

**Workforce Planning:
Key To Future Organizational Viability**
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A pre-requisite for organizational success is having a workforce that is qualified to do what needs to be done and that is motivated to perform at high levels. Yet, far too few organizations plan adequately to ensure their workforce is viable for the long run. As members of the Boomer generation moves through their career cycle in the United States, many organizations face significant losses of personnel within the next five years. Experts differ in their opinions about the likelihood of worker shortages and the magnitude of those shortages, but it is prudent for every organization to evaluate the current and future adequacy of its workforce. Waiting until shortages occur is much like waiting to buy fire insurance until one's house is ablaze... not an optimal strategy.

Several studies have shown that there is a critical need to do workforce planning. The Awwa Research Foundation did a study of the water utility industry in 2005 and concluded that: 1) more than 50% of the current workers will not be at their utility in ten years, 2) the supply of capable workers will be inadequate and 3) utilities are grossly under-investing in training aimed at developing replacement workers. The Society of Human Resource Management study, also done in 2005, found that the majority of workers nationally 55 and older (20% of the workforce today and 30% in 2015) say they will not postpone retirement. The two findings may work together to produce the perfect storm: a large percent of workers eligible to retire and intending to do so.

A critical component of strategic human resource management is workforce planning. Exhibit 1 is a model that illustrates a typical workforce planning process. The component steps in the workforce planning process illustrated are:

1. Identify critical roles/occupations
2. Determine the adequacy of the current workforce
3. Identify gaps that exist today
4. Project demand in 1, 2 and 5 years
5. Identify gaps that will exist in the future if no action is taken
6. Define sources of additional people and ways in which people will be lost
7. Develop a strategy to close gaps and ensure future workforce viability.

It is important to differentiate workforce planning from replacement planning and succession planning. Replacement planning is used to identify qualified individuals who would replace specific individuals if they exit the organization or become incapacitated. It is very short-term in nature and serves the purpose of ensuring the organization can operate if unexpected personnel losses occur (e.g., pandemic outbreak, turnover, death/disability, etc.). Succession planning is more long range and looks at aggregate supply and demand in a specific occupation or role (e.g., management development). Workforce planning as it is dealt with here is both short and long range and looks at external factors as well as internal factors that will impact the supply-demand balance in the workforce.

Exhibit 1 focuses on the various sources for replacing personnel (or growing the workforce) and the ways in which people are lost to the organization, at least for filling a particular role or occupation. Exhibit 2 is a skill/occupation specific model that projects how well the organization will be staffed in critical areas. The first step in creating this model is to survey the management team to identify the skills/occupations that are critical to the organization. The criticality of an occupation can certainly vary by organization, depending on what the core capabilities are. For example, a utility operating power plants or water treatment plants may identify control room operators as being critical to daily operations. Lacking adequate numbers of qualified people in specific roles could cause them to fail in their primary mission. On the other hand, administrative personnel with general skills may not be identified as critical. By focusing on critical skills, an organization can spend its resources ensuring its viability.

Once a critical skill is identified, the previously described process can be applied to that skill. An additional element in this model is the determination of how long it takes to bring a worker who is qualified to enter the role up to the minimum standard of performance in that role. If the organization finds that there will be a substantial gap between supply and demand in 1-2 years and it takes 3-4 years to develop an entrant it becomes apparent that a potential crisis already exists, since time is too short to train someone without the required skills. This was a common occurrence in the late 1990's when so many organizations tried to convert legacy IT systems to new client server network based systems. They did not have the time to retrain their existing IT personnel because they waited so long to face the issue and were forced into a very tight labor market to hire people or retain contractors.

Exhibit 3 is an example of a detailed workforce flow analysis for control room personnel in a utility. It combines estimates with projections of likely events (e.g. the number retiring in a given year and/or the likely turnover) to provide an estimate of the magnitude of shortages. Once deficit positions are identified it becomes necessary to consider alternative actions, such as attracting fully qualified people from other organizations or adopting accelerated training programs. Bringing in people from outside can result in inflated salaries and inequity relative to existing employees, as well as impacting the career opportunities of existing employees. However, if it is not possible to develop current employees in time it may be unavoidable and it avoids having no one to perform critical operations. Some would argue that making projections five years out is sheer speculation and indeed things can change. However, the option (not planning) is not viable.

Once the planning is complete the organization is faced with developing a human resource management strategy and supporting programs that will produce the desired results. The remainder of this article will identify the requirements for success and discuss strategies/programs that will help the organization meet these requirements.

