



January 2008

ROI Benchmark Study Report:

Hewlett Packard's Project and Portfolio Management Center

Solution Payback Assessment

Gantry Group profiled the payback experiences of eight companies that have deployed HP Project and Portfolio Management Center (PPM) software for at least one year to quantify the expected bottom-line business impact and organizational effectiveness that this project and portfolio management solution brings to IT organizations.

- Majority achieve positive ROI in Year 1.**
Of the eight companies participating in this study, six of the companies reported a positive ROI after only the first year of deployment.
- Delivers \$4.8 million ROI after one year.**
HP PPM Center returned, on average, tangible benefits totaling \$6.5 million and an ROI of \$4.8 million by the close of the first year of solution deployment. Over a three year post-deployment period, HP PPM Center averaged \$25.2 million (NPV) in tangible benefits, delivering a positive bottom-line impact of \$22.3 million.
- Recoups 6.5% of annual IT budget after one year.**
Measuring HP PPM Center's payback as a percentage of average annual IT budget, the solution returned a savings of 6.5% by end of year one and 14% (NPV) over three years of deployment.

Top Tangible Value Drivers

- Reduced IT Budget Overruns
- Avoidance of IT Expense on Non-Strategic IT Projects
- Reduced IT Labor Expense Due to Change Request Reduction
- Reduced IT Labor Expense Due to Improved Staff Loading/Utilization
- Reduced IT Project Management Expense

Top Intangible Value Drivers

- Improved Capture of Change Order Requests
- Improved Project Timeliness
- Increased Budget Accuracy
- Reduced IT Management Time Spent on Project Status Reporting
- Reduced Time To Generate IT Labor Capitalization Reports
- Increased Financial Sign-off Process Efficiency for IT Project Approval
- Improved IT Project Capture in Demand Queue

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ROI Benchmark Study Report: IT Project and Portfolio Management Solutions

Product Spotlight: HP Project and Portfolio Management Center

Introduction

Across all industries, competitiveness relies upon a business' ability to deploy timely, on budget, robust technology solutions that optimize business process efficiency and maximize revenue. Technology designed to improve process efficiency can facilitate sales, enhance revenue, improve business responsiveness, reduce labor costs – and improve overall customer satisfaction. Indeed, timely release of new solutions to the market is today's lynchpin to seizing mindshare and market share. However, to achieve this level of IT performance, a company must be fully informed about all of its development initiatives, as well as the interrelationships between them. A company must have visibility into the complete IT project portfolio in order to identify the most strategic projects, with investment decisions aligned to business goals and objectives. During program execution, a business must have real-time visibility into detailed, accurate IT project profiles and status to support intelligent, strategic decisions.

The HP PPM Center software suite is specifically designed to help a company govern and manage its priorities, processes and people related to the development and deployment of IT solutions. HP PPM Center enables companies to:

- accelerate time-to-market of services and products
- align performance to market requirements
- improve bottom-line business results
- extend the reach and effectiveness of the development budget

HP PPM Center, a comprehensive project and portfolio management solution available for technology organizations, digitizes and automates the broadest spectrum of engineering, IT and operations activities, including portfolio management, project and process visibility, and control.

The solution suite's components can be implemented individually or incrementally, starting with the area of greatest need and then expanding across the organization, adding value along the way. The HP PPM Center dashboard software allows management teams to make and execute the real-time decisions needed to accelerate service and product lifecycles, including priorities, processes and people. It provides role-based, exception oriented visibility into program and project status and process performance trends.

Gantry Group profiled the experiences of eight companies who have deployed HP PPM Center for at least one year to quantify the expected bottom-line business impact and organizational effectiveness that this project and portfolio management solution brings to IT organizations.

IT Challenges Overcome by HP PPM Center

As a first step in this ROI benchmark study, Gantry Group interviewed 15 IT executives to pinpoint the top problems that their organizations grapple with today. IT groups turn to project and portfolio management solution suites, like HP PPM Center, to overcome these prevailing problems through enforced process automation, improved data access, and automated workflow oversight. Synthesizing the results from these executive interviews, HP PPM Center's value delivery will be judged by how well the solution suite remedies the following challenges.

Lack of IT Project Visibility

Many IT groups still track projects using manual, paper-based processes. This makes project status reporting highly customized and laborious. As such, projects are updated only at prescribed intervals and often with limited access to status of other IT projects for which the particular IT project is dependent. Since IT management lacks the ability to view IT project progress in real-time and in the full context of all dependent projects, IT management must operate with an impaired, dated view. Such an environment hampers early identification of development issues and roadblocks to preempt schedule slippage and development cost impact. IT groups recognize that they require increased visibility into precisely what IT is really doing with time, resources and budget. The inability to communicate accurate project status and the decisions taken regarding new and existing IT initiatives are driving IT groups to adopt a new approach to IT planning and project management.

Misalignment of IT Investments to Corporate Strategy

Alignment of IT projects to business objectives and goals is critical. Corporate management teams require assurance that IT budgets are being spent wisely on initiatives that will make a difference for the business. Unfortunately, many IT organizations do not have a formal process that brings business guidance to IT project request submission, review and prioritization. Recognizing that IT project requests are not visible to or reviewed by the senior management team, unsubstantiated IT project requests often unreservedly stream in even after the annual IT budget has been solidified. IT groups grapple with the problem of working on non-strategic projects to the detriment of other strategic projects that would have far greater impact on both the financial top and bottom lines. Misalignment of IT investments to corporate strategy is the result of poor IT portfolio prioritization and lack of clarity around the strategic impact of each IT initiative.

IT groups turn to demand and portfolio management solutions to institute a visible, corporate process to review IT projects solely based on each project's merits and its alignment to corporate objectives.

Broken IT Budgeting Process

IT groups frequently report that the IT project docket is dynamic throughout the year: new projects are liberally added outside of the normal budgetary planning cycle. Compounded by unclear IT project scope, this problem makes it difficult for IT groups to accurately assess the IT annual budget. Changing project dockets, fluctuating workloads, and spiraling design change orders make it difficult to forecast the annual IT budget. When IT projects are not clearly identified, reviewed and specified, IT annual fiscal budgets can only be - at best - rough estimates. This broken IT budgeting process leads IT groups to routinely be over budget, impacting the predictability of corporate financial reporting.

