



# Collaborative Project Portfolio Management (CPPM)

*Answering the Need for  
Integrated Structured  
and Unstructured  
Project Information*

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## Executive Summary

This white paper focuses on the value of integrating the features of Project Portfolio Management (PPM) and Project Team Collaboration (PTC) tools into a powerful tool suite called Collaborative Project Portfolio Management (CPPM). Blending structured and unstructured data allows a portfolio manager to boost the organization's project portfolio effectiveness, team buy-in and performance across the enterprise.

## Introduction

Addressing the information management needs of project portfolio managers requires a keen understanding of the immense volume and complexity of data they must manage to be effective. Senior management must be able to evaluate the progress of a portfolio at a glance, be able to drill down to project level details should operations go astray, and use the data to make key decisions that keep the projects aligned with organizational goals and objectives.

Staying on top of their game requires these managers to have effective tools that flex and respond to inputs and reporting requirements—the structured foundation of project management. The prevailing tools of the trade for project portfolio managers have been **Project Portfolio Management (PPM)** packages.

These tools are powerhouses when it comes to allocating and tracking resources across projects, developing and maintaining schedules, flagging warning signs and presenting critical summaries in easy-to-read formats. However, when it comes to handling all the unstructured data that surround projects—brainstorming, proposals, document revisions, specifications and so on—PPM tools haven't really measured up.

In all fairness, PPM tools were not designed originally to store this type of information, but in the complex, global business climate today, the unstructured data has assumed new importance. Responsible managers must assess whether failing to capture and link this information to specific projects/processes will result have negative effects: missed business opportunities, reduced team involvement, regulatory compliance shortcomings, overlooked business processes innovation.

That's where a new class of tools we call **Collaborative Project Portfolio Management**, or **CPPM**, comes in.

## More Productive Project Management

Our goal is to help senior management in mid-to-large-sized organizations understand what is needed to make their projects and portfolios run more smoothly and achieve better results. And we believe that a new way of looking at existing tools and information can do just that.

We begin with an explanation of the origins and evolution to CPPM.



## Recognizing The Need

We then show how senior managers and organization leaders in a variety of industries have begun to recognize the need for an integrated tool set. We also detail the advantages of employing CPPM and provide some questions to help you determine whether your organization would benefit from adopting a CPPM.

Finally, we illustrate how this integration of tools, techniques and data types can produce both top and bottom line benefits for the project organization and the enterprise as a whole.

Acknowledging the practical interplay between a project's objective elements and the impact of a team's subjective interpretation and style, is the first step in understanding why we propose this new approach. Blending objective, structured formats with subjective, unstructured information can help clarify the logistical assumptions and realities that go into executing a successful project. We propose that linking the data creates a clear relationship between the elements and results in a more complete picture whose combined value is "greater than the sum of the its parts." For example, regular collaborative involvement has been proven to strengthen team commitment and the resulting quality of the work that team produces, all while reducing costs and minimizing wasted effort.

Based on the growing complexity of business today, the need is greater than ever to integrate project information in a way that works for all levels of the organization. Access to shared materials and subject-matter experts, both in real time (synchronously) and via posted messages (asynchronously) is may prove critical to moving a project along, especially when a team is distributed geographically.

Our research reveals that project, line and organization leaders would welcome a seamlessly integrated set of tools to archive, retain and review both structured and unstructured data. They want to be able to peruse it in a "just-in-time" fashion to answer team, executive, regulatory and process management requirements. Additionally, they would benefit from doing so in a secure, online location. The managers we interviewed indicated that access to such an integrated set of tools would allow them to reinforce critical project and portfolio decisions, drive team buy-in and performance, and assemble process management collections that have the potential to become organizational knowledge assets on their own.

## Project Portfolio Management

Coordinating and keeping portfolios on track and on budget is a profound challenge for any organization. The bar continues to be raised with the demands of a global marketplace for efficient operations, lower overhead and the best use of resources, such as around-the-clock schedules for teams whose members extend beyond national boundaries



and datelines. Regulatory compliance requires careful handling and full accountability with respect to dialog, documents and decision-making. The tools necessary to manage the structure and the texture of such a grand undertaking must be therefore robust and up to the task.

