

The Higher Education IT Workforce Landscape, 2019

MANAGERS' SUMMARY

FEBRUARY 2019

Key Findings

- **Women continue to be underrepresented in the higher education IT workforce**, but their numbers have increased in recent years. Women have made the greatest gains as managers, followed by staff. Despite these gains, the percentage of female CIOs has declined, and considerable work remains in order for women to break through the glass ceilings in higher education IT.
- **The higher education IT workforce appears to be getting older.** The median age of higher education IT employees has increased to 50. According to our data, Baby Boomers and Gen Xers are overrepresented and Millennials are underrepresented in the higher education IT workforce. The recruitment and retention of Millennials to the higher education IT workforce will become increasingly important to counter looming Baby Boomer retirements.
- **The higher education IT workforce remains predominantly white.** Although the workforce has experienced some moderate improvements with regard to ethnic diversity, our data suggest that minority groups in higher education IT tend to be underrepresented compared with the overall US workforce.
- **The percentage of higher education IT employees who identify as LGBQ is twice that of the general population.** LGBQ employees may be more drawn to IT positions in higher education given these institutions' broader commitment to diversity of thought, creed, and demography, creating a more welcoming environment than general IT work environments.
- **The percentage of higher education IT employees who have disabilities and impairments is substantial.** About 8% of respondents reported having been diagnosed with a disability or impairment. Of those identifying as having a disability, 27% have a sensory impairment, 22% have a learning disability, 21% have a mobility impairment, and 16% have a mental health disorder.
- **Most CIOs and managers reported that they have been able to fill open positions, but fewer reported being able to create and hire for new positions.** Institution size and classification were associated with IT departments' ability to hire. Larger institutions likely have larger IT departments and therefore greater capacity to hire and restructure positions and roles to meet the needs of an extensive organization.

- **Over half of institutions reported not adding any full-time IT positions, and only a little more than a third of institutions reported eliminating positions.** Attrition was the factor that contributed to the highest numbers of positions eliminated. When positions were added, they were for creating and maintaining IT infrastructure (e.g., systems administrator) or were necessary to enhance security.
- **Business skills such as effective communication and the ability to manage relationships within the institution were considered the most important skills for job success.** Although technical skills such as managing processes and services and engaging in design thinking are somewhat less important, they tend to rank higher than general managerial skills.
- **The professional development activities that most contributed to professional growth were analyzing data for strategic decision-making and attending a conference on higher education in IT.** Among all organizational classes engaged in these activities over the past two years, a strong majority assessed these opportunities as moderately or greatly contributing to professional growth in their current position.
- **Quality of life and work environment are the most important factors in keeping employees at an institution.** Other generally important factors include occupational stability and benefits. All of these factors were rated significantly higher than monetary compensation across organizational levels.
- **Higher education IT employees across organizational levels and Carnegie classes deemed insufficient staff and financial resources to be major or critical obstacles to effective job performance.** IT employees are confident in their abilities and skills to do their work, and they reported gaps in these areas as among the least critical obstacles to effectiveness in their current positions.
- **Competitive compensation and additional budgetary resources were the most important factors to CIOs and managers** for adequately maintaining their IT workforce over the next three years. Outsourcing systems, functions, and services and contracting work to be done are among the less important solutions to workforce maintenance.
- **The paths to CIO and manager positions in higher education are related to previous roles, experience in higher education, and education levels.** Although managers come from every IT sector and are typically hired to manage units within the sectors in which they have developed specialization and competency, CIOs tend to come from other executive leadership positions. Managers and CIOs both tend to have considerable experience within higher education, but managers appear to be loyal to their institution, whereas individuals aspiring to a CIO position may have to leave their institution. Education levels are associated with moving up the managerial ladder: CIOs and managers have earned more advanced degrees than staff.
- **CIOs who have an appointment to a president's or a chancellor's cabinet more frequently engage in shaping their institution's academic directions and strategic activities than their counterparts who do not have those appointments.** CIOs and managers most frequently engage in a collaborative relationship with their institution's chief information security officer.

Recommendations

- **Increase the number of women and minorities in the higher education IT workforce and create more opportunities for their advancement to managerial and leadership positions.** Clear steps to achieve this include supporting comprehensive diversity and inclusion strategies related to the talent pipeline, building equity into the culture and process of recruiting talent, creating and sustaining inclusive cultures that support the success of everyone, and developing effective and fair management processes that include auditing performance evaluation and compensation practices for potential biases.
- **Recruit Millennials to the higher education IT workforce in preparation for the looming retirements of Baby Boomers and Gen Xers.** The underrepresentation of Millennials in the higher education IT workforce may be corrected by first understanding their long-term career goals, workplace needs, and value systems. Higher education is well positioned to attract Millennial talent by emphasizing the role higher education plays in advancing the greater good, generating opportunities for more creative approaches to how IT works, and valuing diversity, equity, and inclusion in the workplace.
- **Cultivate a strategic working relationship with human resources** to create, fill, and replace positions in a timely manner when needed. Establishing such a relationship can be beneficial when the time comes to reorganize the unit, retrain and reassign employees, and fund and fill positions in a timely manner when they are vacated.
- **Explore the possibilities of offering convenience benefits such as flextime, telecommuting, and more vacation time, which may contribute to recruitment and retention by aiding individuals in coordinating their job duties with their personal responsibilities.** These benefits can impact quality of life and the work environment, which employees said are the most important factors in staying at an institution; therefore, such benefits can help maintain an effective IT workforce.
- **Provide employees with training and other opportunities to develop the technical, business, and managerial skills that they deem to be most important to doing their jobs successfully and advancing their careers.** Although each employee may have specific needs based on prior experience, IT sector, assigned duties, and career aspirations, opportunities to learn how to communicate effectively, manage relationships across the institution, communicate with diverse populations, engage in strategic thinking and planning, and manage complex projects provide the greatest value to employees.
- **Rethink resource allocations to improve organizational responsiveness and create new positions that will enable implementation of innovations, increase capacity to be early adopters of technology, and keep pace with rapidly developing technologies.** IT departments need to be agile when it comes to creating positions to fill gaps in their workforce to meet stakeholders' needs and respond to technological innovations.

- **Increase opportunities for professional development activities that focus on data analysis for strategic decision-making and attending higher education IT conferences.** Data analysis opportunities for all organizational levels should have clear links to informing strategic decisions to ensure meaningful development activities that will increase technical and management skills.
- **Emphasize the strategic importance of the role of the CIO to position IT as a first responder to the cultural, technological, and workforce trends and changes that digital transformation has brought to higher education.** CIOs are in a better position to increase the impact and reach of their organization when they report directly to the president of their institution, and they have the greatest impact on shaping and influencing the strategic directions of their institution when they hold a seat on the president's or chancellor's cabinet.