The People Side of Asset Management: How Assets are Really Managed

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In many cases, asset management represents real change for many utilities. Creating new processes for predicting remaining asset useful life, generating long-range asset investment profiles, and using the latest enterprise and mobile technologies are necessary but very often insufficient to achieve the desired success level. Real change and advancement comes from focusing on the people of the organization and doing so in an intentional way that proceeds in step with the other aspects of asset management programs. Clear, consistent, frequent, and impactful communications; learning and skill advancement; performance capability and execution; critical knowledge capture and transfer; and organizational structure and development are just a few key elements of the "people side" of asset management.

A utility staff, at all levels, that understands asset management principles, is motivated to get the most out of its asset inventory, and knows how a maintenance task or pipe replacement contributes to the overall organization's successful service delivery, will be way ahead of its peers in realizing the benefits of its asset management program and tools.

This article discusses how utility organizations can increase the effectiveness of asset management programs with the right focus on the staff experience of learning, doing, and seeing the results of asset management. High-quality process improvement ideas can languish due to a lack of understanding of how to interest work teams. Simple, incremental steps in "people focus" can make an important difference in successful implementation. Understanding how people learn, how individuals come to embrace a vision or objective, and how change emerges and can be addressed are primary components of successful asset management.

Background

Asset management as a standard of practice for utilities has gained substantial acceptance over the last several years. More and more utilities have acquainted themselves with asset management principles, and many have come to implement these business practices as a means to enhancing decision making, improving capital and operation and maintenance planning, and creating a robust way of communicating investment needs over the short-, medium-, and long-term horizons.

As the number of utilities starting asset management programs has grown over the last several years, utility organizations have focused most intently on two areas: asset management technical processes (e.g., determining consequence and probability of failure) and asset management software system implementations (e.g., procuring or upgrading computerized maintenance management software [CMMS], geographic information systems [GIS], etc.). Utility organizations have made impressive strides forward in both of these important areas; however, not enough attention is being focused on the personnel resources required for a successful asset management program.

Some, or even many, utilities still have a mindset that asset management is all about their asset database systems, or all about collecting asset data, or measuring the life cycle of each asset. While processes and information technology systems are key elements, strong, integrated asset management programs also pay robust attention to a third area: the people, whose motivation and capabilities are key to implementing practices and making the most out of the available data and software tools.

The integration of organizational and workforce aspects into asset management thinking completes the picture in terms of a utility being able to provide sustainable, best-value service delivery to its customers. Balance among three categories of focus (practices, technology, and people) helps utilities reap the greatest benefit from the decision to invest in asset management. The most successful asset management organizations recognize that organizational development, workforce investment, employee motivation, learning mentality, skill development, and performance improvement are critical.

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The Role of the Asset Manager

Some utilities have created positions specifically responsible for asset management activities. Alternatively, many utilities have assigned asset management responsibility within various other related functions, such as engineering, planning, operations, maintenance, or administration. Whether there is a position titled "asset manager" or not, each utility is in fact an asset manager. Success in this role, regardless of how it's configured, requires bridging traditional boundaries among functional units within a utility's organization.

It is becoming clearer that this role's purview spans from operations and maintenance, to engineering and technical specialties, to business and administration. Asset managers take on work activities that are strategic and long term (3-10 or more years) in nature, such as planning-level asset investment forecasting; tactical and medium term (1-3 years) in nature, such as asset and project prioritization; and operational and short term (less than 1 year) in nature, such as work order and inventory management. Within this context, it is clear that

a wide range of competencies is required for strong performance in the role, whether embodied in a single set of asset management-related job classifications or distributed with other traditional utility roles within several parts of the organization.

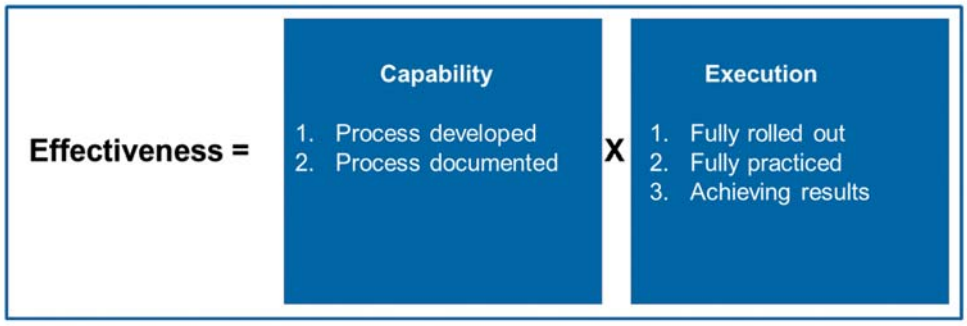
Performance effectiveness is a function of two elements: capability and execution. Capability refers to the extent to which a process is developed and documented, as well the quality level of that process; execution refers to the extent to which a process is rolled out to the organization, practiced by its staff, and is achieving the intended performance results. Employee knowledge, motivation, communication, ability to learn and change, and orientation towards continuous improvement are all factors in these two aspects of performance effectiveness.

