

USING COMPETENCY MODELING TO CREATE A SUSTAINABLE ORGANIZATION

By Richard L. Gerstberger
TAP Resource Development Group, Inc.
Denver, CO

Water is the lifeblood of our society and a key economic engine that employed nearly 1.7 million workers directly involved in designing, constructing, operating, and governing U.S. water infrastructure in 2016. *“Renewing the Water Workforce: Improving Water Infrastructure and Creating a Pipeline to Opportunity” (Brookings, June 2018)*

Water utilities represent significant employers for water workers at both a national and metro level. In particular they control some of the most critical public infrastructure assets in need of long-term operation and maintenance and in many ways are anchor institutions for their communities. And as the U.S. economy continues to grow and change, it is impossible to remain innovative yet sustainable with the workforce and solutions that worked in the past.

You’ve no doubt heard the warnings about the “Silver Tsunami” of Boomers leaving their jobs. One of our clients found in 2017 that 30% of their workforce was eligible for retirement that very same year. Retirements are drastically cutting into the pool of skilled, qualified workers in many utilities and resulting in staffing vacancies of 30-50% by 2020. *“NRWA to Announce Creation of Workforce Advancement Center” (The National Rural Water Association, November 10, 2016)*

While the water industry is not alone in facing the consequences of an aging workforce, there are some other factors that make succession planning and workforce development a more imminent and dire threat to each organization’s success and sustainability. Some additional challenges that affect the water sector specifically include:

1. Wide Range of Knowledge, Skills, & Abilities Necessary

- On average, water workers use 63 different tools and technologies each, compared to the 6 tools and technologies typically used by workers in all occupations nationally. *“Infrastructure Skills: Knowledge, Tools, and Training to Increase Opportunity” (Brookings, 2016)*
- Through a series of worker questionnaires, the Occupational Information Network (O*NET) database ranks the extent to which occupations require knowledge across 33 different categories on a scale from 0 (minimum) to 7 (maximum). Relative to all occupations nationally, infrastructure occupations score above average in 11 of these knowledge categories. *(Brookings analysis of O*NET data, June 2018)*
- In addition, the changing nature of work in the sector, including new types of field work, new design guidelines, and increased automation, only add to the breadth of skills needed. *“Automation: Redefining the Modern Water Utility” (Brad Williams, WaterWorld, April 1, 2016)*

2. Employment Growth & Separations

- The Bureau of Labor Statistics (BLS) projects water occupations to see faster overall employment growth (9.9 percent) compared to all occupations nationally (7.4 percent) between 2016 and 2026. *(Brookings analysis of BLS Employment Projections data, June 2018)*
- The combination of separations and future growth in the water sector, is projected to lead to about 220,000 occupational openings—on average each year—from 2016 to 2026. *(Brookings analysis of BLS Employment Projections data, June 2018)*

In short, many of the biggest water occupations are projected to have thousands of open positions over the next decade in need of skilled talent. At TAP Resource Development Group, we have worked on leadership development, succession planning and workforce development with a number of clients in order to take a proactive stance in managing today's changing workplace. Quite simply, the leaders in these organizations understand that in order to continue to meet or exceed the regulatory, financial, operational, and customer goals of their city, utility or public works agency, they need to have organizational continuity.

As stated by the comprehensive Brookings report, *“Renewing the Water Workforce: Improving Water Infrastructure and Creating a Pipeline to Opportunity”* (Brookings, June 2018),

“Many utilities face pressure to keep rates down, fail to make adequate investments in their workforce, and do not develop proficiencies in competency analysis, which result in poor training for their current staff and inefficient knowledge management. Without actively investing in the current workforce or qualified candidates, the water sector will likely continue to struggle retaining and upskilling workers.”

Comprehensive workforce development involves aligning leadership, management and operations with the organization's strategic purpose. Leadership and management positions need to be filled based on talent, fit with the needs of the position and with how the organization provides for the needs of its customers. For that reason, we follow a seven-step process for effective workforce development:

1. Understand the organization.
2. Analyze risk with a focus on mission critical positions.
3. Develop competency models for the affected positions.
4. Create an integrated and individualized leadership supervisory development program.
5. Identify and train to operational competencies.
6. Identify and remove barriers to succession planning.
7. Implement a management process to ensure success of the succession and workforce development planning process.

We'll go into some detail as to how we do this and why it's important in the following pages. We hope this gives some insight as to how to start this conversation at your organization. Or just give us a call, and we'll facilitate the whole thing.

