Code Talkers

Code Advocacy Dashboard

by Christopher K. Ahoy and David Ballard

Balanced Scorecard Plus, facilities planning and management organizations can develop a systematic and integrated approach of identifying laws, codes, and regulations applicable to each business unit and can assess each unit's regulatory compliance journey through a dashboard system. The dashboard format allows each business unit to input and track the progress of both individuals and work units and displays organizational results on a primary dashboard for senior leaders to review on an interactive basis.

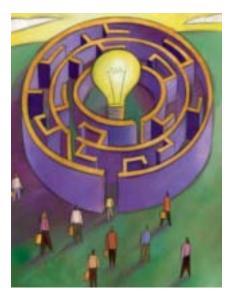
The purpose of this article is to generate an in-depth understanding of a Code Advocacy Dashboard program. It does this by showing how an enterprise can become excellent in the area of regulatory compliance, while tracking the capabilities of their employees and the organization to respond to threats and challenges.

Dashboard Goals

Build. The intent of the Code Advocacy Dashboard is to build a team organization with camaraderie and high performance goals. This team is built to last with the shared values of competency, creativity, credibility, collaboration, and quality communication and an understanding of the concepts of code requirements.

Clarify. In order to clarify the definitions of what an effective organization really is and what it means to

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have operational excellence in promoting awareness, high-level relationship building, process focus, operational excellence, and most importantly, people focus are needed to create "knowledge-based workers" of the 21st century. These knowledge-based workers will have a Code Advocacy Dashboard as one of the tools to achieve success in meeting the everchanging needs of regulatory compliance.

Share. The purpose of this dashboard is to promote understanding of the cross-functional work units. Using Code Advocacy Dashboards raises the bar for facilities personnel to move toward a shared vision in support of each of their institutions' competency in code compliance.

Promote. Promoting Code Advocacy Dashboards through interdepartmental, cross-functional, process management effectiveness and cross-functional relationships helps to ensure greater continuity of collaboration through high-level anticipatory communications.

Engage. Through benchmarking, lessons are shared with like-minded professionals throughout various

APPA regions and others within the industry boundaries.

Regulatory Compliance

The Baldrige business performance assessment tool asks two basic, but difficult to answer, questions in regard to organizational regulatory compliance.

- 1. What is the regulatory environment under which your organization operates?
- 2. What are the applicable occupational health and safety regulations; accreditation, certification, or registration requirements; relevant industry standards; and environmental, financial, and product regulations?

The Balanced Scorecard Plus requires "Metrics," and "Measuring What Matters." Both criteria ask the following question: What are your RESULTS for KEY MEASURES or INDICATORS of regulatory and legal compliance?

All educational facilities administrators must ask these important questions. An error or omission in the realm of regulatory compliance can result in hurting or harming people, property, and the environment, as well as significant fines, litigation, loss of organizational credibility, and damaged reputations. However, the overriding question remains, "What laws, codes, regulations, and recognized standards of care apply to each service unit within a modern facilities organization and are they compliant?" To answer these questions, the Code Advocacy Dashboard was created.

Facilities planning and management organizations can respond to these issues by establishing and deploying a systematic and integrated process to identify and deploy actions necessary to ensure compliance with

key regulatory requirements through a system of layered dashboards. The entire system is based on the Plan-Do-Check-Evaluate cycle, a Baldrige business performance assessment tool. The Code Advocacy Dashboard is designed to:

- Provide each business unit with a systematic process of achieving and maintaining regulatory compliance through online benchmarks and self-audits.
- Allow the knowledge-based worker at the process, operational, and business level to find the status of Code Advocacy Dashboard information in order to make informed decisions.
- Allow senior leaders to evaluate progress toward compliance of applicable laws and regulations at organizational-wide and businessunit levels.

The conceptual model for this system is shown in Figures 1 and 2. Figure 1 shows the system as a process map, and Figure 2 illustrates dashboards generated by the system. At the heart of the system is a twodimensional matrix, with popup informational screens linked to promulgating organization-specific screens that list all applicable laws, codes, regulations, and standards promulgating organizations. (Refer to Figure 3 for a listing of all promulgating agencies/ organizations applicable to a typical facilities planning and management organizations. This is not a complete list, but is a start in looking at various codes that apply in the business of facilities planning and management.)

The system is designed to be user friendly. Upon entering the online system, users are directed to the Organizational Dashboard (refer to Screen 1 on Figure 2). The purpose of the Organizational Dashboard is to show the big picture by identifying all applicable regulatory agencies and business units within the facilities planning and management organization as color coded fields. The Organizational Dashboard also allows users to review the mission of each regulating authority on a popup screen.

From the Organizational Dashboard business unit users are able to select any specific regulating agency for self-auditing. On this action, the user is directed to the business unit's Regulating Agency Dashboard (refer to Screen 2 on Figure 2). On Screen 2, users can identify regulations promulgated by a specific regulating agency. Plain English descriptions of the scope and application of each regulation are provided through popup screens. The

Regulating Agency Dashboard communicates regulatory compliance status by colored fields.

