

WHITE PAPER

How Project and Portfolio Management Solutions Are Delivering Value to Organizations

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EXECUTIVE SUMMARY

To remain competitive in today's global marketplace, organizations seek to automate processes and leverage their technology infrastructure in alignment with their goals. IT staffs are thus tasked with managing multiple concurrent IT projects to introduce new technology solutions while also conducting periodic upgrades of existing infrastructure. Many organizations have deployed project and portfolio management (PPM) solutions to create a more efficient and scalable process for leveraging their IT infrastructure to help achieve organizational goals.

To understand the impact of PPM solutions on complex organizations, IDC conducted research with 13 highly successful companies that had implemented PPM solutions and could articulate the pain points leading to the deployment as well as the benefits to their organization. This paper describes the experiences of these 13 companies — why they chose PPM solutions, pain points, and benefits — and lays out an approach to justify the acquisition of PPM solutions. A summary of the benefits of the 13 companies in deploying PPM solutions follows:

- ☒ Number of projects managed increased 35%.
- ☒ Cost per project was reduced 37%.
- ☒ Redundant projects dropped 78%.
- ☒ IT staff productivity increased by 14%.
- ☒ Project failure rate dropped 59%.
- ☒ The total annual benefit per 100 users is \$83,500.
- ☒ Payback occurred in 7.4 months.

INTRODUCTION

As organizations strive to increase productivity, many have sought a PPM solution to help optimize IT resources and to better plan business strategies. Gauging resources against tasks and developing manageable timelines are essential components in ensuring the success of the organizations' initiatives.

A PPM solution deployment enables management to evaluate the IT organization and focus on the projects with the greatest value to the business. Creating an IT PPM program includes establishing standardized processes enabled by PPM solutions. The benefits extend beyond improved project management and include both IT resource optimization and operational efficiency.

NEED FOR PPM

PPM solutions allow business and IT management to get a holistic view of its organization's entire project workload. From this perspective, C-level and business unit managers can assist IT management in aligning IT projects with the overall business strategy. Budgets, timelines, and project priorities are all designed to fit squarely with the direction of the organization. As one customer mentioned, *"The value of going to portfolio management is that we can strategically plan a lot better than we used to."*

In addition to offering better IT investment alignment, PPM solutions provide greater project and resource management efficiencies. For example, reducing the number of redundant projects allows staff to work on higher-value initiatives, leads to an improvement in staff productivity, and indirectly reduces the time and costs associated with hiring additional staff. A manager said, *"We have approximately 700 projects. Before, we might have had 1,000 projects. We are now able to manage more complex projects with fewer people."*

When considering a PPM solution, an organization should evaluate its processes and strategies in six areas:

1. **IT governance.** What are the processes that manage IT budget, spending, project planning, and governance? How does the organization evaluate IT spending and projects versus organizational strategy? Are review boards established? How are the organization's changes and the impact assessed?
2. **IT demand assessment.** How does the organization collect and manage IT requests? How are roles and responsibilities defined for demand assessment and management? How are the business needs for projects identified?
3. **IT demand prioritization and selection.** How are priorities managed, ranked, and used for selecting projects? How is the business value of the project assessed? What is the process for reviewing cost, benefit, schedule, and risk before selection and funding? What are the definitions of roles and responsibilities for prioritizing, assessing business value, and selection? Have enterprise priority review boards been established?

4. **Business relationship management.** How does the organization communicate portfolio information to groups and stakeholders? How is project data aggregated? How are portfolios audited? How are assets/inventory tracked and managed?
5. **Project management.** How does the organization identify project outcomes and review best practices/lessons learned? Are sponsor organizations involved in the portfolio review process? How is actual cost and schedule data compared with forecasts/expectations? Are the portfolios actively analyzed and balanced? How are benefits and risk management integrated into the control process?
6. **Resource management.** Are resources for projects assigned based on skill sets and availability? Is the management of resources based on project priorities? What are the processes to manage resource pools? Does the organization consider resources other than people in the process? Is enterprise and division performance analyzed on a scheduled basis?