Exhibit 3

Workforce Flow Analysis

Treatment Plant Operators

	Entry Level	Journey Level	Senior/Lead
Current Staff	4	6	10
Current Demand	2	12	6
Gaps (Current)	(2)	6	(4)
Demand: 1 yr. Out	3	12	6
Losses projected	1	(1)	4
Gaps: 1 yr. Out	0	7	4
Demand: 2 yrs. Out	3	13	7
Losses projected	2	2	7
Gaps: 2 yrs. Out	2	10	12
Demand: 5 yrs. Out	3	14	8
Losses projected	4	5	10
Gaps: 5 yrs. Out	6	16	23
ADDED SUPPLY NEEDED			
Current	0	6	0
1 yr. Out	0	7	4
2 yrs. Out	2	10	12
5 yrs. Out	6	16	23

Attract the right people

In order to ensure the organization is capable of competing for the available talent it is prudent to first define the “best fit” employee profile. The organization’s culture, the competencies it determines are required to perform the roles and its rewards philosophy will all have an impact on the type of candidate the organization wishes to attract. This means that the organization must develop its “brand” as an employer and communicate what that means to potential candidates. It also requires that an honest value proposition be put forth so that those considering application know what to expect.

Research has shown that the best tool for preventing unwanted turnover in that critical first 6-18 months is the “Realistic Job Preview,” which entails providing a balanced picture of what is to be expected, including the potential negatives associated with the role and with the organization. By ensuring the picture painted by the organization is accurate two things are accomplished: 1) the new employee is “vaccinated” against some of the inevitable negatives, preventing unpleasant surprises, and 2) the employment agreement is begun on an honest note. Finally, the organization must invest in a viable “onboarding” process that ensures new employees are smoothly transitioned into the workplace. If all of these requirements are not met the usual consequences are difficulty in recruiting and/or unacceptable losses through turnover.

Develop people appropriately

The MIT study of the global auto industry conducted several years ago found that U.S. organizations invested far less in hiring new employees and in training new people than foreign organizations with U.S. operations. That pattern appears to continue, according to further research. This may be due partly to the fact that accounting principles mandate treating training as a short term expense (which reduces profits), while failing to credit the benefits as either assets or a source of future income. Yet most accept that training is necessary if people are to perform well. The highly individualistic culture in many organizations breeds competitiveness for larger salary increases/bonuses and for promotions, which impedes the willingness of employees to share their knowledge with peers and to codify it in procedures. Additionally, in organizations subject to downsizing employees often retreat into a protective mode, believing they compete for jobs. These realities are a significant obstacle to the dissemination of knowledge and to the application of best practices. They also make employee development more difficult, or at least more expensive because of the additional need for formal training. Some of the resistance to sharing knowledge can be overcome by celebrating and rewarding those who make others more effective. The author has found that adding “Contribution To The Effectiveness Of Others / The Unit” as a factor to performance appraisals can help to show employees that this is valued.

Better career management can help reduce the need for formal training that requires people to be off the job. Much lost time can be avoided if career paths are well thought out and communicated and developmental assignments are used to allow employees to accumulate knowledge and skills while being productive. Career planning can also be a positive in retaining people, particularly those who have been entering the workforce during the last decade. Since the lifelong employment contract has expired the “big two” for attracting and retaining Gen Xers , Gen Yers and Millenials have been: “pay me well” and “keep me marketable.”

Maximize The Available Supply

Organizations that have experienced low levels of turnover often relax their recruitment efforts and/or lapse into using the same strategy for transitioning in new employees. If skill shortages are going to worsen, it is incumbent on organizations to become more proactive and innovative in developing sources of supply. Employee referrals are extremely effective if they are valued and rewarded. Identifying and developing non-traditional sources can also produce a high yield on investment. Alliances with educational institutions, job fairs, open houses and marketing campaigns can help to inform the outside world about opportunities.

Skilled trades personnel are becoming more difficult to find in many areas and it may be necessary for organizations to band together to create training programs in technical schools. By demonstrating that there is an unfilled need, community colleges may be enticed into developing technical programs that provide additional qualified candidates, particularly if organizations support students with internships and the prospect of employment. In industries where females or minorities are underrepresented it may be possible to rethink recruiting strategies to reach this growing segment of the labor force.

Maximize Productivity

If people are made more productive it may take fewer of them to get the job done. Many organizations are shifting from seniority-based wages and salaries and instituting incentive programs to provide a reason to increase performance. “What you measure and reward you will surely get more of” is a concept supported by behavioral research. The AWWA Water Utility Industry Compensation Survey documents the shift from step-rate systems (pay incremented by longevity) to merit pay programs over the last decade. Although public and not-for-profit organizations still use incentive programs sparingly, the competition for people with the private sector and the benefits of offering incentives are beginning to increase the adoption of incentive programs.

Investing in capital equipment and technology is another source of increased productivity. If skills are more expensive or unavailable, the economics of investing in technology may change and prove to be a good strategy. Also, redesigning work processes can take out unnecessary work and reduce staffing and timelines.