IT groups look to portfolio and demand management to improve visibility into IT spend and resource allocation, as well as to enforce a process that systematically controls the review and admittance of IT projects into the annual portfolio.

Broken Promises, Damaged Credibility

IT group credibility depends on consistent delivery on promises made to the business users, the financial group, and the C-Suite. IT groups commit to deliver robust solutions that meet their companies' business needs – on time and on budget. Many IT groups participating in this study reported that they formerly used project management tools that yielded only a semi-automated process. Since all IT project data was not stored in a centralized repository, project visibility was limited to one project at a time, rather than a holistic view of the entire IT program for the year.

Too often these IT groups missed their resource and schedule estimates. Project scope was unclear due to the absence of a formalized requirements and design process. Dependencies on other projects being developed in tandem were not fully identified at the time of project specification and scheduling. Issues that affected project execution were not surfaced on a timely basis to avoid schedule impact. This situation led to progressive discovery of project issues, schedule roadblocks, design workarounds, and inadequate IT resource assignments. Schedule accuracy was routinely compromised due to unanticipated workload and misallocation of development resources. Project schedules and IT budgets were habitually extended.

IT groups adopt project and portfolio management solutions, like HP PPM Center, to centralize all IT project data and install a seamless automated process that exposes complete project status in the context of all other active projects. As a result, complex projects that require multiple design teams can be easily managed through a single, real-time view of project schedule, resources, outstanding issues and interdependencies.

Study Methodology

Beginning in April 2007, Gantry Group conducted an objective ROI study that examined, inventoried, and quantified the key ROI value drivers and areas of cost savings realized by companies through the adoption and deployment of HP PPM Center. Gantry Group began the project by conducting interviews with 15 separate HP PPM Center customers, all executives who directly dealt with the HP PPM Center solution. Applying the findings, Gantry Group inventoried the discrete areas of value delivery and created a custom ROI worksheet that modeled each value and cost driver prior to and after solution deployment, as well as capturing capital, ongoing support and maintenance costs associated with HP PPM Center and its implementation.

This ROI worksheet, an Excel-based tool, is segmented into multiple worksheets: tangible value drivers, intangible value drivers, investment data, and the ROI scorecard. The ROI worksheet is configured to capture metrics data for a period of three years from the signing of the contract. The costs of implementation and the length of implementation are included in the measured time period. The ROI worksheet generates total annual benefits by taking the sum of the net incremental changes in the business metrics that are included; annual costs are similarly a summation of all charges and fees associated with the implementation and operation of HP PPM Center. The annual ROI for each year of the three year period is calculated by subtracting Total Investment Costs from Total Tangible Benefits.

Using this ROI worksheet, Gantry Group consistently profiled the business impact and payback experience of these eight companies, each selected to have over one year and preferably three years of deployment experience, with HP PPM Center to determine:

- The discrete areas of impact that HP PPM Center has on IT costs, IT performance and corporate performance overall.
- The average \$ benefit for each HP PPM Center value/cost driver.
- The average \$ ROI for a company that deploys HP PPM Center over a three year timeframe.
- The average payback horizon time to predict when a company should expect to recoup its HP PPM Center investment.

For those customers with fewer than three years deployment experience with HP PPM Center, Gantry Group only captured the *actual* deployment experience data. Gantry Group did not forecast or project any data used within this ROI benchmark study.

Gantry Group aggregated the ROI benchmark data for the eight HP PPM Center customers to compute the average ROI for each discrete area of value and overall ROI as a \$ savings and a percentage of the average IT budget.

Terminology & Definitions

ROI

The equation for determining annual ROI is: $ROI = \text{Tangible Benefits} - \text{Investment}$.

Using a time-value-of-money approach, the Net Present Value ROI is calculated using a standard NPV formula that discounts the net cash flows by the cost of capital (in this case 10% was used).

Benefits

Benefits were categorized as both tangible and intangible.

Tangible Benefits can be directly tracked and connected to bottom line financial impact. Tangible benefits include increased revenue, new business opportunities and avoided/reduced costs. Only tangible benefits were used in computing ROI and payback horizon.

Intangible Benefits include benefits that either cannot be measured, or are quantifiable, but do not drop to the bottom line.

Investment

Investment, alternatively referred to as the Total Cost of Ownership (TCO), represents the financial expenditure that must be made in the solution in order to extract its benefits. Investment covers both upfront deployment costs and recurring lifecycle costs.

Deployment costs include perpetual solution license fees, implementation costs, hardware infrastructure (e.g. servers, storage) and orientation training.

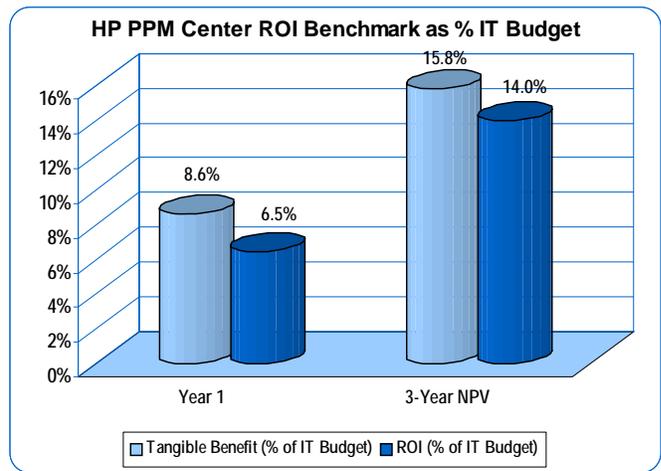
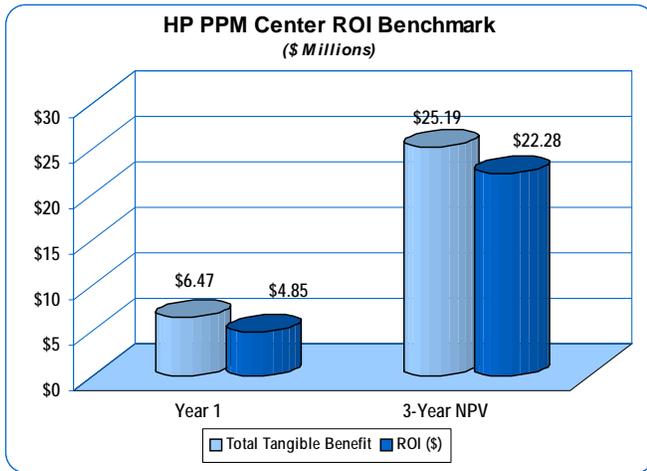
Recurring lifecycle costs include internal/external IT staff costs, technical support, solution maintenance contracts, and follow-on training costs.

