



What Every Operator Needs to Know About Workforce Development


Heath Edelman

Knowledge	Principles	Practical Considerations
What is workforce development and why is it needed?	<p>Workforce development is the encompassing term used to describe the elements of recruiting, retaining, and developing a highly skilled workforce.</p> <p>To recruit successful candidates, there needs to be a pool of potential employees who are interested in the profession. Then, these employees must be trained and developed for operational excellence and potential long-term leadership positions, to replace employees leaving the profession.</p>	<p>There is a crisis in the water sector. Plant operators, mechanics, and laboratory technicians are leaving the profession or retiring at a high rate, and there is a need to replace them. At the same time, water utilities are competing against other industries for talent.</p> <p>To develop a sustainable water utility workforce of the future, the sector needs to use all available tools, including</p> <ul style="list-style-type: none"> • outreach and branding; • workforce planning and organizational change; • job analysis and staffing; • recruiting, hiring, and onboarding; • performance evaluations; • organizational learning and knowledge transfer; • training and education; • soft skills and team building; • mentoring and leadership development; and • retention and succession planning.
Outreach and branding	<p>Outreach involves engaging the community and potential hires. Branding establishes a positive image of the water sector, attracting talent and fostering trust in the utility's services.</p> <p>There are several ways to reach out to the community and enforce a positive image of the water sector. Options range from the utility website and social media channels to facility tours and community events.</p>	<p>Outreach to and engagement of stakeholders is becoming increasingly important for wastewater utilities.</p> <ul style="list-style-type: none"> • Maintain an informative and engaging website with details about the organization, its mission, and career opportunities. • Highlight the organization's commitment to sustainability and environmental conservation, attracting individuals who share similar values. • Use networks and employee social media participation to show employee appreciation and share that utilities are great places to work. Share employees' professional updates, accomplishments, and the value they find in the job. • Use photos and videos to show what it is like on the job. Welcome new employees, answer queries about jobs, and advertise jobs. Video content may include influent and effluent of a wastewater facility. • Use social media platforms, especially LinkedIn, to showcase company culture, projects, and success stories. • Advertise jobs on sector-specific or professional feeds such as Water Environment Federation (WEF; Alexandria, Virginia) job boards, LinkedIn, and X (formerly Twitter). • Engage school partners in immersive activities and programs that get students excited about the role that water workers serve in protecting the environment and providing important services to the community. • Share testimonials and success stories from current employees to provide authentic insights into the work environment and career growth opportunities. • Offer internships, apprenticeships, or educational programs to build relationships with students and introduce them to potential careers in the water sector.

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Outreach and branding <i>(continued)</i>		<ul style="list-style-type: none"> • Engage school partners in immersive activities and programs that get students excited about the role that water workers serve in protecting the environment and providing important services to the community. • Share testimonials and success stories from current employees to provide authentic insights into the work environment and career growth opportunities. • Offer internships, apprenticeships, or educational programs to build relationships with students and introduce them to potential careers in the water sector. • Conduct public and private tours and open houses to showcase facilities to the local community, schools, and potential talent. • Participate in community events and projects to demonstrate a commitment to local initiatives and build a positive reputation.
Workforce planning and organizational change	<p>Workforce planning in water utilities anticipates staffing needs. Organizational change adapts structures and processes, ensuring alignment with water sector advancements that promote workforce growth and effectiveness.</p>	<p>Every organization should evaluate and plan for future staffing needs and prepare the organization for associated changes. This will help ensure successful adaptation and maximize employee engagement for sustained growth and effectiveness.</p> <ul style="list-style-type: none"> • Encourage employee input into change management. • Promote a culture that values continuous improvement, where employees are motivated to identify and suggest enhancements to existing processes and practices. • Stay abreast of technological advancements in the water sector, providing employees with training and resources to adapt to and leverage new technologies. • Ensure future budgeting is in place for additional personnel, wages, and fringe benefits.
Job analysis and staffing	<p>Job analysis identifies roles and requirements in wastewater utilities. Staffing involves recruiting, selecting, and placing qualified individuals to meet organizational needs and goals.</p>	<p>Define your jobs and staff accordingly.</p> <ul style="list-style-type: none"> • Develop knowledge, skills, and abilities (KSAs) that are needed for the job. • Include a written job description. • Create organizational functions, departments, and management hierarchies, collectively called an organizational chart. • Develop a job classification system. • Organize job tasks and responsibilities into positions. • Determine current and future levels of staffing needed in accordance with the organizational mission, strategic plan, and workforce development plan.
Recruiting	<p>When recruiting, seek out the most qualified candidates. Also, communicate the responsibilities and expectations of the role, such as math, problem solving, basic mechanics, and data logging.</p>	<p>Clearly communicate the organization's commitment to employee growth and development, showcasing training programs and career advancement opportunities.</p> <ul style="list-style-type: none"> • Collaborate with educational institutions, water associations, and local communities to establish a positive presence and attract potential talent. • Attend and sponsor relevant conferences, workshops, and job fairs to connect with professionals and students interested in the water sector. • Adopt diversity, equity, and inclusion principles and be intentional in recruiting women, veterans, and minorities into key positions. • Use creative and innovative recruitment methods, such as virtual reality experiences, to showcase the challenging and rewarding aspects of working in the water sector. • Encourage current employees to refer qualified candidates, creating a strong network and tapping into trusted connections. • Ensure timely and personalized communication with potential candidates to create a positive and professional impression. • Provide competitive salary and benefits. • Create a competitive internal job market in which there is a high demand for employment opportunities, and where job seekers compete to secure desirable positions within the organization.