One key people-related responsibility of the asset manager role is to create, share, and reinforce a common vision for asset management in the organization. Asset management implementation is a multiyear journey, with the goal of full embedment of key practices. Every utility is already doing some aspect or aspects of asset management; the role of the asset manager is to bring those individual pieces together in an integrated manner.

It takes time to get everyone pulling in the same direction; a clear, coherent asset management policy is one step that utilities can take to help everyone understand the vision and direction the organization is heading to with regard to asset management. An asset management policy establishes the basis for mandated requirements, overall intentions, principles, and a framework for implementing asset management at the organization. An effective asset management vision and policy also clearly connects to the wider organizational strategic goals of the organization overall. Rolling out an asset management policy, and then visibly reinforcing that policy through frequent, consistent, clear, and impactful communication and on-the-ground action, helps utility organizations align the individual asset-related activities to a unified direction and set of outcomes.

Learning and Knowledge

Another important people-related element of asset management is for a utility to be or become a learning organization. A learning organization is one that carefully reviews the key skills and capabilities needed now—and in the future—in order to provide the expected level of service to its customers and stakeholders. The organizational culture is one where every role is expected to add the right knowledge to support increased delivery capability. A learning organization is evident at all levels:



- Individual Level – technical knowledge growth, skill development, career progression
- Leader/Supervisory Level – mentorship, role modelling, delegation of responsibility and authority
- Team/Division Level – cross-functional skill set, cross-operational collaboration, business process enhancement, team dynamics, and diversity of perspective
- Organization/Enterprise Level – continuous improvement, system-level thinking, strategic focus

Learning and skill building need to be dynamic and adaptive to the situation. For asset management, many utilities have participated in asset management awareness training to learn the basic terminology. Some utilities incorporate asset management principles into new employee onboarding. Those with the most significant asset management-related responsibilities are now often securing approval to attend more advanced asset management training events, such as those given at conferences and association-learning events. In the coming years, asset management certification as a step that increases the professional credentials of the role is likely to further emerge as well.

Learning is most critically important to occur within the context of regular daily work (e.g., on-the-job training). As technology advances, so do the skills needed to be knowledgeable of the most effective asset data collection, analysis, and reporting methods available. Tools, such as mobile device data collection and direct asset data upload linkage to CMMS and GIS, are reshaping the way utility field work is planned and executed. In addition, those who are in direct contact with assets every day are growing more interested in understanding how the data they are asked to collect are being used in decision making. Asset management provides an important context for enhancing skills and capabilities, such that all functions in the organization are effectively contributing to asset decision making and investment planning.

An often overlooked and underutilized source of asset management learning for utility organizations is consultants. Technical consultants in general, and asset management consultants specifically, have a wealth of knowledge and experience utilities can and should tap into. When a utility brings an asset management consultant on board to help plan, launch, implement, or sustain its asset management program, there is a key opportunity to embed a knowledge transfer approach within that partnership arrangement. Traditionally, consultants have been brought in for a specific purpose, with a narrowly defined scope; the project is then executed, and the resultant report is provided to the utility organization for its use or reference. While the output and result of the consulting work is provided to the utility, in many cases the knowledge of how that service was provided was not effectively transferred over during the utility-consultant collaboration.

Asset management, as a systematic paradigm, provides the opportunity for the consultant team to transfer knowledge to the utility organization as the asset management program is planned, implemented, and becomes part of the fabric of the organization. In the early phase of an asset management program, where activities such as awareness enhancement, gap assessment, and strategy development are occurring, these tasks are most effectively led by consultants, with a small but growing role of the utility's asset management team members.

As asset management programs progress to a second phase of designing new practices and piloting asset analysis efforts, utility staff members take on a greater facilitation and leadership role of these activities as part of their learning process. There is still consultant involvement, but there is more partnership and sharing of leadership responsibilities. In later phases of rollout and feedback/improvement cycles, the utility staff now has the opportunity to fully lead as asset management has successfully been embedded into the organization's skill base. Consultants may still advise and help support more advanced asset management techniques, but the utility organization is the primary driver. Asset management programs, where the utility staff-consultant relationship emphasizes this kind of knowledge