Time to Payback Horizon

Payback Horizon measures the time that it takes the organization to gain sufficient benefit and to break even on its solution investment.

ROI Benchmark Analysis

Aggregated, averaged ROI outcomes for the eight customer studies are reflected in the ROI Scorecard below for the first year following HP PPM Center deployment and the cumulative three year total post deployment, using NPV. An analysis of results is provided for each tangible and intangible component of value delivery. Of the eight companies participating in this study, six of the companies reported a positive ROI after only the first year of deployment.



HP PPM Center ROI Scorecard

Tangible Value Drivers: Reduced/Avoided Costs	Average Year 1	% IT Budget Year 1	Average 3-Year NPV	% IT Budget 3-Year NPV
Reduced Budget Overruns	\$2,329,787	3.1%	\$5,481,722	3.4%
Avoidance of IT Expense on Non-Strategic IT Projects	\$5,834,273	7.8%	\$19,982,075	12.6%
Reduced IT Labor Expense Due to Change Request Reduction	\$3,394,739	4.5%	\$11,164,348	7.0%
Reduced IT Labor Expense Due to Improved Staff Loading/Utilization	\$305,750	0.4%	\$1,640,472	1.0%
Reduced IT Project Management Expense	\$344,820	0.5%	\$1,138,075	0.7%
TOTAL TANGIBLE BENEFIT:	\$6,472,111	8.6%	\$25,194,727	15.8%
ROI:	\$4,853,545	6.5%	\$22,276,116	14.0%

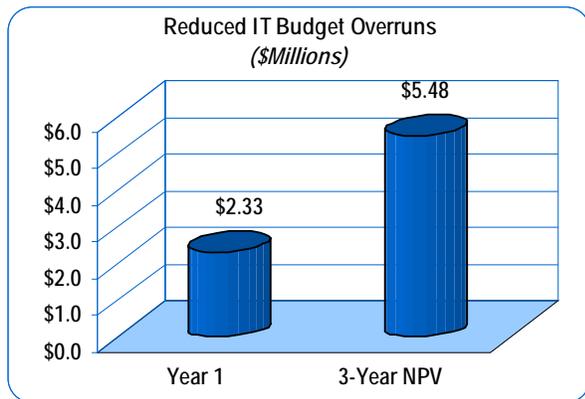
Intangible Value Drivers	1-Year % Average/ Cum. Total	3-Year % Average/ Cum. Total
Improved Capture of Change Order Requests	4.6%	14.3%
Improved Project Timeliness	30.2%	45.2%
Increased Budget Accuracy	12.6%	0.9%
Reduced IT Management Time Spent on Project Status Reporting	30.5%	43.2%
Reduced Time To Generate IT Labor Capitalization Reports	51.9%	54.7%
Increased Financial Sign-off Process Efficiency for IT Project Approval	16.3%	20.4%
Improved IT Project Capture in Demand Queue	13.3%	31.4%

HP PPM Center returned, on average, tangible benefits totaling \$6.5 million and an ROI of \$4.8 million by the close of the first year of solution deployment. Over a three year post-deployment period, HP PPM Center averaged \$25.2 million (NPV) in tangible benefits, delivering positive bottom-line impact of \$22.3 million. Measuring HP PPM Center's payback as a percentage of average annual IT budget, the solution returned a savings of 6.5% by end of year one and 14% over three years of deployment (NPV). Overall, HP PPM Center's payback horizon was well under one year.

Tangible Benefit Summary

Reduced IT Budget Overruns

Through Improved Project Planning and Scheduling



Lack of visibility into IT projects hampers IT managers' ability to see what IT is doing with its time, resources and budget. When IT projects are not scrutinized to assure clear understanding of project scope, complex inter-team project interdependencies, and required resources, IT budgets are best-guess estimates of what it will take for the IT group to accomplish its annual work docket. In such a fuzzy IT operating environment, budget overruns are inevitable. Accurate assessment of the resources required to accomplish the work docket is impossible without insight into

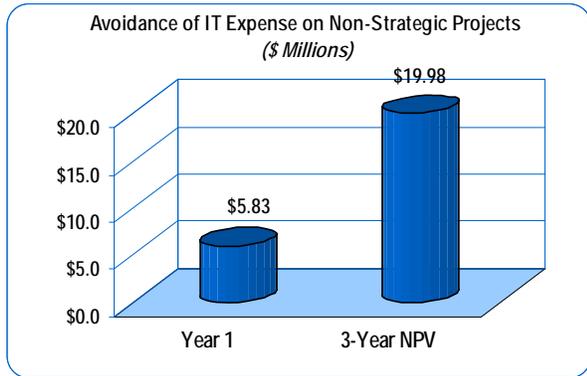
full project scope. The need for redesign and change orders flourish, leading to unnecessary strain on costly development staff. Inefficient time management leads to increased resources and decreased IT productivity.