Understand the Organization

The successful creation of a sustainable organization depends on having a firm understanding of the organization and its purpose, culture, processes and degree of alignment. For this reason, an organizational assessment is critical. This type of assessment includes an in-depth understanding of how the organization provides value to its customers (is there a strategic plan?), the organization's culture (how do things get done or implemented?), and does leadership support the culture, processes, and strategic plan of the organization? The type of analysis will accomplish the following:

- Involve a major portion of the organization in understanding the organization and its current situation.
- Enable the leadership team to get below symptoms and identify core issues.
- Encourage clarity of strategic focus throughout the organization.

Through the assessment process, the leadership team will gain an understanding of the organization's focus, culture, leadership, processes, the alignment of culture and leadership with purpose, and the level of integration among these elements.

Risk Analysis and Needs Identification

The risk analysis builds on the organization assessment to make sure that the jobs that are critical to how the organization provides value to its customers, bringing the right skills and behaviors to meet the organization's needs. The risk analysis should address:

- **Areas where critical skills and knowledge are concentrated.** Are there areas where there are a limited number of employees filling a position?
- **Risk of retirement.** The plan should identify the number of employees in each demographic range for each position or at least each critical position. It should also identify which current employees are eligible to retire now or planning to retire in the next 1 to 5 years.

- **Risk of attrition.** With the high demand for trained and experienced utility employees; are there current employees that are at risk of leaving the organization? Are any of these positions critical to the organization’s mission?
- **Availability of candidates.** Are candidates available now, internal and/or external to replace someone that leaves?

Keep in mind the future needs of the organization throughout the risk analysis. What new or different skills will be needed to meet future service needs and expectations? A Knowledge Management Plan should also be implemented with a strong focus on critical positions.

Develop Competency Models

Effective succession planning requires a clear understanding of the behaviors or competencies required for success in positions within the organization. This is how we get the leaders, managers and operations staff that will bring talent to the position and fit with the needs of the organization and its purpose. A competency is the capability to apply related knowledge, skills and abilities to successfully perform functions or tasks in a job setting. And a competency model is just a collection of all the many competencies that together define successful performance in a particular position. A competency model itself is a framework and resource, not the end product.

According to the recommendations in the afore referenced June 2018 Brookings report on renewing the water workforce, it’s clear that competency models are a key component to turning the water sector challenges into opportunities:

“Employers must continue investing in their (employees’) skills development and valuing their role in the organization. One way to do so is for utilities and other water employers to develop competency models—or customize existing models—to promote continued learning and skills development among staff. Specifically defining and measuring the types of knowledge, skills, and abilities needed among water workers can better target future training efforts; competency models help organizations do so in light of individual worker needs and career trajectories, in addition to the actual positions of greatest need.”

A comprehensive competency model shows the competencies needed for each position divided into tiers and serves as a guide to connect the position with the organization’s strategy and purpose. It provides the organization’s staff with direction and focus for their development efforts (See Figure 1). And it allows the organization to assess and develop its talent using a specific set of development tools.

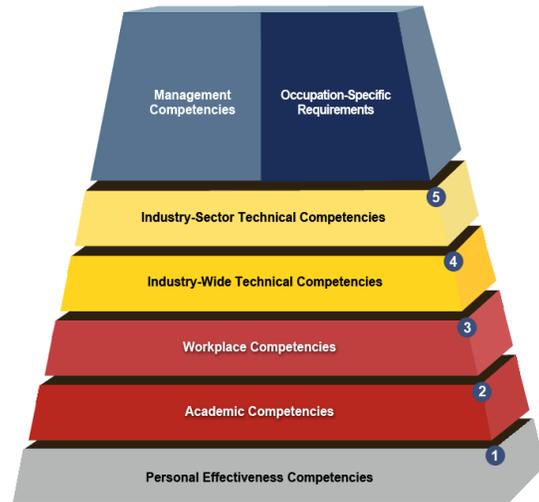


Figure 1 <https://www.careeronestop.org/>

The process of competency modeling involves:

- Gaining a thorough understanding of each position and the competencies required to successfully accomplish its purpose or job description and the organization’s strategic plan. For leadership and management positions we recommend describing the position using desired ranges within a set of 22 specific attributes or behaviors (see Figure 2).
- Creating a team of knowledgeable staff to review and finalize the model. We recommend a process called Strategic Direction Setting that takes a focus group approach to survey results.
- The result is a list of primary and secondary attributes for the position. It’s important to keep the list of leadership attributes for each position as short as possible, including only the sets that would be the key behavioral components of the position or address specific risks.

