

Ensuring a Successful PLM Implementation

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If you've ever been involved in an enterprise software implementation, you already know how challenging it can be to bring projects in on time and under budget. With literally thousands of technical details to keep track of – and the need to manage fundamental changes in how work gets done – there are plenty of opportunities for things to go wrong. In the case of Product Lifecycle Management (PLM) solutions, enterprise implementations can be even tougher. Highly specialized CAD and engineering solutions must connect seamlessly to collaboration software. Product development teams must embrace new processes. And there's no end to the data management challenges companies face.

Our experience has shown that realizing value from a PLM implementation is tied directly to approaching the project with a broad-based operational framework. Issues such as executive sponsorship, project management, 'scope creep', and the involvement of end users can be addressed with specific processes, and therefore dealt with before project failures arise. Important to note is that these operational areas must be addressed in concert with one another. Enacting a change management process without also tackling end-user adoption is, in the end, not beneficial. In effect, you need a system to implement the system.

If you're planning a PLM implementation to improve your product development performance, here are the five operational areas you'll need to manage:

Targeting the right value opportunity –

Ensuring that the program will deliver long-term value to the corporation

Applying a methodical implementation approach –

Ensuring that the implementation follows a proven cycle of design, development, and deployment

Ensuring end-user adoption –

Linking the daily activities of end users to the value opportunity

Creating a contract for success –

Making sure that the mechanics of the written contract reflect the expected value

Strong program governance –

A formalized process and structure for setting of priorities, decision-making, and effective change control

Targeting the Right Value Opportunity

Two critical elements must be in place for companies to realize the value they want from a PLM implementation program. First, the program must be focused on clearly defined value. Value opportunities ensure that you have a strong business case for the program. Examples of PLM value opportunities include implementing product platforms to drive more product variants, lowering product cost by improving part reuse, or simply replacing a homegrown legacy data management system that carries high maintenance costs. By clearly identifying a strong business case you also improve the visibility and interest of executive management. You should feel comfortable with the answers to the following questions:

- Do you know what capabilities you are providing to the end users?
- Do program members and end users understand the measures of success?
- Does the program add long-term value to the company?
- Do the program members understand the value?

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In general, look for value opportunities that lead to sustainable improvements, not just short-term savings.

And second, the value opportunity itself must drive program priorities and decisions. Inevitably, during the course of the program you will be faced with difficult questions and options regarding scope, functionality, or timing. Referencing the value opportunity will help you make decisions, and ensure that the program stays true to the delivery of business value.

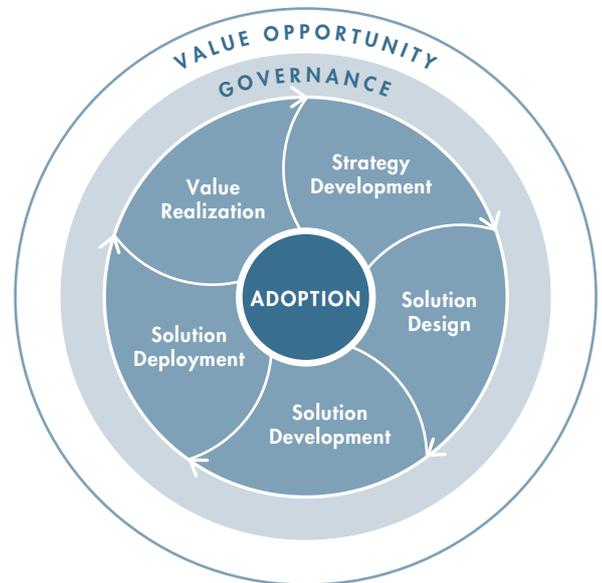
We’ve found it helpful to develop guiding principles, or axioms, for the entire program. For example, maintaining the lowest total cost of ownership may be a single overriding principle for the implementation project. In this example, you should test additions of new functionality against this “north star.” You may find that you can’t support the new additions due to the long-term increases in maintenance of the application.

Applying a Methodical Implementation Approach

Implementations of enterprise systems are, by nature, iterative. Despite the process of building a contract for success, rarely will every aspect of the implementation be well known, diagnosed, and perfectly documented prior to the start of the project.