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Onboarding	After hiring, onboard the employee to fulfill specific roles to ensure efficient operations and quality service delivery.	<p>Get a new employee off on the right foot by using the following onboarding tips.</p> <ul style="list-style-type: none"> • Include a comprehensive orientation that introduces employees to the water utility's mission, values, and organizational structure, fostering a sense of purpose and belonging. • Provide on-the-job training on equipment operation, safety protocols, and specific job responsibilities, ensuring competence and confidence in daily tasks. • Clearly communicate organizational policies, procedures, and expectations, ensuring new hires understand and adhere to essential guidelines for efficient and compliant operations. • Connect new hires with other experienced and enthusiastic employees.
Performance evaluations	Performance evaluations assess employee effectiveness, identify strengths and areas for improvement, and guide professional growth to enhance overall operational efficiency.	<p>Make sure employees understand their strengths and weaknesses. There are several ways to improve the performance evaluation process.</p> <ul style="list-style-type: none"> • Use organizational key performance indicators that align with organizational mission, vision, and goals as well as employee goals. Employee goals should support both management and organizational goals. • Consider 360-degree feedback to gather input from peers, subordinates, and supervisors to provide a comprehensive evaluation of an individual's performance, fostering holistic self-awareness and professional development. • Incorporate a learning and development component into performance reviews, setting goals and plans for employees to acquire new skills or knowledge. • Provide an understanding to the employee about how they can achieve promotions or progress in their career.
Organizational learning and knowledge transfer	<p>Organizational learning fosters continuous improvement, while knowledge transfer ensures the seamless sharing of expertise, enhancing collective skills and helping employees adapt to water sector advancements.</p> 	<p>Continuous improvement of a utility includes improving performance of staff through learning and knowledge transfer.</p> <ul style="list-style-type: none"> • Implement digital platforms or regular meetings to facilitate the exchange of information and experiences among team members, promoting collaborative learning. • Adopt competency-based training and assessment tools that tie to KSAs from job descriptions. • Foster collaboration among different departments or teams within the water utility, encouraging employees to understand diverse roles and perspectives. • Establish feedback mechanisms where employees can provide input on processes, allowing for continuous adjustments and improvements. • Develop plans for the systematic transfer of knowledge from experienced employees to potential successors, ensuring a smooth transition when vacancies occur. • Conduct thorough analyses of incidents or challenges, emphasizing a "lessons learned" approach to prevent similar issues in the future. • Develop a system for documenting and sharing best practices within the organization, creating a repository of valuable insights for employees.