IDC'S ROI METHODOLOGY

IDC's extensive research on PPM systems was recently validated by in-depth interviews with 13 companies that have had PPM installed for more than one year. The IDC ROI methodology is based on gathering data from current PPM users. IDC performs a three-step process to calculate the ROI and payback period:

1. Measure the financial benefits from reduced costs (operations and infrastructure), increased user and IT staff productivity, and increased revenue.
2. Ascertain the investment made in deploying the PPM solution and the associated training and support costs.
3. Estimate the costs and savings over a three-year period and calculate the ROI and payback for the deployed solution.

Because the full benefits of the solution are not available during the deployment period, IDC prorates the benefits on a monthly basis and subtracts the appropriate amount for the deployment time from the first-year savings.

IDC uses a discounted cash flow methodology to calculate the ROI and payback period. ROI is the ratio of the net present value (NPV) and discounted investment. Payback period is the point at which cumulative benefits equal the initial investment. IDC uses a standard 12% discount factor (allows for risk and the missed opportunity cost that could have been realized using that capital).

PROFILE OF RESPONDENTS

This study includes data and qualitative information from 13 companies representing the finance, insurance, research and development, public sector, manufacturing, healthcare, telecom, and leisure industries. All participants were interviewed about their experience since the deployment of one or more PPM systems from CA, Microsoft, Compuware, or SAP.

Note: All financial information in this document is expressed in terms of "per 100 users." A user is defined as an employee who uses business applications supported by the IT staff.

The demographics of the companies are shown in Table 1.

TABLE 1

Demographics

Average number of users supported by IT	32,000
Average number of IT staff	2,879
IT staff range	25–15,000
Average time PPM deployed (months)	37
Geographies	North America, Europe, Asia/Pacific

Source: IDC, 2008

The respondents were taken through a PPM maturity assessment to help IDC identify how PPM solutions combine with IT processes to optimize the benefits. The four levels of IT maturation are defined by how an organization manages its projects:

1. **Ad hoc.** When an organization operates at this level, the evaluation of IT spending and project priority is not aligned with organizational strategy. A process for examining the business value of projects is not established, and a catalog of IT demand is unavailable. Projects are funded without research or critical information. At this level, there is no list of approved projects, portfolio information is not defined or readily available, and project outcomes are rarely evaluated.
2. **Structured.** In a structured environment, a process for creating portfolio review boards has been established. The organization aligns IT spending and projects with the business goals, but alignment is not systematically applied. Processes are established for assessing IT project demand, roles/responsibilities on the projects, and near-term business needs. The organization has designed basic processes for prioritizing and approving projects after each project's business value has been assessed. The organization assigns resources based on the skill set and availability of its technicians. All project data is aggregated for divisional review, and the information is communicated across the division. Sponsor organizations are involved in data review.

3. **Standardized.** At this level of maturity, processes are standard organizationwide and projects are aligned with the overall business strategy. Divisional portfolio review boards are established to review and report portfolio status to enterprise review boards. Strategic criteria, including cost-benefit data, timelines, and risk, are used to define IT spending and priorities. The organization's budgeting, project priorities, and outcomes are viewed from the organizational level. IT demand management processes are standard organizationwide and integrated with the business processes.

4. **Optimized.** In an optimized environment, review boards study and benchmark best practices to improve decision-making processes. The IT portfolios are balanced for optimal business value. Changes in the organization are regularly reviewed to assess any effect on the portfolios. Process improvement is achieved through collecting and analyzing clearly defined data points, which are then validated by historical information. Cost-benefit data is available on demand, and reporting occurs on a scheduled basis. IT opportunity information is available across the organization, audits are regularly conducted, and asset inventory information is maintained.

Respondents were asked to assess their processes before and after the deployment of PPM solutions. The results of the PPM maturity assessment are shown in Table 2.

