Gain visibility and insight into all your application investments

HP Project and Portfolio Management Center—an integral part of managing the complete application lifecycle

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Executive summary

We are experiencing a convergence of trends that is dramatically transforming and modernizing the world of IT organizations. New tools and architectures are making it easier to develop and deliver composite applications. New development practices, such as agile methodologies, are helping organizations speed up the process of creating adaptable software systems. Mobile applications are expected business tools now. Offshoring and outsourcing continue to gain momentum as companies try to find ways to lower project costs and tap into the sourcing partners' expertise and innovation. The business continues to demand efficient integrated applications that respond quickly to market demand, leading to frequent releases, parallel development cycles, and as a result further constrain IT resources and investments.

While these trends offer significant benefits in efficiency and business agility, they require improved techniques for managing the application lifecycle.

Complete Application Lifecycle Management (ALM) is more than a simple, one time process; it is the management of end-to-end lifecycle of the application starting and ending with application portfolio planning. It includes prioritization of investments; establishing standards and policies; design, development, release and operation of the application; and ultimately ending with applications' replacement and retirement. Without an effective and complete ALM process, there is a real risk that applications are built and delivered, yet actual business value is not managed or measured. Ultimately, the business seeing higher costs and limited return on investments (ROIs) will question the overall value and credibility of the IT organization.

According to the research firm IDC in referring to the complete application lifestyle: "These are not 'nice to have' capabilities. Effective decision making for IT projects and programs remains a matter of survival in the current dynamic international economic and regulatory climate."

With that said, how do you recognize the right application investments for the business? How do you successfully build and manage applications? Lastly, when do you retire them?

A successful ALM strategy requires a complete view of the entire application. It also presumes management of strategic control points—the critical gates along the application lifecycle where business visibility and buy in is most crucial. These control points serve as the critical link between the business and IT, enabling IT and the business to stay connected and focused on what really matters.

This paper explores the role of HP Project and Portfolio Management (PPM) Center software as an essential part of complete ALM. It highlights the benefits of the HP PPM Center software—the comprehensive offering that gives the information you need to make better decisions, reduce risk, and enhance business outcomes across the lifecycle—from planning to operations. HP PPM Center software is tightly integrated with industry-leading HP Application Lifecycle

Management, HP Quality Center, HP Performance Center, HP Service Management Center software, HP Universal Configuration Management Database (UCMDB), HP Release Control, and HP Asset Manager making it the central point of control for the complete application lifecycle.

A recent study done by HP surveyed a group of companies that had deployed HP PPM Center for one to three years. The majority of companies who participated in the study reported exceptional business benefits:

- A positive ROI within the first year
- An average of 12.6 percent annual savings in IT budgets after three years of deployment
- Improving project timeliness by up to 46 percent
- Reducing status reporting-related activities by 52 percent, resulting in savings of 3.8 hours of each IT manager's work week
- Reducing project financial sign-off time by nearly 11 days or 31 percent due to increased budget accuracy and automated workflow routing[1]

Many of HP customers are realizing the benefits of deploying HP PPM Center to support their entire application lifecycle.

For example, Virgin Media recently implemented HP PPM for project and resource control throughout the application lifecycle, together with a number of HP ALM tools. According to Peter Doyle, head of performance and Automation at Virgin Media, "Virgin Media conducted a roll out of HP Project Portfolio Management (PPM) Center to provide real-time visibility and control over IT projects that are important to our business strategy."

"In the past, a lot of projects were completely siloed and, when a similar project came along, there was no analysis available of the synergy between projects," continues Doyle. "The HP solution allows us to model and measure our project delivery capability in terms of resources and test environments whilst simultaneously identifying any constraints on project delivery. Consequently, we now support projects fully by creating an appropriate test environment from project funding to project closure."

