

# **The Business Case for a Project and Portfolio Management Platform**

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## 1. Executive summary

Delivery of projects grows and improves an organization. Projects are temporary endeavours by an organization to improve service, develop products or effect change. Delivering projects requires a significant portion of an organization's resources. By improving the efficiency of an organization to deliver projects and selecting high value projects, you maximize the return on your money invested in the projects.

One way to improve efficiency in an organization is with tools. Tools help manage information, perform calculations, share information and communicate. Tools supporting the project management industry are at a turning point. Previously diverse groups of products supporting project selection and delivery are now integrated into one platform - a Project and Portfolio Management (PPM) platform. By utilizing the product, you have the opportunity to drive inefficiency out of the organization and monitor a project from inception through to closure.

Moving to a new PPM platform is a project in itself. As such, you need to know what the benefits are to moving to a new platform and quantify those benefits in a business case. This paper looks at how a PPM platform can improve the efficiency in your delivery process.

This paper outlines a scenario for a mid-sized organization. With this scenario, it's demonstrated how the use of a PPM platform can drive \$1.5 mil of efficiency annually and reduce a project's duration by 15 days. Utilizing the business case structure described you can apply the parameters for your organization to understand the impact a centralized PPM platform can have to your organization.

## 2. What is PPM?

Historically, project selection and project delivery were treated as separate processes. A group of people would decide what projects should be done and these would be handed off to another team to be delivered. These separate groups would have separate systems to track their projects. In recent years, there has been recognition that both processes are in fact one continuous process with different roles being involved at different points in time.

Project Portfolio Management (PPM) encompasses all elements of the project lifecycle from when it is an idea through to when it is closed. As well, PPM puts emphasis on categorizing projects into portfolios: typically by business unit or strategic initiative.

The book *Project Portfolio Management: A View from the Management Trenches* (LASTEPMC, 2009) suggests your ability to answer the following key questions is a measure of how well you have implemented PPM in your organization.

1. Are we investing in the right things?
2. Are we optimizing our capacity?
3. How well are we executing?
4. Can we absorb all the changes?
5. Are we realizing the promised benefits?

In order to answer these questions, you need information about projects. Examples of key information include:

- Expected cost
- Return on investment
- Timeline
- Magnitude and timing of benefits
- Consumption of resources (human and financial)

Each of these need to be measured to make decisions. Manually trying to record, track and report on this information becomes difficult to do. It is even more difficult when the information is aggregated across projects. To make the PPM process easier, PPM tools are required.

*PPM is “The centralized management of one or more portfolios, which includes identifying, prioritizing, authorizing, managing, and controlling projects, programs, and other related work to achieve specific strategic business objectives.*

*~Project Management Institute, 2006*

### 3. PPM tools to improve project delivery

Wiktionary.org defines as tool as, “A mechanical device intended to make a task easier”. For the purposes of this discussion, we will refer to a tool as any device intended to make PPM easier. The past century has seen the introduction of a number of PPM tools as depicted in Figure 1 - Evolution of PPM Tools.

