

Informatics Moving Forward

By Markus Hogue, with Erik C. Backus, P.E., LEED AP BD+C, Christopher Smeds, and Mark Webb, CEFP

In October 2015, the Facilities Informatics Work Group established a goal of providing at least two deliverables for the 2016 APPA conference.

DELIVERABLE ONE

The first deliverable is a whitepaper called “APPA Facilities Informatics Maturity Matrix Technical Report” (available at the APPA Bookstore.) The authors of the whitepaper (Erik Backus, Alan Schay, and Ana Thiemer) created it to help characterize the nature of facilities informatics and the process by which an organization improves and matures its ability to gather, understand, and apply data to decision making.

Topics covered in the whitepaper consist of these items and more:

- Getting from where you are to where you want to be
- Categorizing your information
- Facilities informatics maturity matrix
- Data maturity
- Example processes and visualizations/classifications
- Maturity matrix application case studies

The whitepaper creates a guide to help APPA members collect, manage, and use data for better facilities

outcomes. To know how to move forward, one needs to know the current state of affairs in their organization. For example, the University of Texas at Austin (UT Austin) applied the data maturity model to gather information on their energy usage. The team at UT Austin reports that the integration of informatics has resulted in multiple improvements for the facilities department. Using the information they obtained from informatics, UT Austin now receives \$22 million for deferred maintenance a year, far more than the \$8 million received five years ago. One of the goals of the APPA Informatics Work Group is to develop a live-input model that enables key subject matter experts across our member institutions to develop the maturity model for a particular domain in the matrix.

DELIVERABLE TWO

The second deliverable is a survey for APPA members on what data sets institutions are using. In order to analyze the different data sets from APPA members, we needed to know what systems they had implemented. To narrow down the different software that we wanted to start testing, a consensus on systems was needed so the work group could focus their efforts. Our goal is to include all software types, but to start we needed only a few options.

These are a few areas the survey covered:

- Asset inventory management
- Building automation
- Construction management
- Custodial
- Document management
- Energy/utilities
- Timekeeping
- Work order management

With the wide variety of potential data sets, the data subgroup needed to find commonalities between all the institutions. The survey was created in such a way that institutions could keep their



Photo by Markus Hogue

responses anonymous. Over 50 institutions provided answers that the subgroup is now analyzing to find possible quick-win data sets. Data is the basis for informatics, and being able to gather accurate data is critical to success in this endeavor.

The energy usage data extracted from one institution, for example, needs to be in a format that integrates into a larger data storage system. There is an overwhelming amount of potential information included in each data set. The goal, therefore, is to find common areas in which a majority of institutions utilize the same specific software, and to create case studies with that data—that is, to prove the concept before taking another bite of the elephant.

WORK GROUP GOALS

The informatics conference calls will continue to hone in on the overall goal while providing useful information to APPA, such as the whitepaper. The example of UT Austin increasing their deferred maintenance program from \$6 million to \$22 million shows the value of this process. As the group continues forward, we will be reaching out to APPA institutions

for potential case study and testing opportunities.

One of the many rewards of being part of APPA is the collaboration that takes place between our members. We are able to learn from each other and improve our own institutions based on what we have learned from the conferences, classes, BOK, and the different committees that APPA has created for its members. 

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