tool for ensuring that the project is done right, achieved the project objectives, completed on time, within budget and to expected quality. The definition of project management given in the Guide to the Project Management Body of Knowledge (PMBOK) is “the application of knowledge, skills, tools, and techniques to project activities to meet project requirements.” (PMBOK Guide, 2013, p.47) According to the PMBOK, the five process groups are defined as Initiating, Planning, Executing, Monitoring and Controlling, Closing and ten knowledge areas are defined as Project Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communication Management, Project Risk Management, Project Procurement Management and Project Stakeholder Management.

To manage efficiently projects and portfolios, most of organizations create project management office, which is abbreviated PMO. As stated in PMBOK, a project management office is a management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques. (PMBOK Guide, 2013, p.554) The main functions performed by PMO are as following: Project / program delivery management, portfolio management prioritization, strategic planning, governance and performance management, standards, methodologies and processes. (The Impact of PMOs on Strategy Implementation, 2013, p.4) Although the PMO has important functions, the most important function is to develop standards, methodologies and processes. Establishing an organization's project management process, program management process and portfolio management process and following them ensure that the projects, programs and portfolios are managed in an efficient, effective and quality way. In addition, the success rate of projects is highly improved and more projects are delivered on time and on budget and the customer satisfaction has increased as a result. On the other hand, the failure rate is reduced.

This paper identifies and defines the major key terms of project management process in order to develop a common understanding of the subject. Having a common understanding helps the reader understand the main subject and the numerous details related to the main subject.

Then, the paper discusses the benefits and challenges of establishing an organization's project management process. Even if it worth to assign organizational resources during project management process development, when will the benefits show up.

Lastly, the author suggests a new way. This way explains how an organization's project management process is developed based on PMBOK, published by Project Management Institute (PMI). The author named it as "The Way of Establishment of The Organization's Project Management Process". This way contains for steps as following:

- Do AS-IS Analysis
- Do TO-BE Analysis
- Do GAP Analysis
- Establish The Organization' s Project Management Process

The figure 1 shows the way of establishment of the Organization's Project Management Process.

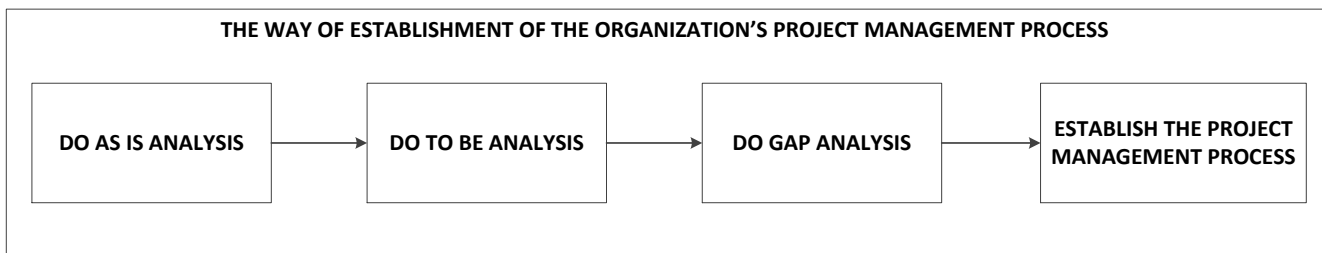


Fig. 1. **The Way of Establishment of Organization's Project Management Process**

## **The Key Terms**

Before addressing the benefits and challenges associated with project management process, it is important to define the key terms used in project management process area so that all readers will have a common understanding. In order to realize that, this section defines the key terms for ensuring that all key terms are known, understood and evaluated when establishing an organization's project management process. In addition, defining key terms helps us to establish accuracy and consistency, and avoid possible confusion and misunderstanding. For each key term this paper presents various definitions that are found in various sources, including PMBOK, PRINCE2 and ISO. PMBOK is a Guide to the Project Management Body of Knowledge. The fifth edition of PMBOK is published by Project Management Institute in 2013. PRINCE2 is a project management methodology and an acronym for Projects in Controlled Environments. ISO, an acronym for The International Organization for Standardization, is an international standard-setting body composed of representatives from various national standards organizations. After all definitions of the key terms are listed, this paper presents the benefits and challenges of project management process.

