IT Portfolio Management

BADM 559 – Enterprise IT Governance

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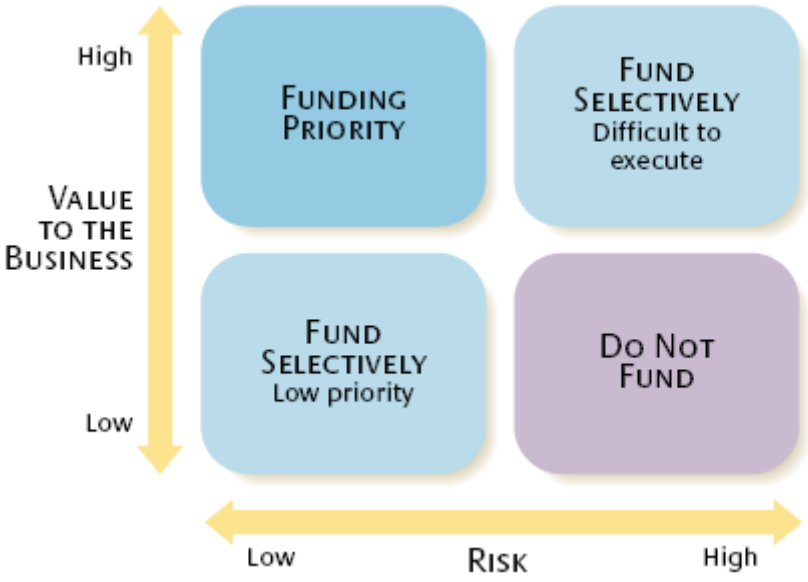
Abstract

With the IT budgets of organizations increasing in the recent years, IT Portfolio Management has experienced significant attention. It has also become one of the main items for concern for the CIOs. This paper will encompass the details about the need for IT Portfolio Management in organizations, how it is aligns with the business strategy and research on best practices in the field of IT Portfolio Management. Also, it will address the issue of IT portfolio management maturity. With the help of a detailed example, the report will mention how IT Portfolio Management is implemented within an organization and the results that have been achieved.

Introduction and Evolution of IT Portfolio Management

The IT budget in any organization has increased dramatically in the past years. As the companies continue to use IT to differentiate themselves from their competitors and keep up with the developments within the organization (mergers, acquisitions and internal development), IT budgets will continue to increase and play an important role within an organization. The other aspect that is going to increase is the ROI on the investments and value realization. From a CIO's perspective, it will be important to make sure that the investment is sound and is going to achieve the results for the organization. As per a Forrester report, total global spending on technology goods, services, and staff, the global IT operating budget from a CIO perspective, will reach $2.4 trillion in 2008, an 8% increase from 2007. This shows the depth of IT investment going forward. The following figure shows the basic concept behind portfolio management.



Source: Best practices in IT Portfolio Management - Mark Jefferey and Ingmar Leliveld

Evolution of IT Portfolio Management

The basic concept of IT portfolio management started gaining acceptance in organizations as the IT budgets increased. However, it was not until later that the true importance of portfolio management was felt. This was mainly due to the complexity in the growing IT budgets and lack of quantitative tools that could be applied to the projects evaluation. The IT projects within the organization were also impacted due to this. The project management institute published the following information regarding the success rate of projects:

1. 72% of IT projects are late, overbudget, lacking in functionality, or never delivered.
2. Of the 28% successful projects, 45% were overbudget and 68% took longer than planned.
3. Only 52% of the projects realized strategic value.

There were various reasons that led to the above results. There were too many projects that had been initiated within organizations and there was a resistance in "killing" the projects. Most of the projects once initiated lost their strategic focus and hence did not deliver the value that was promised. Therefore, there was a need for creating a right mix (portfolio) of projects that resulted in maximum business benefit. There was a need for balancing the business needs, technology changes, resources and the changing environment. Hence, IT Portfolio Management came into prominence.

