

Minimizing Technology Project Delays with Digital Libraries:

The Critical Path to Delivering On Time and Under Budget



How on-demand access to trusted technology information ensures timely IT project success — from securing funding to implementation.

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Introduction

“Projects happen in two ways:

a) Planned and then executed or b) Executed, stopped, planned and then executed.”

—*Mike Harding Roberts, The Project Management Book*

As the number of new technologies has exploded in recent years, so have the complexities of technology projects and requirements for the funding and management of these projects – from software and hardware to electronics and manufacturing. Delays can and do occur, often with serious business and human implications. For example:

- » In 2005, a computer system upgrade triggered a delay in uploading new products onto Overstock.com’s website. Among the many business implications: Wall Street downgraded the company’s stock.
- » In 2007, senior staff of England’s National Health publicly said that delays in a £12 billion IT program was putting the lives of patients at risk.

Project sponsors now face more rigorous approval processes that require them to more accurately scope project deliverables, costs, and schedules. Increased scrutiny flows downwards, resulting in significant performance pressures for project managers, architects, and engineers.

These professionals are on the “hot seat” when it comes to ensuring that projects stay on track and meet objectives for functionality, cost, duration, and quality. Their businesses rely on their ability to deliver, as do their own reputations and team morale.

Subscription-based on-demand digital libraries containing published materials such as books and videos represent one resource with a demonstrated capability to help keep projects on track throughout each stage of the project lifecycle, from mapping technical specifications to business requirements through testing, implementation, and post-rollout support stages.

This white paper explores how project management professionals (PMPs), their technology teams, and other key stakeholders can minimize technology project delays by supplementing best practice processes and popular project management software with digital libraries that provide on-demand access to critical technology information.

Information Gaps: The Root Cause of Delays

“IT [information technology] is like the CIA.
Nobody knows our successes, but the failures are public knowledge.”

—*Shawn Schwegman, CIO, Overstock.com*

Technology projects succeed because they have the ability to negotiate past the sources the pose the most significant threat of delay, most of which pertain to information access and sharing:

- » Inadequate funding and stakeholder support.
- » Inaccurate planning or estimates.
- » Unclear or changing goals and objectives.
- » Lack of technical and technology-specific resources during implementation.
- » Failure to collaborate, communicate, and annotate.
- » Poor post-implementation training and support resources.

Forecasts are the cornerstone of any project plan. Project management forecasting software is a key resource for forecasting schedules, resources, and budgets; however the accuracy of forecasts, whether created with software or manually, first requires the accurate identification of solutions and solution components. Ultimately, a project plan is only as good as the blueprint that is provided by architects, engineers, and other team members. Without this, projects risk failure for not being

funded or not being funded properly to accomplish deliverables on time and according to budget.

At the commencement of the project implementation stage, the need for technical and technology-specific resources becomes evident. Technology team members require information pertaining to such aspects as product brands and versions, best practices for implementation and integration, documentation, and solutions to known issues. In the Overstock.com example previously referenced, the company’s IT team took longer than expected to fix bugs while testing a new Oracle application. Meanwhile, the company’s legacy system could not run during the testing.

Training and knowledge transfer are other critical types of change management responsibilities owned by project managers. This is regularly required across all stages and for a variety of reasons. Examples include becoming familiar with technologies that may be part of a proposed solution, on-boarding new staff in the midst of a project, and transferring responsibility to a support team following an implementation – or even while moving on to the next project often with an existing project still in progress.