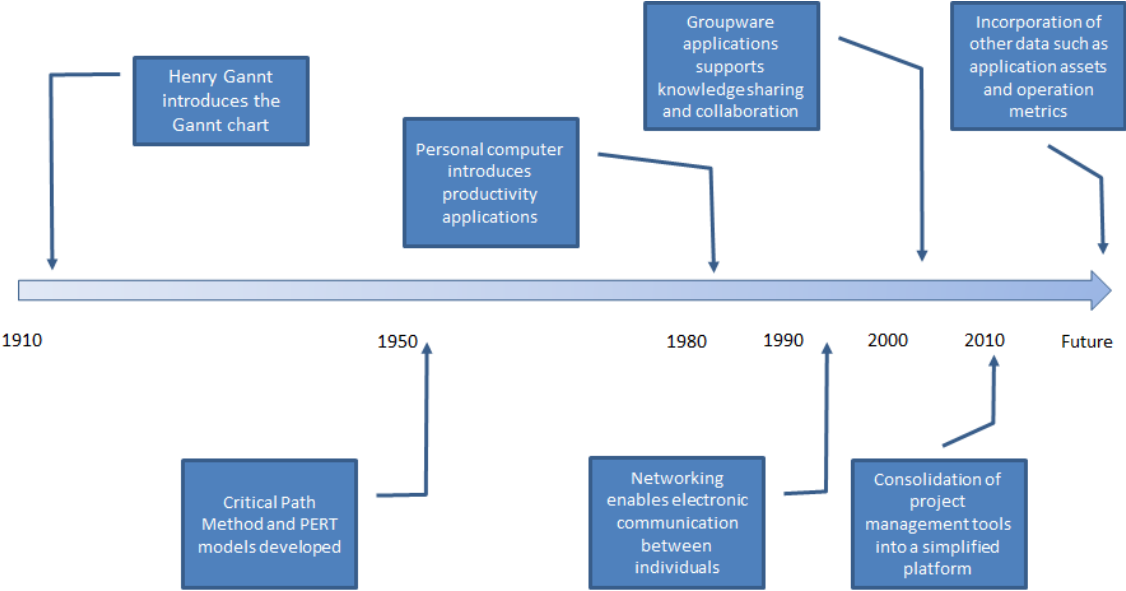


Figure 1 - Evolution of PPM Tools

One of the first tools for Project Management (familiar to all Project Managers) is the Gantt chart named about its founder, Henry Gantt who designed it around 1910-1915. A familiar example is in Figure 2 - Sample Gantt Chart. The Gantt chart enabled people to see a time-based depiction of the tasks required to complete a project.

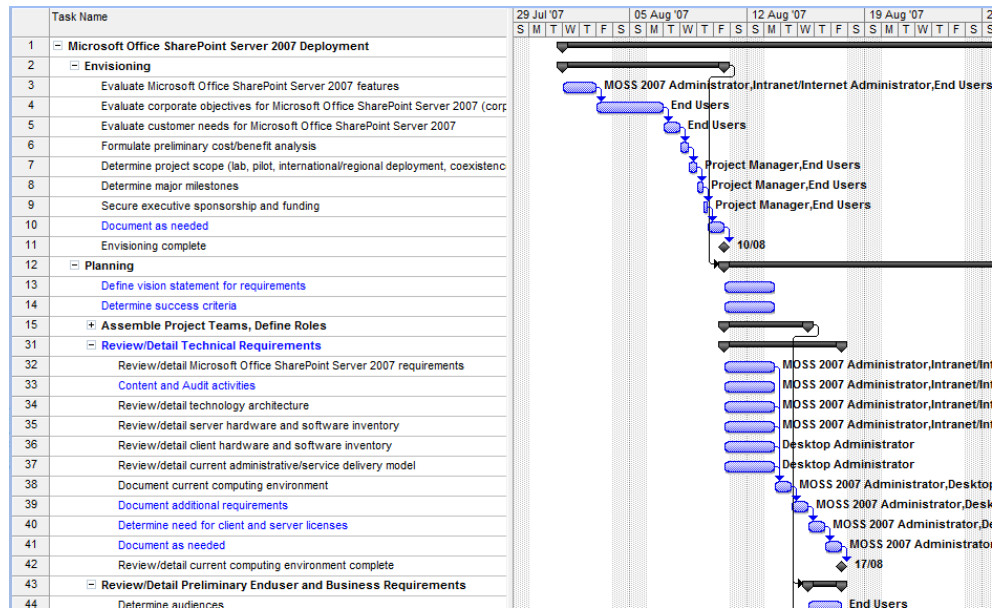


Figure 2 - Sample Gantt Chart

In the 1980's the personal computer introduced a number of productivity tools to support the project manager such as the following:

- Visicalc was released unleashing to the world “management by spreadsheet”. A number of tasks from managing financials to itemizing activities become much easier for a Project Manager
- Word Processors became available for the personal computer making it easier to prepare documentation for projects
- The first version of Microsoft Project was released in 1984. The automation of Gantt charts provided new flexibility for the Project Manager

Electronic communication increased substantially in the 1990s. It becomes easier to share information with widespread adoption of Local Area Networks (LANs). Mainstream use of tools such as email and shared drives quickly followed the deployment of LANs. This allowed a project team to communicate with each other both in the office and across distances.

