



How can government workers and technology align to serve future citizens?



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EY

Building a better
working world

Digital government has the potential to bring huge benefits to citizens, enabling more timely, personalized and cost-effective public services. To make the most of these exciting opportunities and become truly citizen-centric, governments need to reinvent their workforces – sweeping away outmoded ways of working, cultivating digital leaders, investing in digital skills, forging new partnerships and cultivating new cultures that value creativity and experimentation. In the new digital state, employees will shape exciting, fulfilling careers characterized by continual learning and a shared purpose to serve citizens.

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Summary

Today's citizens are accustomed to an increasingly fast, simple and gratifying experience from organizations they do business with, and they expect the same from their interactions with the public sector. What if filing taxes was as convenient as online banking, with returns processed in minutes? What if students enjoyed multiple ways of learning, tailored to bring out the best in each individual? What if vulnerable children and their parents felt that care systems understood their unique needs and responded accordingly?

Technology is a crucial enabler of citizen centricity, with the potential to create more timely, joined-up, personalized and cost-effective public services. And an effective digital state begins with a skilled, empowered and motivated workforce. EY studies on **digital government** show that digital transformation efforts must put humans – not just citizens but also civil servants – at the center of their efforts.

The rapid shift to digitalization during the COVID-19 pandemic gave a tantalizing glimpse of just what is possible when governments empower their workforces to experiment with bold new approaches. But there's a danger that this momentum will stall if the public sector simply lapses back into old ways of working, which are too often burdened by excess bureaucracy, hierarchical career structures, rigid job descriptions and limited training.

New research from EY teams suggests this regression is a very real threat, with governments continuing to face significant challenges in harnessing the potential

of technology. Just 7% of the 150 government leaders taking part in the EY 2022 Tech Horizon Survey say their organization has achieved its digital transformation objectives.

As one of the biggest employers in most countries, with a vital role to play in enabling a well-functioning society, governments must pick up the pace in transforming their workforces to deliver long-term value for citizens. Advanced technologies such as analytics and AI can only fully deliver if they are deployed by skilled, smart, adaptable workers who are committed to continuous improvement.

EY research indicates that government workforces are ill-prepared to capitalize on the enormous potential benefits of a digital state. Many find themselves constrained by a combination of issues:

- ▶ There is a lack of digitally aware leaders who can reimagine the citizen experience and create an inspiring vision for change to the transformation agenda.
- ▶ Workforce initiatives are reactive, uncoordinated and disconnected from the digital transformation strategy. Planning rarely embraces the kind of "future-back" vision that would allow the organization to anticipate and respond to evolving needs.
- ▶ Digital and data skills are often the province of IT specialists, when they should be essential capabilities for every employee.
- ▶ Skills development and recruitment processes are no longer fit for purpose.
- ▶ Organizational culture is reactive and risk-averse, rather than dynamic and innovative, hampering efforts to attract the best digital talent.
- ▶ The employee experience is not designed to create fulfilling, rewarding jobs or emphasize the deep sense of purpose that government roles can offer.



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The digital state offers enormous opportunities for governments and public service organizations to improve citizen outcomes. We can only realize this value by transforming the public sector workforce, building new capabilities and changing ways of working. That is the key to success.

Arnauld Bertrand,
EY Global Consulting Leader – Government and Public Sector

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For governments around the world, this is a crucial time. For years, the mantra within civil services has been ‘do more with less or the same.’ The COVID-19 pandemic has made this task more urgent by exposing the urgent need to build more resilience into public services. Digitalization may actually make this possible — but only if the workforce has the skills to use the technology effectively.

Shalinder Bakshi,
EY Global People Advisory Services Leader – Government and Public Sector



The stakes are high. If governments do not urgently set about reconfiguring the workforce, they will find themselves without the skilled workforce they need. The already considerable gap between the digital experience provided by the public sector and that offered by the most customer-focused businesses will widen, undermining public trust and confidence in government. Opportunities to improve services through harnessing data and technology will be lost. The chance to individualize and target services will be squandered – and with it, the ability to better allocate taxpayer resources and deliver maximum benefits as and where needed. Most concerning, society’s most vulnerable people will suffer if public services deteriorate due to inadequate capacity or skill levels.

Making this shift will not be easy. It’s not enough merely to add a training course here or recruit a few specialists there. It requires new leadership competencies and the entire reconfiguration of workforce design, capacity, skills, ways of working, culture and employee experience. And it’s crucial that this happens without delay.

Different countries are at varying levels of maturity. Some are well advanced in their workforce transformation, while others are at a much earlier stage. There are lessons to be learned from the pioneers, and in this paper, we include examples of good practices from around the world.

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The language, the rhetoric and the narrative around digital transformation needs to shift. We often talk about the risks of adopting new approaches, but we fail to talk about the risks of not changing. We need to balance this risk perception.

Eddie Copeland,
Director at the London Office of Technology & Innovation (LOTI), UK

We present a vision for the future public sector workforce and recommend four key actions to help governments provide a 21st century citizen experience:



Methodology

This report is based on a range of new research from EY teams. We drew from three quantitative surveys: the 2022 EY Work Reimagined Survey, which includes responses from 1,694 government and public sector employees and 44 government employers globally; the EY 2022 Tech Horizon Survey of 150 senior government and public sector leaders; and the EY and University of Oxford’s Saïd Business School Transformation Leadership: Humans@Center research survey of 935 senior leaders and direct reports, as well as 1,127 workforce members from 23 countries and 16 industry sectors.

We also drew insights from in-depth qualitative interviews with 18 government leaders across eight countries, including CEOs, chief digital officers and chief human resource officers. We asked each leader about their digital transformation initiatives, related workforce challenges and the actions they are taking to address them. Finally, we drew on insights from EY professionals and client engagements.



Part 1

Global trends disrupting government workforces

In the wake of the COVID-19 pandemic, a convergence of disruptive trends is creating a dynamic environment where long-established workforce norms no longer apply. We are seeing a rapid pace of technological advance that is challenging to keep up with; changing citizen and employee expectations; skills disruption as people and machines intersect; shifting worker demographics; and the emergence of the hybrid workplace.





1

Changing citizen and employee expectations

Public service users now expect levels of quality, speed and convenience on a par with the private sector, with immediate, seamless, equal and omnichannel access to digital services. The EY **Connected Citizens** study shows that citizens think technology will improve the way they conduct many aspects of their lives – and they expect government to keep up.

“The whole reason for our digital government focus right now is that idea of the changing citizen expectation... we are very focused on improving government services to be more aligned to how people are used to doing things in their day-to-day lives.

Executive Director,
Health Agency, Canada

Citizens are also more vocal, amplifying their opinions on social media and calling for more opportunities to engage on policy and service design. Failure to address this will accentuate the troubling trust deficit that governments face with their citizenry.

This increased focus on customer centricity requires better use of technology and data to understand people’s needs and circumstances. It’s also an important driver of workforce transformation initiatives, calling for new skills such as user experience research and design, collaborative working to join up services across government agencies, and customer

service training for all employees (even those in non-citizen-facing jobs) to help everyone understand their role in delivering a better customer experience.

It’s not just citizens who are more demanding. Public sector employees increasingly want a digital workplace experience that matches their personal experience. The EY 2022 Work Reimagined Survey found 63% of government employees believe extensive or moderate changes are needed to enhance their workplace digital tools and technologies in the future. The figure rises to 78% among those who say they are likely to leave their job in the next 12 months.

Citizens are changing faster than governments can track them and respond

According to the EY Tech Horizon Survey 2022, meeting citizens’ expectations is of primary importance to their transformation efforts, and the most important factor driving successful transformation.

Meeting citizens needs is the **No. 1 transformation objective**



A focus on the customer/citizen experience is the **#1 success factor** for transformation



But keeping up can be a struggle: in the survey, 37% of respondents cited difficulties in tracking fast-changing citizen needs as a top-three challenge in improving the customer experience. A similar proportion mentioned a lack of data or technology to track and measure customer preferences, and a lack of collaboration to create a consistent customer experience.

What are the most significant challenges to improving customer experience?



Source: 2022 EY Tech Horizon Survey: Leadership perspectives on technology and transformation, EY, April 2022. The survey includes responses from 150 senior government leaders in the Americas, Asia-Pacific and EMEA.



Rapid pace of technological disruption

The rapid growth in adoption of new technologies offers huge potential to transform the way governments make policies, deliver services, and improve outcomes for citizens and communities. Governments face tough decisions on where to invest their scarce resources: cloud computing, Internet of Things (IoT), robotic process automation (RPA), AI, machine learning (ML) and predictive analytics all promise to revolutionize different aspects of their operations.

For example, automation technologies can radically improve processes. By automating even a fraction of their high-volume activities, governments can raise efficiency and productivity and reorient workers to more valuable pursuits, resulting in a better citizen and employee experience. Using sophisticated data analysis techniques enables smarter decision-making, more effective resource allocation, and the ability to tailor services to the specific needs of citizens and communities.

Compared with private sectors such as banking and retail, governments have been slow to embrace digital and data. However, as a 2020 EY survey of more than 2,000 health and human services professionals reveals, traditional barriers were swept aside during the pandemic – with positive results. Almost two-thirds of respondents reported improvements in both quality of the service experience and accessibility for patients and service users.

Four technologies that create the digital foundation

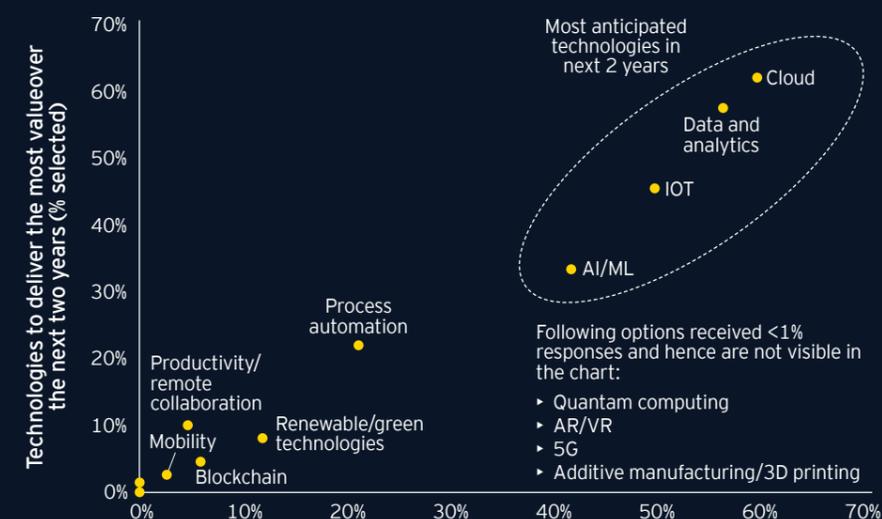
According to the 2022 EY Tech Horizon Survey, four technologies – cloud, data and analytics, the internet of things (IoT), and artificial intelligence (AI) and machine learning (ML) – are the foundation for a successful digital transformation. These will account for the largest share of investment and deliver the most value over the next two years.

Emerging technologies such as quantum computing and the metaverse (including Augmented or virtual

reality) are not part of immediate investment plans, but will need to stay on governments' radar.

More than investing in a single technology tool or platform, the emphasis is on picking a combination of technologies based on the goals of the organization. Selecting the "right" technologies, based on business needs, is crucial to bring the vision to life and maximize the value from investments.

Which of the following technologies are likely to account for the largest share of your organization's investment over the next two years? [Top three ranks]



Technologies for the largest share of investment over the next two years (% selected)

Source: 2022 EY Tech Horizon Survey: Leadership perspectives on technology and transformation, EY, April 2022. The survey includes responses from 150 senior government leaders in the Americas, Asia-Pacific and EMEA.

48%
Nearly half of respondents in high-performing transformations say that their organization has invested in the right technologies to meet their transformation vision versus

33%
of respondents from low-performing transformations.

Source: EY and University of Oxford's Saïd Business School Humans@Center survey of 935 senior leaders and direct reports, as well as 1,127 workforce members from 23 countries and 16 industry sectors.



3

Evolving skill needs

Contrary to widespread fears about job losses, the World Economic Forum (WEF) estimates that, by 2025, although 85m jobs may be displaced through automation, 97m new ones may emerge.¹ As traditional roles in accounting, data entry and administration become redundant, demand will surge for information security analysts, risk management specialists, data analysts and scientists, and software and application developers.



The shift to automation is happening quickly. The proportion of machine task hours compared with those of humans is set to rise from 29% in 2020 to 50% by 2025.² But technology is more likely to replace specific tasks than entire jobs, augmenting the work that people do.

Technological progress is also necessitating agile skill adaptation from workers. [Research from IBM](#) suggests that skills generally have a “half-life” of about five years, but just two and a half years for more technical skills. This requires a continuous re-skilling effort for workers to stay relevant.

Digital skills are in short supply across all sectors. A [2022 survey of 23,000 workers](#) in 19 countries revealed that three-quarters of respondents (76%) globally don't feel equipped with the digital skills needed for the workplace of the future. Just 17% consider themselves “advanced” in workplace digital skills. Even for Gen Z respondents, the first truly digital native generation, the figures are relatively low for “advanced” digital skills in areas such as coding (20%), data encryption and cybersecurity (18%) and AI (7%).

According to another 2021 survey, the share of tech jobs characterized as hard to fill (defined as roles that remained for more than 60 days on the relevant job posting site) in relation to total tech jobs ranged from 37% in the UK to 56% in the Netherlands.

Every public sector worker needs greater “digital literacy” to understand technology’s potential, adapt to new tools and ways of working, and use the data insights generated. But the public servant of the future will require a much broader set of capabilities than merely those relating to technology. In this hi-tech world, “human” social, emotional and cognitive skills are becoming more critical. However, [few universities](#) are adapting their curricula to develop the required competencies, and much of the training that is offered today in the public sector is skewed toward hard skills. The [OECD Framework for digital talent and skills in the public sector](#) outlines, in some depth, the scope of this challenge.





Disruptions to roles and the need for re-skilling

The shift to automation is changing the role of public servants and creating an urgent need for re-skilling.



43% of public sector task hours will be performed by machines in the government and public sector by 2024.



40% of the core skills of public sector workers will need to change in the next five years



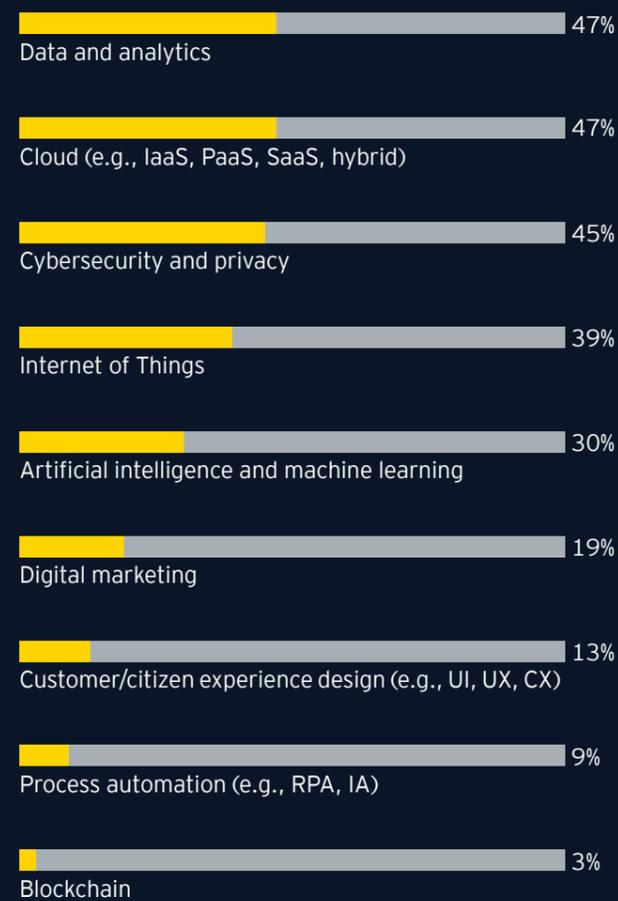
48% of public sector workers will require at least three months of re-skilling

Source: World Economic Forum. WEF_Future_of_Jobs_2020.pdf (weforum.org)

The government and public sector worker of the future will require a broad range of capabilities, including both technical and "soft" skills.

Technology-related skills required by government organizations

% of respondents ranking a particular skill in their top three requirements



Source: 2022 EY Tech Horizons Survey

Emerging skills for government and public sector workers

Skills identified as being in high demand within their organization, ordered by frequency

- 1 Leadership and social influence
- 2 Complex problem-solving
- 3 Analytical thinking and innovation
- 4 Active learning and learning strategies
- 5 Critical thinking and analysis
- 6 Technology design and programming
- 7 Resilience, stress tolerance and flexibility
- 8 Technology use, monitoring and control
- 9 Creativity, originality and initiative
- 10 Technology installation and maintenance
- 11 System analysis and evaluation
- 12 Service orientation
- 13 Reasoning, problem-solving and ideation
- 14 Attention to detail, trustworthiness
- 15 Persuasion and negotiation

Source: World Economic Forum. WEF_Future_of_Jobs_2020.pdf (weforum.org)



4

Shifting worker demographics and attitudes

The composition of the government workforce is changing. An OECD study of the European public sector found that 29% of workers are 55 years or older, 58% are over 45, while just 17% are under 35. It's a similar picture elsewhere, as an aging population stays in the labor market for longer.

This means there is an increasing need to attract younger employees as the older generation retires. Between 2021 and 2026, over 50% of the US federal workforce – including 70% of its senior managers – may [qualify for retirement](#), causing gaps in both leadership and institutional or public administration knowledge.

With as many as five generations coexisting in the workforce, there are [diverse career aspirations and expectations](#). Younger people tend to favor shorter job tenures. For example, Americans born between 1960 and 1980 had held two jobs by the age of 32, while Millennials today have already held three or four positions. Similarly, in Australia, the average 45-year-old stays in a job for seven years, while under-25s remain for less than two. This presents a challenge to retain the best talent.

The great post-COVID-19 resignation has seen employees – especially those with in-demand skills such as analytics and cybersecurity – move at record levels. People of all ages are re-evaluating what they want from work. A recent US [survey](#) revealed that 52% of state and local public sector workers are considering

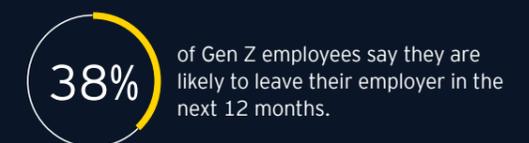
leaving their jobs voluntarily due to COVID-19, for a different job, to retire or to leave the workforce entirely. Of those changing jobs, one-quarter want to leave the government sector, to escape burnout and low pay.

Millennials and Gen Z in particular are also more likely to seek greater purpose and fulfillment from their work, and to care more about – and want to contribute to – their organization's ESG impact. An [EY survey of the US market](#) suggests that Gen Z is less interested in “making money” than in “making a difference” and having a voice in the workplace. The pandemic has awoken an even stronger sense of social responsibility among many young people, and public sector recruitment to roles such as nursing and social care may benefit as a result.

Finally, workers are becoming more pragmatic about how and when they work, and increasingly embracing more flexible career lifestyles. Approximately 68m workers in the US are freelance – a figure [expected to rise to 90m by 2028](#). This trend can help overcome capability gaps, with contractors providing digital and other skills for short-term assignments.

Shifting workforce demographics and attitudes

The EY 2022 Work Reimagined Survey reveals employer and employee insights amid a “great resignation,” including the government and public sector.



Primary drivers of career changes

If you were to consider another offer, what are the primary reasons you would change jobs?



Changes are needed to total rewards ...



... but public employees – particularly Gen Z – are also driven by purpose

Percentage of employees who say they value the clear connection between their job and the overall purpose of the organization above monetary compensation





The new hybrid workplace

Almost overnight, the COVID-19 pandemic made home-based working commonplace – even in public services that have traditionally been more resistant to change, such as health, social care and education. In our survey of health and social services leaders, two-thirds say their staff adapted quickly to new digital tools that enable remote working, and a similar proportion feel digital technologies helped improve staff productivity (for example, physicians scheduled more appointments, while social workers spent less time traveling and more time online with clients).

The EY 2022 Work Reimagined survey reinforces support for the transition to hybrid working. Where, once, government employers expressed skepticism about remote working, the majority are now embracing it for the longer term: 61% describe their return-to-office philosophy as hybrid while, for hard to fill vacancies, 52% will hire employees to work from anywhere. Around three-quarters (73%) agree productively can be measured, regardless of where people work. And 74% have expanded, or are planning to expand, their use of collaboration tools that enhance home working.

Hybrid working brings its own challenges, however, such as finding the optimal balance of remote and office-based activity; avoiding the potential for loneliness and isolation; maintaining a sense of community; and

enabling collaborative working, coaching and mentoring in a virtual environment. Creativity and innovation are other important areas that could suffer.