TABLE 2

PPM Maturity Profile					
	Level 1 Ad Hoc	Level 2 Structured	Level 3 Standardized	Level 4 Optimized	
IT Governance					
Before	54%	31%	15%	0%	
After	0%	8%	69%	23%	
IT Demand Assessment					
Before	15%	62%	15%	8%	
After	0%	17%	42%	42%	
IT Demand Prioritization and Selection					
Before	36%	18%	45%	0%	
After	0%	9%	73%	18%	
Business Relationship Management					
Before	42%	50%	8%	0%	
After	8%	33%	58%	33%	
Project Management					
Before	17%	42%	42%	0%	
After	0%	17%	58%	25%	
Resource Management					
Before	42%	50%	8%	0%	
After	0%	17%	33%	50%	
Overall Average					
Before	46%	54%	0%	0%	
After	0%	23%	62%	15%	

Source: IDC, 2008

The overall assessment shows that initially the companies were split almost 50/50 between ad hoc (no established processes) and structured (some processes, but not consistent across the organization). After deployment of PPM solutions for two to three years, over 60% of the respondents had moved to a level 3 maturity, indicating a move toward standardizing PPM best practices across their organizations, while 15% were considered optimized, meaning they had adopted feedback mechanisms to continuously improve their PPM processes.

HOW PPM DELIVERS BUSINESS VALUE

Aligning Projects with the Business Goals

At a high-level view, PPM solutions equip IT management with the ability to organize its workload by grouping independent projects into initiatives or portfolios. Managing projects independently often results in defined silos that are more internally focused and not synchronized with the higher-level business goals. PPM solutions allow the organization to position resources where needed, in a manner that is consistent with the overall business strategy.

Reducing the Number of Redundant or Failed Projects

Both establishing governance for the entire organization and reporting on project progress to all stakeholders reduce the incidence of redundant projects or projects failing to meet schedules, costs, or requirements. *"The managers had no way of knowing who was working on what project. They had no way to control it. There was no rollup hierarchy for them,"* a respondent said.

Identifying and Allocating Resources

Managing with a PPM solution can help decentralize the organization's resources, creating a greater ability to perform business-critical work. In a typical hierarchy, several staff members wait for instructions from their manager. In this setting, it is difficult to know who is available and how much time they have. In a decentralized environment, PPM helps to show management which staff members are booked and which are available to perform the required tasks.

BENEFITS

The financial benefits generated by PPM solutions fall into the following areas:

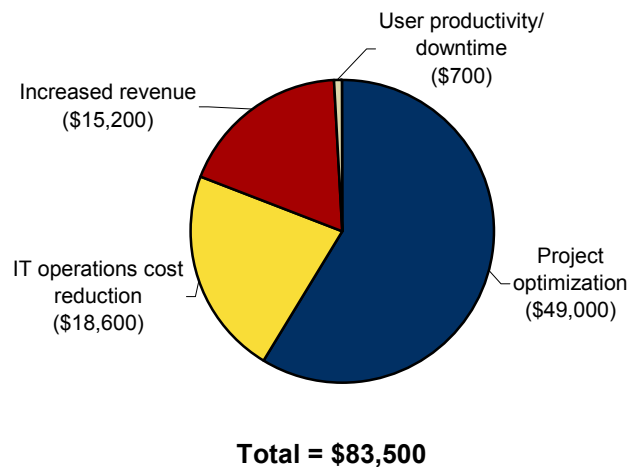
- Cost reduction
 - IT project optimization from better project planning and management — \$49,000 per 100 users annually (59% of total benefits)
 - IT operations cost reduction from resources consolidation and IT staff productivity improvement — \$18,600 per 100 users annually (22% of total benefits)

- ☒ Revenue increase
 - ☐ Revenue increase from delivering revenue-generating business applications to market faster — \$15,200 per 100 users annually (18% of total benefits)
- ☒ Increased user productivity
 - ☐ User productivity increase through reducing help desk issues associated with initial project deployments (first 30 days) — \$700 per 100 users annually (1% of total benefits)

The proportion of annual benefits per 100 users is presented in Figure 1.

FIGURE 1

Annual Benefits per 100 Users



Source: IDC, 2008

IT Project Optimization

PPM solutions provide a basis for integrating and managing an organization's IT resources. An organization can leverage its PPM solution, coupled with standardized processes and procedures, to optimize not only its project management processes but also its IT resources overall. Organizations in the study found benefits across their IT operations stemming from project optimization.

PPM maturity starts with establishing corporate governance processes to set guidelines for and oversee the selection and prioritization of projects to be done and the overall goals of the IT organization.