Filling the Gaps with Digital Libraries

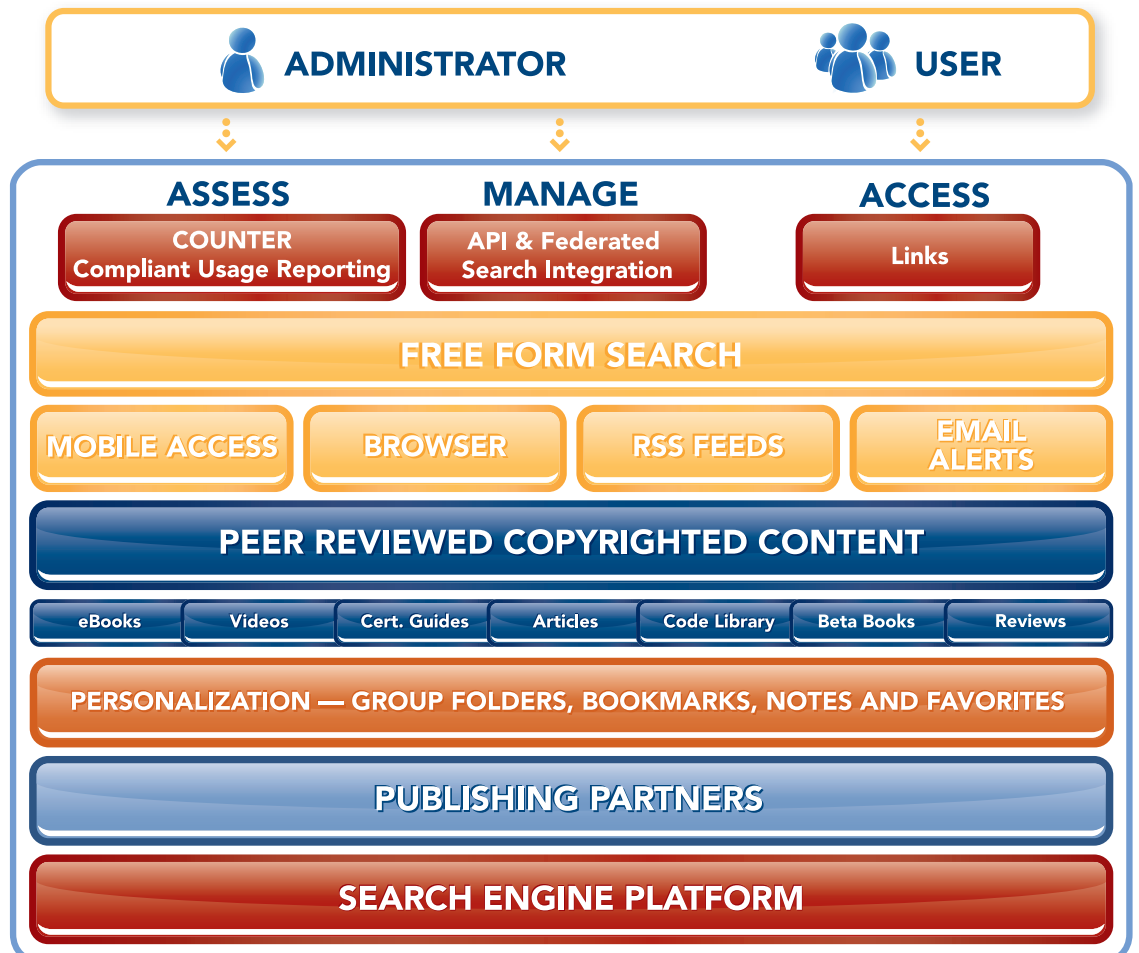
A digital library is a fully – searchable electronic reference database containing the most relevant and current technical information available today.

Digital libraries provide many benefits to project participants – sponsors, project and program managers, project planners, PMO Directors, architects and other IT professionals, business analysts, and product managers.

- » **Project management professionals** can use digital libraries to understand new technologies, identify solution tradeoffs, and discover best project and business management skills and practices, including learning the latest on how to submit compelling proposals or motivate teams.
- » **Technology team members** rely on digital libraries to offset or recover lost productivity for

time otherwise spent searching for information. Digital libraries enable these professionals to pinpoint around-the-clock solutions, quickly research current technical data to help generate accurate forecasts and technical specifications, and to communicate about an expansive range of technology topics. They can also use digital libraries for professional development and certification preparation.

Digital libraries also provide the ability for project teams and organizations to work cohesively—even if scattered across continents, to minimize time spent reimbursing individual information purchases and out-of-office training, and to save significant amounts of money by minimizing delays for delivering new products to market or to internal audiences.



Digital Library Users - In Their Own Words

“The primary value for most of us is making information available on a search-and-retrieve basis—how information is tagged and suggested as alternate search results. Nothing else works as well. No human can take that amount of information from thousands of books and papers and provide this kind of choice so quickly.”

Below are unedited interview excerpts from four professionals who currently use digital libraries. For privacy, their names and the names of the companies that they work for have been omitted.

- VP, Product Management Media Company

The bulk of my experience with digital libraries focuses on intranet structures. There is a significant savings of time with this resource. As most project managers do, I find these tools tremendously valuable. It isn't possible to keep up with real-time changes in relevance of vast amounts of material. I can't imagine working any other way.

I work in an environment where anything written down is outdated by the time it appears in print. We don't have time to wait for an authoritative book on how something should be designed and implemented. We are inventing all the time.

This is why a shared resource library is so helpful and efficient. Actually, it's become essential to us. I cannot imagine trying to disseminate information any other way. The primary value for most of us is making information available on a search-and-retrieve basis—how information is tagged and suggested as alternate search results.

Nothing else works as well. No human can take that amount of information from thousands of books and papers and provide this kind of choice so quickly.

A digital library is the best kind of project application for geographically diverse environments. Nowadays it is more likely that people are working in separate offices. As works fans out across time zones and cultural boundaries, there's nothing better than a well-managed information repository with good search and discovery tools. I can barely contemplate doing things any other way.

