5 Future of the public service: Case studies

This chapter presents six case studies which illustrate various approaches governments are taking to prepare for the future of the public service. It shows how Australia is building workforce planning capabilities; how Belgium is experimenting with online recruitment; how France is improving its management of digital talent; how the United States is reskilling its federal public workforce; how Israel is identifying public sector jobs that will be reshaped by technology, and how Korea is embedding digital tools to improve workforce management.

Workforce planning in the Australian Public Service

Strategic workforce planning supports organisations in getting the right people in the right job or position at the right time. It enables organisations to assess and prepare for current and future needs such as the size of the workforce, deployment of the workforce and the knowledge, skills and competences available and needed to achieve its mission and strategic objectives. A forward-looking public sector conducting business-linked workforce planning on a regular basis can proactively anticipate workforce needs instead of merely reacting to any crisis or other challenges. Throughout the COVID-19 crisis the need for strategic workforce planning became evident to be able to leverage a workforce in moments of crisis and deploy the workforce where and when needed.

Strategic workforce planning, done right and in close partnership with business areas and leaders, can deliver the required workforce transformation for public sector entities. Mindful of the value of strategic workforce planning, in 2020 the Australian Public Service (APS) initiated a long-term strategic programme of work to strengthen workforce planning in APS agencies and shift it from an operational to a future-focused skill and capability based strategic activity. In practice, this programme takes the form of the APS Centre of Excellence (CoE) for Workforce Planning. Strengthening strategic workforce planning capability across the APS supports the implementation of Delivering for Tomorrow – APS Workforce Strategy 2025[1] - the first whole-of-service workforce strategy, launched in March 2021.

Work in building the CoE and workforce planning capability in the APS commenced in April 2020, leveraging the momentum for workforce planning created by the COVID-19 crisis, and in anticipation of the release of the APS Workforce Strategy. Strategic workforce planning capability in APS agencies will allow the service to adapt to changes within the future workforce such as digital-driven transformation, data and evidence based policy and service delivery, and data driven regulatory models.

Establishing the APS Workforce Planning CoE was underpinned by evidence and data from several studies, audit reports and independent reviews of the APS. For example, the 2015 Report on "Unlocking potential- APS workforce management contestability review (2015)" finds "talent practices are not sufficiently linked to the long-term needs of the business". It finds opportunities to improve the sophistication of talent management practices, connect them to other business planning processes. One of the opportunities identified is to link talent management more closely to succession planning. APS senior executives and senior HR leaders also raised the lack of capability to conduct workforce planning.

The report sets out a vision for HR redesign which positions strategic workforce planning as a core function in a well-functioning HR system, that is "an architect of high performance, a driver of agility and a lever for lifting workforce engagement". To achieve this, the HR function requires the right skills mix, increasing focus on analytical and consulting skills, and a much better understanding of business strategy and operations. It also requires technology and data to measure HR performance and drive decision-making insights. The report suggests that 76% of organisational capability reviews conducted in the APS identify strategic workforce planning as a specific concern, often due to lack of workforce planning skills and insufficient data. Without these, workforce planning remains a "budget-planning headcount approach" rather than a strategic tool to address critical future risks (e.g. scenario planning, workforce affordability).

The COVID-19 pandemic further highlighted the need for workforce planning capability across the APS. The challenge for agencies was to identify critical functions and staffing availability to assist in creating a surge capacity in the system to deploy staff fast. In some instances, APS agencies needed to conduct critical workforce planning exercises and make decisions in a crisis environment within a couple of days, sometimes a few hours, as opposed to months.

In order to develop a more strategic approach to workforce planning across the APS the APS Workforce Strategy & Planning team was established within the Australian Public Service Commission (APSC) in mid 2019. The mandate of the team is to develop, implement and measure *Delivering for Tomorrow – APS Workforce Strategy 2025* - a sector-wide workforce strategy supported by strategic workforce planning

capability across the APS, providing tools and resources to support agency-level workforce planning, and partnering with agencies to support workforce planning capability development. In this way, a decentralised approach was taken in which the central team at the APSC develops standards, recommendations, tools and strategic workforce foresight, and advises agencies how to implement these.

Developing a strategic programme for building workforce planning capability

Collecting evidence from agencies

As a first step, the Workforce Strategy & Planning team analysed the capability of workforce planning practitioners and APS agencies as assessed through agency surveys in 2017 and 2018. These are annual surveys of agencies that the APSC are running, to collect information for the annual APS State of the Service Report. Whole of service data on workforce planning capability gaps was supplemented by a survey of workforce planners, and conversations with the APS Chief People Officers Working Group.

In addition, the team reviewed the existing workforce plans from agencies, assessing them against a framework for good practice workforce plans, looking to find certain elements in those plans such as, for example, the identification of workforce impacts from digital transformation and the resulting workforce transition planning. As a result of the analysis, strategic workforce planning gaps could be identified across the APS. These included:

- Limited use of skill and capability based strategic workforce planning;
- Low strategic utilisation of whole of APS workforce datasets, both quantitative and qualitative data;
- Limited skills in workforce planning and data analysis and insights across the group of HR practitioners performing workforce planning and insights roles in the APS;
- Perception of workforce planning as an isolated activity in HR; and workforce planning activities being conducted in isolation of business strategy and planning, and general workforce management processes;
- Limited follow-through on workforce plans resulting in static approaches to workforce planning. The resulting workforce plans were many times not translating through to implementation to drive workforce transformation;
- Static workforce plans were updated infrequently, not aligned to changes in the business environment and strategy- these plans lost their relevance within the first 6 months of being produced;
- Limited change management expertise to support implementation of workforce planning strategies
- Low awareness of the benefits of strategic workforce planning, including at senior leadership level. Senior leaders found the process cumbersome and too technical, without any practical, immediate outcomes being delivered; and
- Limited opportunities for strong accountability for strategic workforce transformation in the APS. By and large, strategic workforce planning was seen as a HR responsibility, with limited involvement of senior leaders throughout the process.

In order to build support and gather further input, the APSC team organised individual discussions with senior workforce planners of the five largest APS agencies, and held discussions with workforce planners from smaller agencies through the APS Workforce Planning community of practice. All this evidence supported a current state analysis, to inform the longer term programme of work to build APS workforce planning capability through the Workforce Planning CoE. The programme concept and the minimum viable product were then tested with senior workforce planners and the Chief People Officers' Working group.

Building a maturity model to draw a clear path

As the principal guiding framework, the APSC team designed a maturity model which rates strategic workforce planning capability across four dimensions: business strategy, people and culture/implementation, reporting and data/workforce analytics and governance & tools, in four maturity levels (Table 5.1). In this way, the model looks beyond the work of workforce planners and analysis, taking into account the broader ecosystem that supports their work in agencies, including senior leadership capability and buy-in, business alignment and a culture of implementing workforce strategies and plans to drive business-aligned workforce transformation. Overall, the APS was categorised as reaching level two (of four) of maturity for business strategy, people and culture/implementation, and governance & tools. In the dimension of reporting and data/workforce analytics, the APS reached level one.

Table 5.1. Simplified APS Maturity model on workforce planning capabilities

Level 1 Ad hoc/initial	Level 2 Foundational	Level 3 Competitive/Organised	Level 4 Differentiating/Mature
Limited strategic approach to workforce planning. May occur at a local level, is conducted in an ad-hoc manner with no formalised process, and is disconnected from business planning processes	Formal workforce planning processes in place and deployed in at least part of the organisation; not yet fully embedded across the entire organisation or integrated into the business planning cycle.	Workforce planning is developed and deployed throughout the organisation, fully integrated into the business planning cycle. Senior leaders and the HR team have the skills needed to engage in (strategic) workforce planning. Focus tends to still be on output and not outcome.	Workforce Planning developed and deployed throughout the organisation as an ongoing process of continually aligning the workforce to organisational deliverables and strategy. It is fully integrated into the business planning and risk management cycles & contributes to organisational performance. Formally evaluated and incorporated into continuous improvement processes

Source: Information provided by APSC. Detailed maturity model can be accessed from the APS Centre of Excellence for Workforce Planning at apswfp@apsc.gov.au.