In general, most of the organizations in the study implemented PPM solutions to increase the number of concurrent projects IT could manage and at the same time increase project efficiency and effectiveness. There was one notable exception — a financial institution wanted a process to prioritize projects so that IT could reject

projects that were likely to fail or deemed to be redundant. In this case, the company actually wanted to undertake fewer projects. There were also organizations that wished to keep their project load the same but increase efficiency and improve quality metrics. The PPM solutions also positioned IT staff as a strategic corporate asset. This allowed for the reallocation of staff to more business-enabling functions. For most of the organizations, the focus is now on larger corporatwide initiatives rather than strictly on IT programs.

The PPM solutions have also allowed organizations to respond faster to changes in their strategic plans. One customer mentioned that in the past, tasks were performed using spreadsheets. Users pulled data from several sources, organized it, calculated it manually, and delivered the information to management. With a PPM solution in place, the organization built a front-end module that aggregates the data based on its custom coding. A process that once required 20 manual steps has been transformed into one automated task.

The ability to view all resources within a single system of record allows management to efficiently prioritize staff workload. As one customer said, *"In the past we basically had eight people working for Person A. And they would waste time waiting for direction from Person A. We have eliminated that by using the matrixing ability of the product."* This demonstrates the advantage of portfolio-level management. Technician time is accounted for, and technicians are assigned to tasks based on their skill set and availability. Lag time that accrues as assignments are passed down through the hierarchy is reduced.

Table 3 provides key performance indicators (KPIs) of companies' success in improving project efficiency, which generated 23% of total annual benefits.

TABLE 3

Project Efficiency KPIs			
	Average Before	Average After	Change
Projects aligned with company goals	68%	87%	27%
Projects per year	104	140	35%
Average cost per project	\$499,270	\$315,740	37%
Average project staff (FTEs)	20.5	17.6	14%
Average time of projects (weeks)	29.1	18.8	35%
Projects per project manager	3.5	4.9	40%

Source: IDC, 2008

The other benefits directly associated with increasing PPM maturity include better project governance and management — choosing high-value, low-risk projects; creating informed project plans; executing the projects well; and feeding lessons learned back into the planning process. Companywide governance, demand assessment, prioritization,

planning, and review enabled IT to significantly reduce the number of redundant projects and projects that had to be redone because they did not deliver on requirements. A customer said, "Because we are able to manage better, I think that we are saving upwards of \$10–20 million per year just in redundancy."

Table 4 shows that improved project management (including business relationship and project management) helped companies to cut the number of failed projects and overbudget projects in half.

TABLE 4

Project Management and Governance KPIs			
Failed projects	31%	13%	59%
Redundant projects	28%	6%	78%
Projects over budget	39%	19%	52%
Project redos	18%	3%	85%

Source: IDC, 2008

Total annual benefits from improving project management and governance accounted for nearly \$84,000 per 100 users and was the largest benefit of PPM solutions at 35%.

The benefits of PPM solutions on project management were largely a factor of the maturity level of the IT organization. Organizations that had the solutions in place longer and that used the solutions in all stages of project and portfolio management for all projects tended to see better results. Table 5 maps the relationship between maturity level and PPM optimization.

TABLE 5

PPM Maturity KPIs				
	Level 1 Ad Hoc	Level 2 Structured	Level 3 Standardized	Level 4 Optimized
Projects managed with PPM	78%	82%	86%	100%
Months using PPM	28	32	42	48
Projects aligned with company goals	66%	75%	77%	98%
Failed projects	47%	19%	17%	16%
Redundant projects	18%	17%	11%	3%
Projects over budget	35%	21%	17%	13%
Project redos	25%	9%	8%	2%

Source: IDC, 2008

IT Operations Cost Reduction

Deploying PPM solutions in conjunction with overall IT process improvements impacts ongoing IT operations beyond the realm of project management. IT staff productivity is most affected by better PPM. More efficiently managed projects mean fewer staff resources are assigned to projects or more projects are completed with the same staff resources. Fewer redundant projects and project redos mean fewer wasted IT staff resources. The PPM customers have been able to avoid hiring staff because of the decrease in the total number of projects. On average, the respondents saved five IT staff since deploying a PPM solution. One manager noted, *"My total headcount — full time — is approximately 225 staff members, so I've avoided hiring 15–20 people."* Annual IT staffing costs were reduced by \$6,900 per 100 users.