Through 2000-2010 there was a move from personal productivity to group productivity. Groupware applications become more robust and adopted in organizations. These technologies made it easier to collaborate on deliverables and share knowledge among a project team.

By 2010 formally disparate applications to support a project team moved together to a consolidated platform. The PPM application of 2010 has high expectations placed on it by its user community as

demonstrated by Gartner's (Stang & Hanford, 2010) PPM application definition in the June 2010 report on IT Project and Portfolio Management:

*IT PPM applications primarily automate and centralize the collection of data about demand, costs, schedules and resources for investment prioritization, as well as the execution of the programs and projects delivering new technologies and other IT assets to the business. They can also be used to assess, justify, rationalize and otherwise control the investment in ongoing IT operations or specific applications.*

Gartner goes on further to say:

*The market has matured extensively from project time and schedule support to the holistic management of IT, as well as business initiatives, resources and spending.*

Where we will go next? Although consolidated, the platform still needs explicit input from the various team members. Next releases of the platform will gather information from the working environment reducing the need for a Project Manager to collect status.

For instance, on a software development project, a source code system that integrates with a project management system can automatically mark a development task as complete when the code unit is promoted to system testing. As an example, Microsoft Team Foundation Server used by a software development team will soon have connections to Microsoft Project Server.

With respect to the future of PPM tools, Gartner suggests:

*...vendors are also positioning their products to support three main (but not exclusive) PPM scenarios in varying degrees, including IT planning and control (ITPC), application portfolio management (APM), and enterprise PPM (EPPM). The 2010 Magic Quadrant reflects a continued pursuit to connect core PPM functions to other applications that log and track activities and events (other than formal projects) incurring additional IT expense and consuming resources. Tracking just enough data to account for the support and maintenance of existing applications and IT services can provide further insights into the annual IT consumption of time, people and money.*

The PPM applications of today can provide significant efficiencies and decision support to those organizations adopting them. To make the leap of implementing a new PPM application, let's look at how to construct a business case.

## 4. Creating the business case

Organizations have inefficiencies built into their project delivery lifecycle. These inefficiencies are sometimes not acknowledged or they are acknowledged but their impact is not quantified. Uncovering the inefficiencies in a manner that quantifies their impact provides an organization with the ammunition to address them through process and tool improvements.

Through our eight years of experience of implementing project management tools and processes, Agora has identified common themes that affect how efficiently projects are delivered. By understanding the parameters with which the themes manifest themselves Agora can quantify their impact. A plan for process and tool improvement can then be formulated which targets the largest impact areas.

This paper will take you through a number of scenarios utilizing common problem areas. The scenarios use the following parameters in the discussion. You can compare this to your organization.

Number of people using time entry	300
Annual number of medium and large projects	100
Average project length (months)	4
Number of document and gating approvals for a project	8
Number of people approving documents and gates	5
Internal daily rate	\$600

A typical organization with these parameters could expect to realize the following savings by improving their project management process and utilizing Microsoft Project Server 2010.

	Efficiency gain (annual)	Schedule gain per project (days)
Project planning and delivery	\$512,000	5
Project status reporting	\$384,000	-
Time entry	\$312,000	-
Approvals	\$160,000	8

Planning resources	\$128,000	2
<b>Total</b>	<b>\$1,496,000</b>	<b>15</b>

Efficiency gain is an estimate of the amount of money that an organization could save. Looked at another way, it is the gain in project throughput that could be obtained with improved efficiency. The schedule gain is the duration of time that could be removed from a project by avoiding delays.