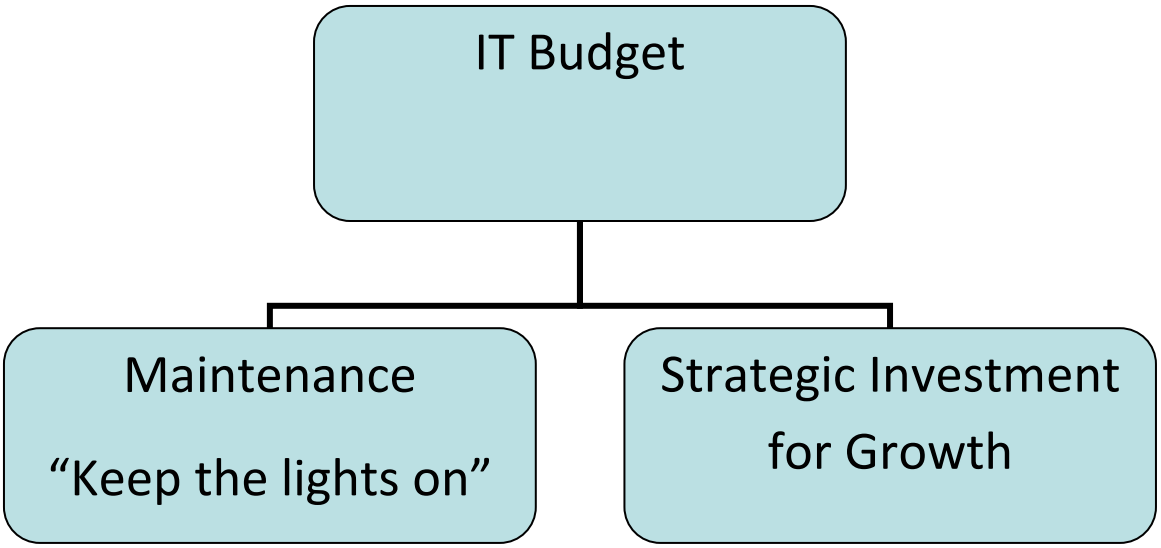
Before an organization can adopt the portfolio management practices and especially the portfolio management tool, it needs to critically evaluate the different objectives. There needs to

be some level of IT maturity before the organization can take advantage of adopting portfolio management. For example, an organization can benefit from portfolio management only if there are certain standard processes and basic level of business alignment present. Also, it makes sense to use a portfolio management process when the organization is able to understand the results. Without these basic factors, the organization will not be able to extract any benefit from using the portfolio management process or tool. All the basic criteria are summarized below:

