



REPORT TO THE CISA DIRECTOR

Transforming the Cyber Workforce

September 13, 2023

Introduction:

The Cybersecurity and Infrastructure Security Agency (CISA) Cybersecurity Advisory Committee (CSAC) established the Transforming the Cyber Workforce subcommittee to support CISA's efforts to recruit top talent and develop and retain its talented workforce and manage a remote workforce.

Findings:

The outlined recommendations are guided by the six scoping questions provided to the subcommittee by the CISA Director. They are informed by meetings that assessed the current state of CISA's workforce management approach and input from industry leaders and private sector experts on the future of work.

CISA must develop clear benchmarks, metrics, and milestones to track progress, drive traction and measure the long-term cultural changes that will define success in this workstream.

How can CISA measure and improve employee engagement beyond the annual employee engagement survey?

Currently, CISA conducts annual employee engagement surveys through the Office of Personnel Management which we understand standardizes the questions for all federal agencies and maintains sole access to the raw data. As such, CISA is constrained in its ability to measure engagement specific to the CISA workforce or to access the standardized data directly and conduct its analyses. To improve employee engagement in creative, thoughtful ways CISA must collect data that is specific and meaningful for its workforce, with appropriate access to the data and regular, thoughtful analysis of the data.

What programs and initiatives are the private sector using to combat burnout, address unreasonable workload, and support employee wellbeing that CISA could benefit from?

Across the private sector there are several programs and initiatives that are being used to combat burnout, address unreasonable workload, and support employee wellbeing. Addressing these challenges is key to driving employee growth and increasing retention. These are best considered in three buckets: Programmatic Enhancements, Cultural Alignment, and Employee Support.

Which promising practices of a People-First culture to recruit, retain, and continually grow top talent can be applied within a federal government agency?

A People-First culture and the practices it promotes are foundational to the recruitment, retention, and growth of top talent. The Subcommittee is pleased with the progress that CISA has made in this area since delivering its initial set of recommendations and applauds its continued commitment. By aligning to industry-specific standards and frameworks and creating more opportunities for employee feedback, CISA can amplify its culture and better compete for top talent.

What are the best practices for managing and motivating a remote and hybrid workforce, to include ensuring that new employees are effectively integrated into the CISA culture and that all employees embrace the importance of collaboration?

As new employees join an organization, it is critical that they are welcomed and onboarded effectively. This is particularly important for remote and hybrid employees (who comprise a significant portion of CISA's workforce). Through conducting a cultural analysis, giving immediate structure to new joiners, and providing opportunities to engage with senior leaders and teammates, CISA can effectively manage and motivate its workforce.



Which internal mobility programs or career development programs should CISA consider for developing broader competencies and experiences for its cyber workforce?

Career development and mobility are essential in developing broader organizational competencies, growing individual employee skillsets, and increasing retention rates. It is important to provide easy access to a wide variety of enrichment opportunities, develop clear structures and guidance for progression and growth, and establish innovative talent programs in support of these efforts.

How can CISA reskill, upskill, and cross-train its workforce to account for changing needs?

As the cyber threat landscape evolves and new technologies emerge, it is important that CISA has a deliberate approach to reskilling, upskilling, and cross-training its workforce to keep pace. Through the establishment of a senior steering committee and enhancements to the agency's learning and development approach, CISA can ensure that its workforce stays ahead of cybercriminals and emerging threat areas.

Recommendations:

- Work with the Office of Personnel Management to obtain access to relevant and appropriate survey and employee data collected from CISA employees. A short technical sprint, in cooperation with OPM and CISA legal counsel, could provide options for OPM to securely share data with CISA about their employees. CISA must be able to access and analyze survey engagement data from its own employees, for the benefit of its workforce.
- The OPM survey data will be helpful but may not provide everything needed for CISA to strengthen employee engagement. As such, CISA should develop and manage its own approach to developing a full-scope employee engagement survey.
 - It is important that this CISA-driven approach include both a broad annual employee engagement survey and supplementary pulse surveys on a weekly, monthly, or quarterly basis to get a complete picture of employee engagement and sentiment.
 - For these surveys, it would be valuable to use pre-written or provided questions as opposed to creating new questions.
 - These questions can also be used to reinforce CISA's cultural values implicitly through the questions asked.
- Gain access to comparative external employee engagement information for benchmark purposes.
 - The focus of the benchmarking should include: 1) Approaches to measure engagement and 2) Tools used for measurement.
 - Tools used in this space by the private sector include: CultureAmp, 15Five, Lattice, and Betterworks.
- CISA's Chief People Officer and Chief Human Capital Officer should create a working group within the agency, comprised of key leaders and mission support personnel, to continually identify, modify, and validate key metrics CISA uses to measure engagement. Additionally, this group should review and validate the tools used to capture this data.
 - Questions that this group could consider include: 1) What are the metrics used across other government agencies, 2) What are the best practices for engagement used across other government agencies, and 3) What are the limited factors that inhibit engagement and action for CISA employees?
- Drive greater value from CISA's Employee Affinity Groups (EAGs) to support employee wellbeing, build community, and enhance culture.
 - This could look like expanding the number of interest areas or points of connection represented by EAGs or incorporating EAGs into overall personnel development and planning.
- Provide opportunities for employees to start their own EAGs and give them potential access to funding if key membership and activity metrics are achieved.
- Leverage data from programs that provide quantitative detail around current workloads and employee capacity such as Microsoft Viva to gain insight into employee wellbeing and help address unreasonable workloads.