Transfer Knowledge Effectively

Many organizations are investing in “knowledge management” programs that are designed to share best practices and critical information more widely and more efficiently. By promoting a sharing culture and recognizing contributions to the organization’s knowledge all employees can be made more effective and more likely to create and share new knowledge. Creating an internal “yellow pages” directory that refers people to documents or people knowledgeable in specific areas makes it easier for employees to deal with situations they have not faced before. It also makes it possible to recognize the experts as being valuable resources. It is advisable to invest in turning tacit knowledge (the know-how people carry around in their heads, often unaware of it) into explicit knowledge that is available to others. Databases that are coded by subject can supplement work procedures and manuals.

It is also necessary to create a culture that encourages informed emulation (called legal theft in one organization), which makes it clear that reusing practices is not the sign of someone who lacks imagination, but rather ingenuity in another form. Technology can be useful in dissemination but just because people can share information does not guarantee they will, particularly if they believe it is not in their best interests. The culture of the organization is a major factor in encouraging or impeding dissemination.

Redesign Organization/Roles

Work design has a long history of success in positively impacting productivity and employee satisfaction. There is a rich literature in organizational design and in designing workplaces/work roles. Job enlargement (often called cross-training) can be a strategy for increasing productivity, since it produces a more flexible workforce that can be shifted to meet changing workloads. Job enrichment, which gives people more responsibility for their work, can also contribute to satisfaction and to fewer “handoffs” between people (e.g., having people handle quality control for the work they do).

There has been much discussion about the concept of a job becoming obsolete, but this varies across roles and workplaces. The model for role design that is most supported by research is one that promotes: 1) appropriate skill variety, 2) understanding why the work is important, 3) appropriate autonomy and 4) continuous measurement and feedback. In cases where a given process must be adhered to (e.g., accounting) it is reasonable to assume jobs will continue to exist. Where people must jump from one activity or project to another there may be less focus on a specific list of tasks they are to perform and more on contributing to the desired results.

The use of work teams in place of individual jobs has become more prevalent where it makes more sense. But the use of teams should be limited to situations where the work process lends itself to this strategy and when there are people available who are capable of operating effectively as a team member. Certainly more work is done in a project mode and project management tools should be applied where appropriate.

Manage Losses Due To Retirement

For many organizations the biggest challenge will be replacing the retiring Boomers, particularly if they have spent all or most of their career with one employer. Some of the studies that have been done recently argue that Boomers do not intend to delay retirement while others say they will never fully retire. This contradiction can be clarified only by carefully defining “retirement.” If the employer has a defined benefit pension plan that enables employees to retire with full benefits when their age and years of service total 75 or more, it is reasonable to assume that some will exercise that right. And since U.S. laws limit the ability of some employees to continue to work for an employer while they are receiving pension benefits from that organization there are limitations with regard to the way in which they are retained after retirement.

It is possible to extend career management strategies beyond the time when an employee ceases to be a full-time, permanent employee. If an organization needs to train new personnel it could create a training contract with retiring employees to accomplish the training. Having a retiree spend one week a month or one day a week running a focused training program may allow the organization to utilize the retiree as a contractor and to accomplish what otherwise would have been a difficult challenge. Although mentoring and other on-the-job approaches can theoretically accomplish the same thing it is often found that daily work demands cause underinvestment in training time, with dire consequences when the experienced person leaves.

Many organizations have created the ideal incentive for forcing out everyone eligible for retirement, no matter how badly they are needed or want to stay. Overly generous retirement plans, fully paid retiree health programs and other rewards for past service may provide more value to those who leave than those who stay. Employees who are eligible for full retirement at a fairly young age can begin to receive the income stream from the pension plan and move on to collect a second income from another organization. Defined contribution plans lend themselves to encouraging continued service more than defined benefit plans, since additional benefits will accrue beyond normal retirement. Also, those who are relatively secure financially are in a position to contribute more to these plans in their later years.

Manage Losses Due To Turnover

The most potent approach to ensuring a viable workforce into the future is to avoid losing any valued employees when it is inconvenient. Organizations with very low turnover of incumbents with critical skills and high performers will certainly have less of a challenge than those suffering large losses of these people. But since so many competitors will be likely to be facing the same challenges they will probably be doing their best to spoil the party by focusing on the organization’s best people.

All of the approaches already mentioned will help to minimize dysfunctional turnover. Well designed jobs in organizations with attractive cultures and generous rewards will certainly promote retention, as will career planning programs that invest in employees. The best strategy is to do all the things with a positive impact on turnover and avoid those with a negative impact. One of the rarest approaches to turnover is not giving up when someone leaves but to maintain “alum relations.” By making it clear in exit interviews that someone is welcome to knock on the door in the future and by periodically reminding them that this is still an option, organizations may find that losses can become future sources of supply.