Planning for iterations of solution development during the course of the project will improve the implementation process and ultimately deliver a stronger outcome. In effect, the project becomes measured against a set of smaller project milestones, yielding a more robust solution.

Following is a five-step implementation approach that has proven to deliver positive results across a variety of projects ranging from pure strategy projects to deep technical projects.



- Strategy Development –**
Create a strategic roadmap that identifies process change, core product development competencies, and enabling capabilities required to achieve business value
- Solution Design –**
Design the solution and implementation plan according to the strategic roadmap
- Solution Development –**
Construct the solution according to the design
- Solution Deployment –**
Install the production technology, introduce new processes and methods, migrate data, train end users, tune for performance and scalability, and establish the overall support process
- Value Realization –**
Measure and quantify the outcome of the program (or, more granularly, an individual program phase)

Understanding and communicating the current step in the implementation approach is helpful not only for the project core team, but even more so for the end users.

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Ensuring End-User Adoption

One of the most telling indicators of success for technology implementations is end-user adoption. In fact, it's more than likely the ultimate test of the implementation project. End users are inherently cynical to change, and therefore the project must address the issues of change management head on. As a critical test of realized value, end-user adoption should be addressed through a systematic approach that encompasses application training and skills transfer.

Here are four areas to focus on when addressing end-user adoption:

- Ensure that the end-user population is **aware** of the system changes that are being made, including the impact that those changes will have on their day-to-day activities. This can be simply accomplished through a series of either face-to-face meetings or a series of electronic communications (e-newsletters or emails). For more sophisticated projects, a comprehensive organizational change management (OCM) program should be developed and rolled out. Keeping the end users aware of the expected value, timelines, and business impacts of the project will improve adoption.
- Implement a training and education program that helps end users **acquire** the necessary skills to be successful with the application. This program should encompass not only the software application itself, but also any business processes that are new or changed as a result of the implementation.
- Focus on helping end users **apply** new applications and skills to their day-to-day activities. This critical step helps to get the application quickly embedded in current projects that the end users are working on. Be sure to implement a support structure comprised of both peer end users and members from the core team or working group.
- Lastly, ensure that the end users can **transfer** these new skills and applications to any new work or activities that they will face in the future. Having a long-term focus on adoption, and helping end users transfer newfound knowledge to new projects ensures that the application is embedded in their day-to-day activities. A plan for continuous improvement is also helpful, including follow-on training and refreshing of skills.

This simple framework of awareness, acquisition, application, and skills transfer is a proven method for driving high rates of end-user adoption – one of the most important indicators of realized value.

Creating a Contract for Success

Every technology implementation should be framed within a written contract. By documenting the parameters of the project, both the client and the technology vendor are obligated to review the key success factors.

All key considerations should be captured, including expectations for business value, principles for decision-making, executive commitment, performance metrics, project management commitments, accountability measures, and milestones.

Don't under estimate the value of seeing these key considerations in written form. Prior to the project, the written contract is a convenient mechanism for documenting rapidly changing project parameters. As the project is underway, the contract becomes a reference document for ensuring that the project activities are staying true to the mutually defined expectations of both parties. At project completion, the contract material is a final checkpoint to ensure all obligations have been satisfied.

Using the contract for success as a living part of the project requires commitment on the part of the project team to keep it up to date and accurately reflecting the project goals and deliverables.

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Strong Program Governance

Program governance is about keeping your PLM project connected to business objectives, and ensuring that scope creep doesn't negatively influence cost and schedule. Governance provides structure and process – and ensures that the implementation team stays aligned with executives, business sponsors, and the value opportunities you're pursuing.

You'll need to consider four distinct levels of structure in your governance model:

The Executive Sponsor –

Serves as the business owner for the implementation. The IT owner alone should never staff the sponsorship role.

The Steering Committee –

Provides overall program direction, makes critical business decisions, secures resources, champions the initiative to other members of the management team, and resolves program conflicts.

The Core Team –

Manages and executes the project plan and produces final deliverables.

