



CONSTRUCTION INDUSTRY INSTITUTE®

THE IMPLEMENTATION
PLANNING MODEL:
AN OVERVIEW

Construction Industry Institute

3M
Abbott
Air Products and Chemicals
Alcoa
Amgen
Anheuser-Busch
Aramco Services Company
BHP Billiton
BP America
Biogen Idec
CITGO Petroleum Corporation
Cargill
Chevron Corporation
Codelco - Chile
ConocoPhillips
The Dow Chemical Company
DuPont
Eastman Chemical Company
ExxonMobil Corporation
General Motors Corporation
GlaxoSmithKline
Intel Corporation
International Paper
Kaiser Permanente
Kraft Foods
Eli Lilly and Company
Marathon Oil Corporation
Merck
NASA
NOVA Chemicals Corporation
Naval Facilities Engineering Command
Ontario Power Generation
Petroleo Brasileiro S/A - Petrobras
Praxair
The Procter & Gamble Company
Progress Energy
Rohm and Haas Company
Sasol Technology
Shell Oil Company
Smithsonian Institution
Solutia
Southern Company
Sunoco
Tennessee Valley Authority
U.S. Architect of the Capitol
U.S. Army Corps of Engineers
U.S. Department of Commerce/NIST/
Building and Fire Research Laboratory
U.S. Department of Health and Human
Services
U.S. Department of State
U.S. General Services Administration
U.S. Steel
Weyerhaeuser Company

ABB Lummus Global
AMEC
AZCO
Adolfson & Peterson Construction
Aker Kværner
Alstom Power
Atkins Faithful & Gould
Autodesk
BE&K
Baker Concrete Construction
Bechtel Group
Black & Veatch
Burns & McDonnell
CB&I
CCC Group
CDI Engineering Solutions
CH2M HILL
CSA Group
Day & Zimmermann International
Dick Corporation
Dresser-Rand Corporation
Emerson Process Management
Fluor Corporation
Foster Wheeler USA Corporation
Fru-Con Construction Corporation
GS Engineering & Construction Corporation
Grinaker-LTA
Harper Industries
Hatch
Hill International
Hilti Corporation
Hyundai Engineering & Construction
JMJ Associates
Jacobs
KBR
Kiewit Construction Group
J. Ray McDermott
M. A. Mortenson Company
Mustang Engineering
R. J. Mycka
The Nielsen-Wurster Group
Parsons
Pathfinder LLC
Perot Systems Corporation
Primavera Systems
S&B Engineers and Constructors
SNC-Lavalin
The Shaw Group
Siemens Power Generation, Inc.
Skire
Technip
Victaulic Company
Walbridge Aldinger Company
Washington Group International
WorleyParsons Limited
Yates Construction
Zachry Construction Corporation
Zurich

The Implementation Planning Model: An Overview

**Prepared by
Construction Industry Institute
Implementation Planning Model Research Team**

**Research Summary 246-1
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Contents

<i>Chapter</i>	<i>Page</i>
Executive Summary	v
1. Introduction	1
2. Model Foundation	5
3. Successful Steps to Implementation	9
4. The Implementation Planning Model	15
5. Change Audit: Approaching New Practices	24
6. Conclusions	27
References	29

Executive Summary

No organization can maintain “status quo” indefinitely and remain competitive in today’s changing business environment. The need for improvement and change varies and is heavily dependent on organization culture, market demands, competition, work force demographics, long-held industry practices, and a necessary focus on minimizing risk. Even with these forces working for and against change, an organization must decide to improve and modify procedures on a regular and continuing basis. Given this demand for continuous change and the introduction of new practices, the question arises as to why organizations have been traditionally reluctant to introduce and implement best practices.

To assist Construction Industry Institute (CII) members to implement change successfully, the Implementation Strategy Committee introduced the CII Implementation Pyramid approach as an overall model for the implementation process. This research builds on the Pyramid by recognizing that the greatest organizational challenge in initiating new practices is the development of an implementation plan. Specifically, organizations require an implementation plan that provides enough detail so all personnel impacted by the planned change understand the roadmap that is going to be followed. Organizations undertaking an implementation process often fail to establish this roadmap or vision for implementing a proposed practice. The CII Implementation Pyramid recognizes the need for a plan, but does not provide specific details that an organization should follow when developing a plan for a new practice. This work fills a gap which is essential to the successful implementation of the pyramid and is primarily focused on Level 4, “Implementation Plan and Goals.”

