



# The Aging Workforce: Planning for the Skills Gap in Service Organizations

**A ClickSoftware White Paper**

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## Market Drivers

More and more of today's service organizations are under pressure to meet the constant and growing demand for a better quality of service and an improved standard of service level agreements, while also complying with strict regulations governing their industries and addressing the need to reduce costs and/or increase profitability.

Over the next decade, an aging workforce and subsequent decrease in skilled labor will greatly affect an organization's ability to effectively manage these contradictory forces. There is a compelling need for service organizations to plan their service strategy now, taking into account the gap between the demand for service and their capacity for meeting that demand with their current in-house employees and subcontractors.

## Changing Workforce Demographics

Baby boomers are poised to retire in large numbers by 2010, taking with them years of experience, talent, and expertise — and leaving fewer experienced workers to replace them. The aging of the global workforce is a worldwide challenge and a top priority of American leaders, as is evidenced by continued legislative reforms for older workers.

According to a U.S. Bureau of Labor Statistics report on the median age of U.S. employees, some 64 million baby boomers (more than 40 percent of the American labor force) are poised to retire in large numbers in the next three to five years, leaving fewer experienced workers to take their places. Similar changes in workforce demographics are occurring in Europe and Australia. In its 2004 Eurostat population projections, the European Commission predicted a substantial decline — about 20 to 30 percent over the next few decades — in the age of the working population within the EU.

In some industries — such as oil and gas, energy, health care, and government — the greatest issue surrounds skills shortages, as there are not enough educated newcomers to fill the positions of the retiring baby boomers. Retirees, who have designed and operated the systems until now, will leave many organizations without enough knowledgeable workers to meet the future demand for labor. This is particularly noticeable when it comes to, for instance, linemen working for a utility company.

In order to handle this shortage and to prolong the working years of their employees, companies will need to improve job opportunities and working conditions by creating new age-related policies that emphasize a reduction in working hours, a flexible working schedule, the transfer of older employees to less strenuous roles, and the implementation of lifelong training.

In other industries, such as telecommunications, the most prominent pressure is a different one. These service organizations need to attract recent graduates who are very comfortable with new technologies. However, the number of new job opportunities is limited, as the retirement age continues to rise and older workers generally are preferring to remain in their jobs for financial gains and/or reasons related to personal fulfillment. In this scenario, an organization needs to plan new technologies training for some of its more experienced employees while constructing an early retirement plan for others.

Should service organizations fail to address these challenges, they will find themselves lacking the adequate workforce mix needed in an extremely competitive market.

The fact that baby boomers far outnumber the members of younger generations will form important changes in the size and age structure of the labor force. In the United States, for example, Generation X comprises only 29 percent of the workforce, compared to the 46 percent that are characterized as baby boomers. This shortage adds to the existing scarcity of skills. The U.S. Department of Education estimates that 60 percent of all new jobs in the 21st century will require skills that are possessed by only 20 percent of the current workforce.

Due to the shortage of new skilled workers, some companies from the utilities, government, and public sectors are now more willing to keep older workers employed beyond the traditional retirement age. This trend will change the overall composition of the workforce, leading toward more part-time working arrangements and more middle-aged employees in the long term.

Different governmental and regional initiatives have set the objective of elevating the retirement age, thereby increasing the number of older people who are still employed. The European Employment Strategy, for example, fully takes into account the need to improve the labor market for older workers. In March 2001, the European Council of Stockholm aimed for a 50 percent employment rate for European workers aged 55–64 by 2010. The

Barcelona European Council in March 2002 agreed on the goal of, over the same period, gradually increasing the average retirement age in Europe by five years. Since 2000, the increase in the employment rate of Europeans aged 55–64 has generally accelerated, outpacing the rise in the EU's working-age population as a whole.

In the United States, there is no current policy regarding an increase in the retirement age, but the Age Discrimination in Employment Act protects older workers from discrimination in the workplace by prohibiting age discrimination (including forced retirement) in employment for persons aged 40 and over.

#### Problems Caused by an Aging Workforce

The main risks involved in the aging of the workforce are an inability to meet the demand for service and poor utilization of resources. Both risks result in a loss of revenues and declining customer satisfaction, influencing the ability of service organizations to grow.

If problems performing physical tasks and an increase in requests for part-time working arrangements do become a reality in the near future, older employees could end up pressuring organizations to move to a different employment mixture. For some organizations, this could result in poor resource utilization, as they find themselves carrying a workforce that is both unable to perform its current work and untrained for other work. Inefficient resource allocation could also impact service organizations that require knowledge of new technologies in order to operate, as the existing aging workforce will generally lack this knowledge.

