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LEADERSHIP IN A KNOWLEDGE ERA:
ACHIEVING THE LEARNING
ORGANIZATION

Construction Industry Institute

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Leadership in a Knowledge Era: Achieving the Learning Organization

**Prepared by
The Construction Industry Institute
Achieving Learning Organizations in the EPC Industry Research Team**

**Research Summary 201-1
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Executive Summary

The emergence of the Knowledge Era has significant relevance to the engineer-procure-construct (EPC) industry, where organization development has been overshadowed by the industry's penchant to improve production. Constantly updated, dynamic knowledge can improve the industry and open up new possibilities in organizational changes. The EPC industry has a definite need for knowledge-based services to help it modernize and to take advantage of current technology.

In 2003, the Construction Industry Institute established its Achieving Learning Organizations Research Team to study current organization learning techniques and technologies in the EPC and other industries. The results indicate that EPC learning organizations are still in the developmental stage. Because of this, the research team moved away from traditional collecting and presenting of industry statistics. Instead, it began developing a new framework to assist organizations in achieving a learning organization culture.

This publication provides an overview of the research. The research team suggests that EPC companies focus on leadership, champions, direction, technology balance, and resource allocation. In doing so, they will make themselves more adaptable to becoming a learning organization.

Introduction

A *learning organization* is skilled at creating, acquiring, sharing, and applying knowledge, and embracing change and innovation at all levels, resulting in optimum performance and maximum competitive advantage.

Background

The EPC industry today is changing as it begins to address issues such as its aging work force, advanced field and office technologies, globalization, economic integration, and international partnering. The industry needs to retain knowledge within the organization and focus on continuous human resource development throughout all levels of the organization. It is imperative that learning organizations become the norm, where continuous knowledge enhancement and improvement of processes becomes a fundamental element of the EPC business.

Such a move will require a comprehensive transformation by an organization. The drivers include the emergence of the “knowledge worker” (one who works primarily with information or one who develops and uses knowledge in the workplace) as the new model for an organization employee. From 1950-1970, the manufacturing era viewed the production worker as primarily important. Now, the knowledge worker is expected to understand how to apply knowledge in unique scenarios and with greater imagination and efficiency.

The CII Effort to Build on This Foundation

The EPC industry is still in the developmental stage of establishing learning organizations. Therefore, the Achieving Learning Organizations Research Team moved away from the traditional CII model of collecting and presenting industry statistics to focus on the development of a new

framework to assist organizations in achieving a learning organization culture. The research team had the following objectives:

1. Identify the critical characteristics of a learning organization.
2. Evaluate learning organization practices in both industry and research environments.
3. Capture the organizational issues that motivate or prevent the development of learning organizations.
4. Develop a model to assist organizations in developing a learning organization culture.
5. Develop a self-evaluation tool for organizations to evaluate their current state of learning organization development.

The research team was aware that its scope was limited. Several major issues such as legal implications, training in safety, workplace harassment, and many others were not able to be addressed due to the timeframe of the study. Any organization contemplating becoming a knowledge-based learning organization must necessarily consider these factors as they set out on the path to expand their cultural make-up.

Method to Achieve Objectives

The steps to achieve the objectives were:

Literature review — works by Senge, Drucker, and others were analyzed to determine how the management community has introduced learning concepts into corporate culture; provided the foundation for both the team's survey and the matrix.

CII survey — gathered data from members (35 organizations responded) on lessons-learned, knowledge management, learning, and organization commitment to developing a learning culture.

In-depth interviews — conducted to gain an understanding of what was required to establish a learning organization culture.

Model development — outlines the characteristics and levels of learning entities within an organization.

LEONARDO — the Learning Organization Rapid Diagnostic (LEONARDO) tool, developed by the research team, evaluates learning organization progress and investment and is described in the team's research report, CII Research Report 201-11.

Validation — companies that participated in the in-depth interviews as well as new organizations were evaluated according to the LEONARDO process. The results of this process were used to adjust the questions and calculations in the model and develop the final version.

Why A Learning Organization?

The desire for learning and its application to change processes and behaviors are the foundation for a learning organization. The primary driver for implementing a learning organization is the need to remain competitive through the delivery of knowledge-based solutions that better meet the needs of customers.

Additional drivers for developing learning organizations include:

- Performance — An educated work force will work both smarter and more efficiently.
- Aging work force — The loss of corporate knowledge through retirement in the engineering and construction industry can be significantly greater since knowledge is not necessarily codified into standard practices or procedures.
- Distributed work force/globalization — Teams may not have local knowledge for specific problems; the availability of a community of practice (described in detail later) will significantly enhance the solution process.
- Better solutions — The implementation of a learning culture will enhance the probability that knowledge resides within the organization.
- Evolution of the organization — The organization that is constantly adapting to new business environments and challenges will succeed.

Benefits

The following provides an overview of the opportunities that an organization has to leverage organization, community, and individual levels.