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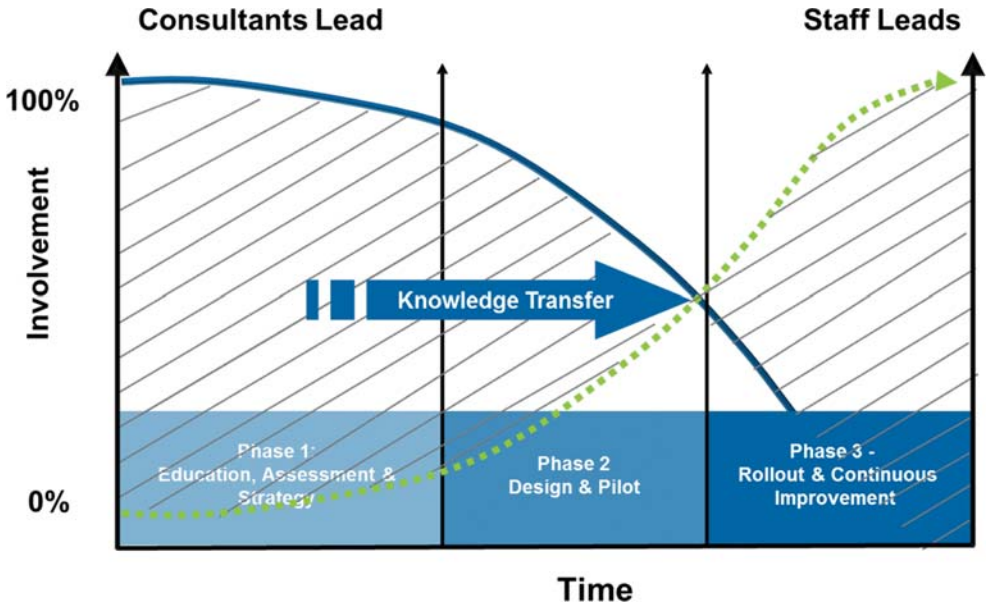
transfer, have greater likelihood of becoming sustainable aspects of the utility's business practice.

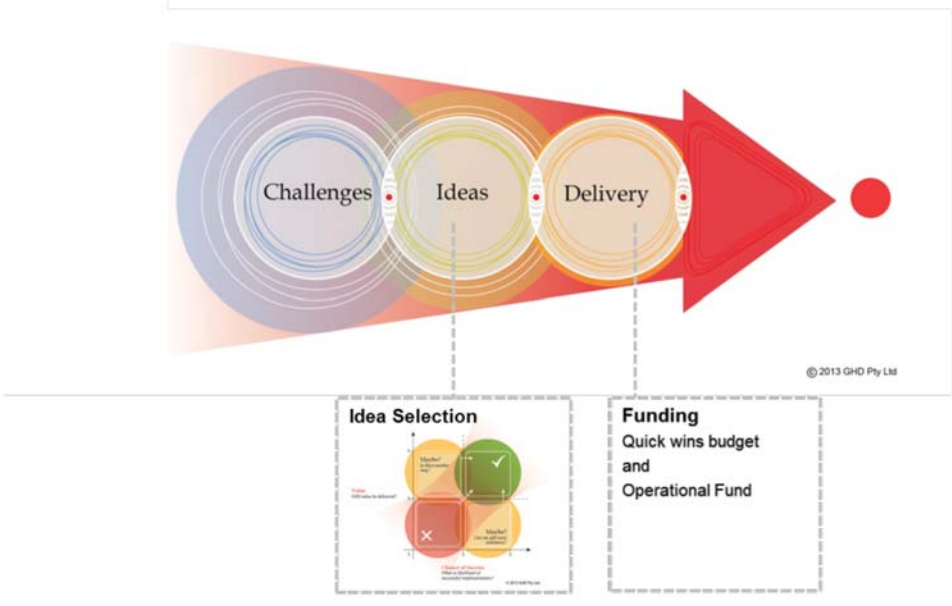
Learning organizations not only learn from external sources, such as courses, conferences, and consultants, but they also learn from within. Every day employees in all parts of the organization are coming up with good ideas for making improvements on how the organization operates. Unfortunately, there usually is not an effective means for encouraging, communicating, capturing, evaluating, and prioritizing these ideas and putting them into action. One approach being used successfully by a small but growing number of utilities is the implementation of an "innovation" program, which is a systematic initiative that is focused on encouraging staff members to share bright ideas and collaborate on them with their colleagues. These programs have review committees that assess submitted ideas and forward the best and most appropriate ones to senior leadership for recognition, funding, and implementation. Visible innovation programs with utilities demonstrate that learning from others in the organization is valued and that everyone can participate in advancing the capabilities of the organization. Done well, significant employee motivation and ingenuity can be harnessed for the benefit of the organization.