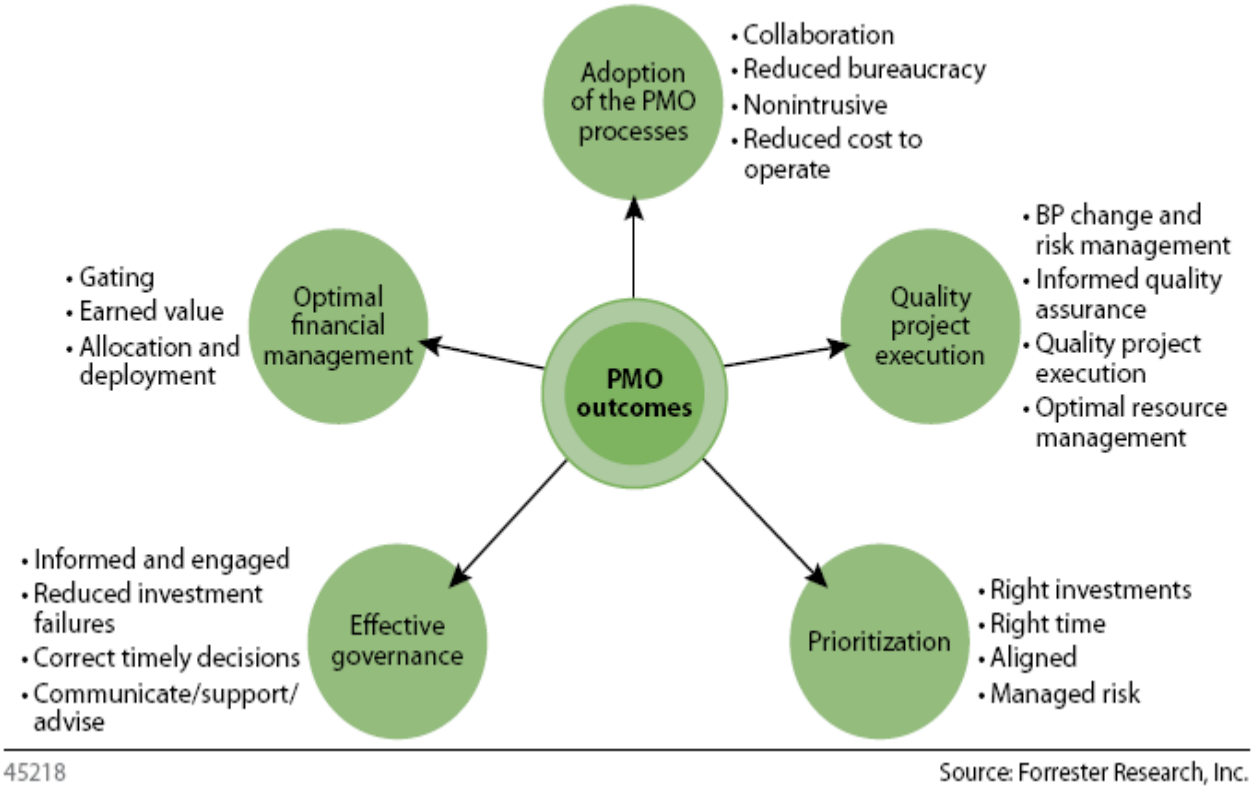
- Standardized project development process
- Basic business alignment (business case approach) to investments
- Organizational readiness to interpret the results

IT Portfolio Management and CIOs

IT portfolio management helps the CIOs and the organization to prioritize the IT spend as per the different parameters set forth by the organization. It is important for the organization to identify the parameters for the selection of portfolio and then pay close attention to the progress of the projects based on these parameters.At a high level, it helps the CIOs differentiate the IT spend in “keeping the lights on” / maintenance kind of activities versus “strategic”/future development and growth expenditure. The figure below illustrates the division of the IT budget at a very high level. A strong look at a company’s IT budget against these high level parameters can relay significant information regarding the IT spend.



Another aspect that remains a top priority for the CIOs is IT governance. IT portfolio management helps CIOs in IT governance. The figure below illustrates the importance of the Project Management Office (a governance mechanism) for IT projects and how Project Portfolio Management (PPM) can help the CIOs achieve the different objectives laid out by the PMO. It can be observed that all the outcomes from a PMO can be more effective by adopting the portfolio management process. Portfolio management makes sure that the right investments are made in the IT projects and the risk is managed. Adopting the portfolio management process helps balance the risk and value and choose the projects that are best aligned with the organizations needs and goals. All of these factors lead to effective governance as the CIOs are better informed and make effective decisions.



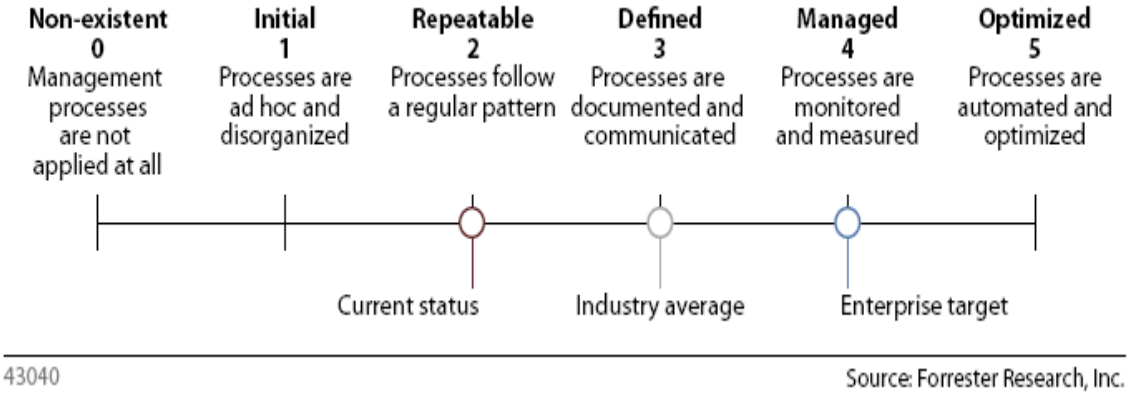
Industry usage of IT Portfolio Management