There are five key terms fundamental to understanding the subject. They are project, process, project management, project management process and project management office. Each key term is unique with its attributes. On the other hand, each term is related to other terms. The

figure shows the key terms and the relationship amongst project, process, project management and project management process.

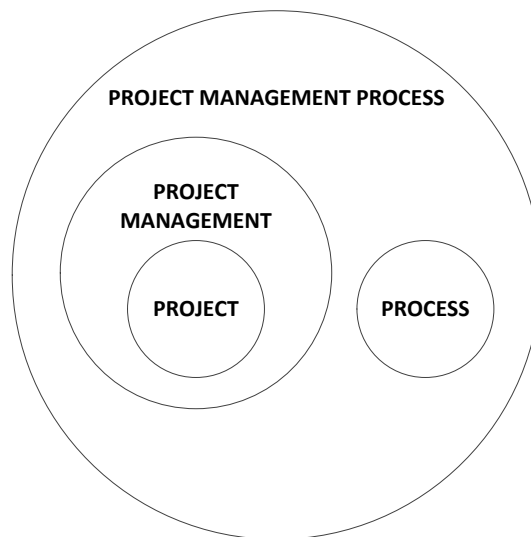


Fig. 2. The Key Terms

The first key term is project. The PMBOK Guide Fifth Edition the global standard for project management defines a project as “a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of projects indicates that a project has a definite beginning and end.” (PMBOK Guide, 2013, p.3) Another definition stated in the Manual Managing Successful Projects with PRINCE2 is that a project is a temporary organization that is created for the purpose of delivering one or more business products according to an agreed business case. (OGC, 2009) ISO10006 states that a project is a unique process consisting of a set of coordinated and controlled activities with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including constraints of time, cost and resources. (ISO 10006:2003, 2003) Wysocki and McGary define a project as “a sequence of unique, complex and connected activities having one goal or purpose and that must be completed by a specific time, within budget, and according to specification.” (Wysocki & McGary, 2003) The other definition of a project stated in ISO 21500:2012 is “a unique set of processes consisting of coordinated and controlled activities with start and end dates, performed to achieve project objectives. Achievement of the project objectives requires the provision of deliverables conforming to specific requirements. (ISO 21500:2012, 2012)

The second key term is process. The definition of process is broad and is varied depending on areas. The process is defined as “a systematic series of activities directed towards causing an end result such that one or more inputs will be acted upon to create one or more inputs.” (PMBOK Guide, 2013, p.551) In ISO 9001:2008, the definition of a process is set of interrelated or interacting activities, which transforms inputs into outputs. (ISO 9001:2008, 2008) Liu and Agah define a process as “a sequence of activities for achieving a goal.” (Liu & Agah, 2009)

The next key term is project management. From the PMI’ s perspective, stated in the introduction section, project management is the application of knowledge, skills and techniques to project activities to meet the project requirements. (PMBOK Guide, 2013, p.5) In ISO 21500,

a project management is defined as “the application of methods, tools, techniques and competencies to a project.”(ISO 21500:2012, 2012) Gray and Larson define project management as “more than just a set of tools; but a result oriented management style that places a premium on building collaborative relationships among a diverse cast of characters.” (Gray & Larson, 2006) The other definition of project management is “the process of controlling the achievement of the project objectives. Utilising the existing organizational structures and resources, it seeks to manage the project by applying a collection of tools and techniques, without adversely disturbing the routine operation of the company.” (Munns & Bjeirmi, 1996, p.81)