Based on the maturity assessment, the APS Centre of Excellence for Workforce Planning was set-up. The CoE delivers initiatives and services across four streams:

- Capability: focused on workforce planners, leaders and managers, including building the capability pipeline for workforce planning roles
- Leadership: building leadership accountability for workforce planning outcomes
- Tools & Technology: supporting workforce planning in agencies and across the APS at the highest level, through policy advice and frameworks, tools and resources, and technology solutions
- Analytics & Insights: data-driven workforce and labour market insights to inform evidence based strategic workforce planning in individual agencies and across the APS.

One of the prioritised deliverables of the CoE was a Workforce Planning Capability Development Programme targeted at workforce planning and insights practitioners. This programme will build both foundational and specialist workforce insights and planning skills for employees undertaking workforce planning roles. Implementing the programme.

The delivery of the APS Workforce Planning CoE offering is organised across five years through to 2025. This includes the roll out of the Workforce Planning Capability Development Programme through:

- Start Up (foundational) and Boost (specialist) workforce planning capability development modules alongside recognition of learning resources for Continuing Professional Development credits and a certification pathway for participants, in partnership with the Australian HR Institute. This will further incentivise staff to build their workforce planning capability.

- A Workforce Planning community of practice with regular forums, including hackathons and design/ co-design workshops delivered virtually, for workforce planners to come together and learn from each other.

- A digital portal of resources for workforce planners, including an APS workforce planning guide for agile delivery, the latest relevant research, data and curated bite-sized learning, workforce planning case studies from other APS agencies or domestic or international jurisdictions, or from the private sector, a workforce planning career development blog, and a news/ interaction channel for workforce planners to link in and learn from each other.

- Building talent pipelines into workforce planning roles, including through partnerships with education institutions, skill assessments and career pathways for workforce planners, an intensive workplace coaching programme to advance specialist workforce planning capability and mentoring, coaching and peer review services for workforce planners.

- Building the APSC's strategic workforce insights function, to generate strategic workforce planning insight from APS and labour market datasets.

A strong evaluation approach for each of the components of the programme and more broadly, for the APS Workforce Planning CoE offering has been built into the operation of the CoE, to ensure that initiatives aimed at building workforce planning capability deliver outcomes, and, longer term, business benefits. In the design and implementation of the programme, the APSC team concentrated on three guiding principles to ensure engagement from the agencies:

- **User-centred design**: Using digital tools and methods to engage APS workforce planners in co-designing solutions to workforce planning capability gaps. Ideas are tested before full adoption through open beta releases to the community. In this way, trust is being built and a cohort of early adopters/ champions are prepared for formal launch of the various products and services. By engaging agencies in design sessions, challenges in implementation can be identified from the start, feedback is gathered from the ground and ownership among the agencies strengthened.

- **Behavioural Insights:** Using behavioural insights to advance workforce planning capability development and design simple and effective workforce planning approaches and interventions that deliver outcomes in agencies. The APSC team is also applying behavioural insights and nudges to actively seek ideas from the agencies and seeking an exchange on challenges and opportunities for workforce planning through regular meetings

- **Strategic Business Partnering**: Ongoing engagement with senior workforce planners and Chief People Officers to understand needs across the system, inform central initiatives and support their workforce planning work. Given that the agencies are the ones implementing the policy advice developed centrally at the APSC, it is essential to build relationships with them and engage them in the process. To be able to provide the best support to agencies, the Workforce Planning CoE team seeks to understand deliverables against business strategies, challenges and opportunities for support across the client group.

The APS Chief People Officers' Working Group oversees the programme of work, and are consulted at critical decision points throughout programme development and implementation. Reporting on the deliverables of the Centre of Excellence will be done annually, as part of the yearly reporting on the implementation of the APS Workforce Strategy.

Success factors

Ultimately, the successful implementation of *Delivering for Tomorrow- APS Workforce Strategy 2025* depends on workforce planning capability uplift delivered through the APS Workforce Planning CoE. Concerning the design and the implementation of the Centre of Excellence, and in particular of the workforce planning capability development programme in the APS, crucial success factors can be identified:

- **Leveraging evidence and data and detailed gap analysis**: Before designing the workforce planning capability programme, the Workforce Planning Centre of Excellence team analysed the available data and collected further inputs through discussions with staff. This allowed drawing a clear picture of opportunities and challenges as well as being able to pinpoint priorities.

- **Building a common understanding of workforce planning**: Throughout the agencies, workforce planning was often perceived as a task done by HR without acknowledging it as part of the organisational strategy. It was essential to build a common understanding of workforce planning as part of the organisational strategy of the agency to be able to anticipate future trends.

- **Moving beyond silos**: In line with workforce planning as part of the organisational strategy, workforce planning will be integrated and mainstreamed in other areas within APS. For example, each digital transformation plan in agencies will have to be accompanied by a workforce transition plan taking into account the interlinkages of digital transformation and workforce planning.

- **Taking into account the broader context**: While traditionally workforce planning might aim simply to strengthen capabilities of workforce planners, the maturity model on which the programme builds takes into account the broader context within the APS. In this way, it includes factors such as the organisational culture, business strategy, the need for data & analytics and governance tools to ensure effective implementation.

- **Engaging leadership through clear communications and accountability**: In order to ensure take-up within the agencies of the workforce planning programme, the engagement and ownership of leaders is essential. The Workforce Planning Centre of Excellence team focussed on developing outputs that could be easily communicated, such as the maturity model providing leaders with a snapshot of the current and desired status. Furthermore, one key theme for interventions was to strengthen accountability of leaders for advancing workforce planning. To achieve this, the team is co-ordinating with the Department of Finance – who oversee corporate planning processes in the APS, to build accountability mechanisms for workforce planning/ workforce transformation for senior leaders.

- **Nudging agencies towards implementation**: Given that the Workforce Planning Centre of Excellence team can consult and advise agencies, but not enforce implementation of its advice, it collaborates with the Behavioural Economics Team in the Prime Minister´s Office to shape guidelines, tools and communications to encourage uptake and engagement of agencies.

Conclusion

The workforce planning programme in the APS, while still one year into its implementation, offers insights on how to build the systems to be able to plan for a more resilient workforce. It underlines the need for a solid understanding of the organisational operating model of the public sector. Given the decentralised nature of the APS, the Workforce Planning Centre of Excellence focusses on supporting and equipping agencies with the skills to be able to align initiatives with high-level directions on workforce planning as outlined in *Delivering for Tomorrow – APS Workforce Strategy 2025*. These skills include understanding business strategies and deliverables, promoting strategic foresight, building data analysis skills and better utilising data sets and establishing enterprise resource planning systems. Furthermore, it makes evident how workforce planning is not an isolated activity, but needs to co-ordinate with other areas within

agencies, and across the service, such as the Department of Finance to build accountability mechanisms for leadership at the highest level through whole of system frameworks.

The APS Workforce Planning Centre of Excellence programme is a key component of a future-ready public service workforce aligning with the three pillars of the OECD Future of the Public Service Framework:

- It builds a **forward-looking public service** that has the tools to plan ahead by developing a solid understanding of the current workforce and future needs based on data and evidence and planning actions to address gaps.

- It can also contribute to a more **flexible public service** by developing a better understanding of the overall workforce and available skills. By overcoming organisational silos, it allows the public service to react to changing situations and placing people with skills where needed. In this way, it can support building a resilient that can anticipate crisis and changes within the public service better.

