Knovel

Solution Story: Project Management with Knovel

Knovel
Solution Story

The challenges of project management for engineering teams

Projects are critical and essential to the success of any engineering organization. Projects are how an organization brings about change, introduces new products to market, and aligns its internal resources.

With business practices, requirements, and expectations constantly evolving, engineering organizations need best practices and proven methodologies to complete projects and accomplish objectives.

Having direct access to proven processes and methodologies allows engineering teams to:

Identify gaps in planning

Learn from the successes and failures of others

Understand examples of project management practices per industry

Adapt to early surprises

Conduct effective project reviews

There are many published resources on project management, but few places that link them together. Engineers need:

Project management guidance

Validated templates

Outlines

Case studies

But often face challenges like:

Invalidated open source searching

Searches untailored to engineers

Results that are not easily filtered

Lack of download options

Additional complexities

In a recent survey, engineers said that "navigating multiple information sources" and "finding previous examples or best practices" were the top two information-related challenges*. But, few resources offer solutions to the questions of engineers from initial concept to decision-support.

*Source: Parthenon Engineering Tools and Information Study, 2012 (600+ Engineers)

? How does Knovel set engineering teams up for project success?

Knovel answers critical questions while informing projects from project initiation through closure.

Fundamentals of a project

	Project Initiation	Project Planning	Project Execution	Project Closure and Review
Questions to be answered	What is the business case? Why are we spending time and resources on this project versus another project?	How are we going to accomplish this project? Who should be involved? What's the best strategy for getting it done?	How can I effectively deliver the project? How can I manage mistakes?	What can we learn from this project that will help us with the next project?
Deliverables	Formal business case	Project plan	Project status report	Debrief report
Resources that provide answers and guidance to critical project management questions	Business case best practices and guidelines	Proven project plans, procedures, and work breakdown structures	Structured project status report templates Case studies from successful and unsuccessful engineering projects	Post-project review templates and surveys

How Knovel Helps

Comprehensive engineering decision-support solution covering project management best practices, guidelines, templates, business cases, case studies, and more.

Why Use Knovel

Expedite projects and better enlighten project managers and engineers through quality content, content discoverability, and integration capabilities into essential engineering software tools.

Through Knovel's information essentials and smart engineering-specific search capabilities, engineers save time and solve problems faster than relying on open source searching. In fact, most Knovel users report saving several hours per month searching Knovel to find answers.**

Knovel can support engineers and project managers from the project starting point to the finish line in several ways by relying on its validated content and seamless integration abilities.

**TechValidate survey 2015 baseline

Here are several specific examples using Knovel that inform engineering projects from initiation to completion.

Project initiation

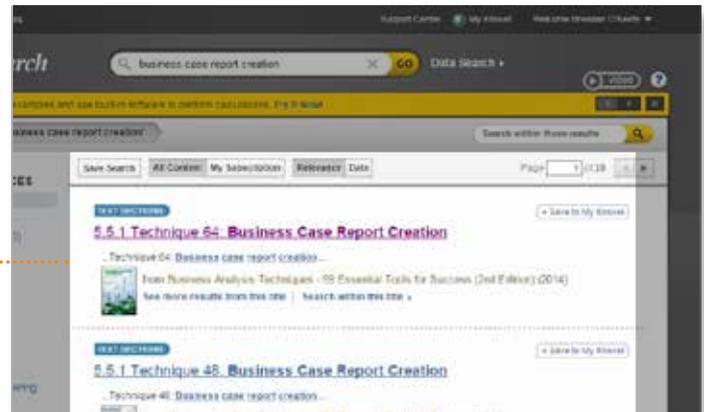Project need — Define the business case using validated and proven outline

STEP 1

Conduct a search. Use Knovel's powerful text search to conduct a search for "business case report creation".

STEP 2

Find answers. You will see guidelines on how to create a business case from a group of analysts.