#### 4.1. Scenario: Project Planning and Delivery

Organizations typically plan projects annually. Heads of business units consolidate all the ideas for projects, follow an evaluation mechanism and produce the final list that receives an approved budget. These projects are then handed off to a delivery team for execution. Although not directly involved in the delivery, the originating business unit tracks the progress of the project through execution.

##### *Problem*

The typical issue in this situation is planning and delivery is performed separately. Each undertaking is performed by different groups of people which results in at least two different systems being used (one for planning and one for delivery). Often each business unit has their own system for planning which results in projects originating in many different places.

Since separate systems are used for planning and delivery, the handoff from one to the other requires that the project be setup twice. The specific issues with this situation are:

- Extra labour to re-key data
- Mistakes made in data transfer
- Different terminology for information between systems
- Project traceability issues with the possibility of different project numbers or names between systems
- Delay in project start-up due to waiting for project delivery setup
- Ongoing alignment of project information during execution requires additional labour

##### *Impact*

Let us assume it takes four hours to setup a new project when it moves from planning to delivery. The following amount of time is lost on an annual basis:

$$1 \text{ person} \times 4 \text{ hours each project} \times 100 \text{ projects} \\ = 400 \text{ hours}$$

The frequency of updating project information is typically weekly. Aligning the two systems would require two people (one for each system). Assuming it takes two hours per week to align the systems the following time is lost on an annual basis.

$$2 \text{ people} \times 2 \text{ hours} \times 16 \text{ weeks} \times 100 \text{ projects} \\ = 6400 \text{ hours}$$

The total financial impact is:

$$\text{\$600 daily rate} * \frac{400 \text{ hours} + 6400 \text{ hours}}{7.5 \frac{\text{hours}}{\text{day}}} \\ = \text{\$512,000 annually}$$

As well, if you assume the lag between project approval and setting it up in the new system is 1 week, you could gain 1 week of schedule time on all projects if the data did not need to move from one system to another.

### *Solution*

The solution to the problem is to have a single platform for project planning through to delivery. This eliminates the need of re-keying information and trying to maintain it in multiple systems. With a single platform, the efficiency and schedule gains can be realized.

Microsoft Project Server 2010 combines the Planning and Delivery process into a unified platform. Beginning with capturing demand to project prioritization to project delivery, all information is captured and stored in one central place.

## **4.2. Scenario: Project Status Reporting**

Project status reports provide key information about a project to the stakeholders. Important decisions are made based on content of the status report. Status reports often go through various reviews before being presented to stakeholders.

In most organizations, status reports are produced on a weekly basis according to a set schedule.

### *Problem*

Preparing status reports requires a significant portion of a project manager's time. Information such as task status, financials, risks and issues typically has to be gathered from various sources. Once the information is prepared, the project manager has to spend time ensuring someone such as a Program Manager reviews it or Portfolio Manager before it is sent to larger distribution.

### *Impact*

If we assume aggregating information for a status report takes two hours per week per project, the following amount of time is lost annually:

$$1 \text{ person} \times 2 \text{ hours} \times 16 \text{ weeks} \times 100 \text{ projects} \\ = 3200 \text{ hours}$$

If we assume each status report takes one hour of a project manager's time to chase approvals before it is distributed, the additional amount of time is list:

$$1 \text{ person} \times 1 \text{ hours} \times 16 \text{ weeks} \times 100 \text{ projects} \\ = 1600 \text{ hours}$$

The total financial impact is:

$$\text{\$600 daily rate} * \frac{3200 \text{ hours} + 1600 \text{ hours}}{7.5 \frac{\text{hours}}{\text{day}}} \\ = \text{\$384,000 annually}$$

### *Solution*

To address the status reporting problems two things are required: central store of project information and a document approval process. Microsoft Project Server 2010 is a central store of project information including schedules, documents, risks and issues. It utilizes a workflow engine that enables approval processes.