- Lastly, it may also lead to a more **fulfilling public service**. Workforce planning and data can help to determine where further actions is needed to advance diversity and inclusion to reinforce a variety of skill sets, professional backgrounds, experience and ways of thinking. Workforce planning can also identify where skills need to be developed offering opportunities for staff development and training. It can also reinforce purpose and meaning of positions by clearly identifying employees´ role in building a future-ready workforce aligned to the mission and vision of the public service. This may increase employee engagement and motivation.

Moving recruitment online in the Belgian Federal Public Service of Finance

Public services around the world face challenges attracting and recruiting people with specific skill sets. Some of these skill sets are in established fields such as law or IT; others relate to relatively new and emerging professions such as cyber-security and artificial intelligence. Recruitment challenges may also refer to specific demographics, such as recent university graduates or experienced managers. Perception of better-paid jobs in the private sector is a factor, but it is not the only factor. Governments are addressing recruitment and retention challenges through a variety of practices.

Public administrations have had aspects of their recruitment procedures online for years: online application portals and some degree of online testing and assessment are considered well-established practices across OECD public administrations. But frequently, the end goal of recruitment procedures involving an online component is to filter candidates to arrive at a small enough candidate pool that can be invited for further in-person testing and/or interviews. In this broad sense, this type of 'online recruitment' can be understood as the partial digitalisation of some of the steps involved in attracting, assessing and recruiting candidates.

The Coronavirus (COVID-19) pandemic has given rise to a new, more holistic form of 'e-recruitment'. Widespread remote working in the public sector has interrupted many planned and in-progress recruitment processes. This has given public administrations the space to re-think how recruitment can and should work – not just to maintain continuity, but to be used more strategically as a tool to attract, assess, recruit and on-board candidates with the types of skills and experience valuable for the public sector.

The development and testing of e-recruitment practices is one area of public sector reform of particular interest for the future of the public service. This is because successful end-to-end e-recruitment involves a wholesale re-think of what recruitment looks like, from improving employer branding and investing in social media outreach to re-evaluating the skill set and profile of a recruiter or hiring manager in the public sector. Modern and future-oriented e-recruitment is so much more than the digitalisation of a previously analogue process. The pilot project on e-recruitment developed by the Belgian Federal Public Service of

Finance (FPSF) aligns explicitly with the call of the OECD Recommendation on Public Service Leadership and Capability (PSLC) to develop future-oriented public employment systems (OECD, 2019[1]):

- Continuously identify skills and competencies needed to transform political vision into services which deliver value to society.
- Attract and retain employees with the skills and competencies required from the labour market.
- Recruit, select and promote candidates through transparent, open and merit-based processes, to guarantee fair and equal treatment.

Background to e-recruitment in the Belgian Federal Public Service of Finance

The e-recruitment project was launched in 2019. E-recruitment was intended to broaden the reach of the FPSF and make it easier for recruiters to assess different types of skill sets. However, it is a good example of a project whose development and impact was accelerated by the COVID-19 pandemic. For context, the FPSF has around 20 000 public servants. In 2019, it hired 1 170 staff members, of which 350 were first employment contracts. In 2020, 705 public servants were recruited of which 400 contracts were first employment (Table 5.2).

Table 5.2. Number of interviews in real life in 2019 vs. digital interviews in 2020

	Total
Interviews for public servant positions, 2019	2 647
Interviews for public servant positions, 2020	1 838
Interviews for public servant positions held virtually, 2020	483
Promotion interviews, 2019	805
Promotion interviews, 2020	829
Promotion interviews held virtually, 2020	374
Horizontal mobility interviews, 2019	1 218
Horizontal mobility interviews, 2020	854
Horizontal mobility interviews held virtually, 2020	632
Total 2019	**4 670**
Total 2020	**3 521**
Virtual interviews, total 2020	**1 489**
Interviews held for first employment, 2020	683

Source: Belgian Federal Public Service of Finance.

The FPSF uses a variety of recruitment methods. External candidates usually sit a computer-based test and have an interview (and in some cases role-play exercises or assessment centre). Candidates for internal promotion sit a computer-based test, assessment centre, and interview. For internal mobility programmes (i.e. horizontal), there is an interview and in some cases a computer-based test or technical presentation. These three 'streams' were moved almost exclusively online in 2020 and will be expanded in 2021.

Adapting a phased approach to e-recruitment in the Belgian Federal Public Service of Finance

On 16 March 2020 in reaction to the rising cases of COVID-19 infections, the Belgian government introduced extensive restrictions on public mobility, social movement as well as restrictions affecting the public workforce. As part of these decisions, teleworking became the norm in the Belgian public service and selection and promotion procedures were put on hold.

Phase 1

In April 2020, the Federal Public Service of Finance began a pilot exercise of the e-recruitment tool for internal mobility. As a first step, this included the roll-out of virtual interviews conducted via Skype for business (later Microsoft Teams). In order to support candidates, the Human Resources department of the FPSF developed a candidate handbook to guide candidates through the technical process. The code of ethics was also provided electronically and candidates were asked to sign the code digitally (a good example of priming techniques and 'nudging' to compensate for the impossibility to verify).

As such, the entire process was rolled out paperless and online. Similarly to interviews held in person, the interviews were conducted by recruiters and the hiring manager. In order to enable the recruiters to assess the candidates in this virtual format, recruiters received training on digital interview techniques and non-verbal communication.

Phase 2

During the second phase of the pilot, online interviews were further rolled out and applied to all vacancies/functions where technical skills were to be evaluated. In most cases, technical skills are evaluated during the interviews, although at times the candidate has to complete a technical test sent via encrypted e-mail and within an allotted time.

Regarding the organisation of the interviews, the handbook for candidates was improved to better reflect common issues and a helpline for candidates was set up. While technical issues were not frequent, the manual does describe how to react to any issues arising. In case a candidate cannot participate in an interview due to technical issues, the interview is rescheduled. To mitigate the risk of discriminating against some candidates, decentralised job partners offer training to help candidates for the online interviews. Overall, this led to a high satisfaction on the user-friendliness of the tool according to a survey conducted by the Federal Public Service of Finance.

Phase 3

In the final pilot phase, CV-screening to assess the motivation of candidates and digital assessments consisting of an exercise for a mock presentation and/or a roleplay exercise were introduced. As such, the standard e-recruitment process now consists of three phases: cv-screening, written test and interview. HR oversees the entire recruitment process, while managers only participate in the interview. After the successful pilot, e-recruitment will also be used for external recruitment (foreseen for august 2021) and promotions (starting from June 2021).

Overall, the advantages of e-recruitment, namely increased transparency, flexibility, efficiency and participation outweigh the challenges related to supervision of candidates during the examination phase, possible technical problems, lack of IT skills and security concerns. Candidates rated the experience very well. The feedback stressed in particular the reduced travel time, higher efficiency, lower levels of stress, and flexibility of the recruitment process.

Branding and on-boarding

Going beyond the interview process, the FPSF also launched a digital job fair as part of the e-recruitment pilot. Using social media helped create a high awareness of vacant positions and brand the FPSF as an attractive employer. The FPSF held 'Facebook live' events and webinar teams which had over 7 700 views with more than 25 000 people reached. Each department presented its key functions and role, followed by a Q&A session. Overall, the digital job fair allowed the FPSF to advertise more than 200 vacant position, for which ultimately 4 300 candidates applied. While in total fewer candidates were recruited in 2020 than 2019, the general impression within the FPSF was that the quality of candidates had increased given the

in-depth process in designing the new e-recruitment tool with a focus on the needs of the departments and candidates. To further increase attractiveness and better target candidates, the FPSF worked with an external partner to define an employer branding strategy which will be launched throughout 2021.