Although portfolio management is widely used in some form or the other in most of the organizations, its usage across the different industries varies. As per a recent Forrester report, finance and retail industries were found to be the heaviest users of portfolio management with 72% and 63% of the respondents mentioning that they use IT portfolio management. Also, the smaller companies lag behind bigger ones as far as adopting portfolio management was concerned. The usage of portfolio management varies from using excel spreadsheets to sophisticated tools.

Portfolio Management Maturity Model

As in the case of the maturity model related with software development, there is a maturity model associated with the portfolio management. A "mature IT organization" is not only able to effectively allocate the budget between the different segments but it also able to realize the value from the investments. This is a key aspect that organizations need to focus on as they experience significant growth.

There are different stages that can be related with portfolio management. At a high level, the stages can be from Non-existent to Optimized as shown below. The key thing to note is that the organizations that adopt portfolio management go through this cycle and move from Non-existent to optimized. Since it is a learning process, the organizations cannot reach the optimized level as soon as they implement portfolio management.



Along the same lines, the guest speaker from State Farm mentioned how the IT portfolio management evolved over a period of time within the organization through different sequencing processes and is still evolving. Therefore, the maturity goal should be closely looked at by the

companies thinking about portfolio management process and should be incorporated into the strategic planning process.

The following figure illustrates the three maturity stages and the different factors that are used to evaluate the maturity stages of the organizations. To reach the synchronized level, advanced valuation, feedback mechanism, benefits measurement and active portfolio measurement need to be considered.

Factor	Maturity Stage		
	Defined	Managed	Synchronized
Advanced Valuation			Inclusion of qualitative option value in funding decisions; monitoring of project's earned value in deployment.
Feedback Mechanism			Feedback on IT alignment with strategy — score cards evaluate each project.
Benefits Measurement			Tracking of project benefits after project development is complete; measurement of IT value through the full project life cycle.
Active Portfolio Management			Understanding of risk and return — portfolio weighted accordingly.
Strategic Alignment		Annual review sessions between business-unit heads and IT to discuss IT and strategy alignment.	Frequent review sessions with business unit to discuss strategy alignment (quarterly or monthly)
Financial Metrics		Use of financial metrics in prioritizing: NPV, ROI, IRR.	
Demand Management		Well-defined scheme for screening, categorizing and prioritizing projects; portfolio-management approach to rank projects for investments.	
Centralization	All projects in one database; all IT spending tracked centrally and rolled into one database; centralized project office monitors projects.		Use of portfolio software — real-time updates on portfolio modifications, performance and health.
Standardization	Applications and infrastructure are well defined and documented.	IT portfolio segmented by asset classes — for example, infrastructure, strategic projects.	

Source: Best practices in IT Portfolio Management - Mark Jefferey and Ingmar Leliveld

IT Portfolio Management Tools

The following figure shows the tools available in the portfolio management area. Some of these tools are widely present in accepted in the industry. While Primavera, HP, IBM and Planview PPM tools are more prevalent in the market, there are other competitors (Microsoft, CA, Oracle, etc.) that have competitive offerings. There has been a lot of activity in this market with the larger companies acquiring some specialized companies in this area. There is an upcoming demand for real time use of PPM tools due to the emergence of SaaS. Also, as more companies begin to integrate project lifecycle with portfolio management, the importance of the enterprise tools will be more prominent.

