

"In God we trust, all others must bring data."

—W. Edwards Deming

By Lindsay Wagner, MA, LEED AP, CEM, CEFP

vividly remember the day in my undergraduate experience when I was first introduced to the concepts of W. Edwards Deming. In the blackand-white film we watched, he sat on a stage in a chair, chain smoking and carrying on about his "Plan, Do, Check, Act," theory. I was completely fascinated by him and his management concepts. I spent months searching for every bit of information I could find on him. Did you know he was not only an engineer, but he also played the flute and drums, and composed music throughout his life?

THE LIGHT BULB COMES ON

There are strands of Deming theory woven throughout APPA educational offerings. In the Supervisor's Toolkit participants work through the Red Bead Game, learning the importance of examining the processes utilized in day-to-day operations. They are given a process, then go through many hypothetical work days on which they change their motivational methods but never the process. The outcome never changes.

I absolutely love facilitating this exercise because you can see the light bulb come on, as participants compare the game to their day-to-day management efforts, realizing that success is multi-faceted. The aspect of human nature and motivation is important, but it has to be coupled with measurement and continuous review and improvement of the process.

FPI—A BENCHMARKING TOOL

APPA is not immune to this process. To that end, I have been tasked with leading the group responsible for looking at the Facilities Performance Indicators (FPI) survey.

The FPI survey allows institutions to assess, measure, and then lead their institutions to successful operation through benchmarking key performance indica-



tors with hundreds of other institutions. FPI empowers the educational facilities professional with the vital data, statistical references, and reporting tools needed to measure operations and performance, identify capital asset realities, and lead a successful facilities strategy that supports the institution's mission and vision.

A group of FPI users has been assembled to address the continuous improvement of the FPI Survey. Members include: Jack Hug, retired; Art Jones, Black Hills State University; Jeri King, University of Iowa; Maggie Kinnaman, retired; Dan Leslie, retired; Rolly Maelwas, Northern Alberta Institute of

Technology; Tim McDonald, University of Alberta; Steve Peary, University of Vermont; Rob Quirk, retired; and Al Stoverink, Arkansas State University. The initial focus of the group has been on three main areas: Total Cost of Ownership (TCO); the "Other" category in Module 4A; and the Energy and Sustainability Assessment Tool (ESAT).

FOCUS GROUPS

TCO is an extremely detailed concept. Doug Christensen has been working on a TCO beta research project that will eventually lead to the implementation of a detailed section in the FPI. This will allow users to look at individual buildings and individual systems within those buildings to identify construction, maintenance, operation, remodel, and demolition costs. The end product is an average TCO by building type that can be used for budgeting purposes over the life of the building. To prepare FPI users for this new tool, the survey currently uses existing data input to compile an overall TCO. The group is looking at the existing formula to increase the accuracy of that data point without requiring additional input from the survey participant.

The "Other" category in Module 4A of the Survey allows participants to include any costs that are not related to the typical facility related functions. This category is utilized for things like public safety, fleet management, sustainability,

"PLAN, DO, CHECK, ACT."

and many others. In the past these costs would roll up into the total cost, less utilities, in Module 3. It is now set up so that the total cost in Module 3 is less the non-specific costs from Module 4A and less utilities. This allows for a better representation of total costs across all users due to the great variation of information that was being included in Module 4A. The group is continuing to analyze the "Other" category to better define what should be included there and what should be included in other sections of the survey in attempt to increase consistency across all participants.

The **ESAT** tool is a new addition to the FPI survey. It is intended to assist participants with managing campus

operating costs, implementing effective energy efficiency measures, and minimizing campus carbon footprints. It is intended to help participants know where they stand in terms of achieving their sustainability goals, providing a snapshot of where their buildings and operations have room for improvement and where they are already strong. The ESAT module requires the participant to input large amounts of data on a per-building basis. Oftentimes this data is already input into an energy management system. The group is looking at possible interfaces that would allow information to directly upload from commonly used systems such as Energy Cap.

A CHALLENGE

As you can see, this group is dedicated to continuous improvement of the FPI survey and report through the constant

analysis of the process. If you have any areas that you would like the group to address, please feel free to e-mail me at lindsayevawagner@gmail.com. It is our mission to provide the FPI survey participants with the best possible product.

To again quote Deming, "There is no substitute for knowledge." We always need to know more about everything in the system. He also said, "In God we trust, but all others must bring data." So, I challenge you to take the time to participate in the FPI survey and involve yourself in the continuous improvement of this great tool. (§)

Lindsay Wagner is former director of operations, maintenance, utility services, and sustainability services at Northern Arizona University Flagstaff, AZ. She can be reached at lindsayevawagner@gmail.com





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