The strength of the Belgian experience was also the broad understanding of e-recruitment, including actions related to on-boarding of new recruits. Conscious of the challenge to integrate new recruits into the public service during the COVID-19 pandemic, the FPSF redesigned the on-boarding model. While prior to the pandemic, a physical welcome day would have been organised, the new model foresaw a virtual welcome day and e-training. Furthermore, the importance of the manager for integrating new recruits into the team and public service was highlighted and an onboarding toolkit developed with mangers receiving a checklist prior to any new employee arriving.

Success factors

- Providing clear information upfront about the recruitment process to candidates facilitates the recruitment process and ensures a higher quality of candidates.
- Developing a phased approach in line with capacities helps adapt the process to challenges and opportunities encountered.
- Ensuring buy-in from recruiters and mangers helps involve them throughout the recruitment process and can result in better candidate match.
- Supporting managers who are not used to doing online recruitment is important to ensure that they adapt their questions and techniques to the online tool being used.
- Building awareness throughout the organisation that introducing e-recruitment will initially have to be accompanied by additional investment for example training, data protection software and proctoring software (to verify the identity of the test-taker), in case of technical tests.
- Considering the development of new roles within HR to drive forward the introduction of e-recruitment, such as data protection officer, and new HR roles such as proactive candidate sourcing.

Conclusion

This case study illustrates that e-recruitment is a potentially valuable tool for public services eager to attract a greater number and quality of candidates. A key conclusion of the pilot study carried out by the Federal Public Service of Finance is that strategic e-recruitment calls for the re-examination of candidate needs and expectations at each stage of the advertising, assessment, recruitment and on-boarding processes. With multiple operational, procedural and technical barriers to overcome, e-recruitment involves the need to gain the buy-in of a large range of stakeholders. It may also require targeted up-skilling in order to make sure that recruiters and managers have a shared vision for the advantages – and limitations – of e-recruitment.

In the public sector across the OECD, many recruitment processes still require in-person presence for testing and/or interviews. The switch to widespread remote working in the public service during the Covid pandemic interrupted many of these processes. The example of the pilot project from Belgium has shown that it is possible to move many – even most – parts of the recruitment process online. However, e-recruitment in this sense is about much more than the digital version of analogue or in-person processes. Online assessments are possible, for example, but may come with privacy concerns. Online interviews have been in use even before the crisis – but come with a trade-off in terms of what competences can be tested.

Resolving these challenges and developing new or adjusted processes can help Human Resource departments fulfil their mandate to be true business partners and add value in finding and hiring great candidates. Administrations that already use aspects of e-recruitment in an ad-hoc manner – such as through LinkedIn job postings or sporadic use of video interview tools – may find themselves better placed to stitch these practices together into a coherent strategy.
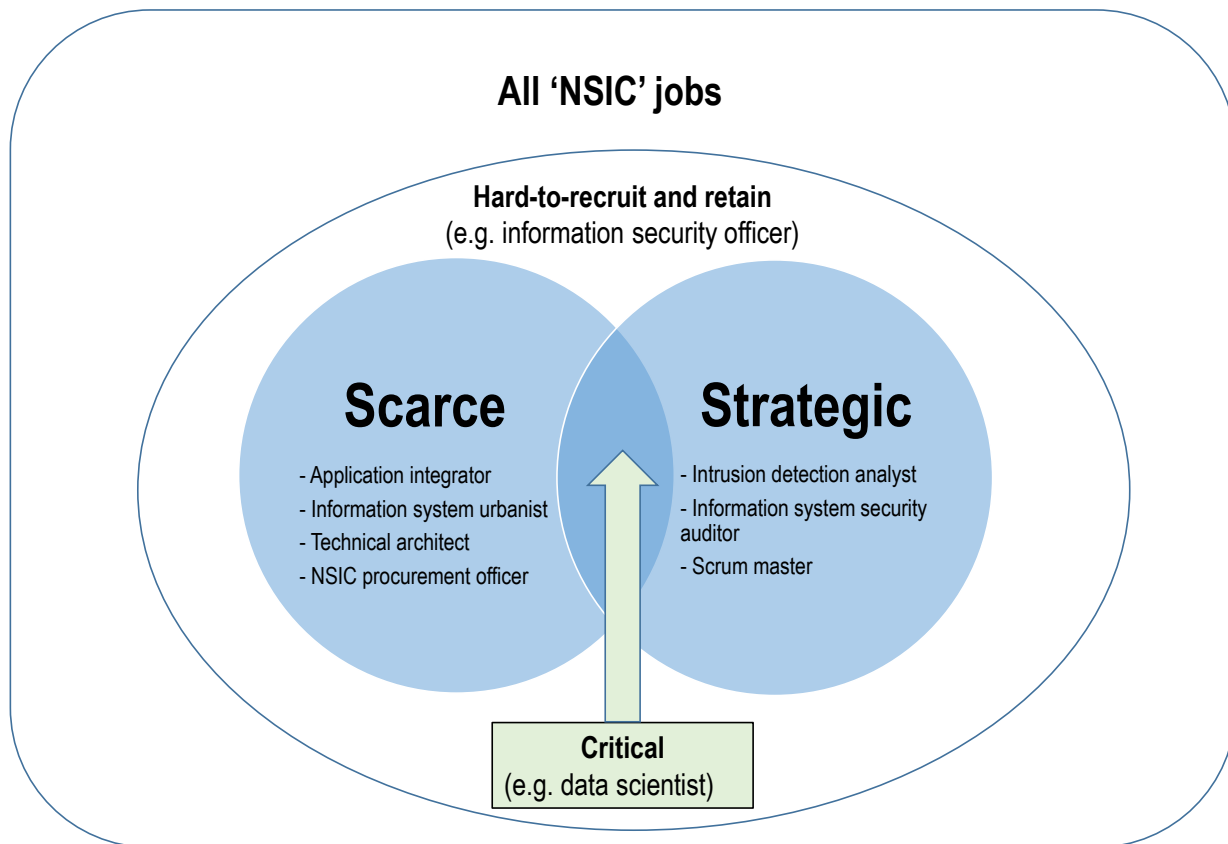
Despite security concerns such as proctoring and data retention, and limitations in terms of assessing or taking non-verbal communication into account, the experience of the Belgian pilot has shown that the advantages of e-recruitment outweigh the disadvantages. The next steps for the Federal Public Service of Finance is to accelerate the integration of e-recruitment into a broader variety of recruitment processes and accompany the scaling up of the pilot team with targeted training and increased engagement across the Federal public service.

Recruiting digital talent in the French Public Service

Across many OECD countries, the public sector faces strong competition from the private sector to attract certain talents and skills, particularly those related to digital technology. This challenge underlines the need to tailor approaches to recruitment while ensuring fairness across jobs in the public sector. In practice, a balance must be found between equal treatment of candidates who apply to public service positions and tailor-made human resource management policies to attract hard-to-recruit profiles – such as in sectors like digital, data and technology, accounting for 18 000 public servants in France.

To overcome this challenge, the French Directorate for Administration and the Public Service (*Direction génerale de l'administration et de la fonction publique, DGAFP*) set up an inter-ministerial working group to identify jobs where there is either a current or forecast lack of talent. By analysing different indicators, the group categorised professions that are hard-to-recruit and to retain as either scarce or strategic. Scarce professions (*'rare* in French*'*) are those which are currently challenging to fill in house with current civil servants. The strategic professions are those expected to significantly increase in demand (Figure 5.1 and Figure 5.2).