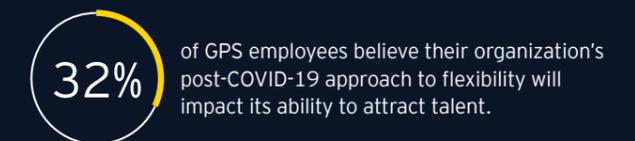
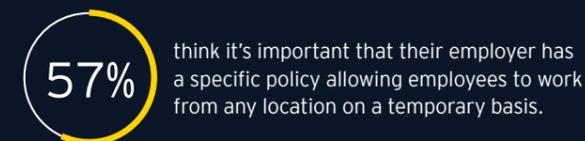
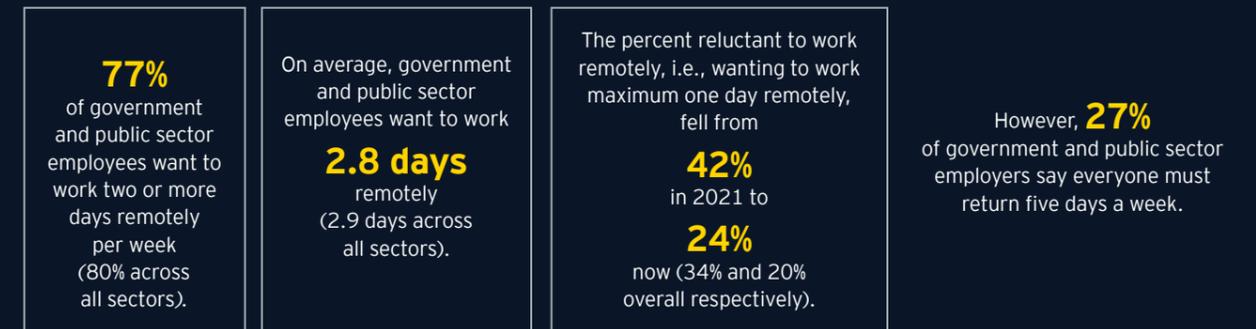
Innovation projects have been halted because, while we understand that Microsoft Teams is a good platform for meetings and some workshops, it's much easier to be creative and innovative when you sit in the same room ... and now it's starting to be a little bit frustrating.

Fredrik Stjernfelt,
Partille Municipality, Sweden

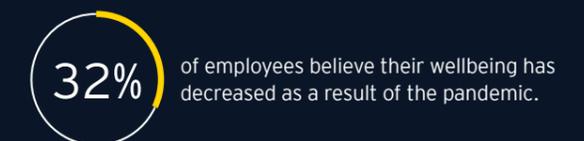
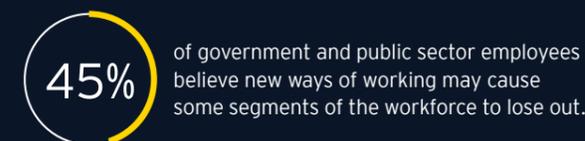
The irreversible shift to hybrid working

Hybrid working has now become an expectation rather than a nice to have for most government and public sector workers.

Employee attitudes toward flexible working



However, pandemic stress and hybrid work arrangements may have some negative consequences if not actively managed ...



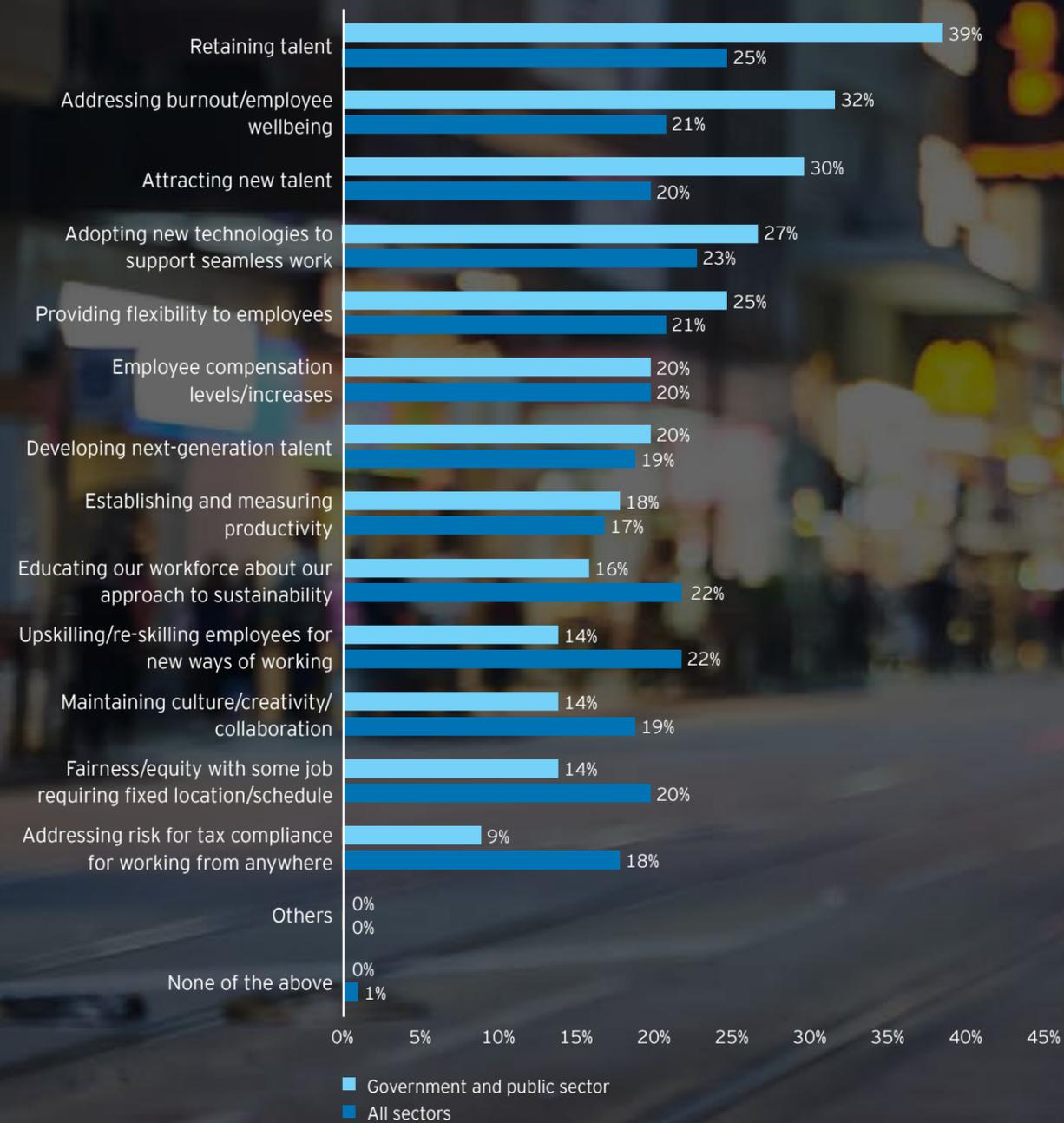
Source: The EY 2022 Work Reimagined Survey included 1,694 government and public sector employees and 44 government employers globally.



The five disruptive forces described on the previous pages are combining to create new risks and challenges for all organizational leaders in managing their workforces, but especially for those within the public sector. The EY 2022 Work Reimagined Survey reveals that governments are particularly concerned about retaining and

attracting talent, increasing rates of employee burnout, and finding the right technologies to support seamless and flexible working. These findings help us identify a number of priorities for governments to reimagine the future workforce, which we will examine in detail in the next chapter.

What are the risks at work that most concern employers?



Source: EY 2022 Work Reimagined Survey – Government and Public Sector.





Part 2

Reimagining the public
sector workforce





Four key actions for government



1 Planning

Anticipate future workforce needs and find agile ways to deploy talent

Given the scale and rapid pace of disruption, traditional approaches to workforce planning need reimagining. Governments will benefit from taking a longer-term view of capacity and capability needs, identifying gaps and creating strategies to access the required skills, internally or externally.

Key takeaways

- ▶ **Use a future-back approach.** Take a long-term view of the strategic context and desired citizen experience, then work back to determine the workforce capacity, composition and capabilities needed to deliver.
- ▶ **Determine the optimal strategy for your organization to bridge the talent gap.** The right mix will include internal skill development, bringing in new long-term talent, employing contingent workers and working with third-party providers.
- ▶ **Create flexible structures to improve workforce mobility.** Adopt dynamic planning capabilities, using data and analytics to track changes in demand and supply, and develop mechanisms to enable rapid deployment of resources based on changing needs.

“

Everyone wants to see the end result and the technology. However, no one wants to do the planning because it's not fun, it's tedious, and it's a lot of work.

Arnaldo Cruz,
Director of Policy and Research,
Civil Service Reform, Puerto Rico

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I don't think there's a lot of long-term planning at the moment. I think the world, as we've seen during COVID and in the technology space in particular, changes so rapidly. It's quite difficult, even for me who thinks about technology all day, every day, pretty much.

Eddie Copeland,
Director, London Office of Technology
& Transformation (LOTI), UK

As new technologies and processes appear, old roles will become redundant while new ones constantly emerge: 10 years ago, who had heard of data ethicists, information security analysts or user experience designers? And as fresh challenges will materialize, and service demand evolves, planning must also be dynamic, with the flexibility to redeploy resources based on changing needs.

Strategic workforce planning should be conducted both at a whole of government level – involving the civil service governing body, the central digital authority, the ministry of finance, and individual departments and agencies – and at the organization level. The center of government is responsible for creating the national digital strategy, which should set out the role of the workforce in driving transformation, as well as the opportunities and risks of new technology, including its impact on people. The plan must take into account technological, social and labor market changes that could significantly shift future talent needs.

Wider structural innovations can usher in faster organizational change, such as new job classifications, less bureaucracy, the breaking down of silos and regulatory reform to enable data sharing between different departments.

Governments will also want to be mindful of creating structures and cultures that appeal to, and get the most out of, increasingly diverse groups in terms of age, capabilities, values and aspirations. An attitude of inclusivity will help employees across all generations embrace digital and other new competencies that encourage creativity and innovation.

1. Designing a workforce plan

At the level of the individual organization, a successful digital transformation requires an integrated strategy that aligns the entity's overall vision and goals with digital and workforce planning, and is relevant to the specific operating context. However, as one interviewee put it, "I see a big disconnect between those two things, the digital transformation and the people and process transformation."

In designing their workforce strategy, organizations must take a longer-term approach to planning, to anticipate their needs and build strong capability pipelines for digital and data roles.

The following steps are a useful guide:

- (i) Use a future-back approach. Define and articulate a purpose-driven vision of the future. Then, with a 5- to 10-year time horizon in mind, imagine possible scenarios that may unfold, and map out the risks and opportunities of each. With this view of the distant future, work backward to understand the changes that are needed to unlock future value for citizens, including the skills, capabilities and cultural changes required for success.
- (ii) Define the organizational structure and transformation strategy – including how the adoption of new technologies will change the work done by employees, and the roles and skills needed to deliver. Assess each task or process to determine its suitability for automation, then "bundle" them into new roles combining humans and machines. Some tasks may be eliminated (such as manual data entry) and new ones created (such as analyzing data from online interactions). After these assessments, each worker's role can be re-evaluated to accommodate the changes. As more routine tasks are automated, employees' time can be redirected to other, higher-value activities, supported by technologies such as AI and ML, which provide insights to aid decision-making.
- (iii) Review the capacity and capability of the current workforce, using demographic and employee data to assess size and composition, age and diversity profile, and current skill sets. Harness administrative HR data to provide further insights into employee performance, compensation, engagement, potential, and likely attrition and retirement rates.
- (iv) Evaluate short-, medium- and long-term workforce needs, taking into account expected new roles and capabilities required, diversity objectives, current employee potential, and staff turnover and attrition.
- (v) Model any projected workforce gaps. New job profiles and role descriptions – written by technical experts and regularly updated – may be needed for new roles requiring deep digital skills. Meanwhile, behavioral assessments can determine whether the workforce has the necessary "soft" skills such as adaptability, reflectiveness, and the ability to experiment and collaborate.
- (vi) Fill any gaps by upskilling and re-skilling, bringing in external talent and allocating scarce resources across different departments and agencies. As digital transformation can affect employees in different ways, each civil servant should have a personalized pathway, which may include retraining, redeployment or, in some cases, redundancy.
- (vii) Continue to assess the multiyear impact of emerging technologies, plot "technology disruption curves," and continually recast existing roles and create new ones.

EY Case Study

Defining skill requirements for Singapore's GovTech agency

The Government Technology Agency of Singapore (GovTech) plays a key role in materializing the smart nation vision. With over 3,000 employees, it aims to digitally transform the public sector and make a difference in citizens' everyday lives. EY supported the agency in identifying emerging digital skills to be developed within government institutions (for example, cyber risk, data science, application development and infrastructure) and in building its technical competency and assessment frameworks.

Pioneering examples

- ▶ The Israeli Civil Service Commission (CSC) sought to understand how labor market, technological and social disruption would affect its workforce. It built a workforce-mapping model based on research and existing data, producing a tool to classify jobs in ministries and agencies according to their risk of change. The CSC then worked with ministries to develop workforce management strategies to address these challenges and plan for future skills needs.
- ▶ Thailand set up a dedicated futures unit, the Digital Economy Promotion Agency (DEPA), to take stock of the latest technology advancements, anticipate emerging jobs and identify digital skills that don't yet exist.
- ▶ In France, the Directorate for Administration and the Civil Service created a working group to map the digital, data and technology jobs and competencies likely to be hardest to recruit for and retain in the public sector, producing an action plan to tackle shortages.





2. Responding to a dynamic environment

As COVID-19 and other recent crises have demonstrated, governments need the capability to adapt to fast-changing circumstances while maintaining a longer-term workforce strategy. Adaptive workforce planning uses advanced data analytics to make better predictions and allocation decisions, allied with a flexible and mobile labor force to move people between roles as needed. However, **many governments struggle with this** because they lack the technology or the skills, or both. Although most organizations generate plenty of employee data, this is often of poor quality, dispersed across a variety of sources and hard to integrate.

(i) Leverage data and advanced analytics

Workforce foresight capabilities and scenario planning tools help organizations plan for

an uncertain future and forecast changing requirements. This requires them to:

- ▶ Capture data such as labor market trends, skill profiles and market salary levels from a variety of external sources.
- ▶ Automate basic HR administrative processes to help generate more internal data while also freeing up HR professionals' time to play a more strategic role as enablers of digital transformation (for example, advising on change management, facilitating workforce mobility and enhancing the employee experience).
- ▶ Integrate internal and external data in a centralized repository and use predictive analytics to model future service demand and create an evidence base of current workforce strengths and future workforce needs, and to identify actions to fill any gaps.

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You have to be strategic and disciplined (when you're doing the transformation). But you have to understand that you have to redo your planning, sometimes on a monthly basis, with new information coming in.... You have to be okay with not having all the answers and that is very hard for certain type of managers who are very keen on strict and robust planning processes. In this type of transformation, it's very hard to do that, so there's a level of risk taking that you're going to have to be able to live with.

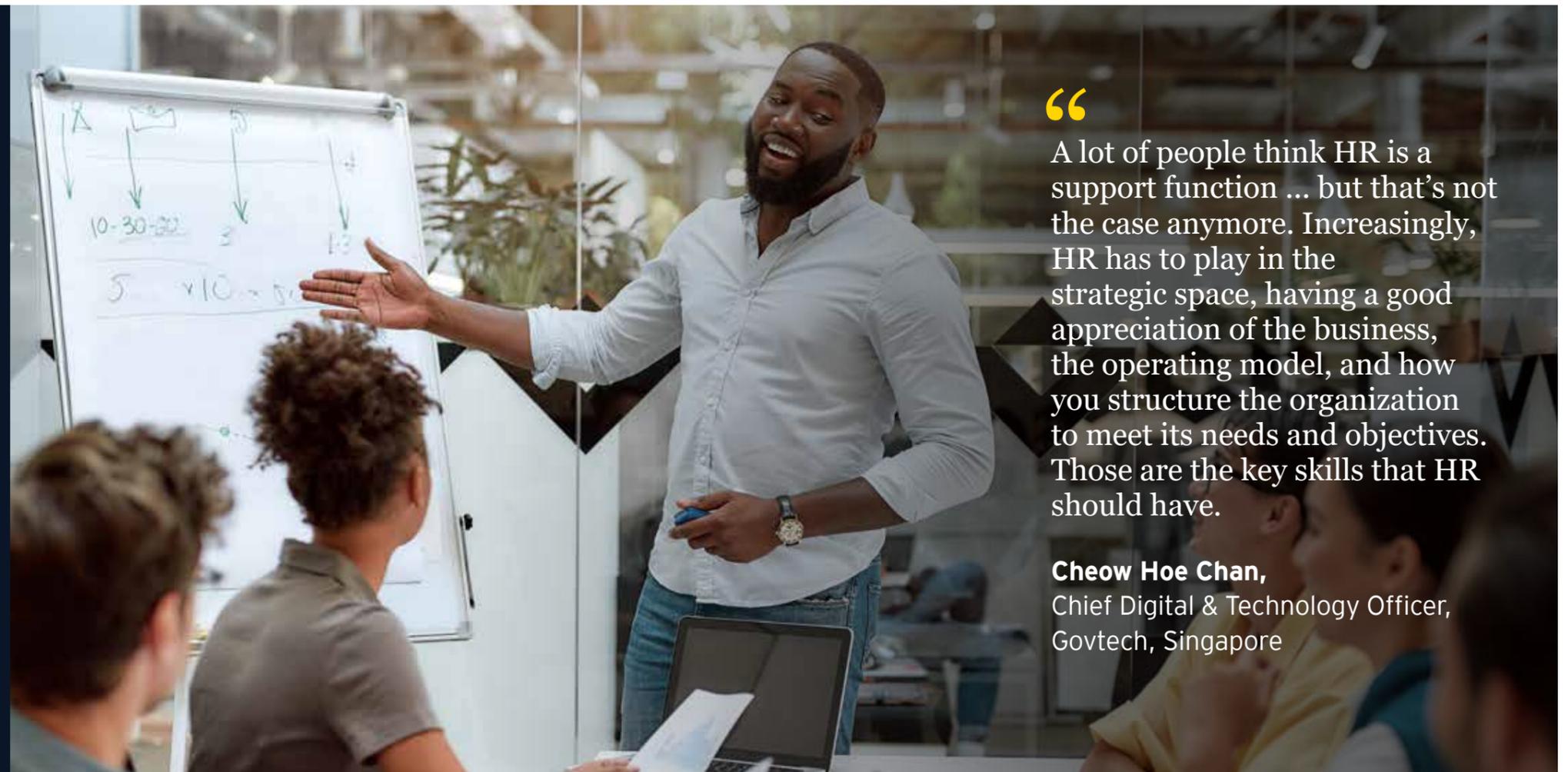
Arnaldo Cruz,
Director of Policy and Research, Civil Service Reform, Puerto Rico

EY Case Study

Cloud-based software analytics tools – such as the [EY Organization Talent Hub \(OTH\)](#) – can support government agencies with strategic workforce planning, organization design and implementation, tracking and reporting. OTH gives users a single database of HR, finance and planning information. This and other workforce planning tools address the inevitable data gaps and disparities that emerge in large organizations. Workforce data feeds in from multiple internal systems and is merged and regularly updated using automation or application programming interface (API).

Pioneering examples

- ▶ The Republic of Korea has achieved a step change in the way it manages its 300,000 public officials through better access to data. Its cloud-based **e-Saram** system contains data on HR decisions, salary, performance evaluation, training and services across 72 administrative agencies. e-Saram enables each government agency to manage a variety of HR-related tasks electronically, such as recruitment, promotion, salary, education and training, and welfare benefits. Managers can also carry out an internal talent search and process work schedules, compensation and overtime.
- ▶ The **Unified Registry for Dubai Government Employees** project – known as Smart Dubai – aims to optimize investment in the Emirate's human resources, build capacity and establish a reliable source of government employee data. By building a centralized database, the Dubai government can plan its human resources across various entities, to accelerate the shift toward a smart city.



“

A lot of people think HR is a support function ... but that's not the case anymore. Increasingly, HR has to play in the strategic space, having a good appreciation of the business, the operating model, and how you structure the organization to meet its needs and objectives. Those are the key skills that HR should have.

Cheow Hoe Chan,
Chief Digital & Technology Officer, Govtech, Singapore

(ii) Increase flexibility and responsiveness

In future, governments will aim to deploy resources for different departments and functions as and when needed – not just to provide additional capacity to address surges in demand, but to bring the right skills at the right time to solve complex problems and uplift capability. This agility will also help to build organizational networks and improve collaboration across government departments and agencies.

To overcome traditional silos, government could benefit from a central pool of workers – not tied to any department – available for different projects and tasks as needed, and schemes to facilitate mobility of workers across agencies. Internal mobility programs include employee “leasing,” rotations, secondments, micro-assignments and talent “trading” from other public sector organizations. These can be enabled by tools such as government-wide talent databases.