The other main benefit of instituting PPM solutions has been the consolidation of IT resources because of better resource allocation and management. Many of the companies had consolidation efforts under way and used PPM to support consolidation activities. Others benefited from reducing the resources required to support IT projects. Organizations found that they could eliminate old applications, establish performance standards and reduce the number of vendors supplying IT infrastructure and services, and reduce the number of datacenters and other support operations dedicated to projects. In total, they were able to realize an average annual benefit of \$5,800 per 100 users.

Other operations cost benefits were generated by PPM. The cost of compliance audits was reduced through better vision into projects. More efficient staffing utilization means a reduction not just in staff assets required but also in the cost of overtime for overworked staff. Finally, outsourcing costs were reduced because vendor tasks could be better defined and measured, enabling better selection, contracting, and management processes. Total benefits from these other IT cost reductions totaled \$5,900 per 100 users annually.

User Productivity/Downtime

Organizations in the study were able to increase the quality of the IT services resulting from the projects managed by PPM solutions. Table 6 shows not only that organizations reduced time to market for projects by 33% but also that users experienced one-third fewer project-related problems that required a call to the help desk.

TABLE 6

Service-Level KPIs

	Average Before	Average After	Change
Time to market (weeks)	16.5	11	33%
Help desk hours per user per year	0.81	0.57	30%

Source: IDC, 2008

Increased Revenue

The two most important factors in growing revenue are reducing the time to market and growing the customer base. PPM solutions reduced the time to market for external revenue-generating business initiatives by 33% in the two years following the deployment of PPM.

Projects are more closely aligned with the overall business plan, and customer acquisition is tied to the IT initiatives. The business support network is prepared for the forecast growth and maintains customer service levels by executing business-critical assignments. A customer said, *"PPM has helped increase revenue 1% to 2%, I'd say. Definitely. The increase in revenue is due to our ability to satisfy more customers with the same infrastructure."*

Five of the 13 companies interviewed reported increases in revenue as high as 15% attributable to PPM. Overall the average company enjoys a revenue benefit of \$15,200 per year per 100 users.

ROI ANALYSIS

The PPM solutions showed a return of \$5.57 for every dollar invested and paid back the initial investment in 7.4 months after the deployment was complete. The ROI results (per 100 users) are displayed in Table 7.

TABLE 7

Three-Year ROI Analysis per 100 Users

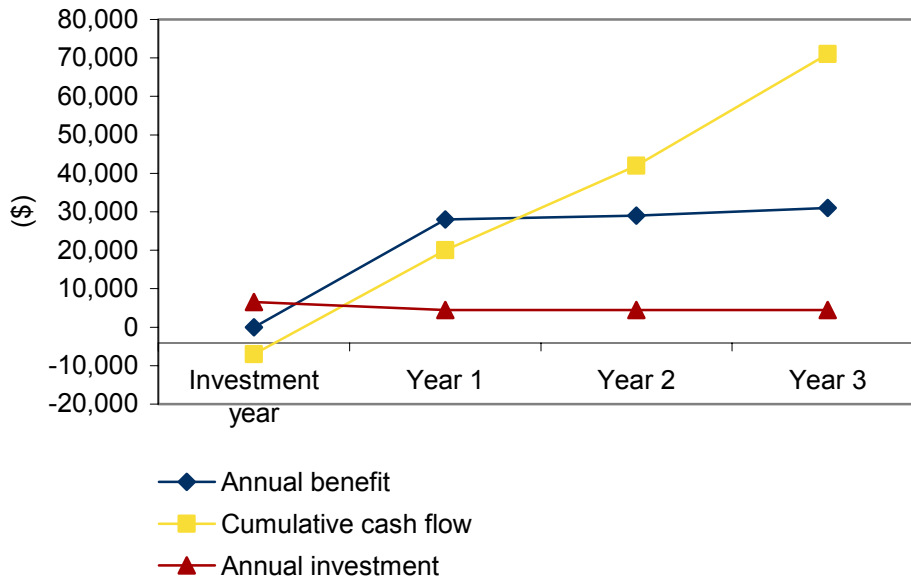
Discounted benefits	\$197,023
Discounted investment	\$29,987
Net present value (NPV)	\$167,036
ROI = NPV/investment	557%
Payback in months	7.4
Discount factor	12%

Source: IDC, 2008

When comparing the investment and benefit of PPM solutions over time, note that cost stays relatively flat, while the annual benefit increases over the first three years (see Figure 2).