A well-thought out identification of the behaviors or competencies required for a give position can be very helpful to an organization. Modeling competencies helps the organization identify and understand

the specific leadership and management behaviors required for particular positions or types of positions such as Supervisor, Superintendent, Division Manager, Treatment Plant Operator, etc. It then allows the organization to assess and develop its talent using an appropriate set of development tools. Figure 1 presents a picture of the seven tiers of competencies for the water industry as identified by the U.S. Department of Labor and published online by CareerOneStop and last updated January 2018. A breakdown of the specific definitions, associated critical work functions, and technical content areas for each competency of Tiers 1-5 can be found CareerOneStop’s web page: [Water & Wastewater Competency Model](#).

Leadership, Supervisory & Management Competencies

Focusing on Tier 7, Management Competencies, the Competency Model selection process defines the leadership and management behaviors that are necessary to achieve the business outcomes identified for the position utilizing the resources available and working within the appropriate organizational culture. This selection process involves the following steps:

1. Based on the position’s Job Description, the organization’s leadership team — or other related groups determined by management — completes an instrument that asks what leadership and management behaviors are most important for success in the specific position.
2. A workshop is conducted for the leadership team to discuss the results from the above instrument, the position’s job description, and any other data that may be available related to the position. Based on the discussion, a Leadership Competency Model is prepared that is specifically related to the position being filled. Figure 2 presents a sample competency model for a hypothetical upper management position. The competencies are ranked by primary (P) and secondary (S) importance.

The development process needs to begin with leadership and management and move down to the lowest levels of the organization and with every new employee. Due to the very nature of leadership, effective development is an individualized training process that consists of the following activities:



Figure 2

- **Leader Assessment.** TAP Resource uses an assessment system that provides comprehensive information to individual managers about their leadership attributes. It is a non-judgmental assessment process involving individual managers, peers, direct reports, and supervisors. By combining this information with the culture and strategy data already obtained from the Organizational Assessment, we establish the foundation for the creation of individualized leadership development plans.
- **Creation of Individual Leadership Development Plans.** Each leader participating in the leadership development planning process designs a preliminary plan for his or her individual development. The plan should include specific goals along with metrics tied to goal accomplishment. Plan development should be accomplished by the leader and his/her supervisor. Plans should also be integrated within the development needs of the particular workgroups.

A comprehensive supervisory training program should be developed for the specific organization. Supervisory training should be required of all employees, team and crew leaders, and supervisors at all levels. A primary goal of supervisory training is to assist employees in understanding the difference between being an employee and being a supervisor.

Operational & Occupational Competencies

As we’ve indicated earlier in this article a truly sustain-

able organization should integrate the use of competency modeling at all levels of the organization. This includes operations and other non-management positions. The goal of Operational Competencies is to develop a competency-based program for key operational tasks. It will identify competencies needed, training required, and measurement methodologies needed to accomplish the organization's goals.

See the example below to get a better idea of what a program might look like for your organization based on your goals, the purpose of those goals, and the subsequent program tasks:

EXAMPLE GOALS

- To Hire, develop, and retain the best quality operational staff
- Operate and maintain state-of-the art plants and processes
- Address skills needed for rapidly changing technology
- Mitigate lost knowledge and skill due to retirement and/or attrition
- Reduces liability

EXAMPLE PURPOSE STATEMENTS

- Career Development
- Improve employee skill sets
- Operational Flexibility
- Allow organization to take advantage of staff skills where & when needed
- Strengthen employee knowledge and autonomy
- Improve job performance and decision-making
- Improve accountability
- Employee Retention
- Focus on employee satisfaction and loyalty

EXAMPLE PROGRAM TASKS

1. Identify and Define Critical Tasks and Standard Operating Procedures (SOPs)
2. Identify Knowledge, Skills, & Abilities (KSAs) and Key Performance Indicators (KPIs)
3. Develop Training Program and Aligned Measurements
4. Succession Planning and Implementation

Implement a Management Process

A successful workforce development program must be a living document; not one that is created and then sets on a shelf in someone's office. Activities within the plan should have specific, measurable timeframes and be monitored on a periodic (often monthly) basis. The overall plan should be reviewed annually and updated as necessary. An effective way to accomplish this is to include workforce development within an overall Organizational Performance Management System of measurable goal setting and planned follow-up.

The balance between innovation and sustainability is an ongoing challenge. Once again, the June 2018 Brookings report sums it up well:

“Whether investing in continued training, defining new competency models, or empowering workers in other ways, many employers are striving to develop and hold onto skilled water workers. Doing so, though, often hinges on progressive leadership in these organizations, an ability to balance long-term budgets with staffing needs, and an appetite for experimentation—which can be rare in a sector known more for its cautious, conservative approach to managing change.”

Call us at (303) 561-3788
email us at info@tapresource.com or
visit us online at www.TAPResource.com
to make your organization more effective.