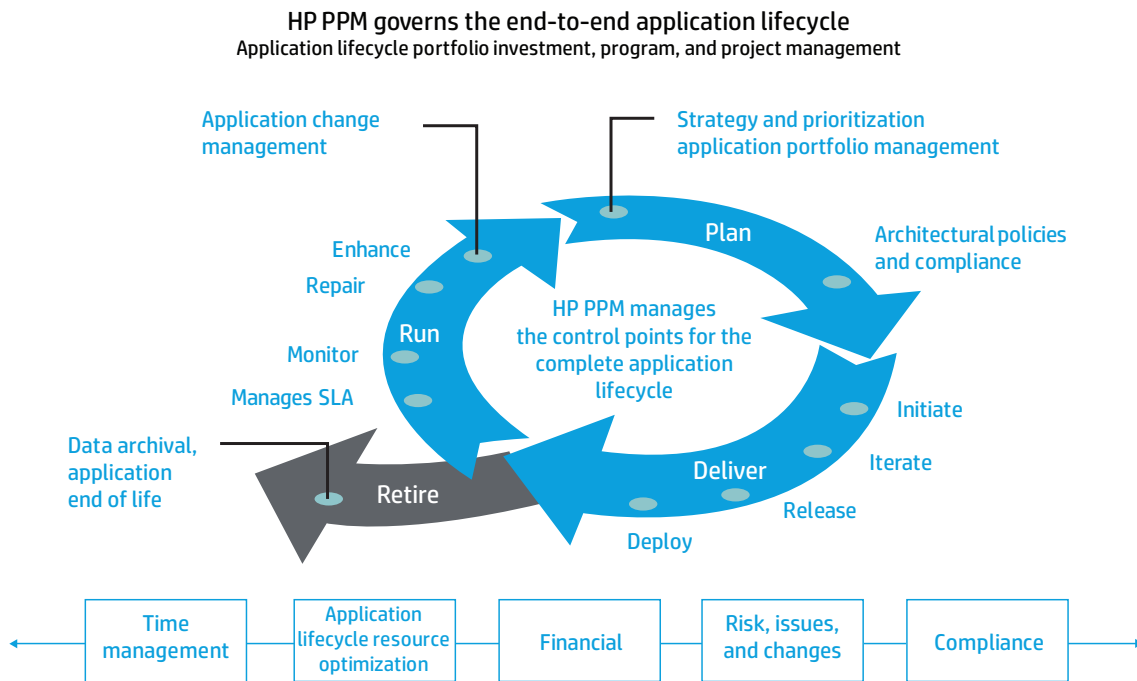## New realities are refining ALM

In the not-so-distant past, even large companies relied on a small handful of "super apps" to power the major business processes (payroll, accounts receivable, and the like). Not anymore. Also most of us would have trouble naming a single business process that doesn't depend on an IT application or series of applications—from the tiniest Wiki to the grandest enterprise resource planning system.

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[1] Source: "Customers prove a positive ROI using HP PPM Center software," HP Business white paper, January 2012. For more information, visit **http://h20195.www2.hp.com/ V2/GetPDF.aspx/4AA3-8673ENW.pdf**

Figure 1. HP PPM is an essential solution to manage the complete application lifecycle.

HP PPM governs the end-to-end application lifecycle
Application lifecycle portfolio investment, program, and project management

Complete application lifecycle; from tactical to strategic value:

HP takes a broader, more complete approach to the application lifecycle, providing solutions to connect the dots of the lifecycle: plan, deliver, run, and retire. We integrate all critical control points of complete ALM.

1. **Plan:** We start with strategic planning and governance including application portfolio to help optimize application investments and prioritize what brings value to the business.

2. **Deliver:** We build on our strength of ensuring application fundamentals: requirements, quality, performance, and security.

3. **Run:** We support the production monitoring, incident and problem management (service desk), and managing ongoing change.

In fact, applications are so integral to the modern enterprise that business nimbleness depends on application agility: You don't get one without the other. The business moves, changes, and expands only as fast and efficiently as its applications do. Recognizing this, IT organizations have fundamentally changed the ways their people, processes, and technologies deliver applications. We're seeing projects with offshore or nearshore support structures; a process shift away from document-heavy methods like waterfall to flexible ones like agile; and new technologies such as rich internet applications, cloud computing, mobile applications, and service-based architectures. These initiatives characterize modern application delivery. While delivering modern applications how do you focus on the business outcomes?