FIGURE 2

Benefit, Investment, and Cash Flow over Time



Source: IDC, 2008

NEXT STEPS

The long-term goal for most respondents is to incorporate all of their IT projects into the PPM solution to gain a total view of their organization so that they can see where staff members are spending their time.

CHALLENGES AND OPPORTUNITIES

One challenge is justifying the investment in a PPM solution. This paper should help the reader understand the benefits of PPM solutions as experienced by other companies. The opportunity is to leverage these experiences to help build your own business case for PPM using a seven-step process:

1. **Gain alignment.** Query key stakeholders as to their assessment of how well IT projects align with business goals and strategy and meet their requirements.
2. **Establish a baseline.** Conduct a self-assessment using the PPM Maturity Calculator. Quantify the average costs per IT project — time to completion, costs of IT and expert staff, outside consulting, and loss of productivity during implementation. Quantify the costs associated with redundant projects, failed projects, and projects that are over budget.
3. **Establish objectives.** Create metrics to measure success and to quantify value (such as reduce redundant projects by 35%, which will save \$50,000 per year).

4. **Identify risk.** Quantify the impact of not meeting objectives.
5. **Develop a road map.** Create a three- to five-year plan for acquisition and rollout with milestones.
6. **Manage to the road map.** Use a PPM solution to do this.
7. **Measure, analyze, and communicate.** Consistently measure and report on the success to the stakeholders.

After a PPM solution has been acquired, the primary challenge of implementing it is prioritizing the projects. First, organizations must define their current company goals and strategies. Second, they should assess current projects to reduce duplicated efforts and increase the amount of resources that are available. With the total workload trimmed, organizations can reprioritize and group the projects into higher-level initiatives that align with the corporate direction.

The opportunity is for an organization that is more in line with the business strategy — a company that enables more business-relevant work to be done while maintaining the same infrastructure will see the return in terms of productivity and revenue increases.

CONCLUSION

Project and portfolio management solutions have brought several benefits to the organizations that deployed them — totaling an average annual benefit of \$83,500 per 100 users. These tools have provided value by optimizing project efficiency, increasing user productivity, reducing costs, and helping revenue generation. In this study, on average, there was a return of \$5.57 for each dollar invested in PPM.

In addition to delivering tangible financial benefits, the deployment of the PPM solutions resulted in better long-term corporate planning due to improved rigor and discipline in managing the IT portfolio. The organizations are able to account for and track what project staff are focusing on, reprioritize those efforts, and manage the tasks in alignment with the overall business strategy. Assigning the business-critical projects top priority improves IT's value and contribution to the organization while helping to ensure a higher level of both internal and external customer satisfaction.

APPENDIX

Table 8 provides a description of the respondents' companies.

TABLE 8

Description of Respondents' Companies

	Industry	IT Staff	Total Employees	Use of PPM (Months)	Maturity Before (Scale of 1–4)	Maturity After (Scale of 1–4)
1	Finance	15,000	180,000	180	1.3	2.6
2	Finance	13,500	–	–	2.6	3.2
3	Finance	1,500	10,000	42	2.5	3.2
4	Finance	800	35,000	30	2.5	3.3
5	Finance	700	6,000	–	1.7	3.1
6	Healthcare	250	5,000	360	2.0	3.8
7	Healthcare	120	2,500	48	2.3	3.8
8	Insurance	300	5,000	36	2.0	3.6
9	Manufacturing	160	20,000	24	1.7	2.7
10	Public sector	40	650	24	1.0	3.0
11	Research and development	25	3,000	36	1.5	3.0
12	Telecommunications	5,000	130,000	60	2.3	3.7
13	Tourism	30	3,000	36	1.3	2.6

Notes:

- Respondents were asked to rate the IT maturity level before and after the PPM deployment on a scale of 1 to 4, with 1 being not at all mature and 4 being very mature.
- (–) indicates no answer provided.

Source: IDC, 2008

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