HP PPM Center provides relentless, consistent oversight to ensure that IT projects are fully defined and resources are fully understood. The solution suite's Demand Management and Portfolio Management modules institute a formal review and definition process for all new IT projects under consideration. HP Project and Resource Management modules provide an IT group with historical IT trends and experiential insights to reveal true resources and time required to accomplished development tasks. The increased visibility into IT project resource requirements and improved clarity of IT project status, regardless of IT project complexity, help IT organizations to avoid situations where IT budget overruns predominately arise.

Companies participating in this ROI study attribute \$2.3 million savings from avoided budget overruns, on average, to HP PPM Center after the first year of solution deployment. Similarly, HP PPM Center corrected a cumulative IT budget overspend of \$5.5 million (NPV) over the three year period following solution deployment.

Avoidance of IT Expense on Non-Strategic IT Projects

Through Improved Demand & Portfolio Management



IT groups wish to focus IT resources on IT projects that promise the greatest business impact on the company. Unfortunately, many IT groups are plagued by a steady deluge of IT project requests that are frequently unscreened and unjustified with respect to corporate merit. Without visibility into the complete IT project demand queue and an enforced, formal process to evaluate and prioritize the demand queue based on the greatest business benefit, IT management teams are handicapped from preventing the engagement of such non-strategic projects. Unknowingly, many non-

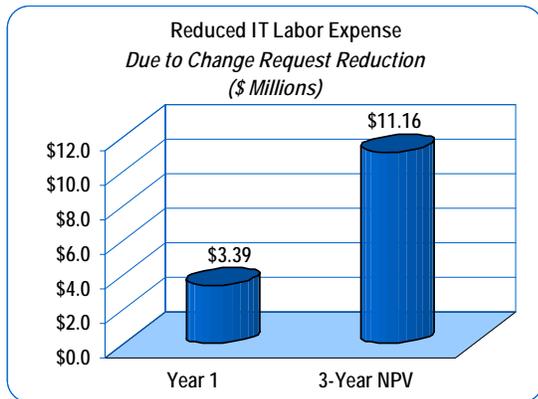
strategic projects are funded at the expense of strategic ones. Expenditures on non-strategic IT projects is perhaps the most pervasive and costly problem for companies today. IT expenditures on non-strategic IT projects that are not aligned to business goals are a wasteful use of IT budget and a net cost to the company. Further exasperating the situation, projects with little impact often get funded while high impact projects are passed over. Non-strategic projects consume both monetary and development resources, often displacing truly strategic projects and the business benefits that they bring.

HP PPM Center improves demand queue visibility and institutes a process to scrutinize the IT demand portfolio that ultimately leads to a reduction of funding of non-strategic projects. The HP solution provides the visibility and oversight to ensure that IT projects are selected solely on their value contribution to corporate goals.

This ROI benchmark study reveals that companies derive an average cost savings of \$5.8 million from avoidance of non-strategic IT project execution after just one year of HP PPM Center deployment. Over the three year post-deployment period, HP PPM Center delivers an average cumulative cost savings of \$20.0 million (NPV). This cost savings is actually quite conservative. Absent from this analysis is the positive business impact that a displaced strategic IT project might yield to the company, including staff savings through process automation, increased revenue, reduced liability, etc.

Reduced IT Labor Expense Due to Change Request Reduction

Through Improved Project Definition & Specification



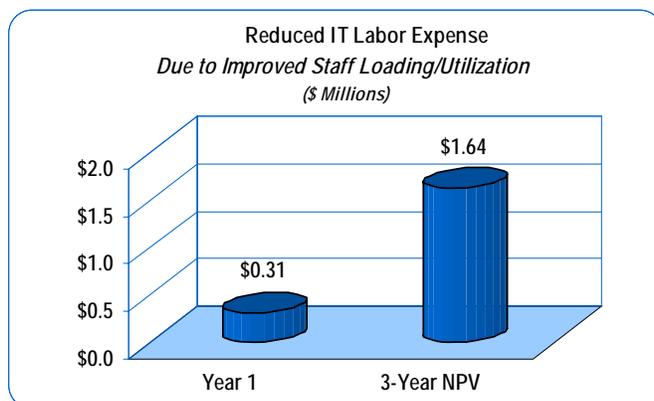
Lack of visibility into the IT project portfolio to fully ascertain how an initiated project relates to other project activities can lead to late discovery of project dependencies after the project design phase is completed. Issue management cannot be easily addressed at the global project level. The unfortunate side effect of this ongoing discovery process often necessitates continual adjustment to the design specification through costly change orders. As a result, projects take longer to implement and require more resources to accomplish than originally forecasted. IT groups' predictability and credibility are damaged. The

project's design is continually adjusted through a journey of progressive discovery. And the overall project architecture is usually compromised and vulnerable to quality issues since project requirements and dependencies were not fully disclosed during the design phase.

A formal design process is needed to ensure that the complete requirements set is considered during the design phase of each IT project. HP PPM Center brings companies the required visibility to thoroughly design IT projects with full consideration of the project requirements set, as well as other project needs and dependencies, during the design phase – and not during the development phase. Moreover, HP PPM Center enables IT groups to easily assign responsibility for issue resolution across projects. When project issues and dependencies are revealed early, IT project designs are more stable and robust. IT groups improve labor efficiency and lower labor costs attributed to unnecessary design change orders and redesign.

By providing IT groups with the visibility to assess project dependencies and an enforced process to achieve robust, comprehensive project designs, HP PPM Center delivers an average labor savings of \$3.4 million through reduction of design change orders during the first year of solution deployment. Similarly, HP PPM Center brings an average cumulative savings of \$11.2 million (NPV) over the first three years of solution deployment.

