Maturity Levels of Project Portfolio Management (PPM) and how to set your Own Target Level

By Matti Haukka

Introduction

The degree of using personnel resources for program and project type work processes is increasing in all organizations. It is a fact and a problem that the organizations’ Governance models are not considering this yet. One reason is that management is not even recognizing the changed situation. Even though it is recognized, the challenge is to set the targets regarding the maturity on a reasonable and realistic level.

This presentation is based on several years’ experiences when consulting organizations representing different industries and service business fields as well as the public sector. As a framework for assessing maturity levels this presentation refers to Five Step and Maturity Level Model developed by Project Institute Finland. The model has already been presented in many IPMA Conference papers. It has also been used as the framework and flowchart of IPMA Advanced training course “Managing Corporate Portfolios” instructed by the Author and CEO of Projects of Schiphol Airport Mr. Gerard Geurtjens.

The paper is also launching a new term – Project Allocation Percentage (PAP). PAP is very good indicator to most organizations to define the target level for PPM maturity. Finally, the paper presents an approach how the maturity target is related to PAP.

Different types of projects and portfolios and the need of PPM

The principles of this presentation can be applied to any kind of project portfolio. But in case of a delivery project portfolio where the majority of projects are delivered to external customers, some of the ideas and principles are not so relevant. Therefore, the following questions and the story are highly relevant whenever you have a portfolio of internal projects:

You can ask the question: which is the most critical resource when implementing your strategy: money or personnel resources? I have set this question hundreds of times to management boards and finally, their answer has always been “personnel resources”. That is because you can always get money for good business ideas but if you have a lack of competent resources, that is a more complex problem.

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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. This paper was originally presented at the 26th IPMA World Congress in Greece, published in the Congress Proceedings and video recorded (http://pmgreece.gr/video.pdf). Paper is republished here with permission of the authors and PM Greece, organizers of the 26th IPMA World Congress in Crete.
Then I continue with a question: If your old laptop is not functioning properly anymore, and you need a new one (let’s say that the price of this new laptop would be 1 k€), are you allowed just to go and buy one and take the invoice to your bookkeeper? The answer is always “no”. You have to fill certain documents and get an approval through a certain governance model.

Then I ask: If you have a good development idea and you want to get together a meeting with four of your colleagues (let’s say that the duration of this meeting is two hours, it means that the labour cost of the meeting is app. 1 k€), are you allowed to do this? The answer is “yes, of course”.

The main point of this story is not say that buying e.g. a new laptop should be allowed without any control, or to say that getting together any meeting should get an official permission. Most of the readers have already got my point: The use of real money is always controlled by our governance systems, but the use of personnel resources are not. Even if personnel resources were just said to be more critical.

So what is the conclusion of my story? Typical governance models are controlling the use of money but not the use of personnel resources. If most of the projects are implemented using external resources, you do not have such a big challenge. But if a huge amount of your own personnel resources are needed to implement your projects, you have a big challenge. This challenge can be solved only by Project Portfolio Management of a reasonable maturity level (See figure 1).

**Figure 1: Different types of portfolios**
There are certain prerequisites that should be applied before achieving any of the maturity levels. The basic prerequisites to achieve any of these levels and some real life PPM applications and experiences are described in the following paragraphs.

**Maturity levels of PPM**

To set the right target level we have to understand the Maturity level Model and the prerequisites to achieve each maturity level.

Several Maturity Models regarding PM and PPM have been published. The approach of this model is little bit different compared with the others. It is mainly focusing on “what you are getting out as a result of your PPM” instead of just describing “how well we are performing it”. This Maturity Model helps to set the objectives for PPM and describes concrete steps to develop it. *(See figure 2)*

![Five levels of PPM maturity or steps to develop it](image)

**Figure 2:** Maturity levels and steps to develop PPM based on ABC Project Model™. Knowing the development steps and key elements of a PPM system helps management to set objectives and time schedule for development work

**1st level: Awareness of ongoing projects**

A method of keeping a database of all on-going projects creates the foundation for PPM. This alone brings a challenge. Many line managers would have to start a two-week investigation when being asked which projects are going on in their organization. The first level of portfolio management maturity is reached when this aspect is in order.
The main prerequisites to achieve the level 1 are:

- A definition of a project which should belong to portfolio. The definition should be set so that PPM will cover the most of the project type work in the organization, because small and medium sized projects are representing a big volume in a project portfolio (Project Complexity classification should be applied to make this easier)
- the ownership of all projects must be functioning
- Harmonized Project Management model including decision gates should be applied to all projects of a portfolio

Project owner is the most critical PM role when an organization starts to develop its PM culture. Our experiences with our customers has shown, that if nothing else is happening but the project owners have been clearly recognized and these owners understand their roles and responsibilities, it is already creating a clear improvement when it comes to effectiveness of project work and business results.

