



CONSTRUCTION INDUSTRY INSTITUTE®

INTRODUCTION TO THE VALUE MANAGEMENT TOOLKIT

Construction Industry Institute

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Introduction to the Value Management Toolkit

**Prepared by
The Construction Industry Institute
Value Management Toolkit Project Team**

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Contents

<i>Chapter</i>	<i>Page</i>
Executive Summary	v
1. Introduction	1
2. Research Methodology	4
3. The Value Management Toolkit	6
4. Value Management Processes	8
5. VMP Descriptive Profiles	11
6. The VMP Selection Tool	12
7. Implementation Aids	14
8. Conclusions and Recommendations	16
References	17
Appendix A: VMPs by Primary Benefits	18
Appendix B: VMP Descriptive Profile Example	19

Executive Summary

Best practices, value enhancing practices, value management, value engineering – all are terms used in construction with much confusion and mystery surrounding them. Project teams and organizations are currently overwhelmed by the number, diversity, and complexity of value management processes (VMPs) available for implementation. The result is that many cannot get their value management efforts defined, organized, or implemented in an effective way.

CII formed the Value Engineering Management Project Team (PT 184), which has developed the *Value Management Toolkit* to address the challenges that organizations face in the awareness, understanding, selection, and implementation of the myriad VMPs available today. This toolkit can be helpful at the program level to assist in developing a strong value management program, yet is equally focused on VMP selection and implementation at the project level.

The *Toolkit* provides an overview of 44 different VMPs and characterizes each VMP with nine descriptive fields of information. The VMPs are unique yet optional processes that can contribute significant value to a capital facility project, but are not currently considered across the industry as part of standard project management. The *Toolkit* also includes case studies, performance benchmarking data, and how-to procedural guidance. The premier feature of the *Toolkit* is a computer-based VMP Selection Tool for assisting project teams in selecting the VMPs best suited for their projects.

The objective of any value management program is to aid project teams in meeting clients' expectations, goals, and project objectives. Projects may range from design and construction of a new U.S. embassy or Federal courthouse that must meet higher security threats, to new pharmaceutical plants rushing to get a new drug to market, to revamping aging oil refineries to meet tighter environmental regulations, to small-scale projects with short lives. The *Value Management Toolkit* offers project teams a unique tool to help meet project objectives and exceed client expectations.

Introduction

The well-established process and tools of value engineering have long been absent from the CII Best Practices. CII Project Team 184 initially was formed to address the under-utilization of conventional value engineering among CII members and to provide related support tools to facilitate higher levels of implementation. During PT 184 discussions, it became apparent that, like value engineering, many similar value processes suffer from low levels of implementation. The team concluded that a broader team focus could facilitate implementation across many value processes, helping facility owners gain much greater value from project investments. The team then turned its attention to developing a publication that would emphasize implementation of value management.

Value, Value Management, and VMPs

Value is “a measure of how well owner objectives are met,” and is typically documented as a set of project objectives. The owner’s ability to understand, prioritize, and articulate project value objectives is critical to overall project success. The right combination of project value objectives is that set of objectives that will provide optimum value to the owner. The concept of value in the context of a capital project should be established by the project owner to reflect unique business goals, project objectives, needs, and expectations.

Value management efforts are needed in order to maximize the potential of a project team and to achieve higher levels of performance pertaining to owner project value objectives. Value management, as defined in the *Toolkit*, is “the collection of processes or efforts by which organizations can proactively pursue one or more project value objectives.” These processes are referred to as Value Management Processes (VMPs).

The organizations that most effectively implement VMPs on a routine basis are those that also have a strong value management program. Value management programs are spearheaded by individuals who, supported by upper management, have a vision to promote the use of VMPs within their organizations. Effective value management programs have a systematic, planned approach to the implementation and support of VMPs, have the resources to train or hire facilitators, and collect and maintain metrics in order to improve the program.

Specifically, a Value Management Process is a defined, unique, yet optional process that can enhance the value of a capital facility. In addition, a VMP is not currently viewed as a part of standard project management (examples of standard project management functions include master planning, safety management, cost control and schedule control). In addition, a VMP can either be a widely accepted practice, such as Value Engineering, or a relatively new, yet proven practice, such as Functional Analysis Concept Development.

The Value Management Toolkit

In order to help project teams (and the industry as a whole) to extract greater value from capital projects, PT 184 developed the *Value Management Toolkit*, a Web-based publication. The *Toolkit* presents 44 VMPs for consideration. Their application ranges widely from early in the project to the end of the project life cycle, well into operations and maintenance. Most VMPs are applicable at the project level, but several are targeted at the overall organizational level and can be implemented at anytime.

The objectives of the *Toolkit* are to:

- Increase industry awareness of the 44 VMPs.
- Facilitate selection of the right VMPs for a project.
- Offer tools for implementation.