Organizational Development and Performance Management

As organizations implement asset management programs, utilities can also support the people aspect by evaluating their organizational structures and performance management approaches. Many utilities have empowered an asset management steering committee (or an equivalent group) to help guide the start-up of asset management capabilities within the organization. As these programs advance along in their maturity and sophistication, the organizational structure itself should support asset management objectives. There is no one right way to organize around asset management responsibilities, but there are a few key aspects that utilities should consider:

- Asset management spans across most, if not all, of the organization's functions, including engineering, planning, maintenance, operations, administration, information technology, and finance. The organization's structure should reflect this and enable the asset management function to have visibility and collaboration across these diverse functions.
- Strong asset management implementation requires excellent communication across the organization. The organization structure should promote this communication and not be a barrier to it.
- Asset management requires an organized way of creating, executing, closing, and reporting on work orders. The asset-related roles within the organization structure should reflect this integration of asset data availability with planning, scheduling, capital planning, and operation and maintenance.





Strong asset management organizations also demonstrate a performance management mindset. Performance emphasis and continuous improvement efforts through measurement, reporting, accountability, and recognition encourage focus on the right tasks at the right time for the right reason. Tools and frameworks, such as enhanced utility management (EUM) and emphasis on specific, measureable, achievable, realistic, and time-bound (SMART) goals, concentrate the focus on where it will have the greatest impact. Establishing an initial baseline, and then working in a systematic fashion to constantly improve relative to that baseline, is a hallmark of a strong, people-oriented asset management program.

Organizations that embrace continuous improvement naturally experience significant change as part of the process. Change can be difficult and challenging; in order for it to be successful, and more importantly, sustainable, it must take the people aspect into account.

Engaging the workforce is critical throughout an asset management program. There are many approaches to change management throughout the organizational literature. In general, successful change is a function of having:

- A strong understanding of the current situation
- A vision of the desired state to achieve
- A solution and path that are believable and reasonable
- A well-thought-out plan for implementation
- An urgency to move from the current status quo situation to the desired state of achievement

Utility organizations going through change and developing asset management implementation programs can look to any of several change models to help support their efforts. One such example is the model called ADKAR (by author Jeffrey Hiatt), which is an acronym for the five basic stages of successful change: awareness, desire, knowledge, ability, reinforcement®. When applied to organizational change, this model allows leaders and change management teams to focus their activities on what will drive individual change, and therefore, achieve organizational results. The model provides clear goals and outcomes for change management activities and it also offers a simple framework for everyone in the organization to use to think about change. Employees, managers, and senior leaders alike can all use this model to describe and discuss change together.

Using such a change model to support asset management initiatives and promote a sustainable and fully embedded new set of business practices can be a valuable approach for addressing the people aspect of asset management.

Summary

Utility organizations can increase the effectiveness of asset management programs with the right focus on the people aspect that's in the appropriate balance with technical processes and technology systems. Asset management programs should embed people elements directly into implementation planning and asset management roadmap development. These can include team member roles and responsibilities, knowledge and skills capability development, communications planning, performance management, and embracing change as part of continuous improvement. Linking the people aspect to specific and measured performance outcomes will demonstrate the powerful and necessary impact that the attention to that aspect has on asset management implementation success. These components are still emerging in the utility industry, and more focus on these areas is needed as utilities move forward with their asset management processes.

Gov. Scott Proclaims Florida Water Professionals Month

The governor of the state of Florida can issue a proclamation to commemorate a specific time period for the purpose of raising awareness about an issue or celebrating a milestone. Gov. Rick Scott recently issued a proclamation designating April as Florida Water Professionals Month. The proclamation was issued because it conveys a statewide significance to a broad group of Floridians and publicizes the importance of water issues, which affect all of Florida's residents.

RICK SCOTT
GOVERNOR

FLORIDA WATER PROFESSIONALS MONTH

WHEREAS, it is vitally important to maintain excellent water quality in the Sunshine State; and

WHEREAS, water professionals are trained, dedicated, and knowledgeable personnel who are responsible for designing, operating and maintaining water and wastewater treatment plants; and

WHEREAS, water professionals design, operate and maintain water distribution, wastewater collection and storm water drainage systems and perform laboratory analysis; and

WHEREAS, the Fighting for Florida's Future budget invests more than $3.9 billion to protect agricultural and natural resources and ensure Florida has a pristine environment for future generations to enjoy; and

WHEREAS, the Fighting for Florida's Future budget also invests $22 million to start a new Wastewater Treatment Facility Storm Preparedness grant program that will offer up to a 75 percent state matching grant with local communities to help local wastewater treatment facilities prepare for future storm events and prevent sanitary sewer overflows like those Floridians experienced during the two hurricanes in 2016; and

WHEREAS, water professionals provide customer service to citizens throughout Florida;

NOW, THEREFORE, I, Rick Scott, Governor of the State of Florida, do hereby extend greetings and best wishes to all observing April 2017 as *Florida Water Professionals Month.*

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Florida to be affixed at Tallahassee, the Capital, this fourth day of April, in the year two thousand seventeen.

Governor

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