If the owners exist, the basic information of all projects is available and there is always somebody who is responsible and aware about the “go/no go” decisions of any project. Only this can make the stage-gate model to function. Certain stage-gate model (decision point model) is of course crucial and all projects of the portfolio must follow this model.

If the necessary prerequisites mainly concerning single PM processes exist, it is quite easy to achieve the maturity level one.

2nd level: Awareness of status and balance of project portfolio

Many would possibly have to start a new investigation when being asked: “What is the status of these projects?” or “Is our portfolio in balance when it comes to strategic objectives and risks?” The second level of maturity is reached when the portfolio reporting is working on regular basis. There is still a long way to go to the stage where projects are systematically evaluated, visible decisions are taken in gates, attention is paid to resources and the strategically most important projects are carried out without delay. When the reporting also covers forecasts of projects’ real benefits and their evaluation continues till the projects are finished, only then can we start talking about advanced PPM.

In order to get reliable information about the project portfolio, a harmonized PM Model is needed. Developing and updating this model is one of the most important responsibilities of a PMO. Another important responsibility is of course to administrate the portfolio. If nobody is doing this it is impossible to give current and reliable information to management. Of course quality of status reporting of single projects should be good enough and reliable.
Level 3: Resource management across all projects and other work

To achieve the 3rd level means that the allocation of resources is continuously known. This cannot happen if the organization has not enough competent project managers with good skills of leading WBS development, time scheduling, work amount estimating, rolling wave planning or using PM software etc. However, the use of project complexity classification helps here. Small non-complex projects are not requiring the same level of planning as complex ones. But still the predefined procedures are needed and all Project Managers should work according to these procedures.

Achieving this level has proven to be the most challenging. Several software tools support these procedures but organizations have not achieved corresponding maturity level and competencies.

Level 4: Systematic and transparent project prioritization considering the availability of resources

To achieve the 4th level PPM Board and strategic level PMO should be established. It is, however, very important that project owners take enough responsibility when it comes to business cases of single projects. This helps PMO in its administrative role and makes it possible for PPM Board to concentrate on its main task – selecting the right projects.

You need the role of PPM Board already on the lower maturity level and it is of course performing project prioritization at least to the certain extent. However, achieving the level 4 requires much more systematic and transparent effort done by management. In a case that PPM board is the same as Management Group, PPM issues should be clearly separated in the agenda or these should be handled in separate meetings. The most important task of PPM board is to select right projects and make prioritization. To do this, they must consider the availability of resources (level 3 needed!).

5th Level: Program and project oriented organization

Real project orientation takes place when an organization is changing its whole organizational structure to be more project and program oriented. Here the role and tasks of PMO can be changed to be part of normal management processes and routines. The ownership and management of projects is the main management approach in the organization. At this level project owners are really responsible over the final business success of projects. When it comes to internal projects the final realization of business objectives forms a major part of their business score cards.
What is the value of projects to your company?

The value of projects to a company should be estimated and management should really be aware of it. This is important to get management awake and start to develop any new PM and PPM models. In a company that is delivering projects to its external customers (delivery projects) the value is well considered. But in the case of internal project portfolio, it usually isn’t.

First, the value can be measured by estimating the significance of strategic change, the need of developing new products and processes etc. Practically the value of projects can be measured by dividing all working processes to project work and non-project work and estimating the amount of resource allocation to both processes (Figure 4). The relative amount of resources allocated to projects is here called Project Allocation Percentage (PAP).

In all cases it should be decided which part of the entire organization is considered when counting the PAP. Usually it is restricted to employees who have their own computer workstation. Sometimes you are considering only a certain BU or function.

In too many companies the amount of resources allocated to project work is surprisingly big but not managed in a proper way and this should be noticed better by management. Figure 5 illustrates this problem.
Figure 4: The use of resources are finally divided into the recurring processes and project or program processes. The relative amount of the latter is called PAP.

Distribution of work

Which tasks should be managed through project processes:

- Bars illustrate the distribution of working hours within an organization, which has several projects

Figure 5: Typical situation is on the left. Management effort is used in the big projects only and huge amounts of medium and small size projects are left without. Solution on the right is based on the use of project complexity classification, which is setting the right level of management effort when it comes to a single project. However, PPM system should consider all projects.
Target level for PPM related to PAP

Depending on the value of projects, the management should set the development objectives and estimate the amount of development effort.