Recruiting new employees becomes a problem, too, because of either skills shortages or the lack of open positions. An aging infrastructure and an increased demand for service place even greater pressure on current employees. The increase in workload on the one hand and the lack of skilled resources on the other put severe pressure on the service organization to meet customer expectations of high-quality service.

Current aging employees are obligated to remain employed in order to answer the demand for service, and are therefore unable to participate in more knowledge creation and mentoring activities, further hindering organizations in their attempts to provide the required level of service.

Even service organizations that have dealt with the overall problem — the total number of employees expected to retire — often have not looked into the effect this trend will have in specific departments, geographies, or skills areas.

### A Call for Awareness

As shown in recent studies and surveys regarding the aging workforce, even though companies are aware of the significant impact this trend will have on their daily operations and performances, few have taken action to address the issue. Consequently, when employees retire, organizations lose a huge amount of knowledge and experience that could have been shared with the next generation of workers.

The paradox is that although the problem clearly becomes more severe with each passing day, most organizations are not preparing or implementing an action plan; they are mistaken in the belief that this problem can be addressed in the long term.

Service organizations that are trying to manage their aging workforce traditionally use the approach of high-level benchmarks and performance reports, mainly in their HR departments. This approach is not granular enough to enable effective decision making throughout the service operation. Without all the granular details such as skills/capabilities, units, and high-risk areas, it is impossible to prioritize the problems and to select the best alternative solutions to your aging workforce.

This is not just an HR or Planning department problem. With the right tools, operations and district managers will be able to prepare for the challenges of daily operations and will be able to consider both short- and long-term scenarios. The right tools will enable these managers to make well-informed decisions about implementing training plans, hiring subcontractors, and executing other alternative actions that can help avoid the pressures and cost implications of last-minute decisions.

## Solutions and the Challenges Involved

In order to address the dual issues of a skills shortage in the next working generation and a lack of new knowledge in the aging workforce, service organizations must take the following steps:

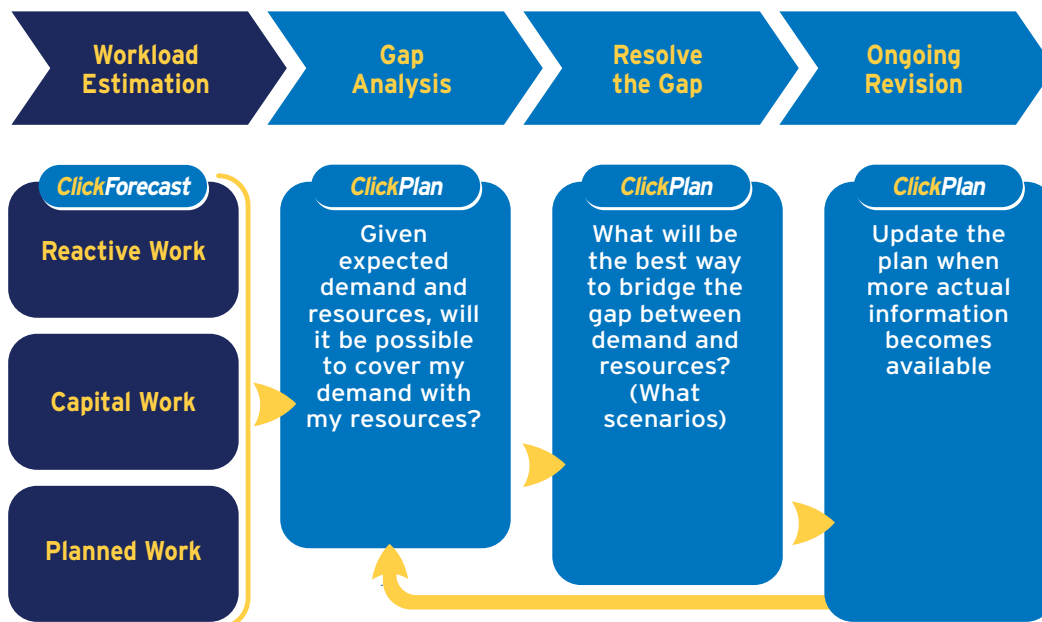
1. **Estimate their workload** for the coming years by forecasting future demand for services.
2. **Estimate their resources' availability** for the coming years by collecting data about their current employees, including important skills and expected retirement dates.
3. **Understand the gap** between the expected workload and the available capacity to fulfill it. It is critical to understand this gap at the most granular level, down to specific skill and organizational segment.
4. **Build an action plan** that will detail the best way to bridge this gap.