Figure 5.1. Diagram of the characterisation of digital, data and technology jobs

All 'NSIC' jobs

Hard-to-recruit and retain
(e.g. information security officer)

Scarce

- Application integrator
- Information system urbanist
- Technical architect
- NSIC procurement officer

Strategic

- Intrusion detection analyst
- Information system security auditor
- Scrum master

Critical
(e.g. data scientist)

Source: DGAFP (2017), Synthèse Matrice GPEEC métiers NSIC en tension

Figure 5.2. Mapping of digital, data and technology jobs in the services of the French State Territorial Administration

Magnitude of jobs considered hard-to-attract and to retain in the State territorial administration (*Administration Territoriale de l'Etat)*
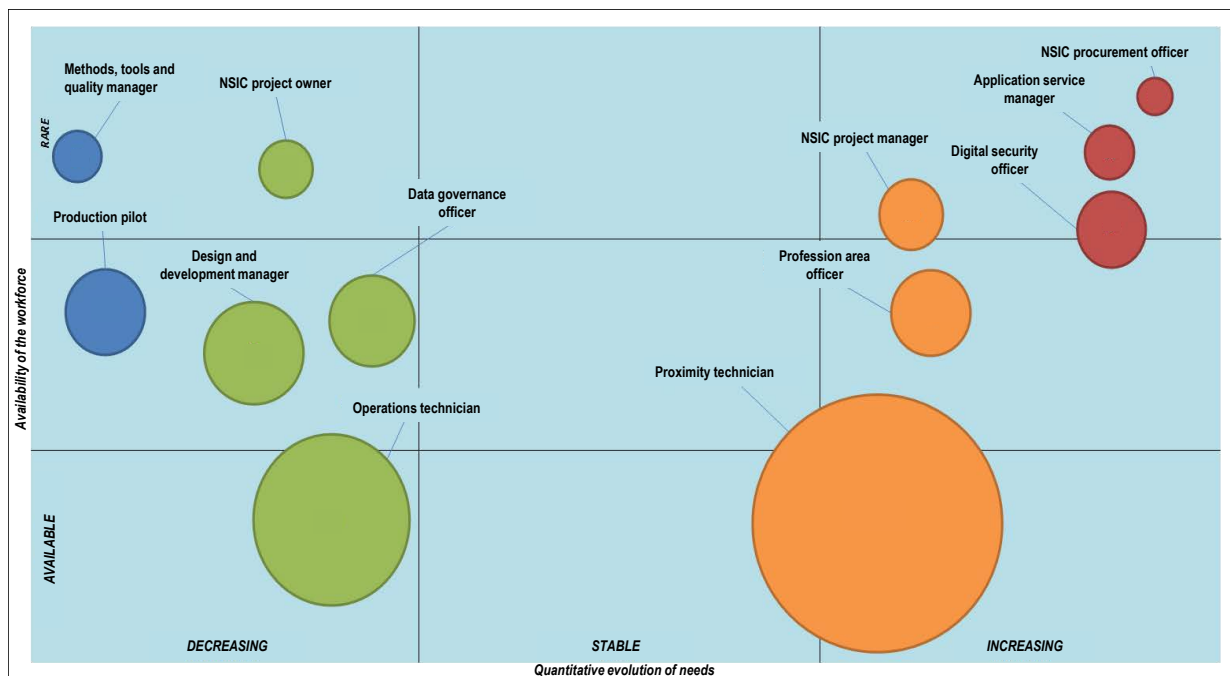
Source: DGAFP (2017) Enquête GPEEC sur la filière NSIC dans les services de l'administration territoriale de l'Etat (ATE)

This working group established an action plan with 37 measures to develop a response to this skills shortage. Collaboration between the Interministerial Directorate for State IT systems and Communication (*Direction interministérielle des systems de communication de l'Etat)* and the DGAFP enabled the analysis and feasibility for each measure.

The action plan resulting from this collaboration aims to reinforce the attraction and retention of digital talents, in particular by tailoring HRM practices to take into account the scarcity and specialisation of the skills sought. This is partly based on a change in managerial culture for the digital and technology sector, and greater contractual flexibility, both of which are considered in the next sections. This case study is an example of how the French administration is adapting recruitment practices to the needs of specific groups.

The role of managers in supporting a digital culture

The first action of the action plan was to conduct a study on the image of the French public sector employer brand in the digital sector. This study identified the drawbacks and concerns of potential candidates, highlighting that management style, working methods, autonomy and the possibility of gaining responsibilities were among the most important to the candidates, while also the lowest-rated elements of public employment opportunities. These elements are fundamentally linked to human resource management practices and the prominent role of managers.

For example, in 2020, and in connection with two actions of the action plan, the Interministerial Digital Directorate (DINUM) launched the "*Partagez vos talents numériques* !" (Share your digital talents) programme, an experiment aimed at providing digital experts with opportunities to work on short-term projects outside their current Ministry. This programme was intended to introduce a greater level of

flexibility and encourage people to work outside silos. It was enthusiastically received by digital and technology employees, and 111 of them applied to the talent pool. However, none of the seven projects under this programme were able to see the light of day due to hierarchical refusals motivated by fears of loss of talent, or because managers were not convinced of the advantages of temporarily sending a team member to work elsewhere.

Faced with this challenge, the working group took additional measures including better communicating about the advantages of such a programme and developing a study to frame the programme in a positive light rather than as a potential 'loss' of talent. This experiment is a good illustration of the extent to which the management culture can affect the success of projects; in this case trying to adapt to the needs and expectations of talents.

Part of the action plan therefore focuses on specific training programmes for managers making recruitment decisions relating to candidates from digital and technology backgrounds, as well as HR professionals in charge of recruitment. These training courses are essential to inform managers of the merits of tailoring practices for these hard-to-recruit professions, and on the other hand to improve the perception of candidates that the public sector can be a good match for their expectations.

For example, participatory management training has already been set up by DINUM in order to allow middle managers to familiarise themselves with 'participatory management' methods, i.e. the greater involvement of staff in decision making alongside their manager. This type of management is common in the digital sector. Moreover, this training is only the first step in a long journey around this topic. Indeed, a complete training offer based on a skills/competence database ('réferentiel de compétences') will be available to managers recruiting digital and technology profiles during 2021, enabling them to develop a better understanding of these issues.

Contractual mechanisms to meet specific needs

France, like many OECD countries, has a career-based public employment system built around '*corps*' or distinct professional groups with long-term development prospects. In this system, candidates usually become civil servants through a competitive examination giving access to a specific group of the civil service, rather than through direct application to a job. This allows the creation of a pool of qualified public workers motivated to work for the common good while maintaining fairness in the processing of applications.

However, this system sometimes conflicts with adaptation to the needs of administrations, candidates, and citizens. In the digital and technology sector, two recruitment systems coexisted in 2019; the first being a career system, mainly with the appointment in the corps of Information and Communication Systems Engineers (*Ingénieurs des Systèmes d'Information et de Communication,* ISIC) - generally following a competitive examination. However, the ISIC corps experienced challenges regarding upward mobility, and presented a lack of attractiveness for potential candidates to in-demand jobs. The second recruitment system was for contractual workers hired on short-term contracts that were renewable under some conditions. The limitations of the two systems have discouraged potential candidates and have been seen as a barrier to candidates who may be more attracted by more stable and potentially more rewarding opportunities in the private sector.

In order to try to solve this situation, France had to develop a third way to convince potential future employees to join the public sector. While keeping the ISIC body as it is, the French administration has decided to expand the use of contractual staff through recently adopted legislative measures. The law on the transformation of the public service, adopted on August 6, 2019, aims to introduce greater flexibility in the public service while preserving its career-based approach. The law now states that candidates with specialised or new technical skills can be recruited on open-ended contracts. This law provides a greater variety of employment tools when it comes to hard-to-recruit digital and technology jobs.

However, given the pace of digital evolution, the technical skills currently in demand today might face rapid obsolescence tomorrow – potentially counteracting the positive effect of open-ended contracts. The DGAFP is therefore working on a mapping of jobs and competencies in order to identify where further action may be needed to mitigate the effect of change, e.g. through re-/up-skilling or internal mobility.