The following figures are illustrating the recommended target level related to PAP. As we can see the PAPs are overlapping. Of course other factors affect as well, but recognizing the PAP, could be a way to wake up even top management to understand the importance of PPM.

To set the right target level we have to understand the Maturity level Model and the prerequisites to achieve each maturity level. Finally, the presentation gives the recommended target level related to the use of resources for projects.

**Target level for PPM Maturity related to PAP**

**PAP 0-15 %**

- The number of projects is quite small
- PPM is not an issue
- Few large projects usually exist
- Quite stable business environment

![Figure 6: The target level 1](image-url)
Target level for PPM Maturity related to PAP

PAP 10-25 %

- The number of projects can be relatively high
- Resources must be allocated in PPM administration
- Changing business environment

Main Outputs
- Produces basic information for project prioritizing
- Produces general information over portfolio status
- Portfolio reports (both operative and strategic) available

Figure 7: The target level 2

Target level for PPM Maturity related to PAP

PAP 20-40 %

- The number of projects is high

Main Outputs
- Reports on resource usage vs. capacity
- Resource planning reduces over allocation of human resources
- Pro-active planning of future resource needs

Figure 8: The target level 3
Target level for PPM Maturity related to PAP

**PAP 30-50 %**

- PPM Governance model should be centralized enough
- Rapidly changing business environment and the speed of change is a critical success factor
- Companies tend to have too many projects at the same time and due to this implementation of strategy is too slow

**Main Outputs**
- A scoring model or another systematic tool to prioritize
- Final authority to initiate new projects is organized as a part of organization’s governance model
- Projects are prioritized in a way that allows project’s initiation only if resources are available (not too many projects at the same time any more)
- Project lead-times shorten essentially

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**Figure 9: The target level 4**

Target level for PPM Maturity related to PAP

**PAP 45-100 %**

- All companies delivering projects to their external customers belong to this group
- Companies which are using external suppliers or automation to run routine processes and the speed of change is extremely important for business success

**Main Outputs**
- The strategy is implemented more efficiently
- Less hierarchy in permanent organization
- Line managers become more project orientated and take responsibility over the project success
- Better ability to measure project success from the business point of view

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**Figure 10: The target level 5**
Conclusion

First of all organizations should recognize the amount of personnel resources used for project type work. It means that management must be aware of organization’s PAP. Experts who are worried about the development of organizations PM Culture can use this fact when promoting PPM. This awareness can be used when setting objectives and arguing investments for PM Culture development.

If you are not using a lot of resources for projects and you just have a couple of projects at the same time, the PPM is not a big issue for you. In the other hand if most of your personnel resources are working in projects, the origination and governance model should be project-orientated. Even if the relation is close to fifty-fifty, the management focus should be more project-orientated. The work which is done in unique project processes is always more challenging and includes more risks compared with recurring processes.

When implementing a PPM system, the question is actually of the need for changes in an organization’s management culture. The time allocated to management should be reconsidered, in middle management in particular. This will not happen unless the evaluation and reward systems in organizations are changed in order to pay attention to the successes in project work as well. The more important strategic change and development are to organizations, the more crucial these issues will become. This requires that a strong project culture is developed at all levels of organisations.

When developing PM culture, PPM maturity levels may help an organization to progress step by step. But before developing PPM, organizational competence and processes of individual projects should be on a certain level. A generic project model for individual projects should be implemented and clear classification criteria for project types and complexity levels should be defined.
References

[6] Matti Haukka, Critical Project Management (PM) roles on different Project Portfolio Management (PPM) Maturity levels, IPMA World Congress, Rome, June 2009
[8] Matti Haukka, Maturity levels of Project Portfolio Management and How to set your own target level?, IPMA World Congress, Crete, June 2012
[11] Project Institute Finland ltd, ABC Project Model™ ver. 3.0
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Matti Haukka has provided tailored project management training for various companies and worked as a consultant for several organizations of different fields since 1989. At Project Institute Finland he has been in charge of developing the ABC Project model™ and held numerous presentations about the topic in international project management conferences. Today he mainly trains experienced project managers, members of steering groups and board of directors and provides consulting services for clients who want to develop their project management cultures. His specialty is project management models and portfolio management. He has been the main instructor of yearly IPMA Advanced Course “Managing Corporate Project Portfolios” since 2006. He also functions as the leader of “Portfolio Management and Program Management – SIG team” in Project Management Association Finland.

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