The following four factors serve to complicate these four steps still further:

1. A variety of considerations could affect future workload, such as new technologies, different regulations, and new competitors.

2. The expected resource availability depends on the retirement age, available contractors, the ability to hire skilled resources, and different organizational retirement policies.
3. Understanding the gap in the skill level in each segment of the organization is not possible by simply looking at the total, but instead requires a systematic, error-free approach.
4. The best action plan may be developed only by evaluating various combinations of the different alternatives available to your service organization (e.g., combination of subcontractors, training options, assignment relocations). It is also important to understand the costs derived from each option in order to ensure that the action plan meets any budgetary limits.

A good solution should incorporate tools for data collection, automatic forecasting (to estimate the work accurately), automatic gap analysis (to find the gaps between the estimated workload and the resources' availability), and an analytic tool that will help the user to evaluate different alternatives for solving the identified gaps.



## Collecting Data and Estimating Workload

Service organizations should start by collecting data in two dimensions: internally and externally.

Internal data includes the following:

- Average overall age and average age by unit, skill, and territory
- Retirement data and forecast of the organization's workforce demographic in the next three years, five years, and ten years
- Requirements of the aging workforce (working hours, workload changes, etc.)
- Current workload and service level policy (skill mix and volumes)

In addition, the following external data that should be collected:

- Changes in organizations plans and policies, or expected compliance regulations
- Technological changes that may effect changes in the nature of the workload (e.g., smart meters and a smart grid that will lead to an increase in remote installation and less daily employee-intensive work) and in the demand for a new business line (e.g., network upgrade)
- Population migration that will obligate boundary changes and/or affect the choice of subcontractors
- Availability of future candidates by skill and territory (e.g., shortage of nuclear engineer candidates in North America)
- Economic trends
- Consumption trends

## Demand Forecast and Plan Process

When data is available, a forecast process should be applied in order to estimate the future workload, taking into account the collected internal and external data.

## Performing a Gap Analysis

Gap analysis is the process that identifies gaps between expected demand and expected resource availability. Understanding this gap can help managers to define priorities and mitigate their workforce risks. It is possible to perform the gap analysis for the entire organization or for specific units and territories; in either case, it is important to perform the analysis according to the skill, unit, and territory level, in order to address any specific risks identified.

Using this process, managers can develop insight into particular divisions or locations that may be significantly affected or where personnel positions within the organization may be at risk.

## Creating an Action Plan That Will Resolve the Gap

An action plan should be designed to close the gap between expected demand and expected resource availability and to help operational managers better prepare their operations for future challenges. Based on input from the gap analysis, service organizations should take the following actions:

- Develop a policy for recruiting and retaining new employees.
- Implement new long-life training programs or an early retirement plan (depending on the industry).
- Assign existing experienced staff to create a knowledge retention plan.
- Reexamine job functions.
- Reexamine boundaries between different service areas.
- Examine external options to bridge the potential gap between the expected workload and the available workforce, including new hires, subcontractors, and working retirees.
- Explore innovation through IT that enables the completion of more work by fewer employees.

It is not easy for a service organization to plan the actions it should take in order to address the problems created in the wake of an aging workforce. The organizations should simulate these situations, see the effect of each action on the skills gap, and examine different scenarios. When considering the possible options, an organization should simulate all the different combinations that could be successful — a task that is virtually impossible to manage manually and that, therefore, calls for an automatic solution.

Remember, the workforce does not stop aging while the company conducts these activities. A continuous evaluation process will allow managers to adjust their plans according to changes in the working and overall economic environment and in organizational levels.

## Benefits

Service organizations that adhere to the suggested solution are expected to see the following benefits:

1. **Achieve a high level of service while maximizing utilization of resources across the organization.** By taking a broad view of the entire organization for the next couple of years, a company will be able to understand how to do more with its resources (e.g., training plan, relocations).
2. **Gain a competitive advantage.** By understanding its own specific needs, the service organization will be able to attract new hires or to sign up with contractors before they align with competitors.
3. **Reduce cost of service operation** by reducing idle time of resources.

## Requirements of a Solution

- **Proficiency** — The database and analytics tools should support the usage and analytical requirements of service organizations.
- **Centralized repository** — The solution should be capable of storing important information such as retirement data and historical workload, to allow managers to develop high-level oversight.
- **Integration with outside information** — Integration of a company's own historical information with a host of other factors, such as new regulations, changes in the service policy, and asset management information, will improve the forecasting process.
- **Sophisticated forecasting ability** — A powerful solution will allow managers to challenge any assumptions about the existing operation.
- **What-if scenarios** — The solution should provide managers with the capability to store and work on multiple predicted scenarios instead of limiting the forecast to one outcome.
- **Workflow** — Integration between workforce information (e.g., retirement, changes in the working hours of specific employees) and the forecasted workload demand is imperative.
- **Consolidation of information** — Information should be both presented in a detailed form and consolidated into a high-level view to help managers prioritize different alternatives.
- **Continuous evaluation of the planning process** — Managers should be able to adjust their plans according to changes in the market on global, national, and organizational levels.