“

It’s long been a bane of my life that there isn’t more flexibility – for example, for people who work across health and care – to move organizations and create exciting career paths. I think there’s something about how you create and innovate on capacity ... and how, as leaders, we unpick some of the practicalities, to unblock some of the skills and capabilities that we want to access.

Ian Thomas CBE,
Chief Executive of the Royal Borough of Kingston Upon Thames, UK

Almost one-third



of government leaders in our survey are forging partnerships with other organizations that have staff with the right skills to meet their transformation needs.

Source: EY 2022 Tech Horizon Survey.

Pioneering examples

- ▶ The Australian Public Service Commission (APSC) has developed a workforce strategy to 2025, covering a range of domains, including the use of mobility as a strategic workforce tool. The APS Mobility Framework aims to remove barriers and enable people and skills to be transferred and deployed more swiftly across government agencies and jurisdictions.
- ▶ The US digital services agency, 18F, fosters innovation across government by bringing in diverse and agile teams to solve urgent problems, adopting project-based recruitment strategies and flexible job descriptions.
- ▶ The Canada’s Free Agents program puts civil servants through a rigorous selection process that emphasizes hard skills as well as public sector problem-solving capabilities. Individuals get the freedom to work on projects of their choice, while departments get speedy access to a wide pool of talent.

Many countries already hire digital specialists from outside the public sector on talent exchange programs, enabling them to enter public service, work for a fixed period (sometimes with higher salaries than those allowed under civil service rules), then return to the private sector. These external workers can bring in innovative ideas to tackle public sector challenges.

Some governments are establishing hiring platforms that can quickly match organizations' talent needs with skilled innovators and independent consultants. They are also broadening their resource base by using freelancers, contractors and secondees from other sectors for shorter-term, project-based roles. In seeking this increased flexibility, however, governments will need to give more thought to the risks related to the way contractors' work is organized, designed and managed, and enhance worker protections.

Governments will need mechanisms for sourcing, vetting, onboarding and managing a nonpermanent workforce. This means hiring for capabilities rather than roles and building speedier recruitment processes based around a fluid set of competencies, rather than a strict person specification. Terms of employment should also be addressed; if employees have fixed job descriptions, it can be hard to shift them to newer roles.

“

My strategy is to work with an external digital partner ... that can provide me with all types of specialists in digital work: for example, web development, IoT, RPA, and project managers, process leaders, analytics and business intelligence people. So I have one partner that I can do the cherry picking from.

Fredrik Stjernfelt,
CIO, Partille Municipality, Sweden

“

Rather than saying, 'Your role is very specifically this,' a lot of our job descriptions will have to change to make people more able to just be redeployed as the organization needs.

Geoff Connell,
Director of IMT & Chief Digital Officer,
Norfolk County Council, UK

EY Case Study

Meeting departmental skill needs in Italy

Working with Italy's Department for Public Employment (DFP – Dipartimento della Funzione Pubblica), EY helped develop a new portal that connects labor market demand with supply, matching different departments' needs with professional profiles. These profiles are continually updated from multiple professional social media sources, such as LinkedIn, to create a high-performing pool of candidates. The portal is enhancing the government's employer brand and attracting young, talented people to the public sector.

Pioneering examples

- ▶ The Canadian government has developed **GC Talent Cloud** – an innovative digital platform that validates the competencies of potential public sector employees and facilitates their searchability based on public agencies' project needs. The platform benefits both agencies and employees, enlarging the available talent pool, increasing opportunities for diversity and speeding up the public hiring process.
- ▶ In France, the **Public Interest Entrepreneurs** (Entrepreneurs d'intérêt général) program recruits highly trained digital professionals

(with streamlined entry procedures and higher, private sector-level salaries) to work on digital transformation of public agencies. They work for around 10 months alongside career civil servants. This approach has now been extended to a new program where **civil servants and designers collaborate** to develop better services for citizens.

- ▶ In the US, the **Presidential Innovation Fellows** program assigns top technologists, designers and strategists to work alongside civil servants in federal agencies for 12-month stints to help tackle some of their biggest challenges. The

United States Digital Service (USDS), a central government technology unit, also recruits digital professionals from the private sector, with contracts ranging from three months to four years.

- ▶ The UK government's Digital Outcomes and Specialist framework (DOS) accesses specialist external resources to help design, build and deliver digital outcomes, often alongside in-house teams. As James Stewart, CTO, Public Digital, UK put it "The specialist framework is about bringing in

deep specialists in particular areas, trying to make that quicker and easier, and bringing in individual specialists, rather than going through very large companies."



2 Skills

Source the capability to deliver on the digital strategy by developing existing employees at scale and attracting new talent

To work effectively with digital and other new technologies, the public servant of the future requires not just technical competence but also a much broader portfolio of attributes such as problem-solving, critical thinking, a capacity for learning, adaptability and empathy. Without these new skills, there's a risk that new technology won't fully deliver what it is intended to.

Key takeaways

- **Reimagine learning and development.** Replace conventional methods with a range of dynamic, ongoing training options (e.g. digital academies, self-directed online learning), tailored to employees, to upskill the existing workforce with digital and “soft” cognitive, inter-personal and leadership skills. Internal mobility programs, such as secondments, will enable “on the job” learning and develop capabilities across departments and technologies.
- **Engage the talent ecosystem.** Draw on the expertise of organizations such as technology partners, GovTech start-ups and academia to deliver training at scale, without the need for significant financial investment.
- **Attract in-demand digital talent.** Rebrand the public sector by promoting a strong sense of social purpose to attract new talent from non-traditional sources, including innovation and tech centers. Provide more flexible opportunities including shorter-term, project-based employment.
- **Rethink hiring processes and job specifications.** Adopt flexible and proactive approaches to source, select and onboard the best candidates, hiring for capabilities rather than roles and prioritizing diversity.





All of these skills – both “hard” technological skills and “soft” human skills – are currently in short supply. Longer term, governments will need to tackle the problem at source by rethinking the curricula taught by schools and universities – nothing less than a learning revolution. Nations that take this step will be in a much stronger position for the future, as discussed in this report: [How education must evolve with disruptions at work](#).

However, national education reform takes a long time. In the shorter term, governments and agencies need other ways to tackle the skills gap. There is no single right answer; solutions require tailoring to the local context and will probably involve a blend of different approaches. Most of the senior government executives we surveyed say their organizations will be very active in the job market in a bid to hire new tech talent. However, they also recognize the fierce competition for scarce specialists, with two-thirds saying that re-skilling of existing staff is a higher priority than hiring experienced staff from outside.

Tackling the digital talent gap



Pioneering examples

- ▶ Since the 1990s, Estonia has aimed to teach digital skills from an early age as a public policy priority. In 2012, it launched the **ProgeTiger program** to improve the technological literacy of teachers and students alike, including programming, robotics and computer hobby groups. Consequently, Estonia has twice as many students enrolled in ICT specialties than the average in developed countries.
- ▶ Coding Thailand is an online platform to teach children basic coding skills as part of a growing digital curriculum for primary schools, high schools and universities, including AI programs. The country’s **Digital Economy Promotion Agency (DEPA)** also partners with universities and tech companies on the Digital Skill platform, which offers more than 100 courses on skills such as data science, IoT and cybersecurity, available to the wider workforce. The platform links to Thailand’s job matching portal, JobD2U, which posts job openings for both digital and non-digital roles across public and private sectors. This integrated approach helps citizens plug any gaps in their skill set before applying for jobs.
- ▶ The **Singapore Institute of Technology** is helping students prepare for future disruption by introducing modules outside of their degree-specific curriculum. This will help them develop interdisciplinary and life skills such as teamwork, leadership and effective communication. The university will offer team projects, involving students from multiple disciplines, to address industry or community problems that require holistic solutions.

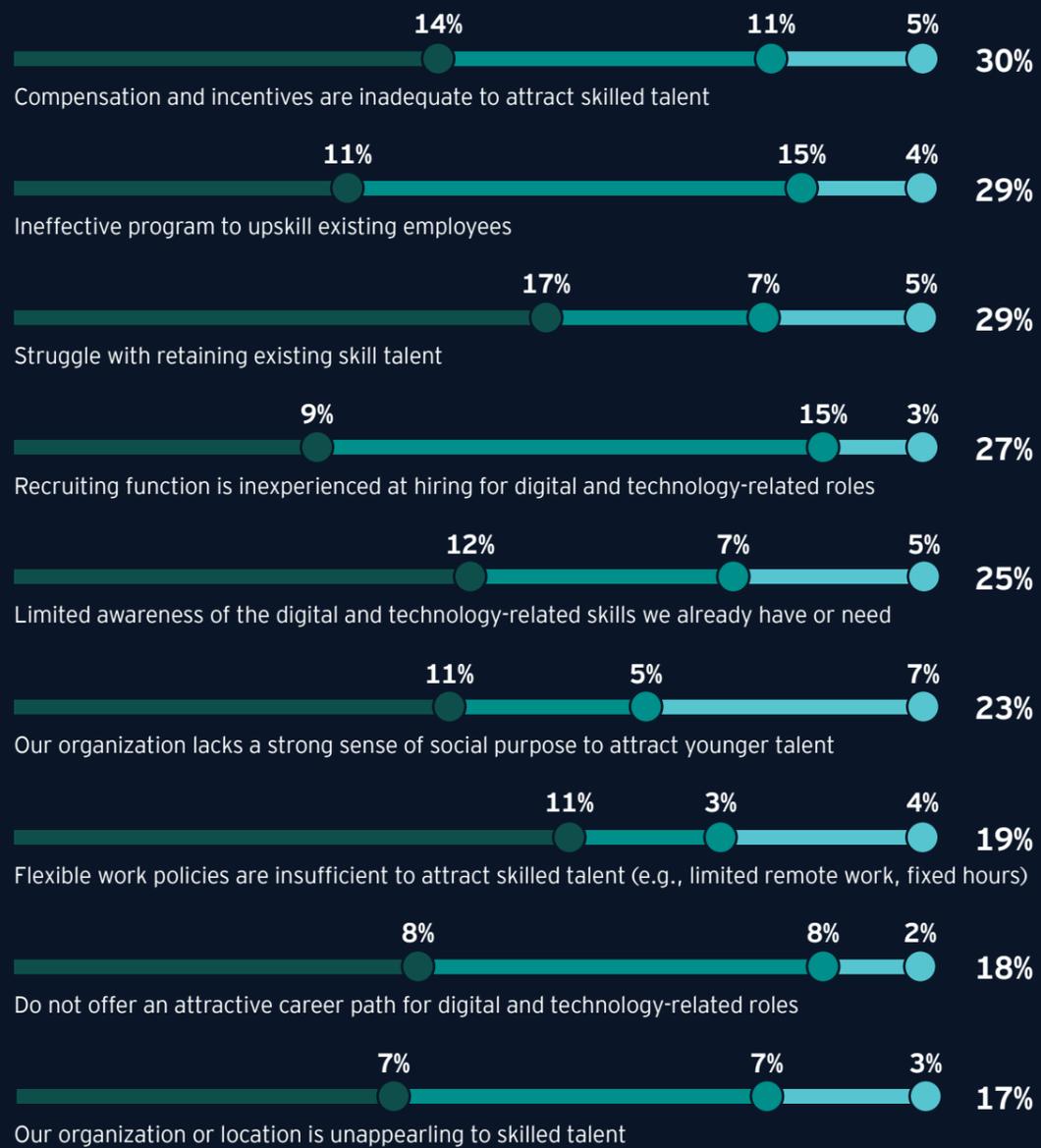




Top barriers to obtaining skills – and how governments are responding

Governments are wrestling with a number of challenges in sourcing the skills they need for digital transformation, among them the inability to compete with private sector salaries and the lack of effective training provision for existing employees. Responses range from implementing new recruitment strategies to pursuing partnerships with organizations that can offer expertise.

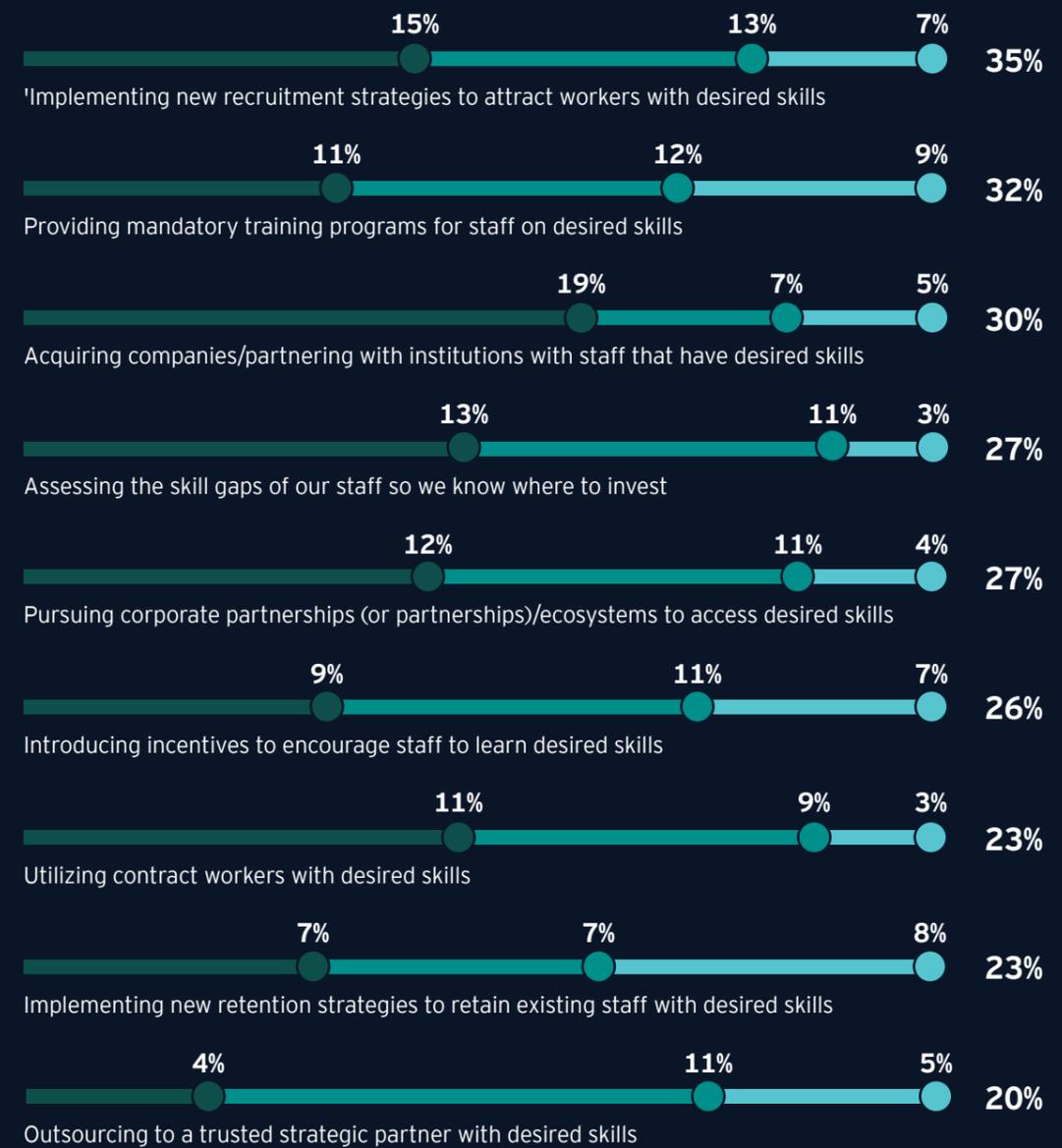
What are the most significant internal barriers to obtaining the digital and technology-related skills your organization needs for its transformation? [Top three ranks]



● 0%
Do not have significant internal barriers

● Rank 1 ● Rank 2 ● Rank 3

What are the most important actions your organization is taking to secure digital and technology-related skills for its transformation? [Top three ranks]



● 0%
None of the above

● Rank 1 ● Rank 2 ● Rank 3



Plugging the skills gap: the two main routes

1. Training existing employees at scale

Past attempts at digital learning have often fallen short due to leaders failing to commit to or communicate its importance. Training and learning may be inaccessible for many workers due to cost,

time required and location constraints. Programs don't always cater to variable and changing needs across governments, while public sector learning methods can be outdated.



Building a more effective program is therefore vital – and the first step is to consider the distinct needs of different employee groups:

- ▶ **Organizational and functional leaders** with strong specialist expertise (e.g., social services, public finance and trade) need to understand the transformational potential of digitalization, prioritize opportunities and help their teams adapt to change.
- ▶ **Civil servants and frontline workers** need to learn how to apply new digital tools and data insights in their everyday roles.
- ▶ **Digital specialists** (such as data scientists, cybersecurity experts and programmers) need to keep abreast of technological innovation so the organization maximizes its potential for the long term.

It's also crucial to recognize that there may be a "digital divide" among existing employees, with some (usually older people) less technologically confident than others. Our Connected Citizens study identifies [seven different digital personas](#), with striking differences in the way each interacts with technology, offering insights into how governments can better engage their employees as well as citizens.

EY Case Study Boosting national digital competitiveness in Singapore

A national government was keen to embrace the digital age by assessing and enhancing technology skills within both the public and private sector. EY helped them rethink re-skilling to cover both technical and adaptive skills, using a scraping engine to gather job descriptions and analyzing data using AI algorithms to constantly identify new and redundant skills across multiple roles. The approach continuously refreshes itself, using dynamic learning including massive open online courses (MOOCs), ensuring that organizations and citizens are aware of their skill gaps and have access to appropriate training.

EY Case Study

A new digital strategy for the United Nations Development Programme in Asia-Pacific

EY professionals helped the United Nations Development Programme's Regional Bureau for Asia and the Pacific (RBAP) Bangkok Regional Hub to overhaul its digital strategy and build a future-ready workforce for the Asia-Pacific region.

By conducting an online assessment of more than 2,700 employees in 24 countries, we pinpointed learning gaps for different cohorts. We defined learning journeys and then formulated a digital skills framework, incorporating leading global practices, to serve as a template for developing future digital skills-related training for specific demographics. EY also identified potential digital champions who could take on the mantle of digital transformation in the RBAP region for the future.

The initiative has built the organization's internal capabilities and strengthened external partnerships and alliances.

Once governments are clear on the needs and preferences of their employees, they can consider a wide range of different options to meet them, including the following:

(i) Set up digital academies to deliver formal training programs

Some governments have set up their own academies to boost digital capability across the public sector. These academies deliver formal training and development programs in areas such as user-centered design and AI, which can be tailored to meet the particular needs of nonspecialists, digital professionals and leaders. Courses may be run online and in person, at permanent or mobile training centers around the country.

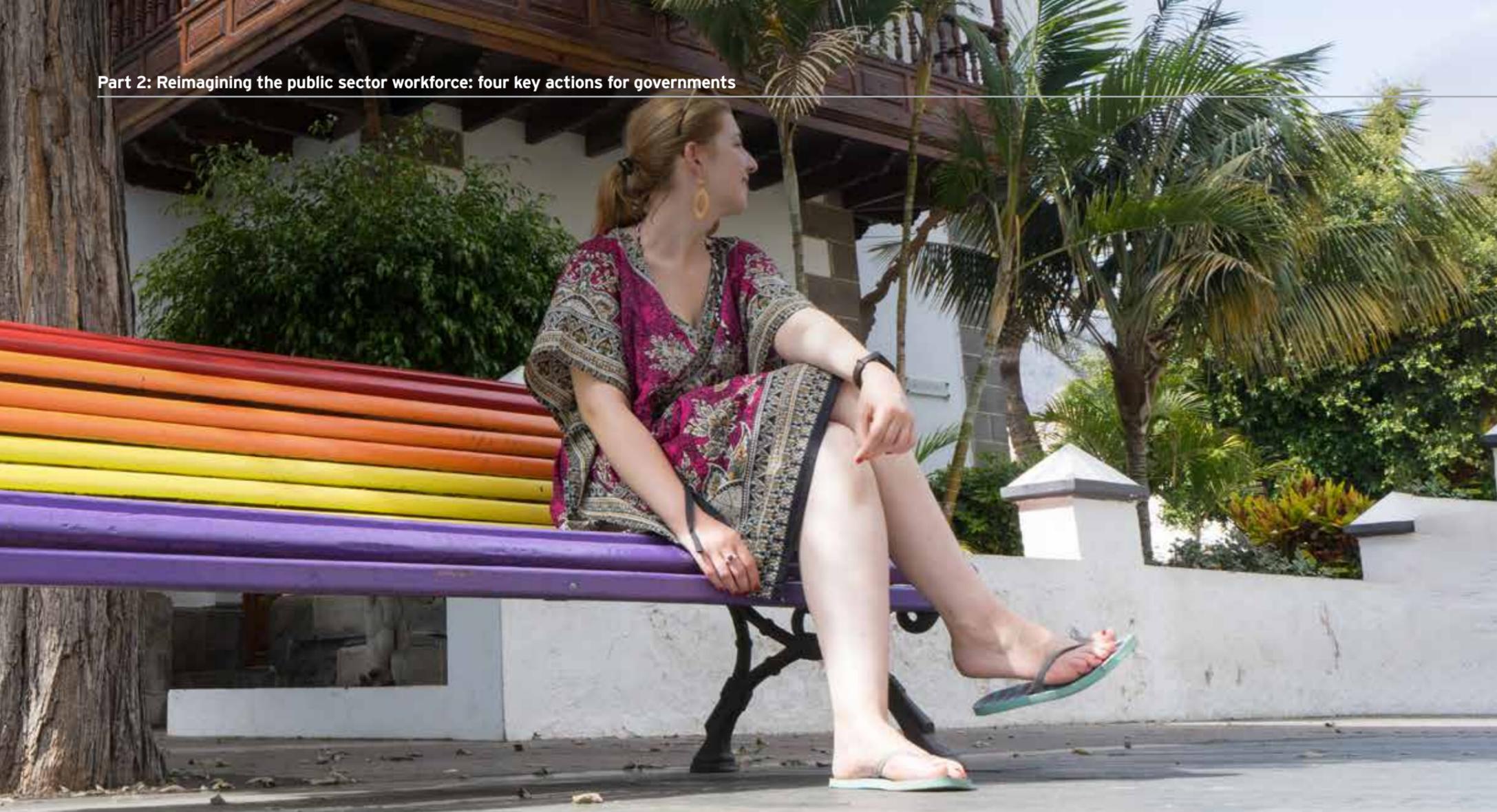
(ii) Enable self-directed digital learning

Recent research shows that 84% of learners now prefer self-directed learning. Over the past decade, many governments' learning and development departments have begun to offer more autonomy and choice through technology-enhanced training. This helps to make educational opportunities more widely available by empowering employees to learn at a time, place and speed that suits them.