- Senior Business Analyst, Online Retailer

Digital libraries are a great resource for just-in-time learning. If there is a question in UNIX that someone just doesn't know anything about, and they have just been placed on a project where they are going to have to support it, that is definitely a resource that they go to.

Digital libraries are an all-inclusive resource for us. The one we use has just been a great help in our fast-paced environment. From one day to the next, we may lose funding for one project and then be placed on another project where we aren't as familiar with the technologies. So it has been a very resourceful asset in our environment.

- VP, Operations, IT Consulting Firm

I sometimes work as a data modeler and Java programmer on web interfaces. Digital libraries provide an excellent resource for me, because I don't work on Java all year. I have to rely on books. For a generalist programmer, online libraries are excellent.

Here is an example: Recently I was responsible for researching a product from a vendor, and the standby databases. I went to our digital library and pulled up everything I could about the standby databases. It's been almost 10 years since I've worked with some of those products. Though I don't stay current, it doesn't keep me from taking these projects. There is usually enough information in the library to find the pieces I need. And, if there's enough material in the chapter, I may download just that without needing the entire book.

- Librarian, Data Analytics Company

When I need to write a new script or make fixes to existing tools I use a digital library. It's great to search and find the exact chapters I need from two or three books, rather than have to buy a book for a short-term project. I use a digital library constantly. It's an indispensable tool. Web technology standards are constantly changing, and with a reliable resource I can stay current. The convenience of this being online makes it even more valuable because I don't have to worry about the availability of the book.

We can generally buy books pretty fast, but we always laugh here because once you buy a book it is out of date. The advantages I most often experience are increased productivity, improved projects, and learning about emerging technology.

Determining Applicability to Projects and Programs

Digital library providers can help you determine if the solution is right for your organization and in use within technology projects. A few of the more prominent characteristics include:

- » Developing, consulting on, or pitching proposals on new products for customers – external and internal – and markets.
- » In-house management of systems, technology infrastructure, or technology deployments.
- » Managing multiple technology projects simultaneously, or supporting or preparing for at least one major project.
- » Integrating communication between management, product, or business line brand management, or IT, IS, or software development.
- » Bridging geographically dispersed project teams.
- » Providing current information resources such as search engines, books, or other sources.

When considering which provider is right for you and your organization, be sure to determine which one is best capable of meeting your technology information needs. A few of the variables that you should carefully consider are:

- » The extent to which technology comprises a core content offering.

- » Content relevancy to a group or company's set of technology clusters— software development and programming, network systems, information support and services, and interactive media - and projects or initiatives.
- » Depth, breadth, and publication date of covered technology topics.
- » The quality and number of publishers represented, as well as any exclusive content distribution agreements.
- » Coverage of specific technologies, operating systems, programming languages.
- » Diversity of content types, e.g., books, manuscripts prior to publication, videos, code fragment libraries, and PDF downloads for portable offline viewing.
- » The extent to which business content exists for supplemental development support.
- » Content ratings as determined by Nielson Bookscan, Amazon best seller lists, and Amazon reader reviews.
- » Search, browse, and personalized notation capabilities.
- » Vendor service, experience, training capabilities, and dedication to customer satisfaction.
- » Customer and marketplace references and testimonials.

Summary

If you are searching for a tool to make your next technology project and ongoing business initiatives successful, then consider a digital library. This resource provides a critical path to streamline processes and gain cost savings – from identifying and analyzing requirements, mapping resources, providing training, identifying risk and contingency plans, and controlling costs.

Digital libraries are also an invaluable resource for enhanced technical knowledge and training and improved decision-making.

Safari Books Online

Safari Books Online is an on-demand digital library that provides one integrated source for over 6,500 expert reference and learning materials from leading publishers. The site includes exclusive access to the collections of O'Reilly Media, Peachpit Press, Cisco Press, Addison-Wesley, as well as additional titles from John Wiley and Sons and Microsoft Press. Safari Books Online provides access to a broad and constantly expanding range of over 100 collections including digital curricula for certification, expert technology, creative and design, and business and management resources in video and text formats.

Safari Books Online enables professionals to save time and money by providing around-the-clock answers to their information needs, while keeping them abreast of emerging and existing technology and business knowledge that is critical to them.

Safari does this by delivering thousands of the best technology, interactive media and business management books, videos and certification guides, as well as a developer code library and manuscripts prior to publication for emerging technologies or topics—before they are publicly available.

Safari's unequalled, exclusive content and easy-to-use interface has enabled professionals around the globe to improve performance, remain competitive in the face of emerging technologies, save time, and improve their ability to retain talent. Our digital library ensures that you and your colleagues have the most current, relevant technology and professional information available to enable productivity, innovation, and growth.

For more information

Go to www.safaribooksonline.com