Consider the application portfolio, which in the modern organization, is supported by globally distributed and shared resources. Managers and stakeholders need a way to effectively understand the applications' value, manage resources, budgets, and priorities across departments, projects, and outsourcing partners while they continue to control application project costs in hard times when budgets are shrinking, but demands on IT continue to grow.

Whether you are an IT executive, VP of applications, program manager, business relationship manager, operations manager, development lead, or project manager, there is a constant struggle to balance application projects, operational tasks, trade-offs, and priorities to reduce risks, maintain compliance, and achieve business objectives. Driving and difficult questions to answer include:

- What is the cost and value of our current applications?
- What application projects are we currently investing in?
- How much are we investing in new initiative vs. maintenance projects?
- Are we focused on the right business priorities throughout the application lifecycle?
- What new projects can we commit to this year?

Figure 2. HP PPM consolidates status and provides visibility of the different phases and control points within the application lifecycle.
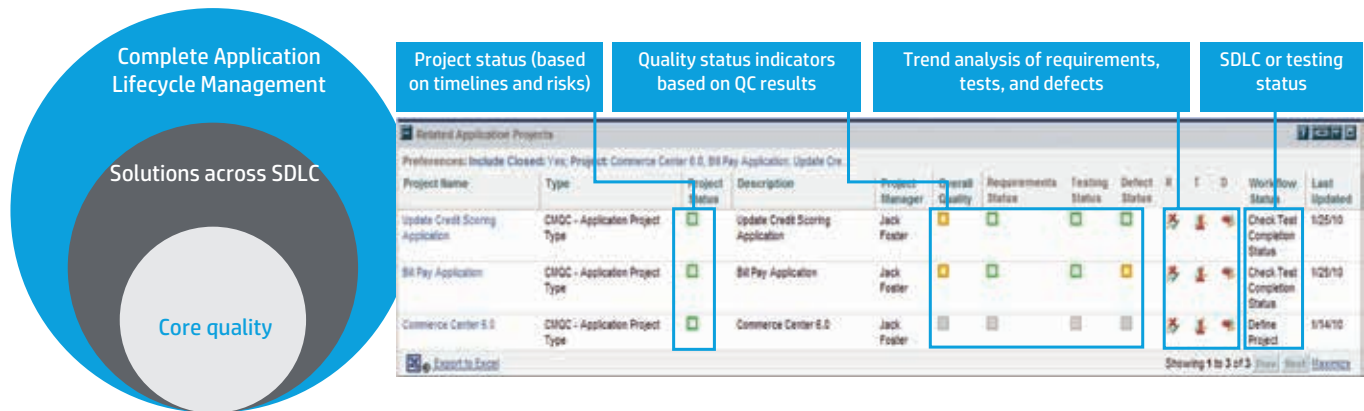
- Can we free up resources to take on an urgent new project and urgent tasks?
- Is our investment optimized across the portfolio?
- How many defects and different application cycles are we working on at a time?
- How do I manage the multiple vendors working in my application development?
- What are the risks along the application lifecycle especially in a cloud environment?
- Which applications should be made to work on mobile devices?

To answer these questions, organizations must gain visibility into their entire portfolio, enforce effective processes, and define higher quality standards. The key to successfully managing business outcomes is implementing efficient project and portfolio management practices and enforce these practices and controls across the entire application lifecycle. HP's vision for a complete application lifecycle goes beyond the traditional development lifecycle (requirements, development, and deployment). While the development lifecycle is critical, it overlooks essential phases essential for application management success. The complete application lifecycle adds application portfolio planning, management of the control points within the application lifecycle; change management; automation; and retirement. By focusing on core delivery to the exclusion of the complete lifecycle, organizations miss the vast majority of an application's total cost of ownership.

HP's approach to the application lifecycle

In today's world, it is not practical to view complete ALM as just a collection of development and testing steps and tools. It is instead a strategic discipline aimed at optimizing the business outcomes of IT. It is designed to focus the IT efforts on the business-level benefits, and provides visibility into control points for all IT activities.