E-learning content should be simple to access and easy to tailor to individual needs and career goals. Bite-size training sessions allow for heightened focus and greater knowledge retention. This kind of self-directed digital learning can award "passports" or "badges" that accredit workers with new knowledge and skills, allowing them to track their own development and aspire to new roles.

Pioneering examples

- ▶ In 2014, the UK was one of the first countries to launch a digital skills academy. It began life in the Department for Work and Pensions before being rolled out as a whole-of-government initiative known as the **Government Digital Service (GDS) Academy**. Canada, Lithuania, Argentina and several other countries have also created digital academies.
- ▶ The Australian government has established a Digital Profession, offering virtual training on design thinking, AI, agile user experience design and creative problem-solving.
- ▶ Malaysia's national public sector ICT training initiative aims to create a pool of highly skilled "digital transformers" to steer digital transformation and upskill all civil servants in digital literacy by 2025.



“

We have six generations of people, with different motivations, different levels of engagement. We have a learning app like Netflix and many cloud platforms that people can use, to ensure they can learn by themselves.

Fabrizio Rauso, Head of People, Organization and Digital eXperience Department, Sogei, Italy

“

Governments cannot reskill civil servants at the scale and pace required using traditional learning methods. Taking time off from the day job to attend face-to-face training is a thing of the past. That's why one of the approaches that EY teams take to address this is to provide access to high-quality, online, micro-accreditations that can be integrated into work (and life) and, ultimately, build into a degree or qualification.

Shalinder Bakshi

EY Global Government and Public Sector People Advisory Service Leader

Pioneering examples

- ▶ The Inland Revenue Authority of Singapore provides online courses via mobile devices, with micro-learning modules covering the skills needed for digital transformation – with a take-up by more than 80% of the workforce.
- ▶ The EY organization launched the **EY Badges** program in 2018 to help our employees **earn digital credentials** by studying for free to develop future-focused skills. It has since joined with Hult International Business School to launch the Tech MBA, a virtual learning model that allows staff to build their own personal curriculum from a range of subject areas, from AI, blockchain and RPA to purpose, personal wellbeing, diversity and inclusion, and sustainability.
- ▶ In Australia, the Digital Profession offers bite-size **insight podcasts** from a diverse group of government leaders who share capabilities, tools and approaches on topics including cybersecurity, agile and human-centered design.

EY Case Study

Bringing e-learning to 18m public officials in India

The government of India's Department of Personnel & Training turned to EY for support in developing a new training policy and learning delivery platform fit for the 21st century. The aim was to democratize skills development for 18m public officials – replacing an outdated and inconsistent program delivered by more than 300 disparate training centers.

EY recommended updates to the national training policy and helped the department design and roll out the new iGOT platform, which so far hosts 115 courses. These courses aid competency-based specialization for government employees and enhance effectiveness and citizen centricity.

EY Case Study

Improving access to learning at the US Federal Aviation Administration

Training for the US's 20,000-plus air traffic control workers typically takes essential staff away from the workplace for long periods. During the COVID-19 pandemic, the US Federal Aviation Administration (FAA) quickly pivoted to virtual training. Working with EY professionals, it **developed a vision and roadmap** for career-long, on-demand digital learning, with a focus on innovation. This approach significantly reduces training time and travel while improving the learning experience.

(iii) Facilitate informal and on-the-job learning

Studies show that people forget around 75% of what they learn after just six days, hence the benefit of “on-the-job” learning to bridge the gap between classroom and workplace. Research suggests that most employees prefer to learn throughout the day and on the job, rather than trying to find time for formal learning and development.

Cross-functional projects, fellowships, job shadowing, and coaching and mentoring all enable employees to simultaneously learn and work on real-world projects. “Social learning” opportunities, such as communities of practice or shared learning communities, bring together employees with similar technical expertise to network, learn from each other’s experiences and share ideas.

Governments are also extending digital skills by bringing together multidisciplinary teams, including frontline case workers, user experience designers, data scientists, data ethicists and policymakers. These individuals learn from each other as they research, build and improve services.

Pioneering examples

- ▶ Chile’s **civil service** launched its **Líderes Digitales (Digital Leaders)** program in 2019. It aims to bridge the digital skills gap between different generations by training civil servants aged under 30 as mentors for the over 50s. By mid-2021, almost 200 public employees had been certified as digital leaders to help promote digital transformation.
- ▶ In **Argentina**, managers at the State Property Management Agency tasked the youngest civil servants with supporting their older peers in adopting a new electronic records system.
- ▶ The Australian **Digital Transformation Agency** created several communities of practice (such as Agile and Lean, Cybersecurity, Government Architecture, and the Data Capability Framework) to promote sharing of ideas, solve problems, explore best practices, reduce duplication of work and facilitate professional digital skills development.

(iv) Learn from external partners

Governments are increasingly harnessing the expertise of partners, including big tech businesses, tech startups and academia, to build the know-how of their existing employees. This enables an injection of up-to-date expertise without the financial investment of creating training from scratch.

Pioneering examples

- ▶ In 2018, the Australian government **partnered with Microsoft** to train 5,000 public servants in cloud computing by 2020. Microsoft now offers a wide range of training options tailored for public servants, including the AI business school for government.
- ▶ In the UK, **PUBLIC**, the GovTech accelerator and investment fund, launched the Public School of Technology (PST) to equip civil servants with digital skills such as data literacy, agility and data-informed policymaking. In one scheme, the **Innovators’ Fellowship**, employees from the Royal Air Force and the Royal Navy were embedded with digital startups for 10 weeks to learn about new technologies and agile methodologies first-hand.
- ▶ Since 2018, the **Indonesian government** has partnered with more than 90 universities and polytechnics, local startups and big tech companies to offer its Digital Talent Scholarship, with the aim of addressing the skills shortfall.
- ▶ Academics from a number of prestigious institutions – including the University of Cambridge and Harvard University – have launched a new international project to bring digital-era skills direct to public servants. **Teaching Public Service in the Digital Age** is an international community of professors, teachers and practitioners that has recently published a set of **eight digital-era competencies** that every public service leader or manager needs.



“ I learn a lot from engaging the community. I talk to people in different areas, and I learn from them. We also have mentors from Silicon Valley mentoring our engineers. They talk about issues, problems, how to solve them. It’s very powerful.

Cheow Hoe Chan,
Chief Digital & Technology Officer, Govtech,
Singapore



2. Sourcing new staff

Civil service pay structures rarely keep pace with the private sector, which makes it especially hard to recruit in-demand technical talent. The EY 2022 Tech Horizon Survey found 30% of respondents believe compensation and incentives are inadequate to attract the skilled employees needed by their organization, citing this as a top-three internal barrier. However, there are a number of ways to increase the allure of working in government and gain access to people who might otherwise not have considered such a career choice.

(i) Rebrand the public sector

Younger workers – Millennials and Generation Z – are unlikely to be enticed by the benefits traditionally seen as the province of the public sector, such as job security, given their preference for frequent job changes. But what the younger generation are looking for is purpose: something that government roles can offer in abundance, as they often deal with the most complex societal challenges and offer opportunities to change people's lives for the better.

The pandemic shone a spotlight on the value of public servants – something governments can build on to reinforce the attractiveness of careers in the sector. They can promote a brand that not only does good but also uses innovative technology to solve complex societal challenges. There is still a way to go, however; 23% of respondents to the EY 2022 Tech Horizon Survey feel their organization lacks a strong sense of purpose to attract younger talent, listing this as a top-three barrier to transformation.

(ii) Reimagine hiring

In the EY 2022 Tech Horizon Survey, 27% of respondents say the inexperience of the organization's recruiting function in hiring for digital and tech-related roles is a top-three internal barrier to transformation. It's no surprise, then, that many organizations are becoming more flexible and proactive in their resourcing strategies – increasingly looking to previously untapped sources. Some are forming specialist teams to proactively hire digital talent; these teams may play a variety of roles, including revising jargon-heavy job descriptions and expediting the hiring process (for example, by using online cognitive assessments, simulation exercises and video screening). They also search for hard-to-source talent, including people who may not be actively seeking employment through traditional open government job sites.



Public sector problems are difficult to solve. Many of these things are long-term, affect millions of people, and good engineers love that challenge. Our advantage here is to attract people with a sense of purpose and to give them interesting problems to solve.

Cheow Hoe Chan,
Chief Digital & Technology Officer, Govtech, Singapore



Purpose is something that attracts. I would say most people want to feel that, when they come to work, they're doing it for a reason. There's something about the common good that appeals to people. For me, it's been more important than money.

Nancy Kennedy,
Senior Vice President, People and Culture, OLG, Canada



I think people have an image that the public sector is very bureaucratic, slow and behind the times. None of that reflects my experience. I've worked with some incredibly bright, energizing, very smart people who are doing cutting-edge stuff in local government ... We've got to dispel some of the myths so that we can make it exciting and attract people to the sector, and also emphasize that by working in local governments, you may earn less, but you can have a real positive social impact.

Eddie Copeland,
Director, London Office of Technology & Innovation (LOTI), UK



It is crucial to evaluate and, when needed, reform current recruitment practices, which are typically rigid and based on open national competitions. Instead, recruitment must be flexible enough to accommodate shifting skills needs for civil services.

Carlo Chiattelli,
EY Advisory S.p.A., Partner, People Advisory Services



(Governments) try and hire the brightest and the best in a generalist sense and build careers for life. However, competing for people who have new, rapidly changing skills and a lot of opportunities and don't think in terms of career for life. That's alien to most governments' recruitment processes.

James Stewart,
CTO, Public Digital, UK

Social-led digital recruitment also presents an opportunity to develop a personalized connection with potential candidates. Governments can create a dialogue with top talent focused on purpose at work. Through direct communication and discussion with young candidates and digital specialists, governments can build a brand focused on career opportunities with social purpose and the ability to “make a difference.”

Digital technologies are making recruitment more efficient, with AI used to automate administrative and manual tasks such as posting jobs on social platforms; screening candidates; scheduling interviews; converting candidate profiles into a standardized format; and even screening applications to identify behavioral, cognitive and cultural characteristics, and performance potential. IDC predicts that in 2022, 60% of government agencies will be deploying AI-enabled technologies to recruit, train and retain key people.

Recruitment is also shifting away from a rigid requirement for specified qualifications toward more flexible assessment criteria, where an individual's capabilities are primary; and from long-term career opportunities to more flexible options.

Pioneering examples

- ▶ The U.S. Department of Homeland Security (DHS) is setting up a **dedicated cybersecurity career track**, with special opportunities, benefits and salaries, in a bid to attract top-flight candidates.
- ▶ The U.S. Digital Service has **streamlined its hiring process**. Jobseekers now submit a simple, two-page resume, rather than the traditional one that can run to 60 pages, while subject matter experts partner with HR specialists to improve the interview process.
- ▶ The Norwegian government uses its own employer perception surveys to inform recruitment campaigns and appeal to potential candidates.
- ▶ Instead of asking for a certain type of degree or other educational attainments, the US government is moving to an **assessment-based model** that tests applicants based on knowledge or skills relevant to a position. It also aims to “actively engage candidates, communities, schools and organizations who have been historically underrepresented in the federal recruitment and advancement process.”

(iii) Target new talent pools

Governments are casting the net wider in search of skills not typically associated with the public sector: for example, by looking to thriving innovation and tech centers. In a bid to attract more experienced talent, some governments are rethinking rigid civil service hierarchies, which only allow entry to the civil service at the lowest rung of the ladder.

Governments are also getting better at recruiting younger candidates, or those with specific skill sets, through fast-track development programs, including internships, fellowships, apprenticeships and IT leadership development. Such tactics have long been used by private sector companies to create a leadership pipeline.

Meanwhile, the charitable sector is increasingly involved in teaching tech skills to people who otherwise might not have been able to access such a career – opening up a fresh wellspring of talent.

“We're bringing in a lot of apprentices and undergraduates ... people who don't yet have the experience, but who have the attitude and the aptitude.”

Geoff Connell,
Director of IMT & Chief Digital Officer, Norfolk County Council, UK

Pioneering examples

- ▶ The **Indian government** has created a “lateral entry” scheme to enable the hiring of experienced external experts directly into senior roles, rather than promoting from within.
- ▶ The **U.S. Digital Corps**, launched in 2021, offers two-year paid fellowships in government departments and agencies to entry-level recruits with skills in software engineering, data science, design and cybersecurity. Candidates are drawn from leading undergraduate programs as well as apprenticeships, boot camps and certificate programs, with an emphasis on diversity, to work on high-impact, high-priority projects.
- ▶ The Australian government’s **Emerging Talent programs** offer a range of different schemes to attract young talent, including the Digital Cadetship Program for undergraduates or postgraduates in digital or technology-related fields, and the Digital Apprenticeship Program for young people looking for a career change or finishing year 12, with no degree required.
- ▶ **Among the charities offering tech skills training** are CodeYourFuture, which trains refugees and other disadvantaged people to become web developers; Code4000, which teaches software development and digital skills to prisoners with the aim of cutting reoffending rates; and Astriid, which matches skilled professionals with long-term health conditions to employers that can accommodate part-time, flexible working, using an AI-based search capability.

EY Case Study

Re-skilling veterans at the Canadian Department of National Defence

EY professionals are supporting the Department of National Defence’s Cyber Workforce Enablement Program (CWEP) to build a skilled IT workforce. CWEP serves to bridge the gap between IT talent shortages and the underemployment problem that is common among Canadian veterans. Through the EY collaboration with **WithYouWithMe (WYWM)**, veterans receive free transition, training and support to start a government career in technology after military service. More than 4,000 Canadian Armed Forces veterans are training in the program, creating a talent pool that would otherwise not exist.

(iv) Improve diversity and inclusion

Diversity can bring fresh new perspectives and thinking that enhance creativity and innovation and improve organizational performance. More than a quarter of respondents (26%) cite a lack of progress on diversity and inclusion as a top-three barrier to transformation. Yet just 7% say that diversity targets are core to their transformation efforts and quantified as a critical measure of success.

Part of the challenge is to attract young women and underrepresented groups to careers in IT. Starting at secondary education level, tactics include presentations at universities, industry conferences and media outreach. Diversity must be incorporated into role design, while recruitment should be open to different backgrounds, life experiences, capabilities and problem-solving styles, with quotas for digital hiring. Selection panels should be diverse, and governments should offer flexible working and eliminate gender pay gaps.

“There is definitely a focus on diversity and inclusion [in our organization] – especially at executive level. It makes a really big difference because your thought leadership changes, the people who are leading the organizations, hopefully, are thinking differently. Then that trickles down, for sure.”

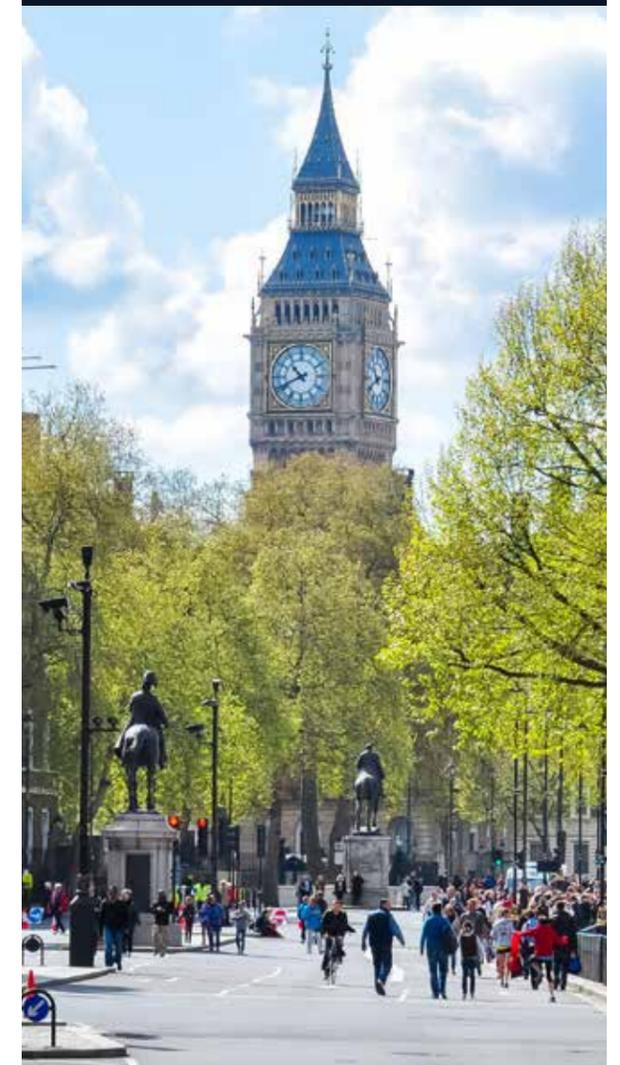
Executive Director,
Health Agency, Canada

“We are running a career development program for women working in digital teams in London local government, which is essentially about helping them to increase their confidence in the workplace, to be more assertive in the workplace, to develop their skills so they can become the next generation of digital leaders.”

Eddie Copeland,
Director, London Office of Technology & Innovation (LOTI), UK

Pioneering examples

- ▶ The Canadian government introduced several measures to improve diversity and inclusion, including the creation of the **Centre on Diversity and Inclusion** to lead initiatives and change management across the public service. The center has established a mentorship program to support the progression of “high-potential” employees. The government has **also amended** the Public Service Employment Act to remove bias in recruitment and give the Public Service Commission the authority to audit departments for discrimination. And it will collect more granular data about the composition of the workforce to identify gaps in representation of minority groups and inform action plans to address them.