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Training and education	<p>Continuous training and education impart specific skills and broaden knowledge. Together, they enhance employee capabilities, ensuring a skilled and adaptable workforce for efficient utility operations.</p> 	<p>Here are some tips on improving training and education.</p> <ul style="list-style-type: none"> • Start by developing a training plan with mandatory training requirements as well as elements for employee development, leadership development, and staying abreast with technology and regulatory developments. • Develop comprehensive training initiatives to enhance technical skills, safety protocols, and water-sector-specific knowledge for employees. • Support employees' attendance at external training sessions, conferences, and sector events to expose them to broader perspectives and trends. • Facilitate cross-training and job-rotation programs to broaden employees' skills, providing them with exposure to various aspects of the utility's operations, including maintenance and lab procedures. • Host workshops and seminars on relevant water sector topics, inviting experts to share insights and ensuring employees stay updated on the latest advancements. • Use educational technology including digital twins, simulations, online training, and game-based learning. • Acknowledge and celebrate employees who actively engage in learning and contribute to the organization's knowledge base.
Soft skills and team building	<p>Soft skills encompass interpersonal and personal abilities and attributes. Team building fosters collaboration and enhances communication and cooperation for a more cohesive and effective workforce.</p>	<p>Although technical skills are important, employees also need soft skills to be successful. Employees need to be on time, considerate of others, and be team players.</p> <ul style="list-style-type: none"> • Conduct assessments and establish feedback mechanisms to identify existing soft skills within the workforce, pinpointing areas that require improvement and guiding targeted training efforts. Assessments may include personality tests. • Organize interactive workshops, team-building activities, and simulations to reinforce soft skills and improve communication, problem-solving, and interpersonal relationships. • Integrate soft-skills assessments into performance reviews, linking these skills to career development and advancement opportunities. • Offer training programs on conflict resolution and negotiation skills, equipping employees with the tools to address and resolve interpersonal conflicts in a constructive manner. • A few pizzas on a Friday for an extended lunch for all shifts can facilitate team building and sharing of ideas. • Encourage employees to contribute to innovation by providing opportunities for them to propose and implement new ideas or technologies. • Gain leadership buy-in and support for soft skills and team building initiatives, fostering a culture that values and prioritizes these skills throughout the organization. • Provide training on diversity, equity, and inclusion to enhance cultural sensitivity and improve team dynamics in a diverse workforce. • Emphasize the importance of clear and effective communication, both within teams and with external stakeholders, to prevent misunderstandings and enhance collaboration. • Implement recognition and reward systems that acknowledge and celebrate teams and individuals who exhibit exceptional soft skills and contribute to a positive team environment.

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<p>Mentoring and leadership development</p>	<p>Mentoring guides individuals' growth. Leadership development cultivates skills in a wastewater utility workforce, ensuring capable leaders and a proficient team for sustainable operations and service delivery.</p> 	<p>Leverage more seasoned employees to help develop younger employees.</p> <ul style="list-style-type: none"> • Establish mentorship initiatives to pair experienced employees with newer team members, facilitating knowledge transfer and professional development. • Mentors do not need to be supervisors. Members of the organization who are one or more levels higher in the organization can offer helpful perspectives. • Professional development opportunities, community outreach, and mentoring can assist with identification of future leaders in the organization and leadership development. • Implement structured leadership development initiatives to groom and enhance the skills of potential successors, aligning their capabilities with organizational needs. • Develop expertise through training and development. Encourage employees at all levels to be trainees and trainers. All trainers should consider completing a train-the-trainer program. • Identify and utilize local business and industry chambers and other community organizations who host or sponsor leadership training, conferences, and seminars. • Identify staff as candidates for the WEF Water Leadership Institute.
<p>Retention and succession planning</p>	<p>Every organization needs to take steps to retain good employees. Succession planning prepares for leadership transitions and continuity of operation.</p> <p>Management should ensure a seamless succession process, identifying and developing talent to sustain effective operations and service continuity.</p>	<p>Once you hire, train, and develop good employees, you want to make sure they continue to be successful and want to remain in your organization. A comprehensive succession plan will include the following elements.</p> <ul style="list-style-type: none"> • Conduct regular assessments of jobs to identify the KSAs required for key positions, ensuring a comprehensive understanding of workforce capabilities. • Conduct regular talent reviews to reassess succession plans based on changing organizational needs, emerging skills, and evolving water sector demands. • Create a talent pool by identifying and nurturing high-potential employees, preparing them for future leadership roles through targeted development programs. • Train current leaders and human resources professionals on effective succession-planning strategies, ensuring a standardized and well-informed approach across the organization. • Create a system where employees can request job shadowing to learn more about other functions of the utility and potential positions and advancement opportunities. • Dedicate time and resources for employees identified as potential leaders to participate in focus groups, strategic planning, and leadership-development activities. • Integrate succession planning with performance management systems, linking employee performance with potential for advancement and identifying areas for improvement. • Consider diversity in succession planning to ensure a varied pool of talent, fostering a more inclusive and innovative organizational culture. • Tell your employees about succession-planning initiatives to instill confidence in employees and demonstrate a commitment to professional growth and development. • Develop contingency plans for sudden departures or unforeseen circumstances, ensuring the organization can respond effectively to unexpected leadership gaps. • Stay informed about sector trends and technological advancements, adjusting succession plans to align with the evolving landscape of the water utility sector. • Regularly assess the effectiveness of succession-planning strategies, adjusting based on feedback, performance outcomes, and changes in organizational goals.

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