The fourth term is project management process. The PMBOK introduced project management process as “ensuring the effective flow of the project throughout its life cycle”. (PMBOK Guide, 2013, p.47) In PMBOK, 47 logical processes are defined and grouped in five process groups. The process groups are Initiating, Planning, Executing, Monitoring and Controlling, Closing. In ISO 10006:2003, there are seven project management processes. These project management processes are interdependency-related processes, scope-related processes, time-related processes, cost-related processes, communication-related processes, risk-related processes, purchasing-related processes. The other standard, 21500:2012, defined five process groups as following: Initiating, Planning, Implementing, Controlling, Closing,

The last term is project management office. The PMBOK defines project management office as following: a management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques. (PMBOK Guide, 2013, p.11) There are three types of PMO: Supportive, Controlling and Directive. The PMO is defined as “a centralized unit within an organization or department that oversees and improves the management of projects.” (Gray & Larson, 2006, p.561) Heldman and Mangago define the project management office as “a centralized organizational unit that oversees the management of projects and programs throughout the organization.” (Heldman & Mangano, 2009, p.7)

## **Benefits and Challenges**

Once the author defined the key terms of project management process it was required to clearly describe the benefits and challenges of project management process. What are the benefits of project management process? Which challenges are existed? In this section, the author will try to answer these questions.

In this century, every organization wants to grow their business rapidly and gains a competitive advantage in their marketplaces. To realize that, every organization should develop their own organizational strategies and objectives and develop appropriate processes to reach their organizational strategies. Project management process is one of them. Developing project management process increases to meet organizational strategies and objectives through projects and obtain greater business values. In addition, the project management process provides a structural way of managing projects. Following a structural way during project management increases the success rate over a wide range of projects. By increasing the success rate of projects, organizations are able to increase income, reduce cost and minimize risks. The outcome of projects is significantly better and more projects are completed on time and under budget. No surprise is occurred. The other benefit of following project management process within

organization is to help optimize performance, because following a process is the only way to optimize what the organization is doing. If there is not a project management process, the projects will be managed in chaos. There is no documentation or existed poorly documentation. The projects will be completed late, over budget, or not met the customer expectations.

The challenges of developing project management process are as following: develop without executive management commitment, poor communications, deal with resistance, neglect the people's values and beliefs, focus only process design and ignore other things.

Table 1

**Benefits & Challenges**

<b>Benefits</b>	<b>Challenges</b>
Increase to meet organizational strategies and objectives	Develop without executive management commitment
Obtain greater business value	Poorly communication
Provide a structural way	Deal with resistance
Increase the success rate	Neglect the people's values and beliefs
Increase income, reduce costs, minimize risk	Focus only process design and ignore other things
Be the outcome significantly better	
Complete more projects on time and under budget	
Occur no surprises	
Help optimize performance	

**The Way of Establishment the Organization's Project Management Process**

In this section of this paper the author will plan to focus on the main topic. In order to ensure the reader has a clear understanding about establishment of the project management process, the author has explained the definition of key terms as following "project", "process", "project management", "project management process" and "project management office" in the previous sections. After that, she has identified the benefits and challenges of developing project management process in detail.

The main topic of this section is to explain how a project management office will develop a project management process based on PMBOK. The Project Management Institute (PMI) has provided guidelines for developing project management process via PMBOK Fifth Edition. There are 47 project management processes grouped into five process groups. These process groups are Iniatiting, Planning, Executing, Monitoring and Controlling, and Closing.

It is very important for organizations to have their own project management process which is often part of an organizational process assets.It could be developed based on any standard such as PMBOK, PRINCE2 or ISO and tailored to the needs of the organization as including

experience, knowledge and professional approach of the organization. This process will allow the organization to obtain managing projects in the right manner.

The project management process should have the following characteristics, but not limited:

- being defined clearly;
- being provided a structural way that is common and repeatable;
- being flexible for adapting to the needs of any project;
- being embedded in the organizational structure;
- being known by everyone within organization and used by all departments.