STEP 3

Read and save your results. Now that you have an end-to-end outline and summary for creating a business case, you can save it to My Knovel for future reference.
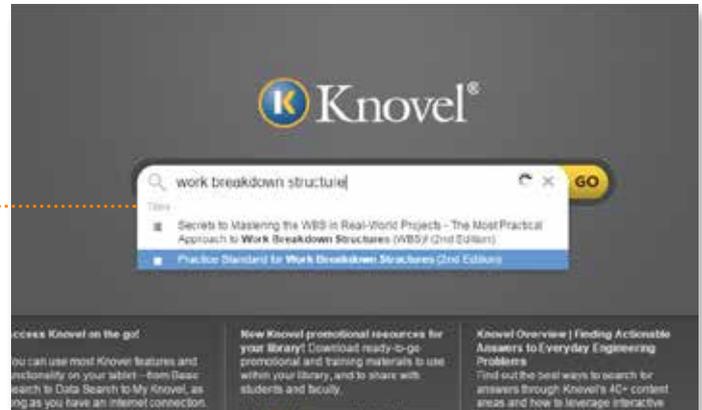
Project planning
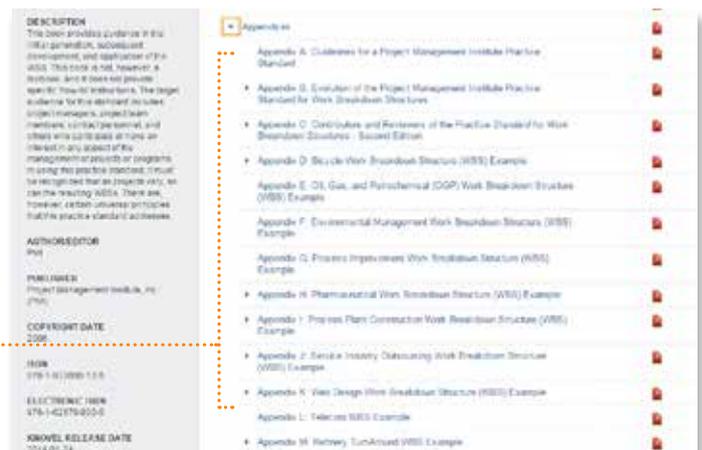
Project need — Understand the steps involved in the project

STEP 1

Find a specialized outline related to a specific engineering project. Go back to Knovel search and type "work breakdown structure." Knovel auto-suggests results from its engineering information essentials database.
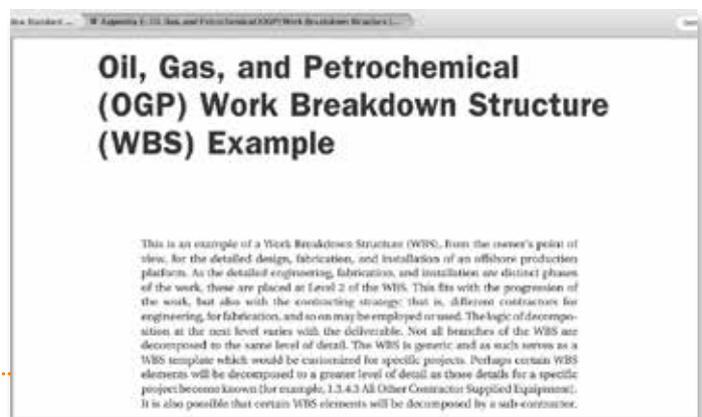

STEP 2

Browse the table of contents. Find specific work breakdown structures from construction to environmental management to process improvement, tailored to specific jobs.

STEP 3

Read and save your results. This Oil, Gas, and Petrochemical Work Breakdown Structure details design, fabrication, and installation of an offshore production platform. Save to My Knovel for future reference.

This is just one example. Knovel contains multiple work breakdown structures across many industries including chemicals, equipment manufacturing, aerospace and defense, and more.

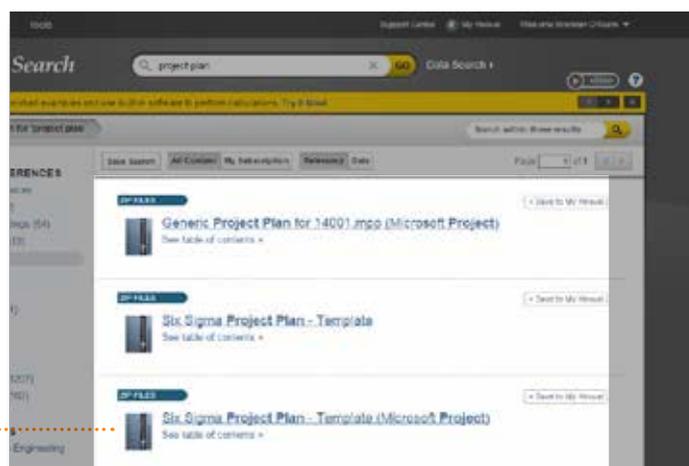Project need — Find a project plan template

STEP 1

Conduct your search. Go to Knovel Search and type in "project plan".

STEP 2

Browse project plan templates. Instead of browsing the technical reference content, go to zip files to find Six Sigma Project Plans that can be directly integrated into Microsoft Project.