The Regulating Agency Dashboard also allows users to identify specific regulations applicable to their business unit for review and self-auditing (refer to Screen 3 on Figure 2). For compliance self-auditing, key requirements of each regulation are stated in plain English Yes/No questions. If the

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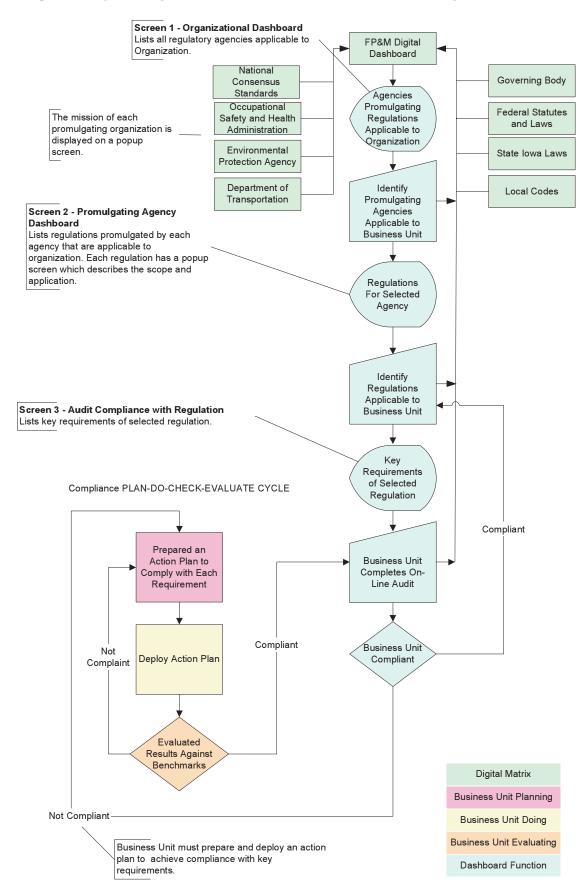


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Figure 1. - Regulatory Compliance Performance Process Map



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Figure 2. Layered Dashboards

Screen I - Dashboard **Facilities Services Popup Screen** Maintenance Support Maintenance Campus Services **Custodial Services** Project Support Mission is to protect health Regulations/Standards and safety of employees in the workplace. Applies to all business units. Occupational Safety and Health Administration **Environmental Protection Agency** NFPA Standards Department of Transportation Local Codes Screen 2 - OSHA Audit **Applies To OSHA Regulation Popup Screen** Service Hazard Communication Υ N Applies to business unit if hazardous chemical are Control of Hazardous Energies (Lockout/Tagout) N present in the workplace. Υ N Hearing Conservation Screen 3 - HAZCOM Audit Key HAZCOM Requirements Compliant List of Hazardous Chemicals Prepared and Available to Employees Υ N MSDS Available for all Hazardous Chemicals and Available to Employees Y N All Chemical Containers Labeled Y N Employees Have Received Information and Training Y N Y N Written Hazard Communication Prepared and Available to Employees Return to Screen 2 – OSHA Audit Applies To **OSHA** Regulation Operation Hazard Communication Υ N Control of Hazardous Energies (Lockout/Tagout) Υ Ν If all key requirements are deployed, the field Υ N Hearing Conservation turns green to indicate compliance with selected regulation. Return to Screen I - Dashboard Occupational Safety and Health Administration **Environmental Protection Agency** If all key OSHA requirements are deployed, the field turns green to indicate compliance applicable regulations.

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business unit is in compliance with the regulation, the regulation field on Screen 2 turns green, and the user can select the next applicable regulation for self-auditing. If the business unit is not compliant, the user is directed to establish and deploy an action plan to achieve compliance. (Refer to the business unit Plan-Do-Check-Evaluate Cycle on Figure 1.)

The cycle of self-auditing and action plan deployment continues until the business unit is compliant with all regulations promulgated by a specific agency/organization. At that point, the promulgating organization field on Screen 1 turns green, and the user moves on to the next applicable promulgating agency/organization for self-auditing.

Benefits of Using the Code Advocacy Dashboard

 Gives the individual perspective relative to the organization's dashboard metrics of various code compliance.

- Gives the employees of the organization perspective about code compliance relative to the organization.
- Gives the organization's perspective relative to code requirements.
- Provides a proactive approach to risk management and saves the institution from negative assessment and potential fines.
- Provides a proactive approach to health, fire, and life-safety of the employees and those they serve at the institution where they work.

Conclusion

While Figures 1 and 2 illustrate only one area of focus and show only one example of the dashboard for the OSHA and HAZMAT compliance, this methodology can be repeated in other areas. Figure 3 shows applicable promulgating agencies and organizations, and additional lists can be manifested based upon local, state, or federal requirements.

Since each work unit is responsible for inputting and data mining from their respective areas, the applicable

code requirements shown on the dashboards are always up-to-date. These displays are easily accessible to anyone in the organization who wishes to check the status of code issues.

Whether at the business, operational, or process level, tracking code requirements and performance can now be easily accomplished with a point and click technology through organized creative technologies and will allow anyone in the organization to view and drill down to business unit levels. This information is invaluable for training and development purposes and also provides a snapshot of the organization relative to meeting or exceeding code requirements on a real-time basis. It also facilitates a systematic and integrated approach for identifying laws, codes, and regulations applicable to each business unit and assesses each unit's regulatory compliance journey through a dashboard system.

Figure 3.

PROMULGATING AGENCIES AND ORGANIZATIONS APPLICABLE TO THE TYPICAL FACILITIES PLANNING AND MANAGEMENT ORGANIZATION OF ANY INSTITUTION

Federal/National

American National Standards Institute (ANSI)
ASME Pressure Vessel Standard
Centers for Disease Control and Prevention (CDC)
United States Department of Agriculture (USDA)
Department of Energy (DOE)
Department of Transportation (DOT)
Environmental Protection Agency (EPA)
Food and Drug Administration (FDA)

Health and Human Services (HHS)
International Building Code (IBC)
National Electric Code (NEC)
National Fire Protection Agency (NFPA)
National Institutes of Health (NIH)
Occupational Safety and Health Administration (OSHA)
Uniform Building Code (UBC)

State/Local

Department of Natural Resources (DNR)
Iowa Administrative Code (IAC)
Iowa Department of Public Health (DPH)
Iowa Occupational Safety and Health Administration (IOSHA)
State Fire Marshal

Source: Iowa State University Environment Health & Safety, 2005.