This publication describes the background leading to the development of the Implementation Planning Model and its individual components. This model includes a comprehensive process for approaching and implementing new practices. The Implementation Planning Model introduces the implementation steps intended to provide an organized approach to successful implementation. The Implementation Strategy

Committee recommends the use of this Implementation Planning Model (Implementation Resource IR 246-2) to develop a comprehensive plan that fully addresses the challenges and achieves the opportunities afforded by implementing a proposed new practice. The implementation resource will give greater detail and provide a guide for any organization to utilize the Implementation Planning Model to develop plans and assess their progress on the roadmap to success.

The implementation resource is derived from Research Report 246-11, “The Implementation Planning Model: Steps to Success.” For a full treatment of this topic, including research performed and basis for the approaches recommended herein, RR 246-11 should be consulted.

Introduction

The greatest threat to achieving greatness is an organization that is content with being extremely good at what it does. Moving from a position of being successful in a specific area to one that potentially excels above the competition can be daunting. Specifically, the cost-benefit analysis for introducing the disruption to existing processes can be difficult to establish due to the unknowns involved with the process. This uncertainty goes against the risk perspective of the capital project investment industry in general and leads directly to the desire to remain with established practices.

Although change management and new practice implementation have a close relationship, the two topics should not be used interchangeably. Specifically, the relationship between change management and new practice implementation can be viewed as a causal link. At the beginning of this link is a trigger for an organization to examine its practices for improvement opportunities. This trigger can be competition, economics, new business opportunities, customer demand, or the result of an internal gap analysis. In each case, this trigger initiates an opportunity for improvement through new or improved practices. Once the opportunity is identified and an implementation path is laid out, the implementation process will result in the need for change. In this manner, the implementation of new or improved practices is the driver for change management. *More importantly, implementation of a practice gives a specific context for change management to occur and establishes a need for a specific plan to be introduced that both manages change and leads to the successful implementation of the practice.* The research summarized in this publication follows this relationship and builds upon change management principles to provide a foundation for the greater detail required for a successful practice implementation plan.

The CII Effort to Address Implementation

The need to enhance an organization's productivity and effectiveness in response to changing environments is a recurring theme through business literature in particular and all areas of production in general. The current research effort introduces an implementation planning model that addresses this need to improve effectiveness through the implementation of new practices. The proposed Implementation Planning Model builds upon existing CII work as well as the experience of the Implementation Strategy Committee to address the need for greater detail in the best practice implementation process. See Research Report 246-11 for a complete discussion of the background research that formed the basis of the proposed model.

This research effort focused on three objectives:

1. Barrier and Success Identification – The key to implementing practices successfully is to understand potential barriers as well as keys to successful implementation. The research team believes that every CII member should understand and address these barriers and key points during best practice implementation.
2. Implementation Framework – The research team developed a model that provides guidelines for any organization approaching the implementation of practices.
3. Sample Plan – The change from a framework to an actual implementation requires an implementation plan that can be communicated to management and personnel who will be involved in the implementation process. To assist in this communication process, the current research effort set an objective of providing a sample plan that organizations can customize for individual requirements.

These objectives provided the basis for initiating the current research effort. The resulting research provides CII member organizations with a new implementation model including an implementation methodology, guidelines, and long-term planning outline that specifically address the issue of implementation within the context of the capital facilities industry.

Literature and Practice Review

The first step in the development process was a literature review, including CII documents on implementation. The CII documents focused on the development of implementation guidelines for suggested practices. Other literature focused extensively on implementation barriers.

Implementation Practice Review

At the conclusion of the literature review, the research team focused on obtaining insights into the practices of CII members in regards to implementing new practices. The goal was to identify the current issues that CII organizations were encountering during the implementation of new practices. The study was undertaken through the use of a survey instrument.

Model Development

The research team synthesized the results of the survey effort into the development of an implementation model. The model has three fundamental goals: outline the steps to a successful implementation effort, identify the barriers and strategies that could be expected during the implementation process, and provide a roadmap to assist an organization in developing a plan for the implementation process.

Testing

After completing the implementation model, the research team conducted a series of tests with participating organizations to determine the accuracy and the usefulness of the model. In each test case, the participating organization matched its implementation process to the proposed model to determine where potential changes to their internal process should be made.

The Implementation Planning Model that was developed from this methodology introduces a number of new terms and processes related to new practice implementation.

Additionally, the model introduces a number of new levels of analysis for an organization to evaluate during the implementation process. The development of an implementation plan is a process rather than a single effort. It is important to understand the concepts introduced in this document and reference the Implementation Planning Model Resource Guide (IR246-2) to develop a plan that integrates the CII Implementation Pyramid, the new Implementation Planning Model, and the implementation measurements.