Reduced IT Labor Expense Due to Improved Staff Loading/Utilization Through Improved Insight into IT Staff Work Loading



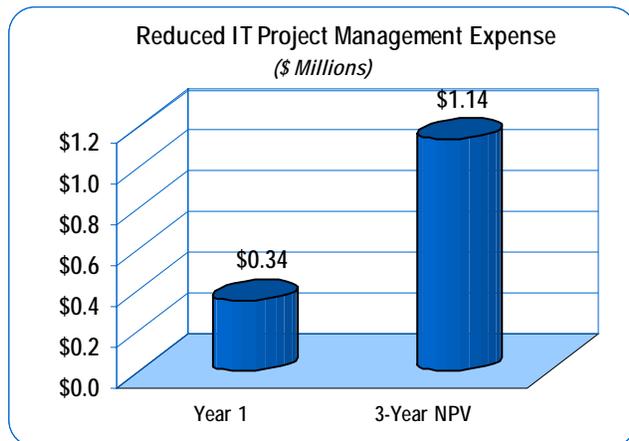
Often IT management lacks clear insight to view IT staff members' assigned workloads to assure that the IT workforce is being fully and efficiently utilized. Believing that IT resources are not available to carry out a new project task, IT groups sometimes unnecessarily hire additional staff or retain contractors through agencies to accomplish the additional work. The net result is that IT labor costs are unnecessarily inflated.

HP PPM Center's Time Management and Resource Management modules provide management with the real-time visibility to quickly ascertain if a staff member has untapped bandwidth to take on additional work assignments. Moreover, by enforcing a standardized IT work process in which projects are fully specified, project dependencies are identified, re-design work is minimized, and realistic project status is tracked, IT staff can allocate more of its time to IT project design and implementation rather than to change orders and workarounds. With HP PPM Center, IT uses its resources much more efficiently and helps IT avoid the cost of hiring additional in-house or external resources.

In this study, participating companies were able to eliminate IT labor cost (through attrition and stayed growth) and improve workload management of in-house resources. After the first year of HP PPM Center deployment, participating companies reported reduced labor expenses averaging \$310,000; labor expense savings accumulated to \$1.6 million (NPV) over the three years following HP PPM Center deployment.

Reduced IT Project Management Expense

Through Increased Project Management Efficiency



Project management efficiency is dictated by the ease in which project managers can surmise IT project schedule and status, pinpoint outstanding issues, and isolate project inter-dependency's impact on project schedules. Manual, paper-based IT project management processes not only are highly laborious and consume project managers' time, but they also inhibit project managers' real-time visibility into IT projects as well as facile access to project data. This problem amplifies when tracking project status and updating schedules for complex projects with multiple project teams. Accurate project status is often so

difficult to distill that the project status assessment is performed intermittently, rather than in real-time. In such cases, IT project issues and problems are often left to fester between project assessment snapshots. Since project manager productivity and project load capacity is overburdened by manual project administration, more project managers are required to accomplish IT project oversight for the active IT project docket -- representing additional IT cost to the company.

HP PPM Center facilitates project status visibility, pinpoints problem and project interdependencies, and streamlines schedule updates and project status reporting. Accurate project status and schedules are always available to all organizational constituencies, regardless of project complexity. By standardizing and automating administrative components of the project management function, project managers focus their time on strategic or critical project issues, rather than data collation and reporting. HP PPM Center increase project management and oversight efficiency to enable each project manager to effectively manage more IT projects. This yields a net saving in project management related labor costs as fewer project managers are needed to oversee more IT projects.

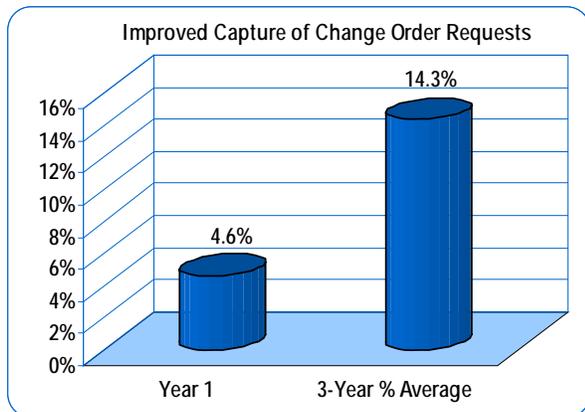
HP PPM Center delivers an average savings of \$340,000 in project management labor expense through attrition and stayed organizational growth during the first year of solution deployment. Companies participating in this study report an average cumulative project management expense savings over the three year post solution deployment of \$1.1 million (NPV).

Intangible Benefits Summary

While intangible benefits are not included in the ROI calculation, they are important metrics that further support and drive the bottom-line impact of HP PPM Center. Not measured are the qualitative benefits of increased employee satisfaction that may minimize employee turnover and increased customer satisfaction that may influence revenue.

Improved Capture of Change Order Requests

Through Improved Planning of IT Projects



Change orders manifest from poor insight into cross-project dependencies and a complete understanding of project requirements during an IT project's design phase. Missing functionality and design shortcomings frequently surface after the IT project is launched for development.

When considering change order request rates, this study revealed that IT groups have two different expectations that the project and portfolio management solution will have depending upon the state of their IT processes at the time of solution deployment. IT groups that already have robust processes in place to

capture change orders will use the project and portfolio management solution to reduce the change order rate. Alternatively, IT organizations that lack any type of change order capture process are challenged to have accurate views of the true work docket remaining for each IT project. In this latter case, IT groups are simply not aware of all change orders logged against a project. Instead change orders are unveiled through progressive discovery of undocumented, unpublicized change orders.

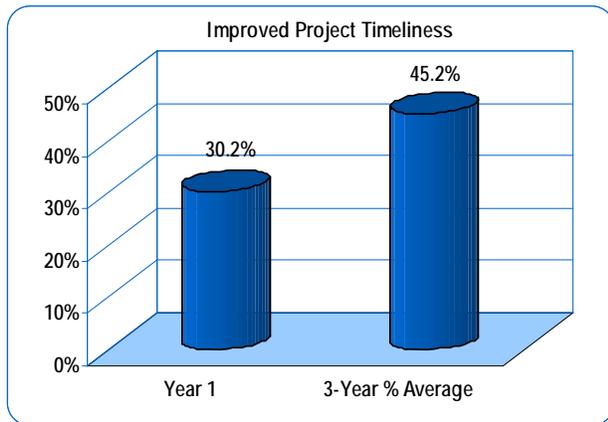
As exhibited in this study, IT organizations may see an increase or decrease in the design change order rate, depending on the maturity of the IT change order process prior to HP PPM Center deployment. HP PPM Center decreases the change order rate for companies with a mature change order capture process by fully informing the project design phase of project requirements and cross-project dependencies; a more robust design phase that considers complete project scope alleviates the need for incremental adjustments and changes.