One of the most effective retention strategies is to aggressively communicate the value of the compensation and benefits package to employees. One of the tragedies for many organizations with generous employee benefits is that employees take them for granted and grossly underestimate the financial value of that which is provided. For example, most organizations would find that employees estimate the expenditure on benefits by the employer at something less than half of what it is. Further, if asked what the benefits would cost if they were acquired directly by the employee, the estimates would be far less than half of the true cost in most cases.

Failure to provide comprehensive individual employee benefits statements on a regular basis is usually a bad decision from a cost-benefit (ROI) perspective, particularly since current technology has made providing them relatively easy and inexpensive. Another way to increase the perceived value of the benefits package is to compare what the organization provides with what is typically provided by other employers. This type of competitive analysis needs to be done periodically, to ensure that current trends towards limiting benefits and increasing the portion of total costs contributed by employees are recognized and that realistic values are placed on what is provided by the employees. Organizations which have historically not asked employees to contribute towards the cost of their healthcare will always experience resistance when beginning to charge employees even a nominal amount. But the noise level can be reduced if the economic necessity for these actions is clearly communicated and if the communication is accompanied by tangible comparisons to what is happening in other organizations.

There is another approach to benefits that can further increase the perceived value to employees. Providing a “flexible” package that enables individuals to pick from equal value options gives them the freedom to choose those things with the most value and appeal to them. Pooling all types of time off, offering selecting from a range of health care packages and ensuring employees understand how to create tax-free accounts to pay premiums and deductibles are all strategies that cost nothing except the time and attention of HR specialists knowledgeable about the options. Employees are intelligent enough to understand when programs make them better off by providing what they want at the best possible out of pocket cost.

A Final Option: Outsource The Work

Not all work performed by the organization needs to be performed by employees. Many organizations are accustomed to contracting out large projects, such as building new infrastructure, but most perform work that is ongoing with employees, either permanent full-time, part-time or seasonal. Organizations are increasingly finding that work not critical to their core capabilities can often be done better by other organizations specializing in that work. For example, it is unlikely that a utility is going to be “world class” in IT, Accounting, Payroll and other administrative processes that are recurring and transactional in nature. This is true because the best qualified people in these fields will not aspire to work in a utility, since they understand that the organization’s primary mission is not closely related to what they do. Also, the utility will not be able to fund development of the most advanced systems and therefore the employees will be unlikely to stay up with the “state of the art” in their field.

By working together organizations could represent a viable business for an outsourcing provider and enjoy state of the art systems and processes without each having to make the large investment in creating them on their own. Alliances and joint ventures between multiple organizations have become more common in many industries: newspapers share distribution services and printing operations; organizations of all types use the same providers to process their payrolls. It is unlikely that organizations will offshore activities that are critical to success (e.g., customer service at Four Seasons) but the current popularity of outsourcing demonstrates that it is not necessary to do some of the things organizations are doing if they will struggle to do them well and effectively. A last consideration is the culture, which is often (and many would argue appropriately) focused on core capabilities that produce competitive advantage. Having the most innovative and leading edge administrative systems may be a low priority for an R&D organization, frustrating administrative professionals who are trained to make their work as good as it can be. This may create conflicts and lead to dissatisfaction and turnover.

Conclusion

Despite the uncertainties about whether there will be a shortage of workers in the near future and its magnitude, it is not wise to assume the organization will be able to deal with whatever happens. There have been shortages in some occupations for decades, often lasting as long as three to five years per crisis (the time it takes to replenish the supply). There will always be shortages for some organizations and for some critical skills, at least for short periods. The biggest mistake is not trying to plan for the future and waiting until the crisis is unarguably afoot.

Scenario planning should be applied to workforce planning. By looking into the future and formulating a “worst case,” a “best case” and a “most likely” scenario, an organization can develop strategies that are reasonably robust when one of the possible futures becomes the present. This type of planning equips the organization to respond more quickly and appropriately because it has thought about its responses to a range of realities and has implemented processes and programs to help it deal with what occurs.

Had there been more planning for the “Y2K” event there would have been fewer bad decisions made. There is a principle that seems to always hold true: *in human resource planning if you run out of time all your best options are no longer available.* This is particularly true for workforce planning, since there are often no quick solutions to a labor shortage. Anticipating the future that is likely to materialize enables human resource planners to broaden their range of options. Some believe planning is useless when the environment is “permanent whitewater.” Another school of thought believes planning is still critical, but that the type of planning done needs to change. The models in Exhibits 1 and 2 are relatively mechanistic and they require judgments to be made that are at best educated guesses. But they accomplish the most important objective of all. They get the organization focused on what might occur and make workforce planning something that needs to become a daily part of management’s activities.

A final requirement is that workforce planning must be a continuous process. Today may not look much like what you projected it to be five years ago, given the rate of change. Therefore, each 1, 2 and 5 year projection must be refined as things change. Workforce planning is a daily part of effective human resource management.