HP's approach is distinctively able to deliver a complete, fully integrated, end-to-end solution using innovative software that gives you the information you need to make better business decisions along every step of the complete application lifecycle.

The HP view of the complete application lifecycle begins with the business justification and aggregation of all potential investments that could be executed within the same IT development and release pipeline. Input to this process includes all new ideas and demands as well as potential investments to enhance existing applications. To be successful, this process requires portfolio prioritization which extends through the development cycle, service and security policies, delivery, production monitoring, and change management and retirement. Without HP PPM Center and its workflows, strategic controls, and visibility, IT organizations would not be able to perform the complete ALM.

Application portfolio and demand management

To help optimize the application portfolio, you first need an understanding of all applications, their usage, and their value to your business. Second, you need to understand and gain control over all demands that are placed on your organization.

As demands for new or enhanced services for new application initiatives and application maintenance come in, there must be a process for prioritizing and refining them.

After all, decisions about any individual demand cannot be made in a vacuum; they need to be compared against the entire portfolio and business value—in the current quarter and in future periods.

Understanding the demands and how they relate to the entire portfolio and strategic business objectives are important to plan how to allocate the IT investments and resources wisely. Demand management is the first step to effective ALM planning achieved through HP PPM Center.

Through application portfolio management, your organization can consolidate and prioritize all applications and application requests, including strategic application projects and operational activities. With better visibility and control, you can focus on the highest-priority requests and deliver on service-level commitments to the business.

Determining the ideal mix of proposed application projects, active projects, and operational work to fund in any particular time frame is not an easy task when done manually or when leveraging spreadsheets. HP PPM Center allows the definition of unlimited "what-if" scenarios, allowing you to create the optimal mix of projects, proposals, and other work, providing you visibility into the best possible investments.

HP PPM Center allows you to model changes to dates, budgets, or resources to meet the IT and business goals, whether they are strategic alignment, ROI, net present value, benefit realization, capacity, skill availability, or a combination of these or other factors. HP PPM Center also provides you with capabilities to show the impact of accelerating an important initiative or sun-setting a low-value asset.

HP PPM Center Modules:

Project management—Create, plan, and monitor project work plans—update milestones, assign resources, manage schedules, define project exception rules, and monitor status and critical path.

Portfolio management—Manage the IT portfolio and use what-if scenarios to plan and rank projects. Manage the resource capacity and utilization. Create and manage the budgets across projects with earned value analysis.

Program management—Collaboratively manage program level tasks that include a set of projects from concept to completion. Enhance the value PMO delivers to the business. Develop the project initiation processes and monitor resource utilization, program scope, issues, and risks. Act on exceptions.

Demand management—Submit and manage requests from different entities. Monitor SLAs and act on exceptions. Run reports and perform approvals. Prioritize demand and assign requests. Capture changes to each request down to the field level. Field level audit trail provides comprehensive process governance.

Time management—Streamline the time collection and reporting processes.

Resource management—Provide supply and demand visibility into resources, roles and skill levels across organization. Support LDAP integration to map resources attributes to the organizational entities.

Financial management—Provide real-time financial coverage for projects. Offer visibility and governance through the lifecycle to manage IT like a business, manage costs by exceptions and improve accuracy of estimates using the robust budget and forecast tools.

Application Portfolio Management (APM)—Enables IT to assess and prioritize the application portfolio for rationalization and modernization opportunities—based on both business goals and IT technology decisions—and then provide ongoing governance through business events such as mergers and acquisitions, divestiture, and IT sourcing strategy changes.

As an example, an energy supplier organization, formed by the merger of two regional energy companies, needed to rapidly lower the cost of IT—and also demonstrate the value of IT to executives.

With HP PPM Center, this customer was able to respond to this executive mandate quickly, saving $8 million USD by identifying at-risk or low-value projects. The company also improved the number of healthy projects by 70 percent—all within eight months of implementation.

Strategic control points in the application lifecycle

Once the proposal for the application has been approved and a project has been initiated, it is important for you to have visibility and control across the application lifecycle phases. Strategic control points are critical gates or handoffs which grant the business visibility into and leverage over IT decisions. Or from the IT point of view, those points which facilitate the buy-in of the business customer. It is the successful management of these strategic control points that determines—perhaps more than anything else—whether the application development effort will be successful or not.