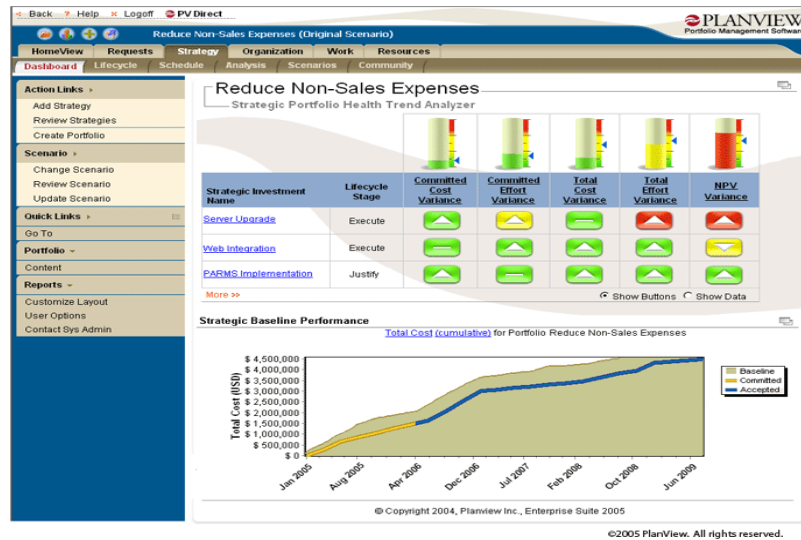


Figure 1 - PPM tools like PlanView Enterprise provide at-a-glance analyses of portfolios

Most large organizations today use tools known as **Project Portfolio Management (PPM)** that support the ability to organize and manage a group of projects simultaneously using a highly structured approach. They track the elements of the work breakdown structure, including costs, timelines, milestones, risks, resources and other critical elements. Executives can then regularly review entire portfolios by glancing at the at-a-glance dashboard indicators ubiquitous in PPMs.



Figure 2 - PPM dashboards provide support for enterprise strategy.



## Project Team Collaboration (PTC)

In banking, for instance, project portfolios are often global in scope, highly regulated and as detailed as snowflakes. PPM tools are used regularly to initiate, optimize, fine-tune and manage the process and performance. One such PPM tool is **PlanView Enterprise**.

Project portfolio managers rely heavily on the use of the PPM application's highly structured format and easy-to-read dashboard indicators that display key metrics graphically. For project portfolio managers, the benefits of tools like PlanView are obvious.

Dashboard project metrics are an effective tool to help management make decisions, such as on the selection of projects for portfolios, on resource management or on the alignment and compliance of projects with corporate goals and regulations. However numbers alone don't play the whole tune. Another class of tools, called **Project Team Collaboration (PTC) tools**, provides centralized, secure storage of all manner of unstructured project content and objects (See Figure 3).

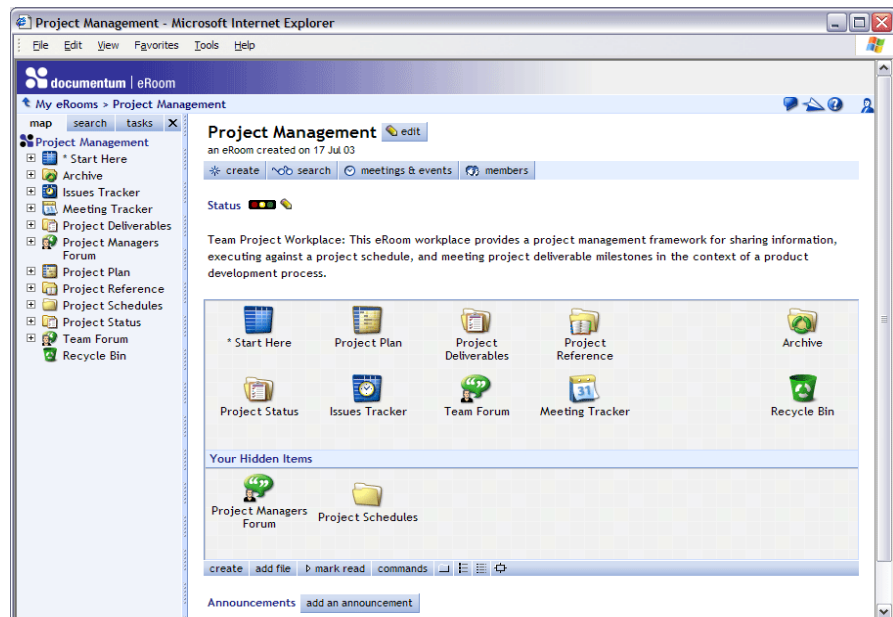


Figure 3- Project Team Collaboration (PCT) tools like EMC Documentum eRoom provide a centralized environment for sharing discussion and materials.

