



Creating a **SHARED CONTEXT**

for Value-Based Collaboration
& Decision Making

BY DONALD J. GUCKERT, APPA FELLOW,
AND JERI RIPLEY KING

How do you succinctly communicate the breadth, complexity, and forward-thinking approaches that are necessary for facilities management organizations to operate in today's complex and ever-changing environment? Recently, we were asked to do just that here at the University of Iowa Department of Facilities Management. The assignment was to develop the "physical asset management" portion of a short presentation that would be used to help external audiences understand institutional services.

We were tempted to describe our menu of services and offer overviews of our custodial care, maintenance services, grounds care, utilities production and distribution, energy management, space management, project management, master planning, and other areas.

Depending on the audience, we might add internal support services such as communications, accounting, information technology, human resources, safety, and the other "life support services" critical to the effective operation of a facilities management organization.

The natural tendency in our business, as with most businesses, is to describe our work in a narrow context often bounded by the organization charts that bring structure and order to our worlds. However, this approach would not really capture the

true value that we bring to the institution and it would not reflect the progress that we had made in recent years.

ON THE ROAD TO BEST PRACTICES

Like most facilities organizations in the early 2000s, the University of Iowa facilities department had attained an effective level of competency. Each unit was working on the continuous improvement of its service delivery components and honing existing practices. However, we had started to realize that innovation was only going to happen if we could increase our efforts to work across the organizational chart in ways that would enhance each other's performance.

Our long-range planning effort culminated in 2004 with the launching of a series of strategic initiatives that would lead us to break through our business-as-usual approach and adopt, adapt, or create best practices. Each of the ambitious number of goals would succeed or fail based on successful interdisciplinary collaboration. By focusing on the significant steps to the end-results in our annual expectations for the department as a whole, we began to leverage talents, knowledge and resources in ways that softened the boundary lines that historically isolated the services in our business.

Every journey needs a simple aligning element, a North Star, to improve decision-making. In those early years, we identified with "facilities stewardship" as our coordinating beacon. Later we replaced that with the "total cost of ownership" because it offered a practical way to align us to our facilities stewardship responsibilities. The total cost of ownership facilitated greater interdisciplinary collaboration by encouraging questions, stimulating a broader view and providing a decision-making framework from which to work.

Now, with this framework in place, we were given the opportunity to put it all together into one short presentation that would describe physical asset management at our institution.

MEET PAM, OUR MODEL

What we needed was a way to organize the activities we wanted to highlight in this presentation. We had identified more than 30 different activities or functions that we perform, such as commissioning, space data management, our energy control center, construction management, capital renewal, chilled water production, etc. It became quickly apparent that we needed to organize these efforts into broader overarching categories. We needed to provide a way to translate what we are doing to why it matters. Rather than leap into a discussion of the services we provide (i.e., custodial or grounds care, project manager services, or utilities distribution), we instead opted to key on the *value* provided by the service. We gathered these value propositions into a model of Physical Asset Management (PAM) to show at-a-glance how they fit together. (See *Figure 1 on page 36.*)

We selected terms for the value propositions that would resonate with a general audience. For example, Optimal Building

Operation reflects our value added efforts to clean, maintain, and operate buildings in an optimal manner, both in terms of financial efficiency and functionality. Asset Life Extension moved us away from centering conversations on what has not been done (deferred maintenance) to what can be done (more life out of the asset through reinvestment). Interestingly, Managed Risks & Regulations is allowing us to frame our recommendations for deferred maintenance investments, utilities plant upgrades and redundancies, fire and life safety inspection and testing, and operational emergency preparedness in terms of business continuity and managing the risk of unplanned failure.

This explanation of our value to the institution moves us away from merely stating we manage projects, maintain buildings, and produce utilities; although these are important aspects of our business, they sound more like costs than investments. It is no coincidence that we used financial and business terms in describing our role. Who does not want smart decisions supporting an investment? Can you argue with making the right subsequent investment to extend the life of a producing asset? And, how about optimizing that asset to accommodate better production or more capacity?

PAM is helping us describe our work in different ways than we once did. Instead of drilling into an explanation of our basic services, we are focusing on our value propositions:

- (1) we optimize and configure the physical asset (space) in a financially and functionally effective manner,
- (2) we manage processes to ensure high-value investments in our physical assets,
- (3) we minimize the energy and utilities demands of the asset,
- (4) we optimize, in terms of both function and cost, the operation of the physical asset,
- (5) we make the smart and timely decisions that extend the life of the asset, and
- (6) we manage the institutional risks and regulatory compliance associated with this complex and valued asset.

Of the six major topics identified in our model, perhaps the most surprising and revealing to us was the increasing importance of our risk and regulatory responsibilities. Our day-to-day work requires that we ensure the continuity of our business operations. We must make sure that our decisions truly reflect the institution's tolerance or aversion to risk. By including key administrators in decisions involving the institutional risks associated with deferred maintenance, lack of system redundancies, limited backup power, emerging regulations, and outdated infrastructure, we are finding there is more buy-in for the investments that, in many cases, we felt all along were important.

PAM also makes it clear that a cross-functional and interdisciplinary team effort is required to execute each of these value propositions successfully. The model made it possible for us to see how integrated the various aspects of our business have become. For example, as we exercise our responsibility under the



Figure 1. Physical Asset Management (PAM) Model

Americans with Disability Act (ADA), we are dependent on our efforts in inventorying and assigning space, configuring space, designing facilities, caring and maintaining systems and pathways, and renewing non-compliant space. In pursuing energy efficiency, we are interdependent on our other organizational efforts in making project investments, renewing antiquated systems with newer more efficient ones, and maintaining the optimal level of system performance.