Pioneering examples

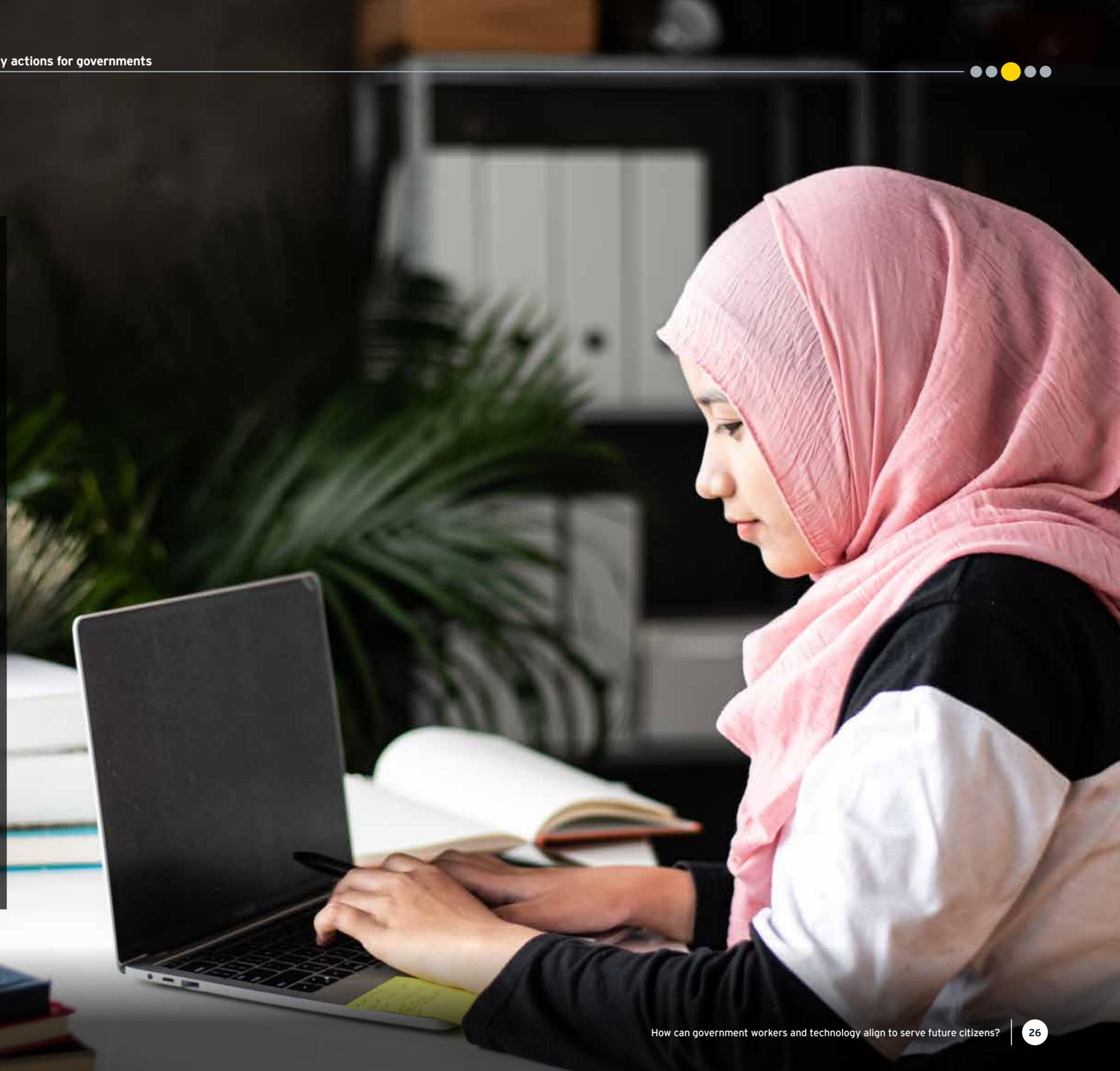
The government of Israel is successfully implementing the full spectrum of actions explored on the previous page. Its integrated national initiative, **Digital Israel**, aims to harness the potential of the digital revolution for the benefit of citizens.

For example, the Israeli Digital Leaders Program, launched in 2014, is creating a network of public sector leaders with the skills to digitally transform their organizations. Mid-level and senior civil servants receive training in key digital trends, models and capabilities, spending time at Harvard Business School, meeting other digital leaders and working on group projects, to become advocates for digital technologies in their home ministry. There's a strong focus on diversity in terms of gender, age and ethnicity.

Meanwhile, Campus IL is the country's digital skills platform, with 350 courses and more than 500,000 members, from senior public servants to university students, who attend interactive online lectures combined with in-person training sessions.

Digital Israel focuses on recruiting data scientists, anthropologists and other new talent to rethink and redesign processes with the user at the center. This means recruiting less like a government department and more like a startup, considering paying market rates, speeding up the recruitment process and introducing secondments. It's understood that a civil service career may not be for life, and that some will return to the private sector.

Finally, each ministry is hiring chief digital officers – often product managers with a tech background from the private sector. Merav Horev, Director, Branch of Public Products Transformation at The National Digital Organization, says: "Civil servants don't lead in a vacuum. They are constantly being challenged by the digital age."



3 Leadership and culture

Foster an environment that encourages employees to work smarter, use data insights and embrace innovation

Under the right conditions, workers can flourish and embrace change. But culture isn't something that just happens. It takes a concerted effort to build an environment that enables people and systems to integrate digital technologies; one where agility, experimentation and continuous learning thrive. And it requires leaders who can communicate a compelling reason for change and bring the vision to life.

“

Technology is a part of [digital transformation], but it's also about ways of working. It's about the processes. It's about how we act. And yet people still think it's just, 'I need a new app' or 'I need a new IT system'... hindering technology from doing what it could do.

Eddie Copeland,
Director, London Office of Technology & Innovation (LOTI), UK

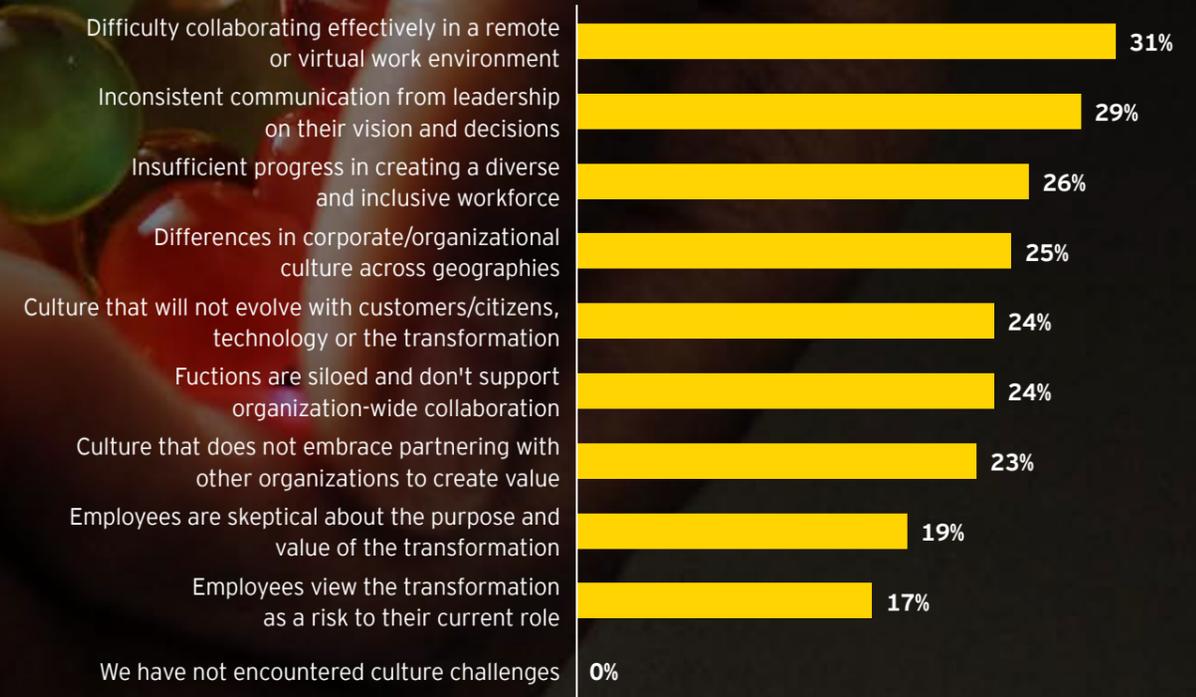
Organizational culture is critical for a successful transformation.



However, the majority of government organizations are still working on this.



What are the most significant culture challenges you've encountered during your organization's transformation? [Select up to three]



Source: EY 2022 Tech Horizon Survey

Key takeaways

- ▶ **Challenge the status quo.** High-performing digital leaders articulate a compelling vision for change and communicate the "why" in a way that all workers understand and embrace.
- ▶ **Empower the workforce.** Listen and learn from employees to understand how technology can make their jobs easier and make them part of the solution. Then create change programs - including digital champions and feedback loops - that drive adoption across the organization.
- ▶ **Abandon caution and embrace a growth mindset.** Champion a culture of continuous improvement by providing a safe environment for exploration and learning, and rewarding employees for bold new ideas that improve the citizen experience.

1. Cultivating the new digital leader

Many leading civil servants have been caught out by the speed of the digital revolution, held back by risk-averse, siloed thinking. According to the UK's National Audit Office, the country's digital government transformation projects show "a consistent pattern of underperformance" due to inadequate leadership and senior decision-makers' inability to understand digital change implementation.

Governments need a new breed of "digitally aware" leaders who understand the role of technology and data in driving improvements. Digital initiatives stand the greatest chance of success if they have the support and active engagement of executive-level sponsors (for instance, a chief executive, director general, city mayor or political leader) who recognize technology's potential and are committed to transformation. The executive sponsor should play an active role in digital transformation rather than merely delegating responsibility and stepping back.

Most high-performing organizations, in both the private and public sector, recognize the need for a dedicated executive to lead the digital transformation program, such as a chief digital officer (CDO) or chief information officer (CIO), along with a chief data or analytics officer or chief data scientist. These digital leaders should report directly to the executive sponsor. Such support will elevate digital initiatives, give digital leaders the credibility and authority to drive change, and endorse the trialing of new and untested ideas.

Digital leaders are responsible for the overall digital strategy and implementation, working closely with the talent leader (for example, the chief human resources

officer) to align with the workforce strategy. They will use future-back planning to identify bold new opportunities, and craft a vision that enthuses and inspires all employees at all levels. In our research with the University of Oxford's Saïd Business School on human-centered transformation, nearly half (47%) of respondents in high-performing transformations say the vision is clear and compelling versus 26% of those in low-performing transformations.

New leadership capabilities and mindsets will be crucial in a world where change is constant. Being a digital leader requires the vision and courage to depart from old command-and-control hierarchies and challenge entrenched processes, behaviors and mindsets, as well as the influence to build consensus for change. These individuals will increasingly lead hybrid teams and foster collaboration across different departments to tackle interrelated policy challenges, navigating complex political environments and competing priorities.

This calls for "soft" as well as technical skills, especially emotional intelligence, a willingness to listen to and empower workers and citizens, and a "we, not me" attitude. Leaders need the humility to acknowledge that they may not have all the answers and a willingness to look for solutions both inside and outside the organization. In the survey mentioned above, nearly half (47%) of respondents in high-performing transformations say their leaders welcome ideas from more junior personnel, versus 29% of respondents in low-performing transformations. EY recent paper, 5 Leadership Mindsets recommends that leaders continually challenge themselves to ensure their beliefs, attitudes and values move with the times.

“ An issue we find extremely challenging is that the current generation of council leaders are often of a generation where they're not particularly digitally-savvy. They don't understand technology well, and therefore as a result, they undervalue it. And because they undervalue it, they underinvest in it.

Eddie Copeland,
Director, London Office of Technology & Innovation (LOTI), UK

“ We've done a lot of work in building our leaders, offering them an opportunity to grow, not only in their technical capability but more importantly, in their ability to bring authentic, collaborative, flexible leadership to the table. We've done staff censuses, and we're really driving our work based on what the staff are telling us about where those leadership gaps are. I think that leadership evolution is still to come.

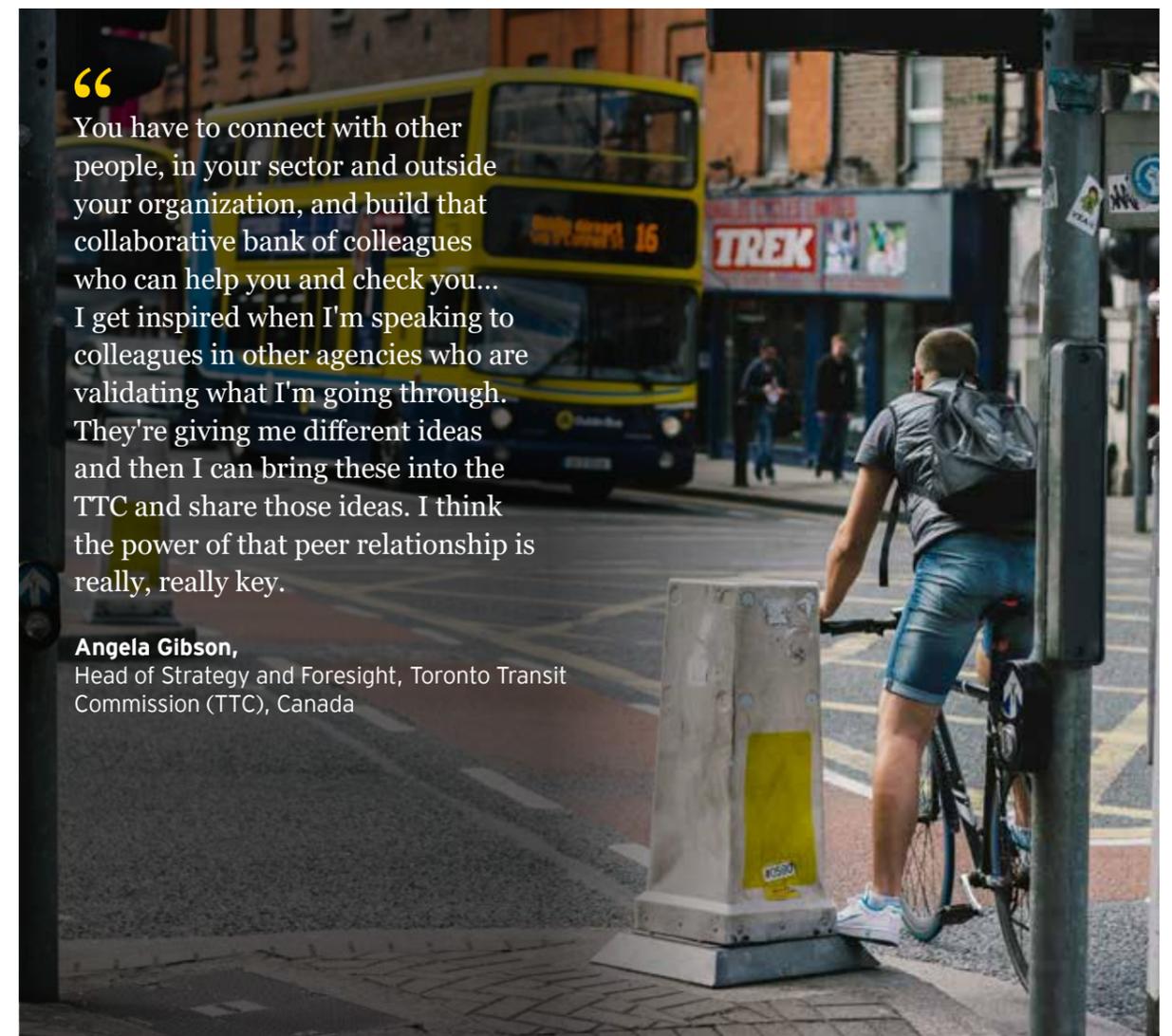
Amanda Cattermole,
CEO, Australian Digital Health Agency, Australia

“ Often, the digital director or chief information officer is not on the senior management board. In fact, it's almost unheard of... You've got the person who's representing the two most powerful skillsets and methods in your organization not represented at the top table. I find that extraordinary.

Eddie Copeland,
Director, London Office of Technology & Innovation (LOTI), UK

“ I believe that collaboration, which was unprecedented across the entire health sector, is the goal that we have to have. That requires all our leaders to be different sorts of leaders. It requires all our people to blow off the old silos and to get their reward from a matrix management model that is delivering the best benefit for all. And we have to have our staff feeling confident to thrive in that kind of environment.

Amanda Cattermole,
CEO, Australian Digital Health Agency, Australia



“ You have to connect with other people, in your sector and outside your organization, and build that collaborative bank of colleagues who can help you and check you... I get inspired when I'm speaking to colleagues in other agencies who are validating what I'm going through. They're giving me different ideas and then I can bring these into the TTC and share those ideas. I think the power of that peer relationship is really, really key.

Angela Gibson,
Head of Strategy and Foresight, Toronto Transit Commission (TTC), Canada

When leaders instigate conversations with the workforce about digital transformation, the starting point should be citizens' needs and the problem that needs to be solved, rather than the technology itself. By placing people at the center of strategy, digital leaders will motivate staff to improve their skills and provide a safe environment that encourages experimentation and risk-taking. This, in turn, inspires other leaders,

including middle- and lower-level managers, to embrace innovation and change.

Through leadership development, coaching and mentoring, governments can create a new breed of digital leaders with diverse perspectives and expertise, who are given opportunities to acquire experience in international, private sector and policy development.

Pioneering examples

▶ Singapore has been extremely successful in transformation because the Prime Minister has taken a personal interest and is accountable. As the Chief Digital Technology Officer (CDTO) of GovTech, Singapore, put it:

“

Leadership is very important ... we are lucky we have a Prime Minister who is very digitally savvy ... He believes that the only way the government can fulfill its mission going forward is to transform itself digitally ...

Cheow Hoe Chan,
Chief Digital & Technology Officer, Govtech, Singapore

- ▶ Meanwhile, the **Singapore government** has drawn up a new competency framework that reflects the more diverse capabilities that leaders need at different levels, including the ability to influence a wider range of stakeholders, to effectively operationalize policies and to exemplify the One Public Service mindset. The framework also includes “red flag” behaviors and actions, such as lacking the courage to make tough decisions or prioritizing the agency’s mission over collective outcomes. Senior leaders will receive 360-degree feedback, supported by coaching and other learning interventions.
- ▶ In **Malaysia**, chief information officers in ministries and agencies have assumed the role of chief digital officer (CDO), reporting directly to the chief secretary to the government.

The characteristics of the new breed of leader

The organizational leader (e.g., CEO)

Constantly challenging the status quo, the organizational leader sets a vision and strategic direction that enthralls all workers and is embedded in everything they do. Digitally astute, the leader focuses on embracing new technologies, keeping abreast of new developments and learning from other organizations and sectors.

The digital leader (e.g., chief digital officer, chief technology officer or chief information officer)

Playing a central role in strategic planning, the digital leader advises on how new technologies can help

achieve organizational goals. The leader identifies not as a technology expert but as a change agent, recognizing that people are the key enablers of transformation.

The talent leader (e.g., chief human resource officer)

As a trusted strategic advisor to the C-suite, the talent leader aligns the people agenda with the organizational and digital transformation strategy. The leader helps to develop a technology-driven workforce plan that sets out future capacity and skill requirement.

Read more about the qualities of the digital leadership roles in Part 3: Digital leadership in 2030.

EY Case Study

Leaders power ahead in the Washington Metropolitan Area Transit Authority

EY supported the Washington Metropolitan Area Transit Authority in improving communication, training, and internal processes leading to a more collaborative work environment.

We helped craft a leadership program to develop existing and future leaders, with a focus on culture to improve experience and engagement. We also assisted with change management to ensure smooth adoption, while providing data analytics to track metrics via a variety of innovative dashboards.

The resulting program is enabling a shift in culture, increasing engagement and retention, and helping the organization meet its goal of being the transportation and employer of choice.

2. Managing the change

Technical specialists may be responsible for implementing digital transformation but, if the full benefits are to be passed onto citizens, it is essential that there is organization-wide enthusiastic adoption of the new digital tools and use of data across the entire workforce. This requires an effective change management program that engages employees in the transformation process and trains them to use new systems.

“

It's one thing to roll out great technology, but great technology that's not used well is just an expense.

Geoff Connell,
Director of IMT & Chief Digital Officer, Norfolk County Council, UK



of government leaders agree that “our employees actively seek out and adopt new technologies and ways of working that create new opportunities for our organization.

Source: EY 2022 Tech Horizon survey.





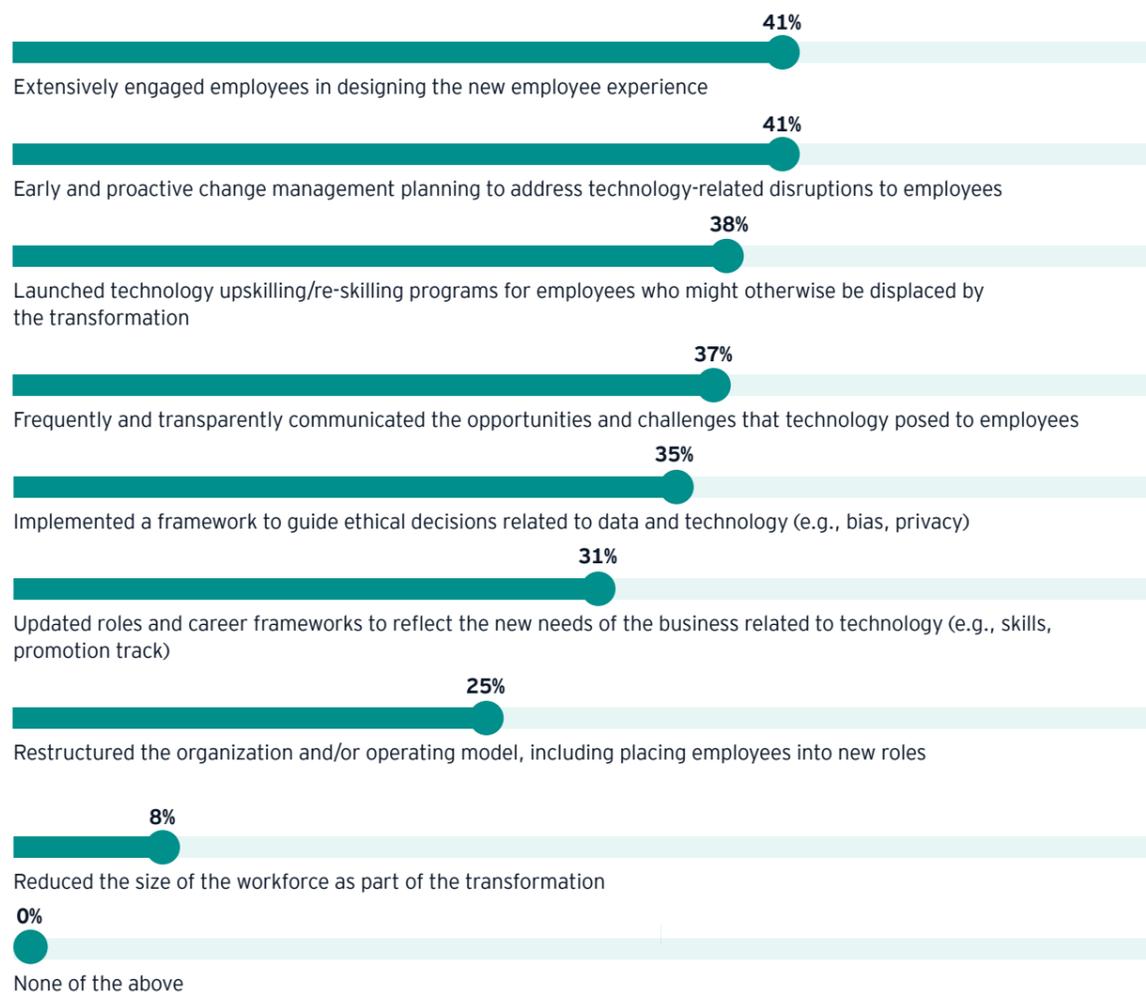
Engaging employees in the process of digital transformation

Often, government agencies succeed in securing sufficient capacity and skills to deliver successful pilots but fall at the hurdle of scaling these up and driving adoption across the whole organization. An effective digital transformation plan will consider all aspects of how the proposed changes will affect the workforce and what engagement is needed to build buy-in.

engaged staff in designing the new employee experience, while the same proportion have carried out early and proactive change management programs. Just under four in 10 launched upskilling or re-skilling programs for workers whose roles were affected by change, and communicated frequently and transparently with employees about the opportunities and challenges posed by technology.