Conversely, organizations possessing immature change order processes prior to HP PPM Center deployment typically experience an increase in the change order rate since the project and portfolio management solution reflects, for the first time, the true inventory of change orders. For this organizational case, a longer solution deployment period is required to first initiate a change order capture process and then to stabilize the change order rate through an improved, enforced automated project design process. In the end, HP PPM Center reduces costly change order requests and instills an environment in which the design center for each project is clear and the most robust project design is achievable for each IT project.

In this study, participating companies report, on average, an improvement in change order capture of 4.6% during the first year of HP PPM Center deployment. As IT organizations' adoption of HP PPM Center matures over a three year deployment period, the change order capture improves by an average of 14.3% annually.

Improved Project Timeliness

Through Improved Project Visibility & Resource Management



The accuracy of a project schedule cannot be better than the robustness of the project specification. IT project execution is hindered when project requirements are not fully scoped, project schedule dependencies are unclear, and issues remain invisible and uncured. IT project schedule slips are typically attributed to changes in functionality, unexpected workarounds, late identification of project dependencies and issues, and poor resource assumptions.

Without full visibility into project requirements and complete control over the IT project, project schedule timeliness is often in jeopardy. Lack of real-time insight into project status, project issues, and cross-project interdependencies often leads to workarounds and project complications. Project designs are more likely to be less robust, compromised by cascading design change orders. Project schedules are often inaccurate before the project begins, slipping even further in response to iterative project scope adjustments and workarounds.

IT project timeliness is far more achievable when the following components are in place:

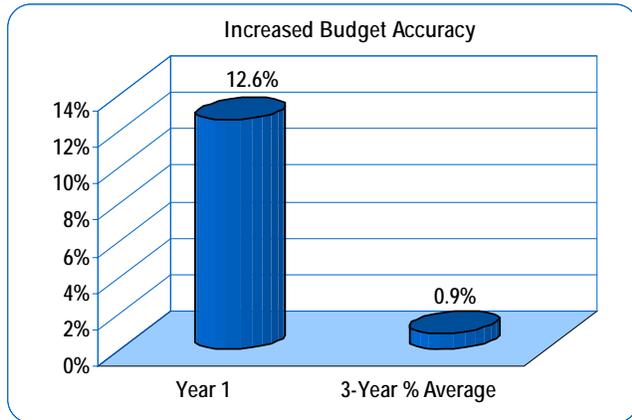
- Clear understanding of project requirements;
- Complete awareness of inter-project dependencies;
- A robust project design that fully responds to project requirements and dependencies;
- Realistic project staff assignments informed by historical development experiences;
- Minimum change orders and workarounds;
- And real-time identification of project issues with quick resolutions.

HP PPM Center improves IT project timeliness through improved project planning, control, and real-time insight into project status and execution against the committed schedule. HP PPM Center encourages thorough definition of the entire IT program by enforcing consistent processes for project requirements and design specification phases that are resistant to the need to post-design through change orders. Access to historical project data informs management on appropriate staffing levels and timelines. Improved visibility to project issues facilitates issue assignment and resolution responsibility across projects. As a result, more IT projects complete on time because project schedules are more realistic, being far less vulnerable to surprises and change.

Companies participating in this study report that 30.2% more projects completed early or on time during the first year after deployment of HP PPM Center. Over the three year solution deployment period, the annual average for project timeliness dramatically improved by 45.2%.

Increased Budget Accuracy

Through Improved IT Project Specification & Project Management



Absence of a consistent, standardized process to fully define IT project scope and required labor resources often leads to poor accuracy in the IT budgetary planning process. IT groups often lack the real-time insight to know what their groups are doing between intermittent status snapshots. Such an operating environment makes it difficult for IT management to learn from past project experience just how long it takes to complete a portfolio of tasks. In such situations, IT managements' ability to forecast IT project schedule and costs rarely can improve. This renders annual

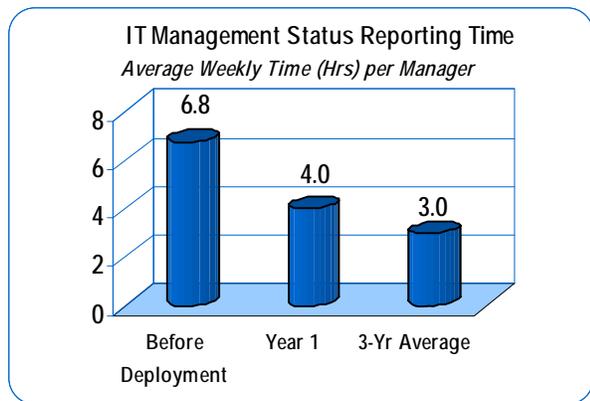
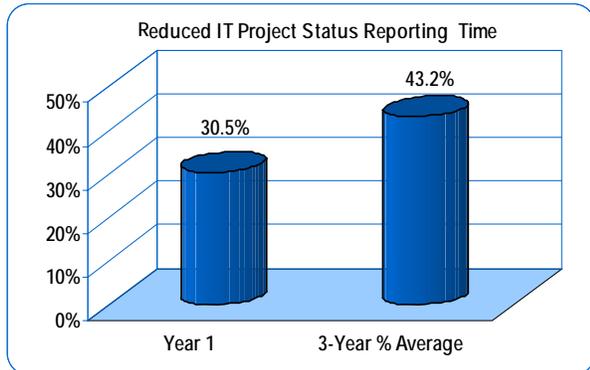
budget planning to be more of an estimating exercise of IT costs for the year, rather than a definitive annual budget. With IT being routinely over/under budget, predictability of corporate financial reporting is vulnerable to swings in IT spending and changes in forecasted capitalization of IT labor expense.