The Working Group –

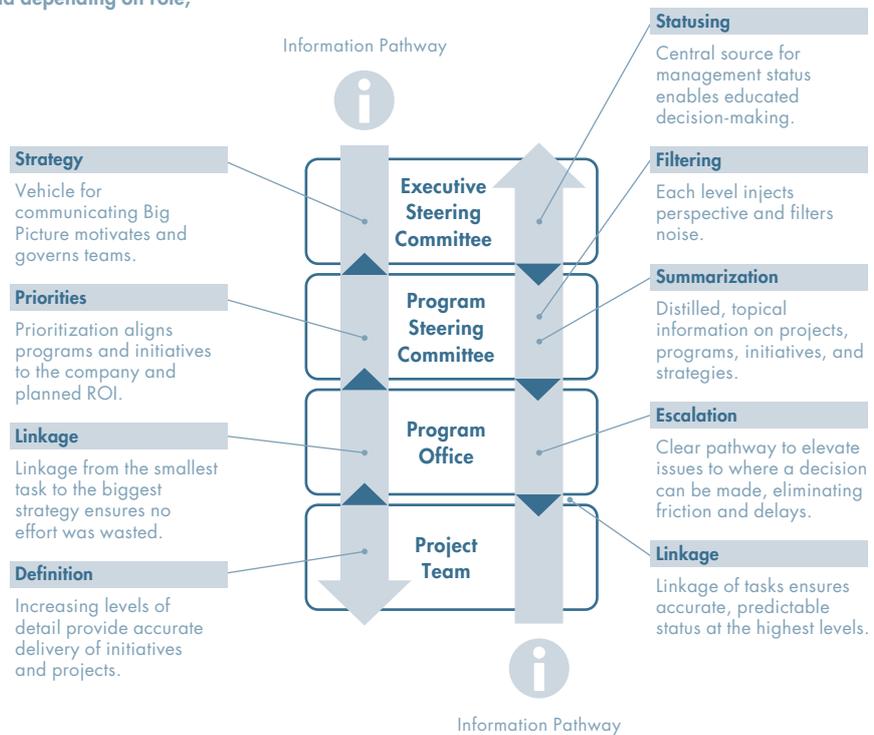
Assists in preparing deliverables, and depending on role, delivers training.

Each level must be staffed with members of the technical implementation team and members from the target business areas. Make sure you fight for the best people you can possibly get – people who can execute well and act as change agents inside the business.

Also critical is to implement a schedule of meetings to drive interaction between these teams. Frequency of meetings is less important than content. Most important is to ensure that a business leader from the core team is updating the steering committee on items such as the overall status of the program and risk mitigation, and making decisions based on the status of the program.

These meetings also provide an opportunity for the steering committee to make decisions for the core team, when necessary. Keep in mind that, ultimately, program governance is about making timely decisions and driving action. If you find that the governance meetings have degraded to simply "reporting" on the status of the program, it's time to review the governance model and get back to making critical decisions.

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Strong Program Governance (CONTINUED)

Effective change control is a critical aspect of program governance. Changes to the original scope of the project are inevitable, as new requirements are uncovered and ultimately prioritized as critical to the project. Implementing a change control board has proven to be a highly effective means of making swift decisions related to changes in scope.

Members of the control board should be selected from the core team and the working group. This membership will manage the myriad requests for changes to the scope of the program, and is therefore the key decision-making body during the entire implementation. As we mentioned earlier, it's a good idea to follow the guiding "axiom" of the program.

The change control board will follow a process of reviewing change requests, evaluating the risk potential, making go/no-go decisions, and following the change through to completion. Just as important as approving certain changes, the change control board must also decline certain changes to the program scope, and formally document the reason for rejecting the change request.

Focus On Five Key Operational Issues for Success

Implementing a product development system can be challenging, both from a technology point of view and in terms of change management. Keep these five operational elements in mind to maximize the value potential and minimize the risk of your implementation. In doing so, you ensure a successful and value-rich PLM implementation. Your program will deliver the business results you envision, finish on time and under budget, and set your PLM enterprise deployment on the right path to realized value. ●●●

For detailed information about product development value opportunities, governance practices, change management and implementation, please visit:

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