PTC tools focus on the interactive aspects of teamwork and offer tremendous support for logging and tracking the context-sensitive materials and iterative discussions that lead to project ideation and creation. Maintaining the collection of materials intact and available for review is more critical now than ever with shorter project cycles, smaller budgets and increasing regulatory governance and control.



### Industry Challenges

**EMC Documentum's eRoom** for example, provides a virtual team work space to manage discussions about the project plan, issues, risks, and best practices. Its ability to support the various elements of project collaboration is essential to give breadth and depth to the project or portfolio and provide a fuller, richer sense of understanding. PTC products support the contextual element of projects in a superior fashion to PPMs but often lack the ability to support detailed operational reports.

#### *Healthcare*

Often within a single organization, project groups require different levels of structure depending on the nature of the project and culture of organization and team. At a large Canadian Healthcare facility, for example, most project teams were satisfied with the fundamental project management features in EMC Documentum's **eRoom**.

At one end of the continuum for this organization are project groups that are satisfied with a less rigorous data management structure and are comfortable with a PCT tool alone to manage both project parameters as well as auxiliary activity and artifacts.

Other groups within the same facility, however, may seek a more rigorous structure, especially for those projects with a steeper risk factor or higher stakes. Their need for project structure begins to exceed the capabilities of the PTC application alone. For them, the addition of certain PPM structures could lend a greater sense of control for project design, process and results.

As one project portfolio manager we interviewed observed, "The tools have to fit with the culture of the organization." She noted that certain project teams require, even crave, a more structured approach to allow them to track the numbers, harness the momentum and keep projects on schedule and budget. They recognize the need for regular feedback, the type that summaries across multiple projects can offer. If they are currently using a PCT tool, they take for granted the ability to manage the collaboration along with the project data. By providing the best-of-breed features in a single environment, she noted, they could fine-tune the level of structure and collaboration based on the needs of the project, the culture of the team and the requirements of senior management.

#### *Pharmaceuticals*

A large international pharmaceutical firm, for instance, engages in a complicated selection process to determine the right portfolio mix for candidate drug development projects. Because it can cost half billion dollars to develop a new drug and 7-10 years to get it to market, financial and regulatory parameters are strict and competition for



inclusion between drug development project team can be fierce. This process can require dozens of iterations of proposal to stay in the running each time the portfolio undergoes FDA compliance and resource allocation optimization changes that impact the parameters. Having PCT tools integration in their PPM application to manage the document iterations would be a tremendous boon to the process.

### *Information Technology*

IT organizations have typically been early adopters of technology. Often, projects in these environments are complex with distributed teams and quick turn-arounds. This scenario lends itself to a higher level of structure for resource management and financial controls. However, as one company's IT director for business operations and portfolio management who uses a PPM tool observed, "we also have a tremendous need to capture and secure the rich interactive elements of my 1,000-person IT department project portfolios."

In his organization's case, which has grown rapidly through acquisition, the IT group was charged with identifying and retooling many of its business processes before throwing additional technology at them. The company was able to take advantage of its existing PTC tool to invite input from across the organization. Through collaborative inquiry they were able to reveal the glitches in the current business process and identify areas that could benefit from more support.

"Once we were able to map our workflow processes and issues," the senior manager reported, "we could see clearly where we needed to apply more technology support and where it was a human interaction issue." As organizations become more complex through growth or acquisition, there is a correlated need to manage projects in a more structured fashion: More detailed tracking, smarter dashboards, better team management tools. But if the culture already has a highly collaborative culture, the expectation for those capabilities remains.

## **Evolving to CPPM**

When the strengths of both types of applications—structured PPM and unstructured PTC—are blended, the team members, the project manager and as well as senior management all benefit from this powerful synergy and integration. The fusion of these technologies is what we call **Collaborative Project Portfolio Management, or CPPM**

CPPM has evolved from several generations of tools in response to the increasing pace of business projects and their grander scale, scope, and complexity as well as the proliferation of distributed project teams across geographies.