In the EY 2020 Tech Horizon Survey, 41% of respondents say their organization has extensively

What actions have you taken to engage employees in the technology initiatives related to the transformation? [Select all that apply]



Source: EY 2022 Tech Horizon Survey.

(i) Make the vision compelling

Many employees are concerned about their ability to work with technology, and fearful that innovations such as automation and AI may cost them their jobs. However, fewer than one in 10 leaders taking part in the EY 2022 Tech Horizon Survey have reduced the size of their workforce as part of their digital transformation. This is a vital message to communicate. Many interviewees believed that digitalization would allow employees to be redeployed to other tasks.

It's equally essential to explain the vision for digital transformation, why it's needed, and how it can enhance everybody's jobs and deliver better outcomes to the public. To minimize skepticism and resistance, leaders must be prepared to listen to questions and be empathetic to the fears and anxieties that might surface.

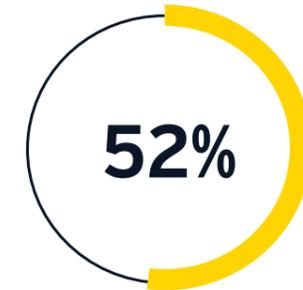
There should be early and regular communications tailored to the interests of different groups, including full-time staff, contractors and other flexible workers. This should include a clear roadmap for change, with an outline of the current state and where the organization needs to get to, so people know what to expect.

“5, 10 years ago, everyone was saying, "We're going to see a smaller knowledge-based workforce." I'm not so sure now. We're going to need people in different ways.

Amanda Cattermole,
CEO, Australian Digital Health Agency, Australia

“Sometimes, resistance in terms of change management actually isn't because people don't want to work in new ways. It's because they don't understand how to, or they're frightened of being caught out and shown to be inadequate.

Geoff Connell,
Director of IMT & Chief Digital Officer, Norfolk County Council, UK



of respondents in high-performing transformations said leaders understood the needs and views of their workforce versus only 31% of respondents in low-performing transformations.

Source: Transformation Leadership: Humans@Center research, EY and the University of Oxford's Saïd Business School.

“You have to show them the “what's in it for me”. Why would I want to use this new technology? How does it make my job easier? How can I be more effective? How can it allow me to be more flexible and work remotely? It's about communication and proactive, ongoing training and handholding folks through the change process.

Michelle Shelton,
Chief Human Resources Officer, Marion County Oregon, US



Many frontline workers also fear that digital technologies may detract from their interactions with citizens and add extra work. Godfred Boahen, former Policy, Research and Practice Improvement Lead, Association of British Social Workers, observes a “*crisis of cynicism around digital technologies in the social services sector because the benefits are not articulated clearly.*” A greater appreciation of the program’s place in the organizational mission, and its practical value, can help to counter such attitudes.

For example, insights from data analytics may be perceived as a threat by professionals who are used to making decisions based on their own judgment. In this case, it should be emphasized that insights are there to augment rather than replace human decision-making.

Many leading governments have started to introduce data literacy training to help staff take advantage of new data insights. This kind of training fosters curiosity in looking at data and improves employees’ ability to ask the right questions, such as: “How can existing data be used to optimize outcomes?” and “What combination of new data sources can further improve public value for citizens?” Training also helps them to interpret the results and provide context and meaning behind the numbers. Ethical use of data is another critical consideration. The EY 2022 Tech Horizon Survey reveals that 35% of government leaders have implemented a framework to guide ethical decision-making.

“

If you are struggling with people’s resistance, then I would say maybe you haven’t done as good a job as you could of talking about what the vision is and what it is that you’re trying to accomplish. So, tell the story in a way that really resonates with them and makes them feel proud to be a part of something.

Executive Director,
Health Agency, Canada

“

If we can sell the benefits - how does this help them do their jobs better — that’s a far more compelling change process than having it thrust upon them. People are more forgiving and understanding of disruption right now if you can articulate what’s the endpoint, why is this worth it? The world would be better because, social workers, you’ll be able to spend 80% of your time with vulnerable families, and just 20% will be doing data entry. How amazing would that feel?

Eddie Copeland,
Director, London Office of Technology & Innovation (LOTI), UK

(ii) **Empower workers to redesign and redefine their own work**

The most effective transformation programs co-create the solution with a wide range of stakeholders in order to consider benefits and risks from the point of view of all affected parties. They ensure that implementation is governed by steering committees comprising senior stakeholders representing strategy, ICT, finance, HR and functional delivery teams, to achieve alignment across the whole organization.

EY research suggests that a shift in how transformation leaders engage employees can help encourage adoption of new tools and ways of working. This means listening to employees, identifying their pain points, understanding what needs to change and enabling them to co-design the solution. Where appropriate, they can also guide the implementation to make their routine work processes simpler and faster.

Digital transformations also present an opportunity to work with employees to rethink existing processes. Instead of just adapting a process, digital teams should first decide whether they could do without the process entirely. For those that are essential, they will need to understand how the manual process works and how to make it more effective through digitization. As one interviewee put it, “*We need to get a bit of innovation in everything we do, not just adapting (the process) from manual to digital. We need to go a step further and innovate the process.*”

“

If we have a change thrust upon us without our engagement, we’re quite likely to resist it. The lesson is you’ve got to codesign these solutions with frontline practitioners... involve them in the process so they feel that their concerns have been heard so that they’re excited. The number of developers who will build technical tools who’ve never come into contact with the end user of their system is alarming.

Eddie Copeland,
Director, London Office of Technology & Innovation (LOTI), UK

“

Don’t do [digital transformation] to them, do it with them. Develop a culture and a feeling of “We want to use technology. We want to exploit it,” so they pull on you. They come and say, “We want to use RPA, etc. Help us to do it.” So, rather than force people to change, develop a culture whereby they want to do it, and they come to you and ask for it.

Geoff Connell,
Director of IMT & Chief Digital Officer, Norfolk County Council, UK

EY Case Study

Putting humans at the center of change in the Australian Defence Force

In one of the country’s largest digital transformation programs, the Australian Defence Force (ADF) is creating a modern, technology-enabled military, upgrading to a next-level enterprise resource planning (ERP) solution. This requires new ways of thinking and working for more than 80,000 staff across 55 national and overseas locations. [Working with EY](#), the ADF adopted a change management approach based upon being “deliberately different,” with messaging, immersive events and personal storytelling from senior leadership, creating strong buy-in and a passion for the vision, and placing people at the center of every change decision.



(iii) Use champions

The use of “digital champions” is becoming more widespread. It can be a highly effective way to help people understand and embrace new technology, since they are learning from peers who have practical experience and understand the day-to-

day realities of their situation. Training can also accelerate buy-in for change, possibly augmented by incentives linking digital learning and adoption to performance evaluations and promotion.

Pioneering examples

- ▶ The Inland Revenue Authority of Singapore appointed 20% of its civil servants as change agents for digital transformation. They attended discussion sessions and informal focus groups with the wider workforce, to share their experiences about training and adapting to new roles.
- ▶ The U.S. Air Force developed a **data literacy program** to improve individual decision-making across the service’s units. Their approach was to attract buy-in from a cohort of senior leaders who could act as change agents across the organization. They were able to clearly communicate the value of using data and build buy-in through relevant examples.

EY Case Study

Harnessing the power of data for local communities

In the London Borough of Barking and Dagenham, which collaborated with EY and Xantura to create an analytics and predictive modeling platform, training has been largely shaped by digital champions who were involved in the design of the platform. These frontline staff guide colleagues on how to access and use the technology and subsequent insights, and are available to resolve any queries.

(iv) Evolve through feedback

Continuous feedback – with agreed actions – ensures digital programs keep pace with changing needs, and gives employees a voice, encouraging participation and creating further opportunities for innovation.

Digital leaders should commit to sharing lessons learned with employees and promoting a genuine dialogue. This doesn’t just improve motivation; it also encourages risk-taking and reassures workers that failure is a natural part of the creative process, rather than something to be feared.

“

You need to get feedback from staff because they are the people using [the technology] day in and day out, and they are very honest. Frontline staff give us some great narratives around what’s going on for them and how service users’ needs have changed. **We are able to take that information and then adapt [the solution] to meet that need.**

Jill Gallagher,
Service Manager,
London Borough of Barking and Dagenham

EY Case Study

Tackling resistance to change at Transport for NSW

Transport for NSW in Australia is delivering the country’s largest-ever transport infrastructure program, integrating key transport agencies under one shared services organization. However, there has been significant resistance to change, with many employees accustomed to traditional ways of working and having to adapt to a new leadership team.

EY helped with change management, including ongoing coaching on how to “navigate and lead through change” team-building exercises to build a common, high-performing culture; and, critically, “reflection” sessions to air and address concerns. Along with highly transparent communications with the service center customers, this greatly helped employees transition into new roles and responsibilities. The reform has been widely recognized for its change management excellence and has significantly improved both customer satisfaction and employee engagement.

EY Case Study

Supporting the digitalization of India’s income tax processing

Infosys is the technology partner for one of the largest government ministries within India, the Income Tax Department. This partnership had embarked on a massive digital transformation that involved automating the country’s entire tax processing value chain.

EY was brought in to support the transformation, implementing a change and communication plan that included workshops, roadshows and continual

measuring of stakeholder engagement. We developed a training strategy and configured a learning management system that hosts more than 50 highly viewed e-learning modules and promotes a culture of continuous learning. We also helped in establishing a network of Change Champions to help the organization drive future transformations from within.

The program has generated a commitment level of 98% among internal stakeholders and is making life simpler for the nation’s taxpayers.





What might the frontline worker of the future look like?

Once a digital novice, the frontline worker appreciates the need to evolve in a rapidly changing work environment, having gone through a series of digital transformation projects and experienced the benefits for both themselves and citizens.

The frontline worker has access to an integrated data system providing a single view of service users. Machine learning algorithms use the data to predict what support is needed and when, so that clients benefit from early interventions and personalized support. While the worker still relies on professional judgment, this augmented decision support has markedly improved citizen outcomes. No longer mired in administrative tasks, the worker can spend more time with service users, acting as a life coach for the most vulnerable and helping them use new digital platforms to seek information and check eligibility for benefits or the status of their support package.

Over many years, the frontline worker has taken part in different types of training to get comfortable with new digital tools and information systems, and enjoys access to a digital skills hub to keep abreast of new innovations. They occasionally step away from day-to-day responsibilities to take part

in digital and data-focused projects, sharing experiences and feedback with the digital team, supervisors and other departmental staff. There is a general acknowledgment of the organization's investment in personal development, improving motivation and job satisfaction. Digital tools have facilitated a hybrid working model, which greatly enhances work-life balance.

Working with the digital transformation team, the frontline worker has been actively involved in designing some of the new digital solutions, helping address pain points and ensuring that digital tools meet the needs of colleagues across the organization. The worker subsequently acts as a digital champion to inspire others to embrace data-driven decision-making, holding coaching sessions to acquaint them with new systems.

As a confident and knowledgeable digital user, the frontline worker can recommend new ideas to supervisors, further encouraged by recognition programs rewarding creative problem-solving and innovative ideas leading to pilot projects. As these ideas feed through to the digital and data science team, the worker feels empowered to make a difference, not just to citizens but to the organization as a whole.

3. Nurturing a growth mindset

In an EY survey, a majority of leaders – 59% – admit that the organization's workforce has not adopted the kind of "fail-fast" mentality that is essential, not only to drive creativity and embrace new ideas but also to provide the agility to adapt to disruption, as required during the COVID-19 pandemic.

To address this, government leaders need to model and nurture a growth mindset across the whole of the workforce and the organization, championing a culture where curiosity and questioning of the status quo is the norm rather than the exception. They will actively challenge the view that critical areas of public services, such as health and social care, cannot afford to experiment due to the high perceived costs of failure. The pandemic proved that that new approaches to service delivery – often involving collaboration – can be very effective and enhance, rather than damage, the citizen experience.

Leaders should encourage experimentation and risk taking, and position failure as part of the creative process, rewarding people for bold new ideas.



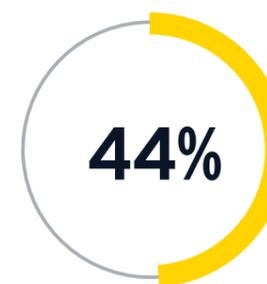
of respondents agreed that "our organization has tried introducing a fail-fast mentality, but our people are scared to embrace it."

Source: EY 2022 Tech Horizon survey.

“ Digital success comes when teams know what they're shooting for and are continually reminded of that and kept on track, but are given space to be creative together as a team.

James Stewart,
CTO, Public Digital, UK

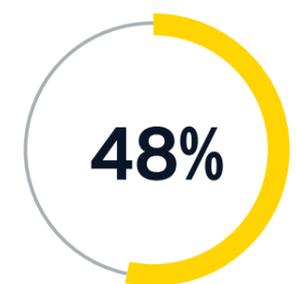
Our research into human-centered transformation shows:



of respondents in high-performing transformations said their organization's culture encouraged new ways of working (compared with 28% in low-performing transformations)



of respondents from high-performing transformations established a process that encourages innovative experimentation and new ideas (versus 29% in low-performing transformations)



of respondents from high-performing transformations said the process was designed so that failed experimentation wouldn't negatively impact career prospects or compensation (versus 29% in low-performing transformations)

Source: Transformation leadership: Humans@center research.





To embed entrepreneurial behavior, governments are increasingly using innovation labs, incubators, accelerators and internal hackathons or “skunkworks” – where small, loosely structured groups work on radical or experimental new projects. These provide a safe environment for exploration and learning.

Organizations can adopt agile approaches such as DevOps, where projects are composed of “sprint” steps, allowing the team to assess, at the end of each step, whether to continue. Legislative and structural barriers should also be broken down, to cut through unnecessary bureaucracy that may hold back progress.

Networking is a further, popular route to innovation, bringing together businesses, entrepreneurs, startups, finance companies, academics and civil society organizations to codevelop new ways to deliver citizen services.

Governments can learn from pioneers in the private sector that have demonstrated the value of an innovative, experimental and collaborative culture. Microsoft has put this at the heart of its own corporate culture change, with a string of programs to support it. The [annual global Hackathon](#), for example, provides an opportunity for staff to bring forward an idea, develop a business plan and pitch it company-wide. Winners are given funding to develop their idea, and some move into leadership roles even if they have not previously been on a management career track.

Pioneering examples

- ▶ The **Canadian government** offers prizes to stimulate new solutions for major public challenges, via the Smart Cities Challenge, the Drug Checking Technology Challenge and the Indigenous Homes Innovation Initiative.
- ▶ Incentives are a central part of **Argentina's** efforts to inspire creative thinking in government. Its Design Academy of Public Policy, funded by the Government Lab of Argentina, acts as an experimental ground to test new ideas to bring it into everyday work. For every class taken, a public servant earns points, which are a prerequisite for promotions and pay raises.



We're always trying to encourage people to take on more risk and more innovation. The quid pro quo to that is you have to let people make mistakes and you have to let them fail fast, stand back up and try again.... But you have to be very clear about where are you willing to take on risk.

Nancy Kennedy,
Senior Vice President, People and Culture,
OLG, Canada



One of the main goals I have in my team is to embrace every innovative mind and every project that makes us better. I can't pay them more, so I have to ... make them shine in other ways.

Fredrik Stjernfelt,
CIO, Partille Municipality, Sweden



Basically, it's about having that growth mindset, always seeking better ways to do something, learning new things. There's a concentrated effort on shifting our mindset to 'We want to innovate. We want to deliver services in a better way.'

Executive Director,
Health Agency, Canada

What governments can learn from digital natives

Although government organizations cannot replicate the startup model from the private sector, there is much to learn from disruptive organizations in terms of their ability to drive longer-term cultural change. It means adopting traits that are more typical of “digital natives” – the younger generation that has grown up with new technology. **Read more about digital natives in the EY article 'How digital natives are influencing traditional design'.**

A government organization that can thrive in the digital age will have a continuous cycle of digital innovation. Its people will

have the capability to disrupt and create like a startup; to design, test and iterate like a tech giant; and to plan, invest and scale up swiftly like a venture capital firm.

Feedback and learning become second nature, with employees comfortable with making mistakes and able to take responsibility for redesigning processes – and, indeed, their own roles – within a culture of continual growth and learning. Finally, everyone is collaborative, connecting teams in pursuit of a joined-up employee experience that, in turn, drives a consistent citizen experience.





Employee experience

Create a tailored and purposeful employee experience, with varied career opportunities to keep people productive and engaged

Organizations must be equally concerned with retaining existing skill sets and keeping workers happy and engaged. But in our survey, 29% of respondents said the struggle to keep existing talent was among the top-three barriers to obtaining the digital and tech-related skills the organization needs. A crucial way to tackle this – and to attract new talent – is to provide an outstanding employee experience (EX). This means creating fulfilling, rewarding jobs; configuring modern, digital-driven, hybrid workplaces; and providing the sense of purpose that employees are increasingly seeking.

“

You have to look at the whole employee and the whole person when you want to keep someone working for you in this day and age. Gone is that employer-employee relationship where the employer had a lot of the power. The employee has a lot more power now. It's a candidate-employees market, so you have to get more involved in people's lives than you ever thought you would.

Nancy Kennedy,
Senior Vice President, People and Culture, OLG, Canada

Key takeaways

- ▶ **Put pride in public service at the heart of the employee experience.** Measure the positive impact of services on people's lives and communicate achievements regularly to the workforce.
- ▶ **Embed hybrid working policies while keeping a check on wellbeing.** Take a regular pulse of employee sentiment, offer tailored support packages, and adapt communication and management policies to new ways of working.
- ▶ **Offer varied and exciting career opportunities.** Prioritize continuous development opportunities for the whole workforce, incentivizing individuals to keep skills updated.
- ▶ **Professionalize digital roles.** Create a capability framework for digital specialist roles, establishing a structured career track for each, to aid retention.



The lines between citizen experience and EX have converged. A recent survey by global market intelligence firm IDC found that 85% of technology decision-makers believe improved EX and employee engagement translate to a better customer experience, higher customer satisfaction and increased revenues. And 58% feel customer satisfaction is related to employee productivity. In another survey of HR leaders commissioned by EY, SAP SuccessFactors and Qualtrics, and undertaken by Forrester, 78% felt EX would be one of the most important factors affecting their organization's ability to deliver on key business objectives.

(i) Create an integrated talent management strategy

Organizations need to look at the employee lifecycle in a holistic, joined-up way. This represents a huge opportunity to create a compelling end-to-end EX that improves people's experience throughout their entire time with the organization.

Chief HR officers need to work with others in the C-suite to refresh the talent strategy and develop modern HR Management Systems to better manage HR functions across the whole employee lifecycle, from recruitment and onboarding to training and development, supervision, performance management, and recognition, pay and rewards. This will help earn the loyalty and commitment of employees, improve productivity and deliver greater value to citizens. By getting executive buy-in, the HR department can secure more investment, better tools and increased headcount with which to improve EX. Coordinating these efforts across departments, from legal and finance to marketing and IT, can help create momentum for change.