A reform of this magnitude in a country used to career-based systems has encountered certain difficulties, in particular linked to the important role of social dialogue in France, the desire of staff already hired to review their status and renegotiate salaries, and the risk of salary competition between ministries which will likely be limited by the introduction of a salary benchmark. In the short term, reforms risk creating discord between staff who remain on old types of contracts and staff to whom new conditions apply. This will likely be counterbalanced by the growing implementation and normalisation of the new contractual mechanism.

Conclusion

The relevance of such an extensive project can only be maintained if the mapping of digital jobs that are hard to recruit for takes place regularly and anticipates the future needs of the public service. Each ministry is therefore asked to produce a mapping of jobs that are at risk – or about to be – every two years. This practice is divided into short, medium and long term actions. In the short term, the DGAFP has a central role in the assessment of the needs, since it is responsible for the projected management of jobs, personnel and skill matrices related to digital and technology jobs. The medium-term objective of this practice is for the human resources department of the ministries to produce their own mapping through their human resources management system. Finally, the main long-term objective is to develop a provisional inter-ministerial management tool added to the ministerial Human Resources Management Information System to enable public sector-wide data collection and analysis.

Even if most of the work carried out has been supported by the stakeholders involved, this project was not without challenges. For example, the establishment of a compensation framework has led to difficulties of ownership between HR and budget departments, and a disruption of social dialogue with unions. These elements are all challenges that call for new paths of reflection and consultation.

Through several pillars, including cultural change management and contractual mechanisms focused on in this study, France is demonstrating that the revision of practices to attract groups that are difficult to recruit is also possible for career-based systems. By establishing a higher degree of flexibility and rethinking more satisfactory job opportunities for target audiences, the French public service is acquiring the necessary tools to be competitive with the private sector, and to provide the digital skills necessary for a forward-looking public service.

Workforce mapping in the Israeli Civil Service to prepare for the future

In 2017, the Israeli Civil Service Commission began a project to identify roles and functions across the Israeli civil service at risk of substantial change due to automation, digitalisation, and changing skills requirements. The purpose was to develop a methodology to enable line Ministries and agencies to understand where and how broad labour market, technological and socio-economic changes could be expected to affect their workforce. The CSC developed a two-stage approach.

First, the CSC built a workforce mapping model based on human capital research and existing people analytics data held by the CSC. The outcome was an Excel-based tool that enabled the CSC to classify jobs in individual Ministries and line agencies on a three point-scale according to their risk of change. Jobs classified as substantial risk of change or even elimination were flagged as 'red jobs'.

Second, the CSC worked with Ministries on the results of the mapping to develop workforce management strategies, especially for 'red jobs'. The goal was to move away from a passive strategy of attrition (workers retiring) toward a more proactive engagement with affected staff focussing on up-skilling, re-skilling and mobility to other areas of the civil service.

Over time, the project is expected to provide greater clarity to the leadership of the Israeli public sector on how their staff and organisations will be affected by change. Developed initially as a pilot with the Immigration Authority and the Tax Authority, the project has strong potential to be expanded to other areas of the civil service. This case study captures the steps involved in launching the project. It outlines the methodology involved and discusses the success factors and lessons learned that could apply to other OECD members

Background to the project

This project built on several years of workforce planning by the Israeli Civil Service Commission. It represents a bridge between changes that were intuitively felt but not yet empirically mapped (at least in the context of the Israeli public sector) and a more future-oriented, data-driven, and client-oriented approach to workforce planning. From the beginning, the CSC drew on existing workforce data to emphasise the urgency of the project.

The CSC identified three main stakeholder groups whose buy-in was crucial to launching the pilot. First, the Ministry of Finance was focused on the cost element of excess or underutilised workforce capacity. It primarily saw the issue as a challenge to be addressed through tools such as redundancy packages. Second, line Ministries and agencies were broadly aware of the impact of changes on their workforce, but were unsure of how to proceed other than through a natural process of attrition through retirement of workers whose skills were of diminishing value. Finally, key stakeholders in the Civil Service Commission itself were important to bring on board.

Each of these groups had distinct concerns and perspectives that the pilot project was designed to address. The CSC was also keenly aware of the need to engage with Israel's powerful public sector unions. In this sense, one of the key insights to developing the pilot project was that it should be framed as much as a cultural and change management exercise as a substantive policy reform effort.

The initial stages of the pilot were designed as a 'proof of concept' and funded from existing resources. The CSC selected the Immigration Authority and the Tax Authority as pilot Ministries based on the following criteria:

- Likely impact of automation and new technologies on Ministry functions and tasks
- Buy-in from senior leadership and support from the Human Resources department
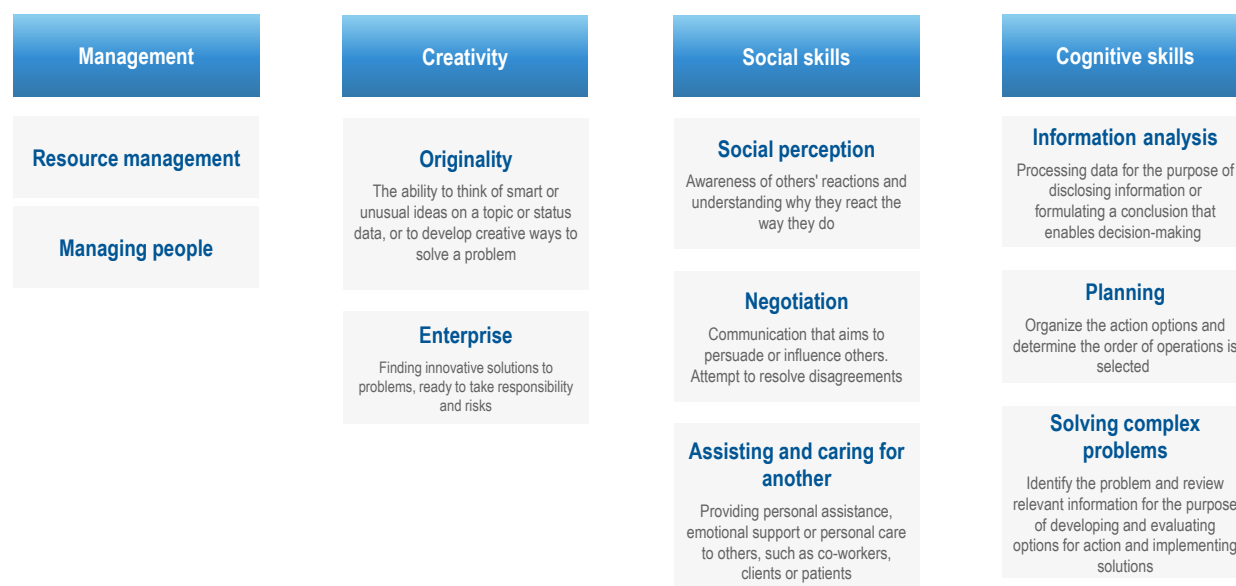- Headcount (on the assumption that more staff meant a greater potential for change)

Getting the project off the ground

Mapping

The first step was to identify partners inside the Tax Authority as well as 'veto-wielders', or people with blocking power. The CSC considered launching the project with a large conference involving multiple stakeholders, but decided instead to start small in order to build an evidence base before substantial communication. This was also partly due to alleviate Ministries' concerns about alarming staff and unions before the project reached maturity.

Early on in the pilot, the CSC decided to focus on skills rather than on roles. This meant asking managers in the Immigration and Tax Authorities to articulate what skills underpinned roles across their workforces. The CSC worked with Lotem, an Israeli consulting company, to carry out background research to develop the framework used. Figure 5.3 shows the skills model they developed, based on (Benedikt Frey and Osborne, 2017[2]) and other background research.