The senior IT manager we interviewed admits to being ready to implement one of the new CPPM tools (PlanView Community) in Q3



(2005) when he anticipates rolling out this new class of tool to his 1,000-person IT department.

## Evolving to CPPM

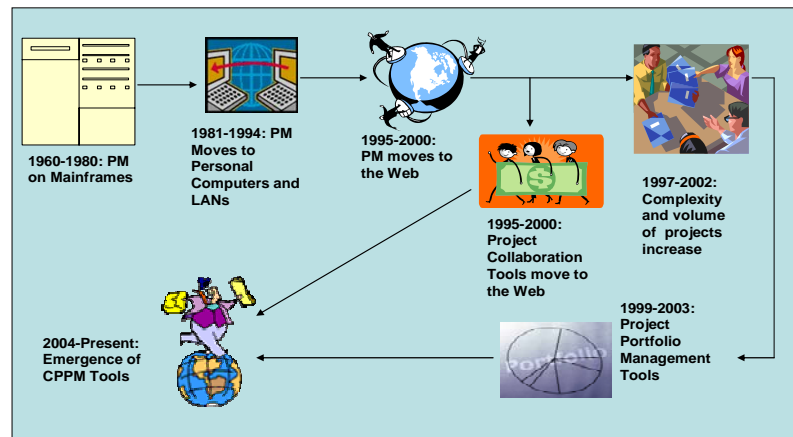


Figure 4 - Collaborative Project Portfolio Management (CPPM) tools evolved from Project Portfolio Management (PPM) and Project Team Collaboration (PTC) and their Project Management (PM) information *ancestors*.

## Implementing CPPM

When introducing CPPM tools into a PPM or PCT only environment, the most effective implementation approach is to go after short (90 day) wins on smaller projects to provide an opportunity to establish a growing track record of successes. Once the initial projects have been transitioned over and are running smoothly, and you have a greater understanding of how your organization reacts to CPPM technology, then one can consider enterprise-wide adoption.

Having worked with dozens of organizations in the throes of introducing collaborative technology across their enterprise and researched the process for hundreds more, Collaborative Strategies has distilled ten (10) steps for success when implementing new tools:

1. Select initial projects that have a high chance of success.
2. Publicize successes widely throughout the organization and your value network (customers, suppliers, or regulatory agencies with which you work ).
3. Secure buy-in from all the stake holders in the project, especially those at the executive management level.
4. Clearly communicate the value of the CPPM technology is make sure it is understood by all



## Benefits of CPPM

- stakeholders.
5. Establish clear baseline metrics before implementing CPPM technologies.
  6. Use the same metrics after implementation to provide an objective (tangible) measure of value.
  7. Interview CPPM project participants during and after the project to capture the intangible value of the changes and the technology.
  8. Provide training and support to all stakeholders and users for their role.
  9. Assure seamless integration of structured and unstructured information via the features/functionality of the CPPM tool.
  10. Establish the success of the initial projects, then use a phased approach (e.g., 90-day windows) to roll out broader or deeper applications in the organization.

As with a great piece of music, there is power in integrating a structured composition with the vitality of how the orchestra performs it live. The more complex the music, the more intricately it must be managed. CPPM tools master the planned, structured project elements *and* capture the vital, yet unstructured information that arises before, during and after real-time execution of projects. CPPM benefits include:

- **Enterprise Focus:** Rather than simply focusing on a single department's project or portfolio, the real strength of CPPM tools is their ability to address project and portfolio management across the entire enterprise and throughout the organization's "value network". In doing so, senior management can ensure that project/portfolios are in alignment with corporate goals and initiatives. And if they are not, understand why not?
- **Contextual Integration of Information Sources:** Because project/portfolio information is often as distributed as the project team itself, CPPM tools help to integrate this information from a variety of sources such as ERP or CRM systems data, HR human capital data, external supply-chain data and so on.
- **Real-Time Interaction:** CPPM tools combine several types of communication tools that are able to support and capture real-time interactions. *Presence detection*, for example, allows a user to see who is currently online and available for contact. *Instant Messaging (IM)*, as the name implies, allows for quick pop-up interchanges between team members, management, and internal or external subject experts (depending on security settings) to deal with issues, ideas and resources. *Team room chat tools* provide a rich environment for multiple users to "meet" online to discuss process



## Key Factors for Success

innovations, specifications, contingency plans to mitigate risk. Collaborative tools can be configured to do *document versioning*, *approval tracking and routing*, *executive oversight specifications* and other critical process can be linked to the actual work of the project. Versions of these tools offer varying levels of *security and archiving* features to help meet governance and regulatory compliance.