We wanted the model to provide a platform from which we could illustrate the complexities and demonstrate the forward-thinking approaches that we employ to manage facilities in the ever-changing and challenging campus environment. We sought to move the view of our value to the institution away from thinking about each of the services independently to the recognition that integration and collaboration are the keys to demonstrating true value. Like listening to a beautiful symphony, we wanted to focus on the orchestra, not the individual instruments or musicians.

PAM IN ACTION

Using High-Value Project Investments as an example, we can see the high dependency on and impact upon the other five value propositions in the Physical Asset Management (PAM) model. These six components need to work in harmony to align with the total cost of ownership and yield sound, institutional decision making. In addition, if we view our worth to the institution in terms of ensuring that our project investments yield high value results, PAM can lead us to think differently about design and construction management.

Design and construction management typically focuses on

project delivery processes and decision making that balance cost, schedule, and quality. But what good is lower cost if it yields higher future costs and liability? Is meeting the schedule better than getting our long-term buildings to function the way we need them? Is highest quality or best value for the money our ultimate goal? Often, higher cost, longer schedules, and quality that is more modest yield higher value to the institution. The key is in balancing the host of often competing needs and reaching an outcome that works for the institution as a whole.

The project manager who guides high-value project investments is one who works to expand the project decision-making framework to include an analysis rooted in the other value propositions:

- Optimal Space Utilization
- Energy Efficient Operation
- Optimal Building Operation
- Asset Life Extension
- Managed Risks & Regulations

We believe that stating these five value propositions as project goals or project owner requirements is an effective way to orient and align the design team to embrace the contributions of those who can help the design team pursue these objectives. For each of these objectives, the project manager needs to seek out partners who will help them make the right—right in the sense of the broadest context practical—decisions for the campus. Certainly not all decisions will satisfy all participants. What project managers need to ensure is a measured consideration of the institutional consequences of a particular decision. They must seek the “inputs” needed for a fully informed decision, and understand how that decision affects the other value propositions.

For example, the input, guidance and directions provided by our maintenance service providers are of critical importance to the design project manager in ensuring a “high-value project investment.” Without this input, the project designer may be designing a facility that will demand unnecessary, additional annual costs or result in problematic system functioning for the life of the building, and thus diminish the value of the investment. In turn, the design project manager needs to make sure the project team delivers a serviceable facility to ensure they do not diminish the goal of optimal building operation.

The birth of a new facility offers by far the most, if not the only, chance to make the right decisions that will forever influence the institution’s financial, operational, functional, risk-management, strategic, and stewardship obligations. When pausing to consider the weight of this responsibility, it appears to be too much to place on the shoulders of the relatively few who make up most project design teams.

Project managers should be organizationally and institutionally supported in managing major decisions that could put business operations at risk (such as eliminating a redundant chiller), or elevate future financial obligations (such as compromising on

energy efficiency). In higher education, if we are going to get it right the first time, it is going to take the involvement of others, and often many, to make the more impactful decisions.


A measure of our success with our increased collaboration and interdependency is that less and less we are finding ourselves questioning the outcomes of completed projects. When we do, we can often trace it to a missed opportunity to engage others in helping to make a project decision that ultimately had institutional consequences.

The more successful projects are led by project managers who effectively utilize and coordinate the collaboration of all of the resources and talents within and external to our facilities organizations with the design professionals to produce high project investment decisions.

PUTTING IT ALL TOGETHER

The integration of effort represented by the cluster of value propositions in our physical asset management model creates an appreciation for the complexity of the issues and challenges we face in managing the institution's physical assets. Unlike earlier times, when communication, let alone collaboration, with others outside a particular service unit used to be the all too rare occurrence, we now recognize that we want partners at

our side, in every aspect of our business, working through the critical issues and decisions that provide value to our institution.

The interdependency we have with one another in our organization and others on the campus is a sign of a forward-thinking team that is grappling with major issues that affect the future viability of our institution. By taking a broader view of our responsibilities and opportunities, we have created a shared context around the value we bring to the institution. 

Don Guckert is associate vice president and director of facilities management at the University of Iowa in Iowa City. He also serves as dean for the Planning, Design, and Construction track of APPA's Institute for Facilities Management. He can be reached at don-guckert@uiowa.edu. Jeri King is assistant to the AVP for facilities management at the University of Iowa and is APPA's newly elected Vice President for Information and Research. She can be reached at jeri-king@uiowa.edu.



GALE

**ENGINEERS & DESIGN
PROFESSIONALS**

*Specializing in Educational Facilities
since 1964*

Gale Associates, Inc.
800-366-1714
ejm@gainc.com
www.galeassociates.com

Building Envelope/Structural Services:

- Roof, wall, window/glazing, waterproofing, and structural evaluations and designs
- Construction phase assistance
- Building envelope design assistance and peer review for new construction; and historic, LEED-certified, and green roof facilities
- Roof and building envelope management programs
- Forensic evaluations

Athletic and Recreation Facilities Design Services:

- Comprehensive athletic campus evaluation and master planning
- Athletic facilities planning, permitting, and programming
- High-efficiency lighting, minimizing off-site impacts
- New track facilities, track renovations, and conversions
- All types of synthetic and natural turf fields

BOSTON BALTIMORE ORLANDO SAN FRANCISCO WASHINGTON, D.C. HARTFORD