For example, regardless of the application implementation details—such as whether it is written in Java or .NET—it is critical that the business requirements are established properly, that the application is validated against those requirements, and that there is traceability to make sure that the functionality, performance, and security of the finished application meet the business objectives. Strategic control points support alignment, which is used to drive all the critical aspects of application governance, delivery, and operations. It enables you to accurately prioritize, control, and manage every aspect of your IT projects, make better decisions, maintain compliance, and reduce the risk of failure. Through robust integration with HP and non-HP solutions, HP PPM Center provides control points into the entire ALM lifecycle: plan, deliver, run, and retire.

Driving business outcomes with HP PPM Center

The HP approach is to provide you with visibility into the entire application lifecycle using HP PPM Center. HP PPM Center will provide your management with more visibility into the portfolio; more effective controls through the workflow; greater flexibility in applying processes, standards, and methodologies; and better-defined and automated quality standards than you currently have in place. HP PPM Center enables a strong collaborative and communications platform to facilitate progress of various activities in the lifecycle between team members and stakeholders. HP delivers an integrated, top-down view of all IT activities while supporting bottoms-up execution. It includes visibility to your existing application portfolio, strategic and operational projects, non-project work, project health metrics, resource allocations, and overall costs. The details of day-to-day project work are easily monitored, ensuring that the data is accurate at all levels. Task-level input is captured by a system that applies consistent project methodologies, which then accumulates critical information to support executive-level decision making. That is a vital capability that many PPM solutions on the market today are not able to deliver consistently.

HP PPM Center also lets you bring in project plans from Microsoft® Project and other data sources to gain a comprehensive view. You can aggregate both strategic and operational projects and see the critical interdependencies among projects—for example if the resource demands of an operational project, it might prevent you from undertaking a proposed strategic initiative. This capability enables you to manage and prioritize the collected work so you can make sure that the right people are working on the right tasks at the right time—appropriately investing your limited resources to meet business demands. Every decision is supported by hard data. The ability to identify and simplify prioritization helps you clearly demonstrate the value IT delivers to the business.

Integrated workflows, processes, and controls
A key part of the application lifecycle is integration. To effectively support a project process from beginning to end, the solution suite must support tight alignment, sharing of assets and information, and help automate as well as enforce consistent process flows and methodologies.

HP PPM Center is closely integrated with a full suite of HP software and third-party solutions to provide nearly continuous workflows and visibility throughout the application lifecycle. HP PPM Center features tight integrations with HP ALM, HP Quality Center—incorporating quality processes into the complete application lifecycle and helping to make sure that only high-quality applications are moved to production. HP PPM is also closely linked with HP Service Management Center and HP Release Control (also known as Change Control Manager) to manage change and demand requests from operations and to understand the impact of change on production. HP PPM integrates with UCMDB, linking the business services to projects and tasks, as well as determining which configuration items are being changed within the project, or changes for end-to-end business services visibility and management.

HP PPM Center is also integrated with HP Asset Manager to track labor and non-labor spending and a number of third-party version control software tools for the application development and release cycles. Such comprehensive, integrated solutions enable your IT organization to create and automate processes for handling both strategic demand and operational application changes while lowering the total cost of ownership for the business and better managing risk.

A comprehensive HP approach to the application lifecycle

HP's comprehensive approach to the complete application lifecycle also includes pre-packaged content and workflows that automate key processes for quality management and enable excellent practices for project collaboration and project and resource management.

HP PPM software allows the project owner to define and enforce project workflows. What it means for the quality assurance organization is that requirements and testing steps are built directly into the project flow, and control points are put in place to make sure that requirements and quality tasks are completed before the application can be moved to the production stage. The powerful project planning and management features in HP PPM, HP ALM, and HP Quality Center help organizations build a project structure that allocates enough time, resources and budgets to quality and performance validation activities. This approach allows you to manage quality from a strategic perspective and make sure that it meets the business objectives.