The author offers a new method for developing a organization's project management process and named it "The Way of Establishment of The Organization's Project Management Process". The way includes the below activities: Do AS-IS Analysis, Do TO-BE Analysis, Do GAP Analysis, Establish the Organization's Project Management Process.

### **Do AS-IS Analysis**

The overall goal of the AS-IS analysis is to get a better understanding of the existing situation and its weaknesses before developing a new organization's project management process. Understanding the existing situation and its weaknesses are basis for the development new project management process. "Do AS-IS Analysis" activity consists of two steps. The first step of the AS-IS analysis is to examine the organizational process assets .Organizational process assets are defined in the PMBOK Fifth Edition as " the plans, processes, policies, procedures, and knowledge bases specific to and used by the performing organization." (PMBOK Guide, 2013, p.27) In the second step, the weaknesses, input of "Do TO-BE Analysis", are identified and documented. Several tools could be used during doing AS-IS analysis such as workshops, group interviews or individual interviews. Existing processes, part of an organizational process assets, should be examined and the weakness of them are identified and documented.

### **Do TO-BE Analysis**

After being completed the first activity "Do AS-IS Analysis", the next activity has to be conducted. The objective of this activity is to develop the new project management process as eliminating the weaknesses of existing project management process. The PMBOK will be used as guideline during this activity. The following tools could be used during doing TO-BE analysis such as brainstorming, workshops, group interviews, individual interviews or expert judgement.

### **Do GAP Analysis**

The third activity is "Do GAP Analysis". The aim of doing GAP analysis is to define the gaps between AS-IS process and TO-BE process. This activity will be conducted after "Do AS-IS Analysis" and "Do TO-BE Analysis". The definition of GAP Analysis, stated in the "Performance Gap Analysis: Tips, Tools and Intelligence for Trainers", is "the process used to determine where you are and where you want to be. In other words, this is when you reveal the desired state of performance and compare it with the current state of performance." (Franklin,

2006, p.2) First of all, the existing situation is defined. Then the existing outcome is identified. After all the desired outcome and process are identified.

### **Establish The Organization's Project Management Process**

The fourth activity is “Establish the Organization's Project Management Process”. The objective of this activity is to establish the organization's project management process. The input of this activity is AS-IS analysis documentation, TO-BE analysis documentation, GAP analysis documentation and enterprise environmental factors. Enterprise environmental factors are referred in the PMBOK Fifth Edition as “to conditions, not under the control of the project team, that influence constrain, or direct the project. Enterprise environmental factors are considered inputs to most planning processes, may enhance or constrain project management options, and may have a positive or negative influence on the outcome.” (PMBOK Guide, 2013, p.29) In addition, the organizational constraints, information technology (IT) constraints and cultural constraints should be considered. After completing the establishment the organization's project management process, training should be conducted.

### **Conclusions**

The value of having a project management process moves the organization forward to remain competitive in the marketplace. This paper offers a new way to develop an organization's project management process. The way described in this paper is the one developed by the author to meet the requirements of effective project management. This way enables that the projects are completed on time and within budget. A standardized, documented and structured project management process assures the project success rate, increases income, reduces costs and minimizes risks. Based on this paper, further research could be conducted based on the other standards such as PRINCE2, ISO 21500: 2012 or etc.



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**Ipek Sahra Özgüler**, a project portfolio manager in TAV IT PMO, has more than 10 years' experience in various areas such as portfolio management, program management, project management, software management, business analysis. She has managed a wide-variety of projects across manufacturing, defence, FMCG (Cola Cola), telecommunication, audit (Deloitte), ICT and aviation sectors and gained broad insights.

In addition, she is a contributing writer of the book "*A Day In The Life of A Project Manager*" which was authored and edited by Frank Saladis and managed by Elaine Jackson in 2013. Her story explained when she decided to develop a multiprocessor project manager's system. She holds a master's degree in Software Management from Middle East Technical University and a Bachelor's Degree from Istanbul University. Ipek is a certified project manager (PMP) and Professional Scrum Master I (PSM I).

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