STEP 3

Build your project plan. Open in Microsoft Project and start building your project plan.

Validate. Project plan templates often sit on disparate CDs. In Knovel, multiple examples are availble with one click.

Project execution
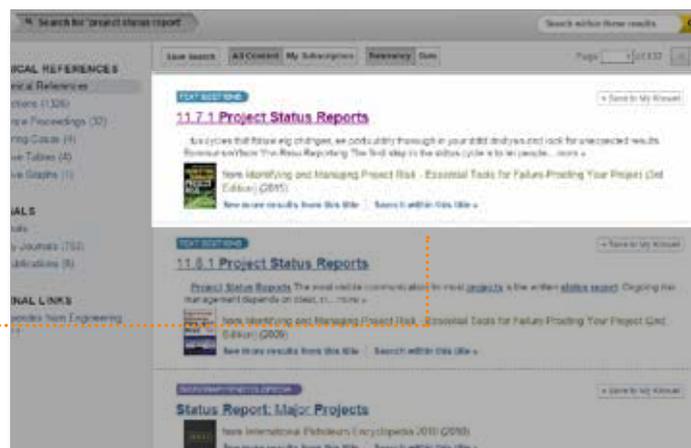
Project need — Create a project status report

STEP 1

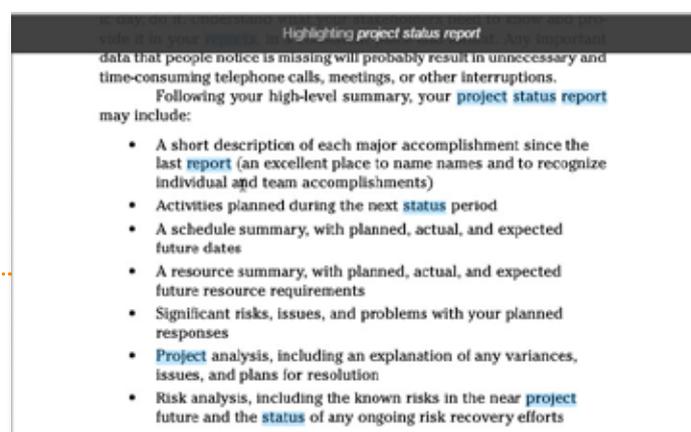**Conduct your search.** Search for "project status report".

STEP 2

Find your answer. There are multiple examples of project status reports from reputable sources. The first result gives guidance on communication and risk reporting.
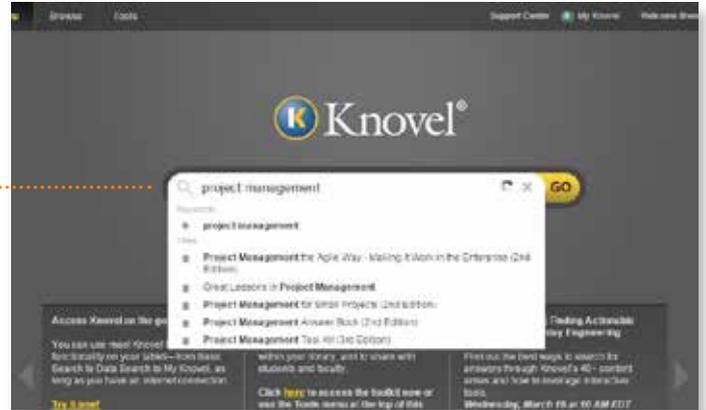

STEP 3

Discover your checklist. This resource contains must-haves for any project status report. Save to My Knovel.
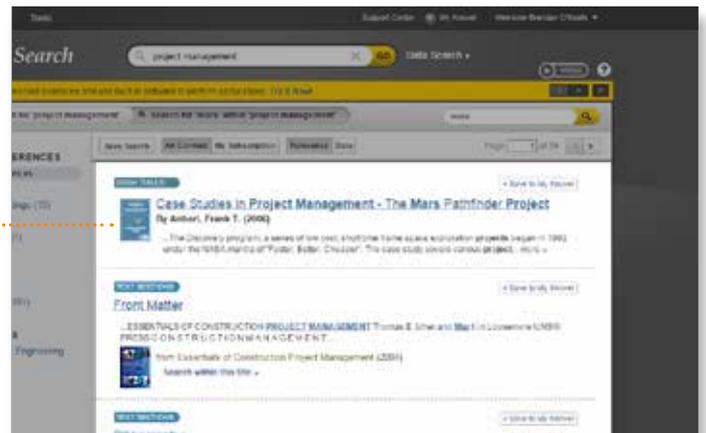
STEP 1