## The ClickSoftware Solution

ClickSoftware has designed an integrated, automatic solution for service organizations. This solution can help organizations to design the right plan in order to mitigate future workforce challenges.

### Data Collection

The ClickSoftware solution provides an organization with one centralized repository for storing important information, such as retirement data and historical workload. Data can be collected either through integration with existing legacy systems or by using ClickSoftware out-of-the-box tools.

Based on our extensive knowledge of service organizations, our database and tools are pre-configured to support the usage and analytical requirements of service organizations.

### Forecasting the Expected Workload

ClickForecast is an application that enables service organizations to better predict future workload, in both the short term and the long term. **ClickForecast** assists companies in using their own historical information by automatically analyzing trends, seasonality, and other repeated patterns in the demand data. Above and beyond considering historical data, **ClickForecast** enables the integration of a host of other pieces of information, such as new regulations or changes in the service policy, into the forecasting process using what-if scenarios. The forecasted workload then becomes an input for gap analysis (using **ClickPlan** tools).

### Gap Analysis: Expected Workload Versus Resource Availability

**ClickPlan** provides integration between workforce information (retirement, changes in the working hours of specific employees) and the forecasted workload demand. Organizations can apply different retirement policies in ClickPlan (e.g., working hours, early retirement age) to gain perspective on how each affects the resource availability. **ClickPlan** performs an automatic gap analysis to identify capacity shortages or excesses at a given time for each territory, unit, skill type, or position. This unique, detailed gap analysis allows managers to highlight specific challenges that the organization should examine.

### Creating Action Plans

**ClickPlan** facilitates decision making in terms of the optimal ways to close the skills gap, in both the short term and the long term. In doing so, the application defines many factors, including the

optimal skill mix, required training programs, temporary and/or permanent relocations, subcontractor usage under the known limitations, new hires considering the available talent, recommendation for an early retirement program, and changes in the skill set and the working hours that may be needed in order to retain the knowledgeable aging workforce.

The information can either be viewed in a very detailed way or consolidated into a high-level view; this helps managers to prioritize between different options and to realize the risk levels, the timeline, and alternative options to address these factors. For example, in an organization with two areas lacking employees with the appropriate skills, ClickSoftware may reveal that there is a short-term solution of using subcontractors in one area, allowing the manager to direct an action plan for new hires in the other area.

A continuous evaluation process allows managers to adjust their plans according to changes in the market on global, national, and organizational levels.

## Contact Us Today

For more information about ClickSoftware's solution to address the skills gap in the aging workforce of service organizations, visit [www.clicksoftware.com](http://www.clicksoftware.com) or e-mail [sales@clicksoftware.com](mailto:sales@clicksoftware.com)

## Glossary

**Baby boomer** — A person born between 1946 and 1964.

**Demographic landscape of an organization** — Average age and age range of the overall workforce by division, workgroup, and location in the present, in three years, in five years, and in ten years.

**Generation X** — A person born between 1965 and 1983.

**Retention of older workers** — Efforts to prolong working years of employees by offering to older workers any combination of flexible scheduling, continuous skills training, reduction in work hours, and other perks that may interest them.

**Skills gap** — Gap between an organization's current skills match and its future needed skills (taking into account the loss of key skills and experience through downsizing and retirement, as well as developments in technology requirements).

## About ClickSoftware

ClickSoftware (NasdaqCM:CKSW) is the leading provider of mobile workforce management and service optimization solutions that create business value for service operations through higher levels of productivity, customer satisfaction and cost effectiveness. Combining educational, implementation and support services with best practices and its industry-leading solutions, ClickSoftware drives service decision making across all levels of the organization. From proactive customer demand forecasting and capacity planning to real-time decision making, incorporating scheduling, mobility and location-based services, ClickSoftware helps service organizations get the most out of their resources.

With more than 100 customers across a variety of industries and geographies, and strong partnerships with leading platform and system integration partners, ClickSoftware is uniquely positioned to deliver superb business performance to any organization. The company is headquartered in Burlington, Mass. and Israel, with offices in Europe and Asia Pacific.

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