IT budgets are in flux and/or inaccurate when changing projects and changing project scope make it difficult to ascertain the implementation costs for each project that in aggregate comprise the annual IT budget. Several IT groups participating in this study report that prior to deployment of HP PPM Center, it was difficult to determine the set of IT projects that promised the greatest business impact to the company. These IT groups also found it difficult to obtain a clear understanding of the requirements for each IT project. As a result, the IT project docket was quite dynamic. Projects streamed in throughout the year that had not been identified during the budgetary planning cycle and project requirements were progressively disclosed throughout each project's implementation phase.

HP PPM Center enforces a process that requires a company to justify, prioritize and fully scope each project elected to the annual IT docket. By doing so, HP PPM Center enables a company to create a realistic, stable IT budget that more accurately represents the costs of IT project implementation for the year. In short, HP PPM Center reduces the deviation between planned vs. actual IT budget and business financials are more predictable. Companies participating in this ROI study report that IT budget accuracy dramatically improved by an average of 12.6% during the first year of HP PPM Center deployment, stabilizing to an average annual improvement of .9% over the three year post-deployment period.

Reduced IT Management Time Spent on Project Status Reporting

Through Improved IT Project Visibility & Schedule Management



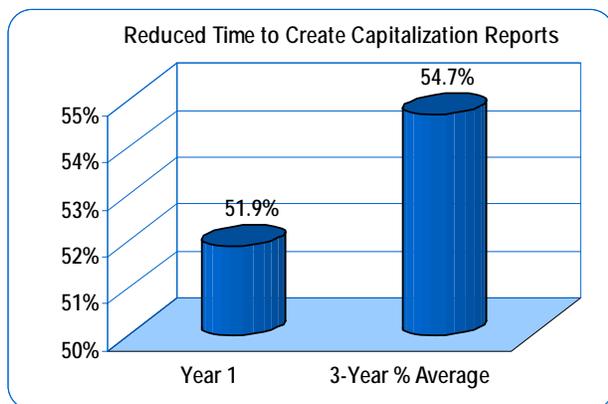
Without a solution like HP PPM Center, communicating IT project status is a major time investment for the IT management team. IT often compensates for a lack of a standardized project tracking tool by developing custom Microsoft PowerPoint presentations on the status of each IT project. In lieu of any other means to acquire insight, business users rely on these project status reports as their only portal into IT project progress.

HP PPM Center automates a significant portion of the status reporting process, enabling IT management to reclaim precious time. Using HP PPM Center's defined workflows, staff can be automatically and routinely informed on IT project status with required actions and documented feedback. Business group sign-off is acquired and tracked throughout the project. Using a comprehensive executive dashboard, business users can get accurate IT status at any time -- without reliance on phone calls, meetings, or delving into custom PowerPoint slide sets for each project.

With HP PPM Center, communications regarding IT project status are improved, while the time investment in accomplishing the communication is minimized. Companies participating in this ROI study reported significant productivity gains derived from reduced time devoted to status reporting. On average, these companies' management teams spent 30.5% less time on project status reporting during the first year after HP PPM Center deployment, further improving to 43.2% as an annual average over the three year solution post-deployment period. While each IT manager spent an average of 6.8 hours per week on project status reporting prior to HP PPM Center deployment, the solution reclaimed 2.8 hours per week per manager during the first year of deployment and 3.8 hours per week per manager over the course of three years.

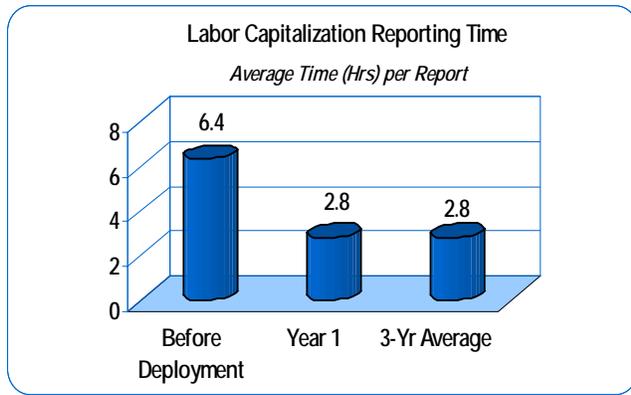
Reduced Time to Generate IT Labor Capitalization Reports

Through Resource Management Tracking & Automated Reporting



Most IT groups are required to submit monthly IT labor capitalization reports to their companies' respective finance groups. Using manual project management processes, pinpointing exactly which resources spent how much time on which IT project(s) for the given month is both tedious and time consuming.

With HP PPM Center's Time Management module, IT labor capitalization reports are generated quickly and accurately, bringing

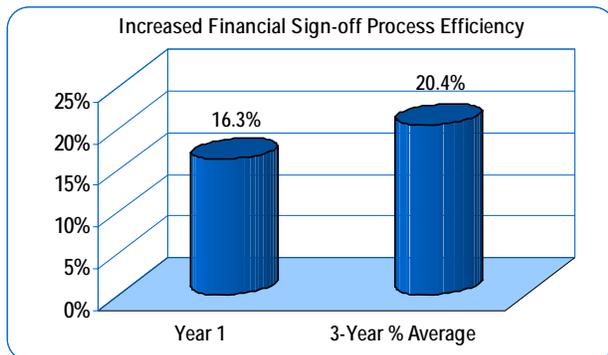


substantial reporting efficiency improvements to IT management teams.

Companies participating in the ROI study reduced time spent generating IT labor capitalization by 51.9% within the first year of HP PPM Center deployment; this productivity gain further improved to 54.7%, averaged over the three year solution post-deployment period. While companies typically spent 6.4 hours to generate each IT labor capitalization report prior to HP PPM Center deployment, IT management now

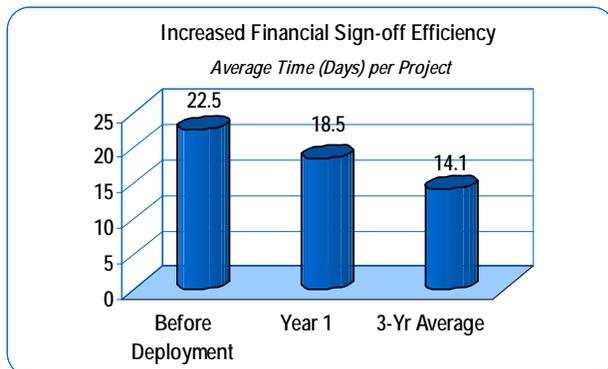
only spends, on average, 2.8 hours per report, recouping an average of 3.6 hours per report using HP PPM Center.