Conduct a search. Search for "project management".
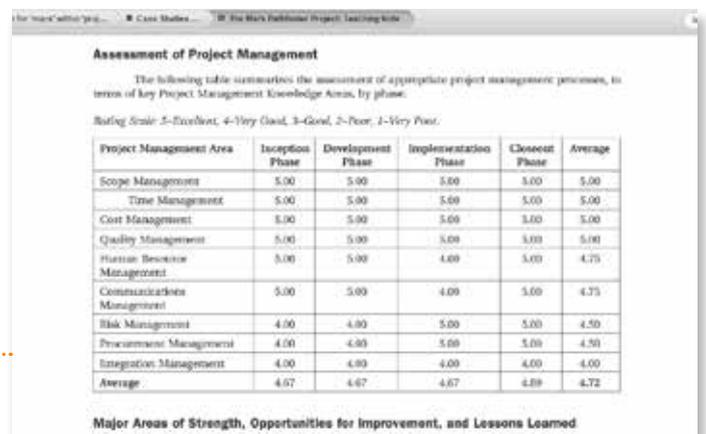

STEP 2

Uncover case studies. Instead of browsing technical reference content, filter your results by case studies.

STEP 3

Learn from project success stories. Look at the teaching notes from the Mars Pathfinder mission, which had stellar risk and project management from start to finish. Save to My Knovel.

Project closure and review

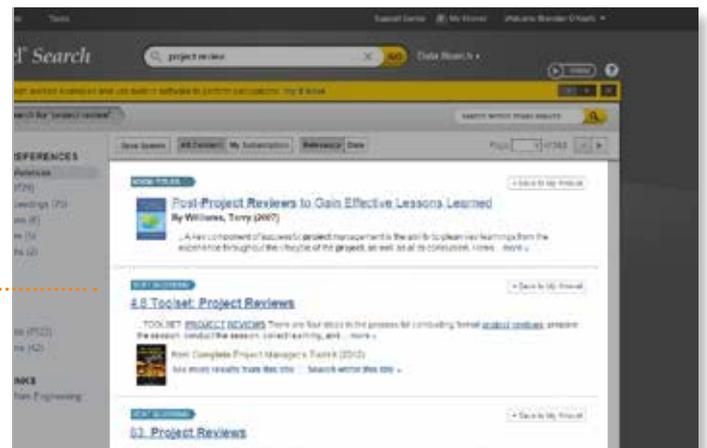Project need — Review your project's successes and opportunities for improvement

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STEP 1

Conduct a search. Search for "project review".
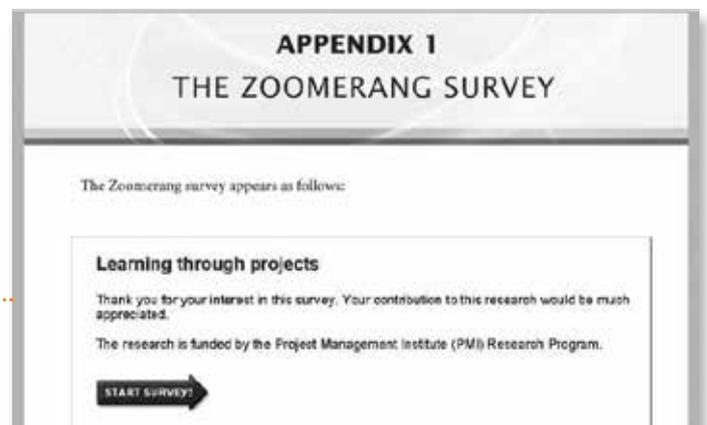

STEP 2

View your results. Knovel contains multiple examples of post-project reviews.

STEP 3

Discover critical questions to ask post-project. This survey helps you learn and analyze the results of your projects.

Summary

Projects are multifaceted and intricate—but always significant. Successfully executed projects help companies stay ahead of their competitors and save money. Poorly executed projects result in wasted resources and budget. Without proper methodologies, projects can fail.

When money is at stake, engineering teams need proven procedures, guidelines, information, and easily downloadable documents all in one place. Knovel can help engineers solve problems faster and execute projects with better outcomes across multiple industries:

- Chemicals
- Oil & Gas
- Aerospace & Defense
- Engineering Design & Construction
- Equipment Manufacturing

See the next page for how to contact us.

Knovel

Knovel helps oil & gas businesses minimize risk while maximizing output and efficiency by providing engineers access to technical reference materials and interactive tools for developing and managing projects with greater efficiency and certainty.

For more information about Knovel, visit elsevier.com/knovel

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