Figure 5.3. Skills model for examining the effect of automation in the Israeli Civil Service

Management	Creativity	Social skills	Cognitive skills
Resource management	**Originality** The ability to think of smart or unusual ideas on a topic or status data, or to develop creative ways to solve a problem	**Social perception** Awareness of others' reactions and understanding why they react the way they do	**Information analysis** Processing data for the purpose of disclosing information or formulating a conclusion that enables decision-making
Managing people	**Enterprise** Finding innovative solutions to problems, ready to take responsibility and risks	**Negotiation** Communication that aims to persuade or influence others. Attempt to resolve disagreements	**Planning** Organize the action options and determine the order of operations is selected
		Assisting and caring for another Providing personal assistance, emotional support or personal care to others, such as co-workers, clients or patients	**Solving complex problems** Identify the problem and review relevant information for the purpose of developing and evaluating options for action and implementing solutions

Source: Based on material provided to the OECD by the Israeli Civil Service Commission.

In the Tax Authority, the skills model was applied in two stages. First, a small team took a range of positions and assigned a rank to each skill involved in that position. Then, a workshop was held with senior managers to understand the position in more detail, especially how these skills were being used in their teams and departments (see skills model in Figure 5.3). Using an online questionnaire, managers rated the level of *complexity* of each skill as it related to the position, as well as the *frequency* of its use on a four-point scale. In parallel, staff assessed their own position using the skills model on a five-point scale. Overall, this involved 23 distinct roles across nine job families. The results were displayed on a matrix as shown in Figure 5.4. A similar process was followed for the Immigration Authority.

Figure 5.4. Matrix for manager's assessments of staff role complexity
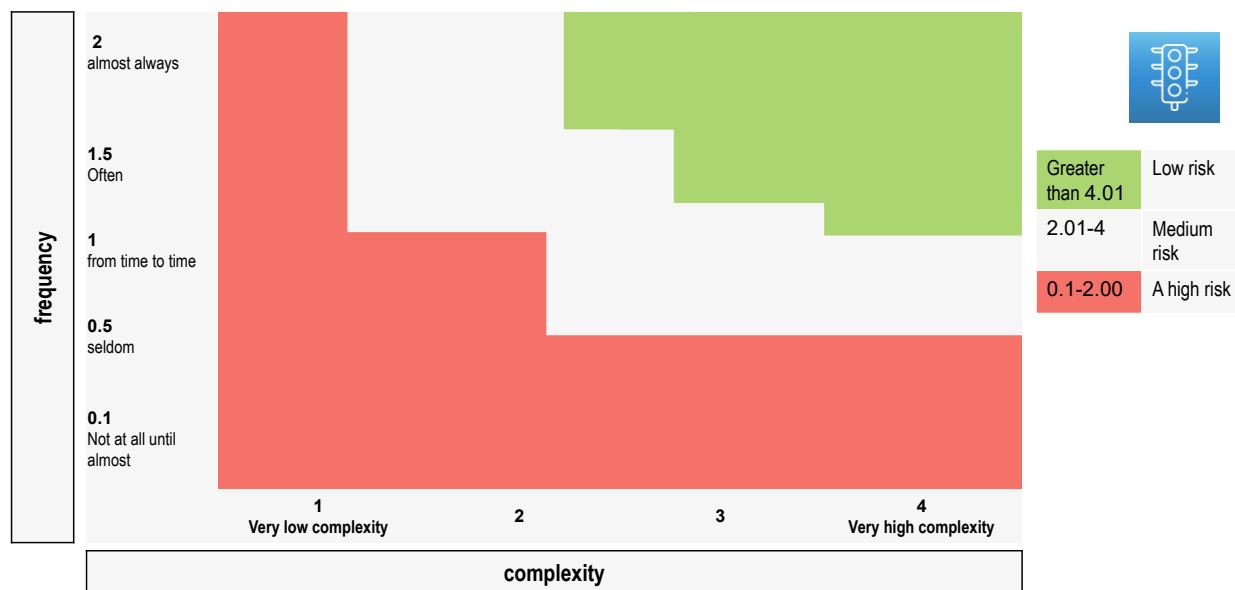
Source: Based on material provided to the OECD by the Israeli Civil Service Commission.

The first phase of mapping also included a component examining how digitalisation affected existing and emerging roles (Figure 5.5). The mapping isolated the discrete tasks this involved as well as the skills that underpinned these tasks. Using a 'traffic-light' framework, the CSC ran a workshop where participants were asked to identify roles in which the scope changed significantly or where roles could be consolidated in terms of skills and processes.

Figure 5.5. Stages of mapping the effect of digitalisation on roles

Source: Based on material provided to the OECD by the Israeli Civil Service Commission.

Toward solutions

The purpose of creating a list of 'red jobs' was to make it easier to identify what parts of the civil service should be prioritised for specific initiatives to mitigate the effect of automation, such as up-skilling, re-skilling, and mobility to other parts of the public service. A secondary consideration was that the list of red jobs could serve to inform other workforce development issues, such as recruitment, succession planning, and pay reform – as well as engagement with unions on these and other issues.

Once the list of red jobs was finalised for the Immigration and Tax Authorities, the focus of the pilot turned to what to do with this list. One of the key findings for the CSC was that while the list was useful as a basis to move toward solutions, it was also highly politically sensitive. Without appropriate communication and consultation, the pilot Ministries expressed concerns that unions would strike over fears of job losses, or that the Ministry of Finance would use the list as a reason to cut their budget.

As a way to overcome these concerns, the CSC contacted a bank which had gone through a similar exercise previously. This engagement was to demonstrate that workforces with considerable percentages of jobs at risk of automation are not necessarily doomed. Engaging with an external partner helped build trust between the CSC and the Ministries and shift.

Success factors

- Importance of having and using existing workforce data to build a business case.
- Getting stakeholders on board beforehand – consensus building and regular dialogue, not just when there is a problem.
- Having a champion inside the Ministry convinced of the business case and willing to convince others.
- Background research from a variety of sources to complement internal data.
- Doing what the client wants – can't impose a vision without taking the time to build trust.
- Awareness of political sensitivity: workforce mapping is not a dry academic exercise, it has a real impact on people's lives and performance. Need to be sensitive about communication.
- Resources need to follow at some point in order to deliver on the promise of solutions and go beyond highlighting the need.

Conclusion

At the time of drafting this case study, the CSC's focus was on (i) accelerating work on the solutions to roles identified on the red list and (ii) on expanding the pilot project to a wider range of Ministries. On the first issue – moving toward solutions – the COVID-19 (Coronavirus) pandemic interrupted the rhythm and frequency of meetings which had helped to build and maintain a sense of urgency during the mapping phase.

The pilot project demonstrated that hard-to-quantify megatrends such as automation and digitalisation can be translated to a workforce development setting and presented in an accessible way for senior leaders, managers, and external stakeholders such as unions. The mapping tool is a concrete success that has the potential to be used in a variety of contexts.

Anticipating future challenges for the workforce through the re-skilling toolkit of US Office of personnel management

The US Federal workforce is, like many workforces across the OECD, affected by digitalisation, globalisation and ageing workforces. In particular, the impact of major workforce changes such as automation is already being felt in a number of areas of the Federal workforce. Against this background, the US Office of Personnel Management (OPM) has developed a re-skilling toolkit to help Federal agencies meet their objective of strategic workforce management and skills development in line with the President's Management Agenda (Office of Personnel Management, 2019[3]).

The toolkit is a compendium of information, guidance and other resources for managers to use in designing ways to help employees affected by the automation of parts of their jobs to improve their skills or develop new ones. The toolkit is also designed to be used by employees, and helps bridge the gap between widespread recognition of broad changes and concrete tools to help workforce managers plan and adapt. The development of the toolkit was strongly driven by the recognition that:

> [w]hen employees' duties are modified through reassignment, relocation, or increased workloads, it is imperative that they receive the proper training and development to address new and augmented assignments and acclimate to new environments and modes of operation (Office of Personnel Management, 2019[3]).