#### **4.3. Scenario: Time Entry**

Time entry is used to understand the effort resources have contributed to a project. In some cases, time entry is used for billing purposes, either for external resources to bill their time or cost allocation between business units within an organization.

Resources are assigned to projects and tasks within those projects. Resources then enter their time on a timesheet against those tasks. Often a project manager will be required to approve the timesheet prior to it becoming final.

### *Problem*

When a time entry system is disconnected from a project management system manual effort has to be expended to align the two systems. Tasks in the project management system need to be configured in the time entry system. This can lead to lag for resources waiting on time entry tasks to be set up and raises the risk of misalignment between the

time system and project system. Even if the two systems are integrated, the user has to deal with two separate user interfaces for managing tasks.

### *Impact*

With a separate time system and a project system inefficiencies are introduced due to maintaining information in two separate user interfaces. Assuming 15 minutes per week of a resources time is lost due to inefficient timesheets the overall annual impact is:

$$300 \text{ people} \times 15 \text{ minutes} \times 52 \text{ weeks} = 3900 \text{ hours}$$

The total financial impact is:

$$\text{\$600 daily rate} * \frac{3900 \text{ hours}}{7.5 \frac{\text{hours}}{\text{day}}} = \text{\$312,000 annually}$$

### *Solution*

The time entry system and project system should be on the same platform. In this way, project tasks and time entry tasks are automatically aligned. As well, the user interface should be unified providing a better user experience.

Microsoft Project Server 2010 timesheet functionality ties project tasks with time entry tasks. As well, it provides the additional flexibility of entering time against administrative tasks and projects.

## **4.4. Scenario: Approvals**

During the lifecycle of a project, approvals are required for various gates and documents. For instance, Finance may have to sign-off to initiate a project and an Architect may have to sign off on a design document.

The Project Manager is usually responsible for collecting and tracking the sign-offs. If an organization has an Audit group, the Project Manager may be asked at some point during the project to demonstrate that sign-off has occurred.

In many cases, approvals are provided from the approver to the project manager through an email. It is the project manager's responsibility to track the emails and pursue the late approvers.

### *Problem*

Approval by email is difficult to track. Even if the project manager maintains a list in a spreadsheet of who has approved it is still not the authoritative source of the approval.

Chasing approvers for approval is not an effective use of a project manager's time.

Tardiness in getting approvals often has a schedule impact on projects should a project not proceed until sign-off has happened. Email approvals makes it difficult to measure who is typically late with approvals and which documents or gates take the longest to get approval.

#### *Impact*

If we assume it requires 30 minutes per approval for a project managers to ensure an approval is obtained and track it appropriately, the following time is lost:

$$1 \text{ person} \times 0.5 \text{ hours} \times 100 \text{ projects} \times 8 \text{ approvals} \\ \times 5 \text{ approvers} = 2000 \text{ hours}$$

The financial impact would then be:

$$\$600 \text{ daily rate} * \frac{2000 \text{ hours}}{7.5 \frac{\text{hours}}{\text{day}}} = \$160,000 \text{ annually}$$

If we assume that the use of automated reminders and exception reports can shorten the approval time by one day per approval, then eight days duration could be gained in the project schedule.

#### *Solution*

A workflow solution that has approval infrastructure would alleviate the need for the project manager to track the approvals. A report could be produced which lists outstanding approvals. As well, for process improvement, reports can be produced which list the time required for each gate and document approval.

Microsoft Project Server 2010 uses workflow that enables approval processes. The status of all approvals can be reported on through the built in Business Intelligence tools.

### **4.5. Scenario: Planning Resources**

Resources are committed to a project upon project approval. Working together, a project manager and resource manager work assign resources to the project roles.