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- Implement an employee-driven recognition program that allows employees to recognize each other's exemplary performance, provide a measure of success for achievement, and take an active role in promoting CISA's culture.
- Establish a working group that benchmarks CISA's approach to employee support against the private sector's approach on a regular basis.
 - The working group should be given a mandate to make continual recommendations of best practices and innovative ways to support employee wellbeing.
 - As an initial action, the working group could evaluate and enhance CISA's approach through: 1) Implementing meeting-free days or blocks of time, 2) Reinforcing and re-educating scheduling flexibility approaches that exist within CISA today, and 3) Exploring the potential of incorporating half-day/Summer Fridays as workloads allow.
- Formalize and educate employees on organizational growth paths and career progressions to provide more structure and clarity around development.
- Build a cohort-based continuous learning opportunity to upskill employees in key areas of strategic interest while also driving culture through connection.
 - To strengthen the impact these cohorts have on CISA's culture, cohorts should be cross-functional in make-up.
- Establish internal events (like Capture the Flag competitions) that provide the broader organization with the chance to deepen their cyber skillsets through access to CISA's cyber range or other cyber-specific training tools.
- Create people manager specific training pathways to equip them with the tools needed to support employee wellbeing and reinforce the importance of their role in proactively identifying and addressing employee burnout.
- Leverage the NICE Framework Career Navigation Pathways to align job roles and responsibilities more closely to widely accepted industry framework and make it easier for external talent to join CISA as part of their career progression.
- Create more opportunities for team members to share feedback on their managers to gain insight into leadership effectiveness and empower employees to feel more ownership of CISA's culture.
- Conduct Exit Interviews vs. exit surveys to better understand the motivations of people separating from CISA.
 - The interviews should be designed to gain insight into key questions such as: 1) What has worked in supporting their development and career growth, 2) Where do they see opportunity for improvement, and 3) Would they consider coming back to work at CISA in the future?
- As part of CISA's ongoing efforts to amplify their cultural principles and values, CISA should gather a small working group of key senior stakeholders to identify opportunities for remote and hybrid employees to actively engage with the culture. This will help to drive a sense of cultural ownership and support adoption of the culture.
- Develop a remote/hybrid on-boarding program that provides structure for new employees and a checklist of essential actions, trainings and learning modules that they need to complete.
 - As part of this high-touch onboarding program, each new employee should be given an on-boarding buddy from their team and directed to Employee Affinity Groups.
- Host a weekly welcome meeting for new joiners led by senior leadership to reinforce the cultural messages received during onboarding and make them feel like part of the team.
- Intentionally bring teams together on a regular basis for the kind of collaboration and culture building that is best done in person such as larger meetings, project-specific work and team development days.
- Implement an internal talent marketplace to facilitate internal mobility, help increase transparency and democratize opportunities for career development. A platform like this allows employees to own their own careers while upskilling CISA's workforce.
 - This internal talent marketplace can be used to proactively identify experiences to support the growth path of CISA's top talent by leveraging the gig work mentality that is so prevalent in the tech space.
- Identify career development opportunities that support volunteerism efforts, giving employees the chance to blend their passion and profession while supporting communities that lack the ability or knowledge to effectively secure themselves- including those that are target-rich, cyber-poor such as hospitals, K-12 school districts, or nongovernment organizations (NGOs).



- As an example, the Cyber Peace Institute has a program called Cyber Peace Builders through which volunteers lend their cyber skillsets to enhance the security of NGOs.
- Develop multi-year strategic development rotations for talent to gain interdisciplinary experience.
 - As part of these strategic development rotations, CISA should provide people managers additional training to help identify suitable candidates for the program.
 - The creation of these strategic rotations should take an incremental approach. To help ensure the quality of these rotations and their sustainable success, the initial focus could first be on a single professional development track aligned to growth paths within the organization, such as Artificial Intelligence. From there, CISA could expand the program to include other areas of strategic interest.
- Support the expansion and usage of a tour-of-duty program that enables talent swapping 1) between CISA and the private sector and 2) within government agencies. As part of this, CISA must gain insight into current program usage, areas of opportunity for improvement, and barriers to usage.
 - Expanded talent swap programs and secondments with high usage rates could serve as a competitive differentiator for CISA and provide a unique offering to help attract top talent.
- Establish a working group of senior CISA leaders to evaluate emerging technologies and incorporate it into their plans to reskill, upskill, and cross-skill the CISA workforce.
 - As part of these efforts, the working group should map these emerging technologies to CISA's strategic priorities and goals and explore the creation of an academy-based learning model.
- Review the current approach to employee development to ensure that employees have access to a variety of relevant and effective trainings that are both experiential, hands-on training and more traditional academic training.

Appendix: List of Contributors to this Report

The following TCW subcommittee members participated in the study and recommendations documented in this report.

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