Manage resources and skill sets
All requirements and quality testing activities require skilled personnel. The problem is that unless an organization plans ahead and carefully allocates required resources and skill sets to projects, they often end up losing valuable time waiting for the right resource to become available. HP solution gives your organization the ability to track resource skills, identify skill gaps, and match quality and performance project tasks to resources based on availability and required skill sets.

Enforce process and compliance through workflow
HP PPM helps enforce your business processes by enabling the organization to define a template application project work plan that can be reused by all the lines of business. In addition, the audit trails help your organization enforce and maintain regulatory compliance and quality gates.

Enhance checkpoints and gate controls
In order to gain visibility across many application initiatives, development managers must collect data from multiple sources to create real-time snapshots, project trends, and comprehensive reports that cover the entire application lifecycle. HP PPM provides a consolidated view of application projects and progress; trends quality metrics over time and across projects; provides real-time breakdown summaries of requirements, tests, and defects; and generates a consolidated view of related information from different data sources.

Share project assets for better business outcomes
Through product-level integration, HP ALM and HP Quality Center can derive application requirements directly from the HP PPM Center project data. This helps you to make sure that the application's functional and technical requirements are directly connected with the high-level business requirements that were defined at the project level. At the end of the day, it matters to the business how closely the finished application meets its objectives.

Summary

HP's approach of leveraging project and portfolio management capabilities within the complete application lifecycle provides the needed flexibility to aggregate all your demands, projects, and investments into one place regardless of the data sources. HP PPM Center supports key ALM processes by consolidating the proposed strategic and relevant operational activities and initiatives—it enables you to respond to the rapidly changing application portfolio needs in a timely and decisive manner. The HP solution allows you to understand the trade-offs among various investment alternatives and communicate them clearly through real-time reports and dashboards giving you virtually unlimited scenario-based planning capabilities and the ability to forecast the financial and technical impacts of changes.

With HP PPM Center, you can control what resources and capabilities are available at any given time, so you can optimize resources, demands, budgets, schedules, and timeframes within the complete ALM flow. Real-time access to resources helps you to do effective prioritization. Robust security at the field level makes sure only the right person can make the change. The audit trail helps customers meet and sustain compliance efforts while controlling costs. HP PPM Center makes sure your data is accurate, helping you maintain regulatory compliance. With the capability to implement standards and methodologies across the enterprise, HP PPM Center enables rapid time to value with little or no customization, so you can get started quickly and adopt new capabilities at your own pace. HP PPM provides a collection of workflows and first-rate practices that help support the application lifecycle. It enables you to align business goals with technical resources and allows you to enhance the business outcomes of the projects. And it is comprehensive, integrated, and flexible enough to deliver an unprecedented level of business agility while helping mitigate the risks and lowering costs associated with failed projects.

HP PPM Center's integrations and support within the complete ALM flow increases the visibility, makes it easier to match the right resources to the right operational and project activities—so you can deliver superior business outcomes in a predictable manner. HP PPM Center offers higher credibility for the teams managing the application lifecycle.

Benefits of HP PPM Center in the complete ALM solution

- Provides visibility into entire IT portfolio: Including existing applications, demand, project health, non-project work, resource allocations, overall costs, and so on.
- Enables application portfolio management, consolidating and prioritizing all applications based on business value.
- Addresses all critical control points of ALM: Governance, demand management, quality management, security, production monitoring, and change management.
- HP PPM Center is tightly integrated with HP industry-leading software products, and non-HP software, making it the central point of control for the entire application lifecycle.
- Delivers rapid time-to-value for organizations of all types and sizes.

HP Services

Get the most from your software investment. We know that your support challenges may vary according to the size and business-critical needs of your organization.

HP provides technical software support services that address all aspects of your software lifecycle. This gives you the flexibility of choosing the appropriate support level to meet your specific IT and business needs. Use HP cost-effective software support to free up IT resources, so you can focus on other business priorities and innovation.

HP Software Support Services gives you:

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- Fast answers giving you technical expertise and remote tools to access fast answers, reactive problem resolution, and proactive problem prevention
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