#### *Problem*

Often project managers and resource managers will keep they own local resource plans. They would occasionally synchronize their plans to update each other on resource availability. This requires manual effort on the part of the project manager and resource manager. As well, the information becomes stale in between the project manager and resource manager synchronizing their information.

#### *Impact*

With local resource planning, the time lost with the project manager and resource manager is:

$$2 \text{ people} \times 30 \text{ minutes} \times 16 \text{ weeks} \times 100 \text{ projects} \\ = 1600 \text{ hours}$$

The financial impact is:

$$\$600 \text{ daily rate} * \frac{1600 \text{ hours}}{7.5 \frac{\text{hours}}{\text{day}}} = \$128,000 \text{ annually}$$

Centralized resource planning we will assume 2 days duration could be gained per project.

#### *Solution*

With centralized resource planning project managers and resource managers would have a central view of resource availability removing the need to synchronize local resource plans.

Microsoft Project Server 2010 has full resource management capabilities including a central store of resource information and reporting capabilities.

## 5. Don't forget about risk

So far, we have focused on financial and schedule benefits. Risk management and risk avoidance can be a significant contributor to your business case.

Risk can be quantified. In his book “How to Measure Anything” (Hubbard, 2007), Douglas Hubbard provides an excellent discussion about techniques to measure risk.

Let us look at some risk areas that might apply to your organization by not having a PPM platform.

### 5.1. The projects you choose to execute are the wrong projects

An ad-hoc approach to selecting projects means you run the risk of selecting projects with mediocre benefits while skipping projects of high value. This reduces the possible return on your investment dollars. A systematic approach reduces the risk of choosing projects that aren't the right fit for your organization.

### 5.2. You currently don't meet industry compliance requirements

As part of corporate responsibility organizations need to make the right decisions for their shareholders and ensure that things are run to maximize the value to the company. Compliance regulations are put in place to protect the shareholders.

The impact to the company is potentially fines from regulatory agencies and loss of faith in the leadership from the shareholders.

A PPM tool provides a way to implement and report on processes required for compliance.

### 5.3. You are not able to produce information for audit

Large organizations usually have an audit function that checks that business processes are being followed for project selection and delivery. Without an adequate platform in place, it is difficult to demonstrate processes are being followed. In addition, you cannot automatically detect the projects that are at risk.

The impact is audit may miss the projects that are at most risk.

### 5.4. Existing tools falling out of support

Your organization may be in the situation that legacy applications supporting PPM are falling out of support. They may be on old technology for which it is difficult to find resources to diagnosis problems or implement changes.

The impact to the organization is that should the tool fail in the environment, the users will not be able to accomplish the tasks associated with the tool.

## 6. First steps for your organization

To take the first steps to a new PPM platform within your organization start with finding an Executive champion. As stated by Gartner (Stang & Hanford, 2010):

*When management agrees upfront that PPM is a necessity, the business case for an aggressive PPM budget is easier to win.*

Various studies with respect to resource management, demand planning etc. may already exist within your organization. Review what has historically been investigated. This provides a good starting point to structure conversations with PPM stakeholders and users.

Find a diverse group of people who touch PPM and select representatives. Examples of different groups include:

- Heads of Business units
- Portfolio Managers
- Project Managers
- Resource Managers
- Delivery staff
- Audit
- Finance

Within these groups, find the consistent themes of opportunity gain.

Using the examples provided in this document, quantify the impact of the current issues surrounding PPM in the organization. Consider the risks you are taking by not moving to a new PPM platform.

With the combination of reviewing existing documentation, interviewing staff and quantifying the impact to your organization, you will get a picture of the opportunity to improve your organization with a PPM tool.

## 7. References

- Hubbard, D. W. (2007). *How to Measure Anything: Finding the Value of Intangibles in Business*. Hoboken: Wiley.
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- Stang, D. B., & Hanford, M. (2010). *Magic Quadrant for IT Project and Portfolio Management*. Gartner.