Guest speakers from Motorola indicated the incorporation of Project Management tools with the Portfolio Management tools so that there is a better visibility of the IT portfolio within the organization. This will help in making informed decisions at any given time regarding the project approval.

Vendor	Product evaluated	Product version evaluated	Version release date
Artemis	Artemis 7	7.0	July 2007
CA	Clarity PPM	8	October 2007
Cardinis	CARDINIS Suite	4.2.1	August 2007
Compuware	Changepoint	12	June 2007
Daptiv	PPM	Fall	November 2007
HP	PPM Center	7.1	June 2007
IBM	RPM	7.1	July 2007
ITM-Software	ITM PPM	3.5	April 2007
Microsoft	EPM 2007	2007	January 2007
Oracle	PeopleSoft/E-Business Suite PPM	9/12	January 2007
Planview	Enterprise	9.1	November 2007
Primavera	Evolve/ProSight	8.9/7.0	November 2007
SAP	xRPM	4.5	December 2007
Serena	Mariner	6.2	March 2007

Portfolio Management – Example

Lowe's used enterprise portfolio management (EPM) for developing a new cobranded credit card offering for its customers. The EPM system helped the CIO identify and allocate the necessary resources to complete the new credit card program by providing an organizational view of the company's IT activities.

Lowe's approach to IT portfolio management has evolved over the years and they have started reaping the benefits from it. They not only use IT portfolio management for IT related activities but also use it for non-IT related activities (for example, finding resource allocation,

etc.). In the beginning, all the projects were divided projects into five categories: mandatory, maintenance, enhancements, growth and innovation. Once the project was assigned a category, projects were prioritized based on criteria such as ROI, risk and resource requirements. The progress of these projects was then tracked as they were executed. Even after adopting this process, there were still problems in portfolio management due to the lack of standard processes to evaluate the different criteria. Therefore, in 2001, two separate groups were formed focusing on Project management and a steering committee that approved/disapproved the projects. This greatly improved the portfolio management process.

Currently, Lowe's uses Pacific Edge's portfolio management software and tracks the following parameters closely:

- Status of the projects
- Changes in the projects delivery schedule and explanations of the impact of these changes
- Resource loads across the company's IT projects

These parameters are tracked with the help of reports generated on a weekly basis using the portfolio management software. These reports help the CIO understand not only the progress of the projects but also helps understand the changes that can negatively impact some of the other projects and provides information regarding the resource load.

While developing a new cobranded credit card offering for its customers, Lowe's used EPM to identify the list of projects that were not providing benefits to the organization and the

ones that were low on the priority list and moved resources to this new project, resulting in successful implementation.

IT Portfolio Management – Best Practices

Best practices regarding portfolio management can be summarized below:

1. Adopt incremental approach
2. Involve business partners right from the beginning
3. Understand customers needs
4. Use a business case approach to IT investment
5. Regularly review the current portfolio

Future of IT Portfolio Management

There is a significant growth expected in the IT portfolio management areas as the IT spend matures within different organizations. The following factors are expected to contribute to this growth in the future:

1. IT governance focus – With organizations focusing on IT governance mechanisms more in the coming years, IT portfolio management will gain better acceptance. It will be the "goto" tool for the executives in the organization.

2. Better visibility of IT spend and measurement of ROI – As mentioned earlier, the need for better visibility of IT budget spend will increase the usage of portfolio management as the organizations need to understand where to invest money and meet the business needs.

3. Projects incorporated within the Portfolio Management approach – As more projects are executed within organizations, the project development will move beyond just the software development lifecycle and portfolio management approach will be incorporated.

4. Continuous assessment of the projects in execution – To take advantage of portfolio management, there will be a significant growth in assessment of projects in execution. Sometimes during the execution of the project, the goals of the project change due to which they might no longer be a high priority. In such cases, continuous assessment of the projects using portfolio management will be helpful.

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