(ii) Keep a pulse on employee sentiment

Governments must be "listening organizations," keeping abreast of employee sentiment and identifying barriers to engagement and performance. Surveys are an obvious way to gauge satisfaction with the work and working environment, physical and emotional wellbeing, and attitudes to learning and skills development, providing insights to design better experiences.

Rather than static, annual surveys, governments are shifting to frequent "pulse" surveys to continuously track sentiment. It's now possible to create ongoing two-way communications between employer and employee, and generate real-time insights that enable the creation of individually tailored responses.



We decided in 2017 to place people at the center of digital transformation and said we will make the employee experience our cultural path because in the end, our people will execute all of this. Today, after five years, everything in the company is made with the employee journey (in mind).

Fabrizio Rauso,
Head of People, Organization and Digital eXperience Department, Sogei, Italy



You need a very strong employee experience strategy that isn't just lip service. It has to be real and it has to be tangible for employees. And then you need to measure the reaction to that .. and adjust your plans when you hear people are not happy.

Nancy Kennedy,
Senior Vice President, People and Culture, OLG, Canada

EY Case Study

Supporting workers through tough times

During the COVID-19 pandemic, EY, SAP and Qualtrics developed a suite of digital tools to help governments interact with their citizens, health care workers and call centers. Solutions included a rapid pulse survey to capture feedback on frontline health workers' experiences and preferences, and provide rapid analysis to drive communications and aid crisis management responses.

The pandemic has changed leaders' perceptions of what they can and should do for employees. According to an international study, the number-one desired leadership attribute for the next five years is "inspiring, motivating and engaging employees to achieve results and enable a positive employee experience." When asked what employees need to perform at their best, the top response was to be "motivated, happy, valued and supported."

(iii) Put purpose at the heart of public service

Public services such as health care, education, public safety and infrastructure play a vital societal role – something that could be leveraged to create a sense of pride and purpose among employees.

Having a well-defined purpose helps to maintain a focus on goals and satisfies a human need to feel part of something meaningful. Shared purpose appeals to younger people's values in particular and can bind together a diverse workforce of permanent workers and contractors, of different generations and across different locations.

Citizen centricity makes it easier for staff to see a direct link between what they do and the benefits to society and individuals. Government agencies should stay in close touch with citizens, gaining continuous feedback on their needs and experiences, and turning such knowledge into swift actions, using digital technologies and data to improve services. They can accurately measure the positive impact services are having, communicating these findings regularly to the workforce.



We conduct surveys internally to understand the employee experience and make adjustments based on their feedback ... We treat our employees like customers. I prefer to call myself a Customer HR Director.

Fabrizio Rauso,
Head of People, Organization and Digital eXperience Department, Sogei, Italy



I think [employees need to] understand the difference they make. We try to make sure we've got high-quality data and visualization systems to show our staff how effective they are being, what differences they are making and what's the performance. They constantly get the reassurance that they do something, and it has a positive impact.

Geoff Connell,
Director of IMT & Chief Digital Officer, Norfolk County Council, UK



It's easier to feel better about a digitalization project when we see a citizen who has directly benefited from that transformation.

Arnaldo Cruz,
Director of Policy and Research, Civil Service Reform, Puerto Rico

Pioneering examples

- ▶ The U.S. Department of Veterans Affairs has demonstrated that a common goal of providing a better citizen experience can help to rebuild trust in government institutions. With a history of long wait times, and an outdated IT infrastructure, the department underwent a cultural shift, using regular patient experience feedback to enhance services, and training more than 95,000 employees on how to create consistently exceptional experiences.
- ▶ New Zealand's Public Service Act 2020 spells out the purpose of public sector workers and introduced Spirit of Service Awards to celebrate outstanding public sector governance, young leaders and initiatives delivering exceptional outcomes for citizens. The aim is to increase the appeal of working in government.

Consequently, trust in the organization rose to at an all-time high of 90%.



(iv) Make hybrid working effective

The pandemic has shifted employees' preferences about where and how they work, and the EX must adapt to the new hybrid workplace. However, when asked whether their organizations were promoting hybrid work to attract and retain talent, a significantly lower proportion of government and public sector employees agreed compared with the overall cross-industry sample (35% versus 52%). To give employees greater control over their working day, governments should embed flexible working policies for the long term, while considering which roles are suited to this model.

There will also need to be a greater focus on employee safety and wellbeing, particularly given the blurred boundaries between work and personal

life. Almost one-third of government and public sector employers responding to the EY 2022 Work Reimagined Survey cite employee wellbeing and burnout as one of the workforce risks they are most concerned about, second only to retaining talent. The survey also found that government and public sector employees' perceived levels of wellbeing are lower than any other sector, as they adapt to new ways of working.

More than half (55%) of employers say they are consistently monitoring employees' wellbeing. Our predictive model, developed as part of the [EY research on human-centered transformation](#), indicates that providing more emotional support improved the average likelihood of transformation success by 17%.

Running remote teams calls for innovative communication and management styles to support workers; avoid burnout, disengagement and isolation; and ensure a balance between wellbeing and productivity. This requires empathy

and compassion, and a stronger focus on physical and mental health. Wellbeing packages (including information, guidance and mental health support), wellness programs and sabbaticals are becoming more commonplace.

Pioneering examples

- ▶ During the COVID-19 pandemic, the UK's NHS carried out a **monthly pulse check** with workers, to learn how they were coping with remote work. It led to the creation of a wellbeing strategy, including a working group with initiatives such as team members training as mental health first aiders, a learning management system, and links to external websites offering support and guidance.
- ▶ The UAE government launched the **Hayat Employee Assistance Program**, offering psychological and moral support and mental health consultations for government employees during the pandemic.
- ▶ In May 2021, the U.S. Office of Personnel Management (OPM) **issued advice for all public agencies** to better support employees during the pandemic. In addition to information on employee assistance programs and mental health treatments offered through health benefit plans, the OPM also communicated on office safety and flexible working, to ease employee anxiety.

EY Case Study

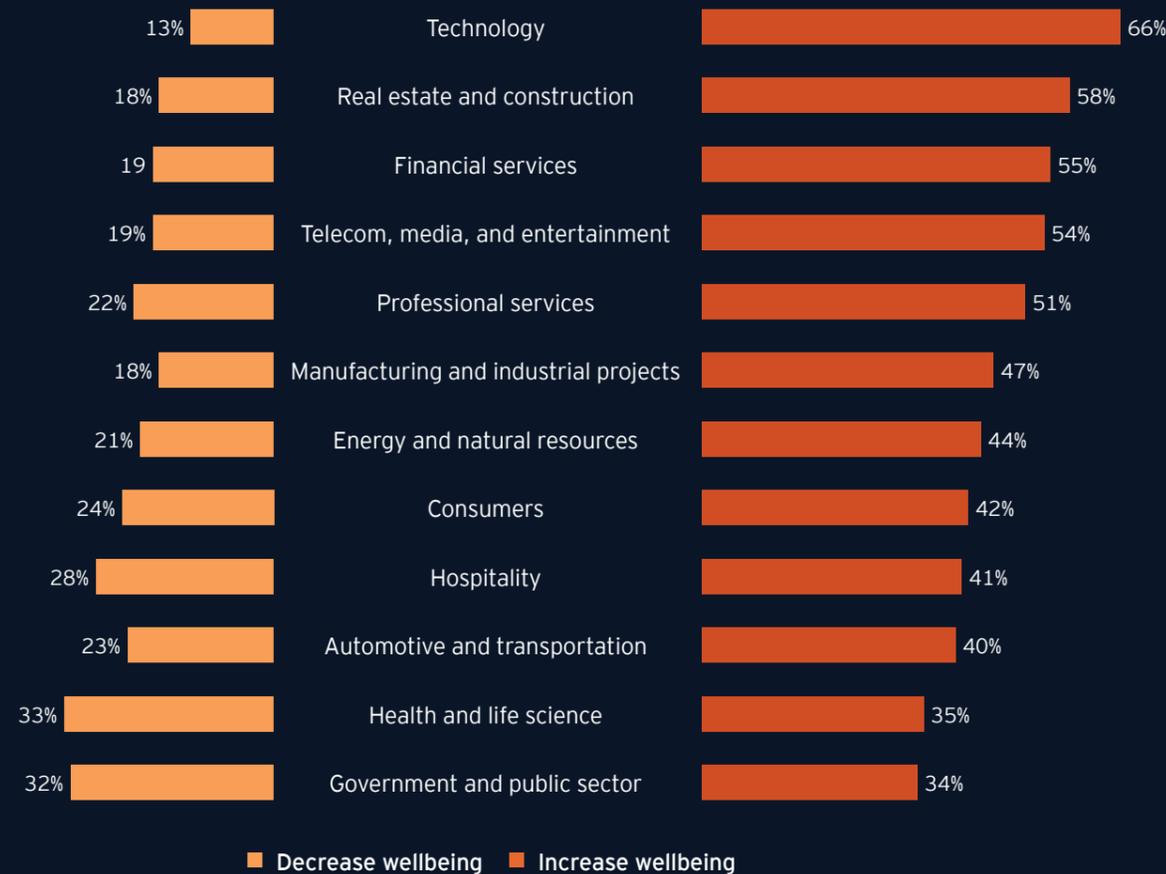
Creating healthy workplaces in Sweden

EY collaborated with Partsrådet to establish a more sustainable work-life balance for 270,000 public sector workers in Sweden – 5% of the nation's total workforce.

Partsrådet, a nonprofit organization funded by state agencies in cooperation with unions, was concerned about the impact of an anticipated trend of employees retiring at a later stage. EY teams helped the organization to design a five-year program, by defining what a "sustainable work-life balance" means, mapping the needs of the workforce and delivering tailored services to meet those needs.

The program underpins the creation of healthy and engaged workplaces – with a positive impact not just on government employees but also on Swedish society as a whole.

How COVID-19 and new ways of working affected wellbeing



Note: Employees who selected "No change in wellbeing" are excluded for simplicity.

Source: EY 2022 Work Reimagined Survey.

In a hybrid work environment, workers expect the processes and technologies they encounter to be absolutely seamless and intuitive, regardless of where they are based. New collaborative technologies can help bring the home and office closer together and lead to a more positive employee digital experience. However, cybersecurity will have to be strengthened as data leaves the confines of the office and enters the cloud via multiple devices.



I feel passionately, as a digital enabling agency, that my staff have the best digital tools, they're confident using them, and they can choose to be more flexible in their work lives because of that. We treat that as an absolute necessity, not as a nice to have, so they can be enabled to do their jobs.

Amanda Cattermole,
CEO, Australian Digital Health Agency, Australia

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Any transformation into a hybrid and digital work environment should actively align space, people and technology. Hybrid work models require employees to work in new ways, in new places and with new tools; all three must be in harmony and delivery of change must occur accordingly.

Carlo Chiattelli,
EY Advisory S.p.A., Partner,
People Advisory Services

Hybrid working presents an opportunity to repurpose office space, including desk-sharing, equipping rooms with videoconferencing technologies, and creating collaboration and networking hubs. In the longer term, governments may choose to rethink their real estate footprint and consider cheaper, out-of-town locations, as well as moving away from major cities to different regions to be closer to citizens.

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Rationalizing the office estate is something we're actively doing at the moment. We probably only need a fifth of the real estate that we used to operate from. The office estate that we do have, however, we will need to get to a higher level than we ever have before, through immersive hybrid meeting technology.

Geoff Connell,
Director of IMT & Chief Digital Officer, Norfolk
County Council, UK

Pioneering examples

- ▶ The Canadian government has piloted the **GCcoworking initiative**: a modern workplace for the new public service, giving employees greater flexibility in where and how they work to improve productivity and enhance citizen services, including the home, physical offices and shared co-working sites. GCcoworking

Of course, ultimately, hybrid working must fit within service delivery mandates, which means that some roles must remain on-site. One of the biggest risks is to maintain equity between those working remotely and those obliged to be present in the workplace, in order to avoid a “two-tier” workforce. The EY 2022 Work Reimagined Survey found that hybrid or flexible working conditions may present a risk of slower career advancement, with 45% of government employees believing new ways of working will cause some segments of the workforce to lose out. Leaders should make sure that employees who are rarely in the office do not become “invisible” when it comes to promotions and other career opportunities, and ensure they have networking and development opportunities.

Governments must also consider how they monitor productivity in a remote working environment. Historically, the main measurement has been time spent working, but future metrics should be oriented toward achievements, collaboration, skills developed, and external and internal feedback, to foster a results-driven culture.

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It's essential that individuals' targets reflect, for example, the aims of fostering cross-departmental collaboration and the need to build a more digitally skilled workforce.

Samir Bedi,
EY Asean Workforce Advisory Leader

aims to transform government offices to provide shared workplaces, for use by multiple departments. Offices will be organized into different activity-based zones, suitable for a wide range of tasks, including a “quiet zone” for focused individual working and an “interactive zone” intended for collaboration.

Each government organization must set its own unique metrics and identify available performance measurement data. Employees should have clear expectations and goals, with the freedom to determine the best way to achieve their own performance targets while contributing to broader organizational goals.

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If productivity is to be increased, a more nuanced and fine-grained approach is needed to evaluate and measure work, alongside the implementation of performance metrics and monitoring mechanisms. A more refined method of performance evaluation (based on results, skills, and external and internal feedback) will usher in a results-driven culture in public services.

Carlo Chiattelli,
EY Advisory S.p.A., Partner, People Advisory Services

- (v) **Offer continuous learning and structured career paths**

Government agencies should prioritize learning and ensure it is sufficiently funded. Learning can contribute greatly to the employee experience, boosting satisfaction, productivity, retention and recruitment.

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We try to encourage an environment of owning your development and continuous learning as part of the expectations that we have for employees generally. You just can't keep doing things the way you were doing for years and years and years and not change.

Nancy Kennedy,
Senior Vice President, People and Culture,
OLG, Canada

EY Case Study

Designing the post-COVID-19 workplace

A US human services agency wanted to build on the changes it had made during the pandemic, to create a new way of working that would benefit both employees and citizens. This called for a comprehensive review of the impact of hybrid working and the options for a more flexible use of real estate.

EY teams developed a pulse survey to gauge employee sentiments and carried out interviews with leadership. We gathered data on productivity and analyzed the office space, looking at various potential designs and usage, including sharing, and reducing total footprint. Pulling these findings together, we held a workshop to capture the client's vision of their future workplace, then created a roadmap and implementation plan for the transition.

The agency now has a clear plan for a vastly improved employee experience, encompassing health, training, remote learning and digital enablement, while optimizing its real estate; all of which should translate into better and more cost-effective services for citizens.

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Learning will soon become the new dollar. Maybe even more important for employees than their compensation and benefits.

Samir Bedi,
EY Asean Workforce Advisory Leader



As technology develops and skills become obsolete, continuous learning becomes essential for all employees, regardless of age or level, with individually tailored programs available on demand. However, OECD research suggests older workers spend half as much time training as their younger colleagues, increasing their chances of getting left behind.

Structured professional and career frameworks for digital roles, aligning with industry standards such as SFIA, and underpinned by robust performance evaluation systems and merit-based promotions, give employees a sense that they can grow their skills and fulfil their career ambitions. A professionalized public service would also allow for more individualized and flexible pay structures and terms of employment. Technical ladders can be applied to highly skilled staff, enabling them to enjoy significant pay rises without necessarily having to enter the managerial echelons.

Technology talent in particular should be encouraged to take responsibility for their own professional development, such as being set an annual minimum quota of learning hours. Digital workers need to have the curiosity to want to learn new skills to deepen their technical expertise. As one interviewee put it, “If you have to push them to upskill themselves, then we may not be hiring the right workforce.”

Workers will need guidance, including individual pathways that consider not just learning needs, preferences and career goals but also motivation, capacity, confidence and work-life constraints. One way to address barriers – such as lack of time – is to incentivize staff to learn, including rewards and recognition programs. In the EY 2022 Tech Horizon Survey, leaders consider incentives as one of the most important ways to build digital skills.

Pioneering examples

- ▶ The Australian Public Service has a new learning and development strategy to target priority capabilities such as data, digital and human resources, including a professional academy, to foster a culture of learning. Employees have regular conversations about performance and development needs, while managers give them time and space to attend courses and access digital and on-the-job learning resources.

EY Case Study

Professionalizing digital careers in the UK public sector

The UK government’s Data, Digital, and Technology (DDaT) Profession Capability Framework creates a structured career path for digital professionals. EY supported the Government Digital Service (GDS) in defining the skills required for various roles and how to acquire them, as well as establishing a career track for each. This not only helps boost recruitment and retention but also helps management plan their future workforce needs.

EY Case Study

Meeting a multitude of worker needs

Today’s public sector organizations must cater to an increasingly diverse set of employee needs. Working with a public transit agency in a major US metropolitan area, EY surveyed 2,500 employees and interviewed 15 department leaders, as well as facilitating roundtables, to understand how they felt about their current and future roles.

We subsequently developed eight workstyle “personas” to reflect how different groups of employees would operate in a future work model, with an emphasis on equity and inclusion. By aligning the organizational structure to these personas, we helped the agency devise a new, hybrid working model – including training – that should help all workers progress. In addition, we recommended a more efficient and productive use of office space.





Part 3

Digital leadership in 2030

The new breed of public sector leader

Successful digital transformation calls for a new breed of leader. In this chapter, we outline what three different leadership roles might look like in future, describe their key attributes and suggest some areas to consider.





The organizational leader (e.g., CEO)

Constantly challenging the status quo, the organizational leader uses future-back planning to imagine and understand potential future scenarios for the next five to 10 years. They then set a vision and strategic direction that enthruses all workers, at all levels, and is embedded in everything they do. Digitally astute, the leader focuses on the transformational potential of new technologies, keeping abreast of new developments and learning from others in the private and public sector, nationally and internationally. Securing investment in new digital programs is a high priority, requiring ongoing dialogue with political leaders to state the case for new solutions.

The organizational leader recognizes they may not have all the answers. By networking with peers across government, and with public sector unions, they can better understand emerging public sector challenges and the impact of social, economic and technological change on people, roles and skills. And by working closely with the talent and digital leaders, they chart a clear path for change that utilizes new technologies to transform the operating model, while creating an environment in which people can thrive and deliver better outcomes. This includes an integrated digital and workforce plan to build the right capabilities and capacity to meet current and future needs, and help workers adapt to changing roles.

A role model for “doing things differently,” the organizational leader’s hands-on approach fosters digital adoption and readiness. Acting as the sponsor of key learning and development programs helps to ensure that everyone understands the importance of digital ways of working. The leader has spent years cultivating an entrepreneurial and collaborative organizational culture to boost digital programs,

and aligning the board on strategy, with other senior leaders championing transformation across their respective functions.

Departing from the command-and-control hierarchies of the past, and with a “we, not me” attitude, the organizational leader believes in giving staff the space and flexibility to work together in agile ways, encouraging departmental leaders to experiment with digital solutions, and setting them digital targets. Leaders are incentivized for sharing problems, ideas, data and resources, and working across departments to tackle challenges. This helps rebalance risk and reward in favor of ambitious digital goals. Progress is regularly monitored against measurable outcomes, with successes and failures shared across the organization to learn lessons and define “what good looks like.”

The organizational leader builds a strong external profile, acting as a digital ambassador and promoting the organization as a great place to work that offers fulfilling roles with genuine social impact.

The digital leader (e.g., chief digital officer)

Playing a central role in strategic planning, the digital leader advises on how new technologies can help solve business problems and achieve organizational objectives, including better citizen outcomes. In developing the digital vision, the leader balances short-term goals and financial viability with long-term investments in disruptive technologies to modernize delivery models and working practices.