- **Best Practices and Better Decisions:** CPPM tools provide a full range of inputs, produce richer information for decision making, identify opportunities, optimize results, expose redundancies, capture best practices for future projects, and build team trust and commitment.
- **Faster Problem and Opportunity Recognition:** By combing both task-centric and collaboration-oriented tools, CPPM technologies enable recognition of items that might require attention that a dashboard-only perspective might not have revealed.

The most significant factor to a successful CPPM solution is “transparency” or a seamless integration between the two types of technologies and information types. Whether a team is moving from a looser structure to a more structured one or vice versa, or is already balancing the two styles in independent applications, a successful CPPM solution must make the link between data types and repositories intuitive, flexible and fast.



Figure 5 - PPM/PCT Integration Points in PlanView Community



As an example of integration, Figure 5 shows the seven key integration points between PlanView's PPM and EMC Documentum's eRoom functionality:

- **Point 1 (Business Strategy):** Business strategy requires the input from a number of departments and the decision impacts how projects are executed. Here then, discussion on, say, the development of a specific business initiative or approach in eRoom could be linked into the project info to which the initiative refers in the PPM structure.
- **Point 2 (Investment Analysis):** Provides a means to align documents and discussion to a portfolio to support risk analysis and ROI specification.
- **Point 3 (Projects):** There is often significant discussion as project concepts are being developed, proposals worked and reworked and of course discussion during the execution phases of the project.
- **Point 4 (Service Work):** Prioritization of support tickets and change management can be facilitated through collaboration to ensure optimized resource assignment.
- **Point 5 (Service Delivery):** Enable interactions between business and IT managers to define improvements to critical business services.
- **Point 6 (Optimize Resources):** Core to managing portfolios is efficient cost and use of resources within and across projects. Much planning and discussion surround this effort as it is key to cost control.
- **Point 7 (Benefits Realization):** Creating knowledge assets from successful processes can mean significant cost savings or new revenue streams. Linking the projects results to discussions of triumphs, champions and lessons learned can be critical to realizing the richness of experience in project work.

Finding a best-of-breed solution often allows a project manager to eliminate a host of hard-to-manage home-grown tools that teams develop to solve problems that are only being partially addressed by senior management and IT. Selecting the CPPM tool may come down to identifying the solution that best integrates structured and unstructured data at a the right price point.

## Summary and Key Questions

As we've discussed, Collaborative Project Portfolio Management (CPPM) is a new class of tool that effectively combines the best features of both structured project portfolio management (PPM) and project team collaboration technologies (PTCT).

To gauge how in-tune you are with the potential benefits of a CPPM system, ask yourself:

- *Is my organization consistently able to meet budget and scheduling constraints? If not, can I quickly track the root of the problem and troubleshoot a solution?*



## Resources/ Authors

- *Can I track and archive the dialog, documents and decision points surrounding key project for lessons learned, training and auditing purposes?*
- *Do I fully understand the nature and impact of obstacles that effect productivity and efficiency within and across projects and portfolios?*
- *Are the tools I'm currently using robust enough to provide both structural and contextual information about projects/portfolios?*
- *What would make them more powerful, revealing and effective?*

The first examples of CPPM—such as the combination of PlanView and EMC Documentum's eRoom functionality called PlanView Community—will address the top issues facing senior management and IT professionals in managing projects and portfolios. However, these products will continue to evolve, add functionality and introduce even more richness to the information symphony.

For more information on Collaborative Project Portfolio Management trends and technologies contact:

**Collaborative Strategies**—a San Francisco-based analyst/consulting firm focused on electronic collaboration and knowledge management. Since 1989, we have worked with vendors and end users of collaborative tools and technologies to make them more effective at the science and art of collaboration. Please visit our Web site at [www.collaborate.com](http://www.collaborate.com) or contact us directly at 415-282-9197.

Visit **PlanView** at [www.planview.com](http://www.planview.com) and **EMC Documentum** at [www.documentum.com](http://www.documentum.com) to learn about their jointly supported Collaborative Project Portfolio Management technology, PlanView Community.

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