Increased Financial Sign-off Process Efficiency for IT Project Approval Through Automated Workflow Routing



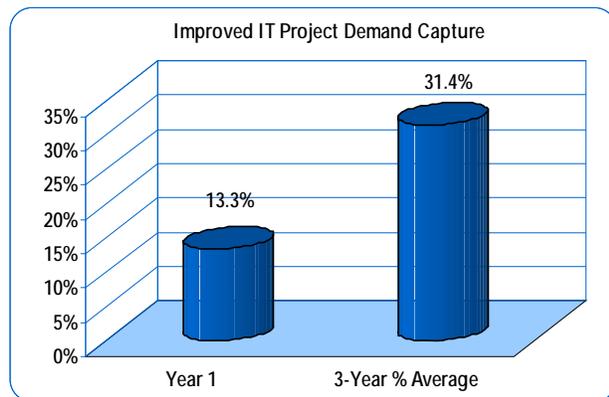
Manual, paper-based processes make IT project sign-off cumbersome and slow. HP PPM Center's automated workflows enable IT project deliverables to be captured within the tool. IT project funding can be treated as just another routed workflow, enabling financial sign-off to be completely automated.

Prior to HP PPM Center deployment, IT companies reported that acquiring financial sign-off for a single IT project took an average of 22.5 days. HP PPM Center significantly improves corporate agility. Over the solution's three year post-deployment period, the sign-off process improves by 20.4%, reducing a project's financial sign-off process an average of 8.4 days.



Improved IT Project Capture in Demand Queue

Through Improved Visibility & Scrutiny of IT Projects



IT organizations that possess a formal, but often manual process to capture projects in the IT demand queue are often challenged to make this process visible to senior management. In the absence of IT demand queue visibility – and senior management scrutiny – frivolous, unjustified IT projects requests are often submitted for consideration without reservation by anyone in the company.

On the other hand, IT organizations lacking any kind of IT demand capture process wish to increase their awareness of the complete demand queue. These companies are

challenged to have a complete, accurate view of all projects under consideration to fully inform the budget planning process.

HP PPM Center establishes a structured funnel process for all incoming IT requests, making a company fully aware of its total IT demand queue. This study found that one of two outcomes may result from HP PPM Center deployments. Organizations lacking a formal demand capture process will see an increase in demand queue size by capturing project requests that were never entered into the queue prior to HP PPM Center deployment.

Alternatively, IT groups that have instituted a demand capture process prior to HP PPM Center deployment will usually see a reduction in project requests due to the fact that business users, knowing that all incoming IT requests will now be scrutinized by top management, are more likely to refrain from unjustified IT project submissions. As a result, the demand queue submission rate diminishes to only projects that bring positive impact to the company.

In this ROI study, the majority of participating companies lacked a formal process to capture IT demand. Capturing full IT demand for the first time as the result of HP PPM Center deployment, the demand queue grew an average of 13.3% the first year. The demand queue proportionally increased by 31.4% over the three year post-deployment period as companies' adoption of HP PPM Center matured.

Conclusion

In short, HP PPM Center promises to:

- Improve business impact of IT investments through consistent, objective scrutiny and prioritization of IT demand queue.
- Improve overall IT effectiveness through improved IT project visibility and historical insights.
- Improve IT productivity through the removal of manual administrative processes.
- Improve IT staff utilization through accurate exposure of IT staff workloads.
- Improve IT project quality through consistent IT project management processes & full design consideration of project dependencies.
- Increases the predictability of IT project delivery: on time, on budget.

HP PPM Center delivers significant value to companies within the first year of solution deployment. Of the eight companies participating in this ROI study, six of the companies report a positive ROI after only the first year of deployment. HP PPM Center returns a savings of 6.5% of the average annual IT budget by end of year one and 14% (NPV) over a three year deployment period. In addition to tangible, bottom-line payback, HP PPM Center delivered significant efficiency gains. Most significantly over the three year post-deployment period, HP PPM Center:

- Improves the annual average for project timeliness dramatically by 45.2%.
- Reduces IT management time spent on project status reporting by 43.2%, reclaiming 3.8 hours of each manager's workweek.
- Reduces IT management time spent on IT labor capitalization report by 54.7%, recouping 3.6 hours per report.
- Decreases the time to achieve financial sign-off for new IT projects by 20.4%, or 8.4 days.

About Gantry Group

The Gantry Group is a research and consulting firm specializing in technology ROI. With over 300 technology clients, 4,000 business process interviews and profiles in our knowledgebase, and more than 1,000 ROI business processes and value drivers modeled, we offer our clients the greatest depth and breadth of ROI experience and invaluable objectivity.

The Gantry Group uses analysis drawn from practiced operational experience, supported by custom primary research, to help IT vendors and enterprises forecast accurate ROI and TCO. Gantry Group translates the business process enhancements that result from IT solutions into enterprise bottom-line impact. This analysis helps vendors to sell their solutions more persuasively and enterprises to make more informed buying decisions. Through a rigorous interview approach, Gantry Group profiles real enterprises with solution deployments to isolate and capture actual business performance metrics before and after implementation. Gantry Group develops predictive ROI tools that measure and quantify the effect of the technology on business performance prior to investment. Using these results, technology vendors can substantiate their solutions' real ROI and expected payback horizons to increase revenue. Enterprises can realistically evaluate and forecast the likelihood of net financial benefit derived from a technology solution.

For more information about Gantry Group, visit www.gantrygroup.com or call 978-371-7557.