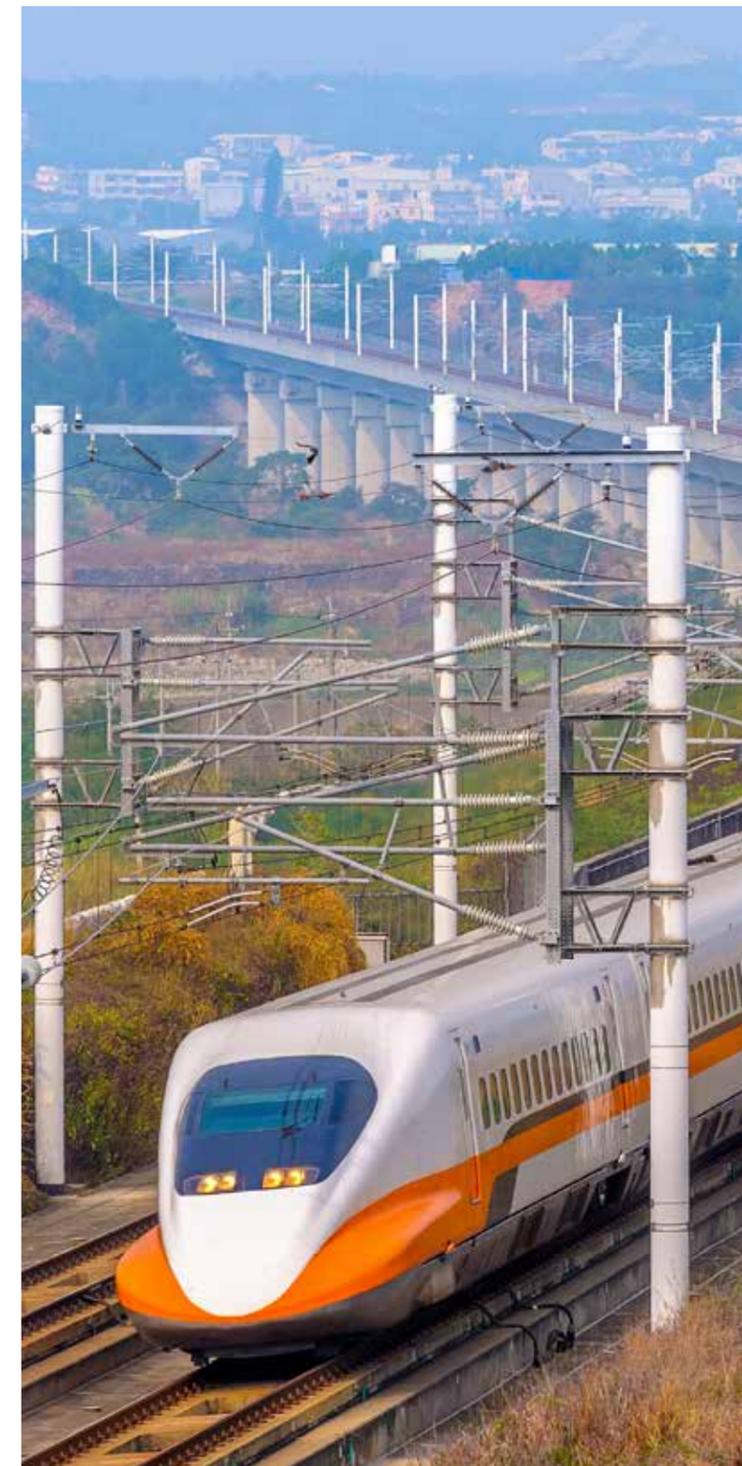
To keep abreast of developments, the digital leader networks with other government agencies, IT partners, analysts, academics and GovTech organizations, to identify emerging technology trends and capabilities, as an integral part of digital and workforce planning.

The leader plays a critical role in shaping the talent strategy, creating the mandate for capacity and capability building, and building a high-performance culture. The wider network of partners and suppliers regularly comes together to discuss the organization’s challenges and possible solutions.

The digital leader identifies not as a technology expert but as a “change agent,” recognizing that people are the key enablers of transformation. The leader enthruses the board about the digital vision and rallies the whole organization around new ways of working, even when these may initially be uncomfortable. Keeping the long-term game in mind, they also acknowledge that small steps can pave the way for wider transformation, building momentum for change, frequently broadcasting successful digital initiatives. They encourage experimentation by coaxing the organization from a “don’t fail” to a “fail fast” mindset, aware that initial failures can generate eventual successes.

Rather than “pushing” technology onto business functions, the digital leader listens to a wide range of staff, from departmental leaders to frontline employees, to understand their operational challenges and citizens’ concerns, and works with these teams to co-design solutions driven by digitalization and better use of data. The focus of any initiative is on outcomes and value to the business, including the employee experience.

The digital leader communicates regularly with the wider workforce throughout the transformation, using a range of in-person and virtual channels to give employees up-to-date information about the change, gaining buy-in and easing any concerns. Emotional support is offered to prevent anxiety and burnout. The digital leader is also tasked with improving digital literacy across the workforce and, together with the talent leader, develops a range of training





options – with different formats, duration, content and objectives – tailored to employees' individual needs, encompassing both the technical and socio-emotional skills necessary in a new digital world. No individual should be left behind, and staff must be empowered, with measurable results from any learning.

The leader's multidisciplinary team of digital specialists has grown rapidly in a few years, combining career civil servants enjoying a structured career path within the government's digital profession, supplemented by contingent workers and secondees from other government organizations and sectors who focus on specific digital projects for a defined period. There is little hierarchy, and all members are respected for their expertise and experience, with an emphasis on optimizing talent to maximize the team's impact. Agile methodologies bring focus and pace, and each team member is empowered to define their own work and deliver. The digital leader ensures that achievements are celebrated, while also dealing swiftly with any risks and blockers to progress.

The digital leader's team members are encouraged to pursue continuous learning, including technical and leadership skills, and to take ownership of their professional development, based on professional career paths and clear performance goals. By partnering with talent leaders, the digital leader integrates such development into the human capital strategy to retain the best technical people.

Building a compelling digital brand is another priority. This involves working with the talent leader to promote awareness of how digital transformation programs and disruptive technologies are addressing critical public policy challenges and delivering better services that improve people's lives. This in turn improves the EX, and positions the organization as offering fulfilling and purposeful careers.

The talent leader (e.g., chief human resource officer)

As a trusted strategic advisor to the C-suite, the talent leader aligns the people agenda with the organizational and digital transformation strategy. Along with the digital leader, the talent leader develops a technology-driven workforce plan that sets out future capacity and skill requirements. The plan is regularly refreshed based on data-driven models, enabling the organization to re-skill, adapt recruitment plans and invest in training to meet changing needs.

The talent leader ensures that learning and development (L&D) is firmly on the C-suite agenda, fostering a commitment to invest in programs to meet future skill needs. Working closely with external partners, including private businesses, GovTech companies and academic institutions, the leader develops a range of innovative, personalized learning experiences that suit a multigenerational workforce. As part of a cross-sector 'Future of Education' council set up by the central government, they are able to influence the curricula for students at primary, secondary and tertiary levels of education to ensure future skill needs will be met.

All workers are encouraged to develop and discuss personal five-year career plans, setting expectations and agreeing steps and resources (such as training and other experiences). Cultivating a continuous learning culture helps to retain employees and create a distinctive EX. Succession planning is a continual process, and the talent leader keeps a close eye on managers who are excelling and acting as role models.

Together with the digital leader, the talent leader ensures that the right technical skills and leadership capabilities are available to meet the organization's objectives. A cross-government digital platform, with up-to-date competency profiles for every employee, offers searchability based on specific project needs, acting as an "internal project marketplace" to redeploy people across the organization or wider public sector workforce.

The talent leader has developed a comprehensive talent management strategy to create an adaptive and resilient workplace where all staff can clearly see the value they create and the difference they make for people and communities. The focus is on providing the best possible EX at each stage of the lifecycle – from recruiting through onboarding, training and development, supervision, performance management and recognition, pay and rewards, and employee wellbeing. Job rotation and secondments – within government as well as the private sector – encourage cross-fertilization of skills, while regular employee sentiment surveys (pulse checks) measure wellbeing, morale, job satisfaction and career expectations. Armed with this knowledge, the talent leader can match workers to projects they care about, that challenge them, and use their skill sets to the fullest while also tailoring wellbeing packages to meet their needs.

Recruitment of digital talent, whether internally or externally, is proactive and based on skills and aptitude, rather than formal qualifications. Using AI helps to enhance the candidate experience and make better hiring decisions. The talent leader also draws on a wider pool of contingent workers to address capacity or skill shortages for projects, and can onboard new staff in a matter of days. Workers with in-demand skills, on short-term contracts, are offered individualized, flexible terms and conditions, and higher compensation.

By developing flexible working policies and practices, the talent leader has improved employees' work-life balance and helped the organization compete with the private sector for the best people. New roles have been created to adapt to a hybrid workplace: the **remote work leader** oversees the organization's processes, policies and technologies for successful remote working; and the **director of wellbeing** is responsible for developing a strategy and running programs that promote mental, physical, emotional and financial wellbeing.



Conclusion

Harnessing the power of people to drive transformation success

With many governments facing record levels of public debt, and a legacy of cuts to training and development, radical solutions are needed to meet rising citizen demand. Governments should prioritize the digital transformation agenda. But this will only yield the desired results if the workforce is equipped, and motivated, to use technology to build a better world for its citizens.

The good news is that recent gains in digital government have proved that swift transformation is possible. If public service providers can maintain this momentum and respond to changing workforce and workplace trends, placing humans at the center of their transformation efforts, a new era in citizen-centered service awaits.

There is no single correct path, however. Organizations around the world operate in very different contexts, and factors such as the maturity of the digital economy, the local labor market, the availability of funding and the nature of the education system vary widely and exert an influence on the building of a future-fit workforce. On the next page is a set of strategic questions that leaders can use to identify areas for action, spark discussions and inform strategic planning.





Strategic questions for your organization

Planning

- ▶ Do we understand technological advances and have the expertise to select and implement the right technologies to meet our goals?
- ▶ Is our agency's structure helping or hindering technology adoption?
- ▶ How will the adoption of new technology affect our workforce?
- ▶ How could we combine humans and technology to work in smarter ways?
- ▶ What new skills and roles will be needed to maximize the potential of new technology?
- ▶ Where are the gaps in our current skill base (both 'hard' technical and 'soft' human skills)?
- ▶ How could we harness data to forecast changing workforce requirements and allocate resources more effectively?
- ▶ How can we become more flexible and responsive to fluctuating needs?
- ▶ How can we balance mobility with the need for institutional and domain expertise?
- ▶ How can we efficiently source, vet and onboard temporary workers?

Skills

- ▶ How do we make learning and skills development accessible to the whole of our workforce?
- ▶ How do we bridge the gap between more digitally adept workers and those who lack skills or confidence?
- ▶ How can we create the right mix of training options to meet the needs and preferences of our workforce?
- ▶ What could we do to facilitate informal and on-the-job learning?
- ▶ Could we draw on external expertise to help build the skills of our workforce?
- ▶ How can we make our organization more attractive to younger, purpose-driven workers?
- ▶ Is our recruitment function geared toward finding new digital talent?
- ▶ Are there opportunities to target new talent pools?
- ▶ What actions can we take to improve diversity and inclusion?
- ▶ How can we influence the curricula of schools and universities to tackle the skills gap for the longer term?

Culture

- ▶ Do we have digitally aware leaders to inspire and drive transformation?
- ▶ Does our management board provide appropriate levels of support and sponsorship for digital programs?
- ▶ Do we have a clear and compelling vision that the whole workforce buys into?
- ▶ How can we increase our employees' focus on improving the citizen experience?
- ▶ How can we educate and reassure our employees about the adoption of new technologies?
- ▶ Are there ways to involve staff in the design and implementation of technology?
- ▶ Does our management board provide appropriate levels of support and sponsorship for digital programs?
- ▶ What feedback mechanisms could we introduce to track how new technology is being received?
- ▶ How do we nurture a growth mindset and create the means to allow employees to experiment?
- ▶ What innovative practices could we borrow from the private sector?

Employee experience

- ▶ Does our talent management strategy take a holistic approach across the whole employee lifecycle?
- ▶ How can we configure a modern, digital-driven, hybrid workplace?
- ▶ How can we align employee work location preferences with the ability to deliver our mission and goals?
- ▶ Do we offer the right mix of flexible working options?
- ▶ How do we ensure remote workers feel included and supported?
- ▶ How can we engage our people to embrace lifelong learning?
- ▶ How should we measure productivity and performance in a remote work environment?
- ▶ How can we create professional development opportunities to retain our best talent?
- ▶ How can we monitor and respond to employee sentiment and maintain wellbeing?
- ▶ How can we create a stronger sense of purpose for our employees?



Appendix

Insights from the leaders

As part of our research for this paper, EY teams conducted in-depth interviews with government leaders from eight countries. The following extracts capture a range of their valuable insights on topics including design thinking, citizen centricity, the hunt for talent and the role of storytelling in securing employee buy-in.





**Amanda Cattermole, CEO,
Australian Digital Health Agency, Australia**

We've got to move away from those old, very stable ways of briefing ministers and getting public policy on the page. You've suddenly got social media throwing opinions out far faster than we can create policy. You've got delivery suddenly becoming the big story. What does the customer think? Never mind what a bunch of bureaucrats in Canberra or wherever think.

That's been a fantastic revolution because it's meant public servants have got to stop thinking they've got a premium on the future. People want to steer their own futures now, and they're more and more engaged.

In our agency, we do a lot of work with consumers. They say, "Don't build a digital platform that looks like that because it really isn't very helpful. I can't understand it. I can't find what I want. I want you to build it like this." And you reply, "Oh yeah, that makes perfect sense." It's a big flip, and everyone's now on the journey.

You've now got a civil service that gets that it has to change, wants to change. So we've caught up with that bit of the journey, which is pivoted now towards delivery and customer service and driving the customer at the center. But we haven't caught up the digital pace yet. We cannot get enough people through the door who are solution architects, design architects, program managers and have informatics backgrounds. They go into industry because they're yet to see government as a value proposition they are excited by. However, I think if we can harness this completely revamped story of what it is to be in public service – which is that there's a wonderful value proposition, an opportunity to influence the future, and a recognition of the importance of new professions and innovative thinkers – then we can start to get them back.

We've also started to partner with universities and other training providers. We're doing things like, instead of waiting till graduates finish, bringing them in at the end of year two or year three, so they can do a day a week in the agency while they also bring to us the latest digital capability that they're learning. So we're trying a lot of new experiments in the way that we hire people and the way that we engage with the digital profession, and how we build those skill gaps out for the future.

Cheow Hoe Chan, Chief Digital & Technology Officer, Govtech, Singapore

There's a big difference between digitization and digitalization. This is because many people take existing systems and try to build them in a different way, or take something that's manual and put it online. Now, those things aren't digitalization, because there's no change to the business model at all. If you want to effect a real change, the business model has to change, and that's a difficult one.

The concept of digitalization starts with what problem you're trying to solve. In the COVID-19 pandemic, everybody was shocked that we managed to build a contact tracing app in four weeks. We could do it because there was a clear and present problem. There was urgency, and we did not break any rules. It shows that there was so much friction around the system that could be avoided if you focus on the problem.

The other thing we learned very quickly was that if we hadn't had a bunch of engineers who could step in straight away and build a system, the contracting process itself would have taken us six months. All of this has opened the eyes of a lot of people. It gives confidence to many of the agencies that we actually can solve our problems much faster and cheaper. We are in control.

Before you even talk about transformation, you need leaders to understand how to utilize technology and how it's going to help them solve a problem. The learning process, most of the time, is not going to a class or searching online about coding, about AI – that's passive learning. Active learning is about participation, it's about working in the community, it's about engaging people who are the best at what they do, and doing projects together. That, to me, is probably the most important route for learning.

For people who are 25 years old right now, the next 30 years of their life are going to be very disruptive. If they're not prepared for that, they'll be irrelevant in a short period of time. To me, that's the most important skill that people need to possess: intellectual humility, the ability to keep looking for new skills to learn and invest ahead of the cycle as much as you can.

Estonia: Former Chief Information Officer

We started going digital 25 years ago. The government heavily focused on the technology and engineering aspect when implementing its digital program, but has started to shift to a design focus over the past seven to eight years. Our challenge has been combining the day-to-day operational upkeep with innovation and experimentation.

In our own team, we set up an experimentation time fund – very similar to what Google has. If somebody wanted to experiment with something new and needed to carve out some time, I said, "Take a day, take a week. Come back with the results and show what you've done. If it's been something useful, then obviously we can shift your work portfolio and you can do it more systematically." So, carving out time is what it starts with, and managers can really enable that. The second thing is to encourage risk-taking. Often people come to us with just one solution. However, if you ask, "Hey, have you tried alternatives?" it encourages them to try different things.

Our workforce requirement changes very often. For instance, we might need an employee who is good with data analytics and is a right fit for us now, but we may also need them to learn automation and machine learning skills in the next two years. On the other side, there is a lot of flexibility here when you are working with government agencies. There is no obligation to stay until your retirement; employees can exit to work at a private organization and then, if they want to rejoin, they can come back anytime and work with us. This flexibility helps us in tapping the right talent from the market.

In Estonia, we don't have an issue with core digital literacy anymore. Everybody who's in public services has that knowledge, regardless of their age group. For us, the most important thing is how employees can help redesign the current processes and make them more efficient. So, that's more upper-level skills, and even there, we have not seen that age is a differentiator. I can think of many examples where managers are aged 60-plus and doing just the same as some of the younger ones – if they have the awareness, if they have been exposed, if they have an incentive to do it.

Eddie Copeland, Director, London Office of Technology & Innovation (LOTI), UK

There's not enough appreciation of the difference between technology and digital. Technology is a part of it, but it's also about the ways of working, the processes, how we act. And yet people still think it's just, "I need a new app," or, "I need a new IT system." We've got to shift organizations from having an IT department to having a digital function. If you accept that broader definition of digital, it's not just people who run software or networks or do cybersecurity. We need service designers, user researchers, policy specialists, visual designers.

London boroughs have technology people, but they've got very few digital people. So that is a big shift that needs to happen pretty urgently over the next couple of years. Remote working means local government could, if they were smart, recruit from anywhere – cheaper areas like the north of England, or indeed globally. The possibilities are really quite profound.

There's very little theory as to exactly what you need for a successful digital transformation. We are constantly thinking about workforce management, about the skills we need, and trying initiative after initiative. We're developing a model that describes what a borough should have in terms of digital expertise, data expertise and innovation expertise. What are the functions? What are the roles? What skills do those roles have? We're creating a library of standard job descriptions that all boroughs can use. We're hiring a recruiter. We're salary benchmarking. We're creating a new jobs board. We're running careers days. With each initiative, we'll see what the impact is before we try the next thing. It's always iterative and adaptable. Otherwise, if we try and launch a big grand initiative that says, "Five years from now, this is how it'll be," I think we'll almost certainly be wrong.

With emerging roles, you need structures and processes in place as well as job descriptions. For example, we are conscious that it's not enough to just have a couple more staff who do data ethics in an organization. It may be that each government should have a data ethics board internally where any employee with a data idea comes to it and says, "Here's our idea," and that idea is then assessed using a data ethics framework.



Arnaldo Cruz, Director of Policy and Research, Civil Service Reform, Puerto Rico
Director of Policy and Research

A lot of times, I've seen technology projects that put a very good solution in place, but the implementation team doesn't incorporate other critical elements, like change management and policy and processes. That means the technology just sits there and no one uses it, and it's a big waste of time and effort and money. Planning is the baseline and the foundation for any transformation. And one thing we can all do as leaders is to change our approach, because flowcharts are not easy to understand and digest for a lot of public sector employees. So, in the same way the private sector has introduced a lot of innovations to make their products, their processes and their Point of Sale (POS) systems more accessible to citizens, we have to do the same.

We are at a very early stage in the transformation process. We're firstly identifying the skills that each job needs to have. We're setting a proficiency level for each competency, then we'll measure proficiency through an employee evaluation system. This will be the first time in the history of the government of Puerto Rico that this exercise has taken place.

It will be interesting to see, once we get the output from this initial exercise, what sort of decision-making we're able to drive with the data. Certainly, we want the government to develop a strategy to close those skill gaps, but our mission is going to be helping them to see the urgency and move faster. Around data, one thing that's missing is storytelling. You can do all the sophisticated data management you want, but if you're not a good storyteller, your data is just going to sit there. So that's going to be an important skill for the future.

The government here has a theory that if we just increase salaries, talent is going to come, but we all know that's not the case. A lot of things need to happen in order to attract talent: being able to have better branding about working with government; and ensuring that the interview process is pristine and professional. We're also going to have to be more creative. This could involve temporary engagements, different types of job classification, more project-based recruitment. The years of bringing in talent and assuming that people are going to be in the government for 20, 25 years – those are long gone.

Nancy Kennedy, Senior Vice President, People and Culture, OLG, Canada

We're in a unique situation: We're a crown corporation, a commercial entity. So, we're not pure government and we're not pure private sector – we're somewhere in the middle. A big thing for us is working in an agile way – becoming faster and nimbler as an organization. We've set up a center of excellence for agile methodologies to serve the whole company, focused on digital-first and helping to train and advance that way of thinking. We have a digital academy and we're due to launch a foundation course that gets people comfortable with thinking in an agile way, changing how they do things, making things less bureaucratic.

Not every part of the organization has to be agile, but all employees need a basic understanding of it. We have employees who are 35 who've been here for 15 years, and they can be as stuck in their ways as somebody who's over 50. So I think it's more about long-tenured employees than about old ones versus young ones. How do you get a long-tenured employee to do things differently? It can be hard, and it takes time. You have to be clear about expectations and integrate mandatory learning right into people's plans.

We try to encourage an environment of owning your development – continuous learning. You also have to be willing to change rapidly because the pace of change is not getting any slower. There's going to be more need for resiliency. Not just from a pandemic perspective, from a climate perspective, from a geopolitical conflict perspective. The things bearing down on people are pretty significant, so you need a workforce that can cope with change and continue to evolve.

We're always trying to encourage people to take on more risk and more innovation. The quid pro quo is that you have to let people make mistakes, fail fast, stand back up and try again. One of the challenges in government environments is that it's really hard to do because you're scrutinized so heavily by the public. They don't accept that you make a mistake. That doesn't happen when you work at a bank or a private sector provider. People talk about wanting to make government more innovative and riskier, but there's a very low tolerance for risk in the political realm.





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