Background

The Partnership for Public Service, a think-tank, suggests that more than 80 different federal occupations are likely to be affected by automation (Partnership for Public Service, 2019[4]). With a recent study suggesting that 60% of all new hires leave the US Federal workforce after less than two years, preventing skills gaps is a key priority for Federal employers. Up-skilling and re-skilling is one way to do this (Government Accountability Office, 2020[5]). While the Federal workforce can be expected to see some jobs disappear entirely, the big change is the alteration to existing roles as technology replaces and alters discrete functions. This places a premium on the ability of Federal workforce managers to conceptualise how change will affect their mission and teams. It means they must provide opportunities to up-skill and re-skill their staff – but this is easier said than done.

- **Reskilling**: training for employees who have shown they have the aptitude to learn a completely new occupation. For example, an office clerk whose job has become obsolete might be reskilled to learn web development.
- **Upskilling**: training employees in a particular occupation with new skills to improve how they perform their jobs. For instance, employees who use the Microsoft Excel spreadsheet programme in the grant administration process might be upskilled to use robotic process automation instead (Partnership for Public Service, 2019[4]).

In 2018, OPM identified four major trends shaping the Federal workforce: (i) the evolving role of workers in the context of automation, (ii) the impact of digital technologies, (iii) employee health and wellbeing, and (iv) shifting demographics (Office of Personnel Management, 2019[3]). As technology continues to advance, digitalisation and automation is expected to eliminate or lead to changes of work roles or tasks within positions. Some of the top labour-intensive Federal activities with automation potential are roles related to:

- Retrieving and synthesising data
- Providing some customer service activities

Performing some administrative activities
Many public services across the OECD face similar challenges, and the OECD Recommendation on Public Service Leadership and Capability (PSLC) urges adherents to:

- Continuously identify skills and competencies needed to transform political vision into services which deliver value to society
- Develop the necessary skills and competencies by creating a learning culture and environment in the public service
- Develop a long-term, strategic and systematic approach to people management based on evidence and inclusive planning (OECD, 2019[1]).

Getting the project off the ground

The toolkit was developed by OPM in collaboration with agency partners, the National Science Foundation and the Department of Homeland and Urban Development (HUD). From the beginning, OPM engaged with the Chief Human Capital Officers across agencies to build engagement. An important starting point was recognition of the need to update multiple paper-based processes across government. For example, the IRS has been closing down a number of their facilities that processed tax returns manually – but this means the need to find new work and new types of work for staff in these centres (who are mainly clerical officers) (Box 5.1).

Box 5.1. Internal Revenue Service Re-skilling Academy

The IRS has been closing down a number of their facilities that did manual processing of tax returns and finding these clerical staff new work in areas that are less prone to automation.

The Reskilling Academy is designed to assist IRS Submission Processing employees in Fresno, CA, in transitioning to a new career path within the Service. The primary goal is to support these employees in developing the skills necessary to qualify for higher grade opportunities in the customer service and tax examining fields. To achieve this, these employees will choose a path based on their interests and skills, participate in and complete multiple phases of structured training and assessments, and emerge fully certified and qualified to enter into a continuing position in a new area of expertise.

Source: USA Jobs (n.d.[6]), "Contact Representative & Tax Examiner (Customer Service Reskilling Academy) *12 Month Roster*", https://www.usajobs.gov/GetJob/ViewDetails/576228400

One of the tools used in the development of the toolkit was the *Competency Exploration for Developments and Readiness* (CEDAR) tool.[2] This is an online competency assessment tool that can be used by employees and at organisation-wide level to better understand where there are specific competency strengths and gaps. CEDAR provides employee-specific results of a comprehensive assessment based on supervisor and employee input. Agencies can use the aggregated results of their assessments to support their competency gap analyses, personnel training and development efforts, and to identify the employee competency strengths in an organisation.

Use of the CEDAR tool at organisation and agency level provided a clear indication of areas of the Federal workforce that could benefit from using OPM's re-skilling toolkit. The development of the toolkit and its initial use in practice built on quantifiable data gathered through the CEDAR tool. In other words, while the starting point for an up-skilling or re-skilling intervention might be based on observable trends – e.g. 'jobs involving a lot of paper-based processes will probably change substantially' – the CEDAR tool allows managers to calculate the degree to which such hypotheses applies to their workforces.

The toolkit is divided into four sections: the first explains the concepts of re-skilling and up-skilling and provides guidance to identify key stakeholders involved. The next section develops a logic model (Figure 5.6) before focussing on implementation and subsequently evaluation of reskilling models.

Figure 5.6. Reskilling and upskilling logic model example

Drivers	Inputs	Activities		Outputs	Outcomes
		Planning	Implementation		
Agency goals and plans Mandate Major change in agency or workforce Different work or change in how work is accomplished Employee desirer or need PMA	Time Financial resources Federal partners Equipment Facilities Staff Technology Data	Conduct job analysis Position management review Identify agency skills and performance gaps Develop and communicate a reskilling or upskilling strategy	Mentoring programmes Coaching programmes Rotation opportunities Details training – internal and external Shadowing programmes Blended learning & Online training Career paths	Percent of competency and skills gaps closed Percent of employees who participate in training Percent of employees who participate in mentoring, shadowing or coaching programmes Manager satisfaction with quality of reskilled/upskilled employees Employee overall satisfaction	*Short term* Position agency for the Future Reduced skills gaps New opportunities New career Improved performance *Long term* Mission achievement Continuous learning culture Engaged workforce
Assumptions *What unexamined beliefs about people involved, leadership support and agency context influence the inputs, outputs and outcomes?*					
External influences *What in the external social, economic, etc. environment could positively or negatively interact with and/or influence outcomes?*					

Source: U.S. Office of Personnel Management (n.d.[7]), *Reskilling Toolkit - Accerlerating the Gears of Transformation*, https://www.opm.gov/policy-data-oversight/workforce-restructuring/reshaping/accelerating-the-gears-of-transformation/reskilling-toolkit.pdf

Initial use of the tool has shown positive results, though data are still being gathered. One of the most encouraging and high-profile examples has been the development of the Cyber Reskilling Academy (Box 5.2). The Government Accountability Office (GAO) – often referred to as the 'Congressional watchdog' – is preparing a study that will use data gathered through various projects where the upskilling toolkit has been used.

Box 5.2. Re-skilling in action: the Cyber Reskilling Academy

In November 2018, as part of the president's management agenda, the CIO Council announced the government-wide Federal Cyber Reskilling Academy to address the shortage of cybersecurity talent in the federal government. The programme, run by the council's workforce committee and the Department of Education, aims to develop new IT and cyber talent to fill open cybersecurity positions in government. The Academy was designed to fill a gap by targeting existing Federal employees eager to move into new roles but lacking structured opportunities to do so.

Interest in the programme was primarily from federal employees who wanted an opportunity to expand how they might work for the government. The academy attracted more than 1 500 applicants from across government to fill 30 spots in its inaugural class. The finalists who completed the three month training programme in July 2019 received two Global Information Assurance Certification credentials in cybersecurity and are hoping to either transition into new cybersecurity roles or apply their new skills to fill existing gaps at their current agencies. While the first cohort was restricted to current employees who did not work in the IT field, the second cohort was expanded to admit federal employees with IT backgrounds.

Source: Partnership for Public Service/General Assembly (2019[8]), *Looking Inward for Talent: Retraining Employees for Tomorrow's Jobs*, https://ourpublicservice.org/publications/looking-inward-for-talent-retraining-employees-for-tomorrows-jobs/

Early observations suggest that not everyone wants to take advantage of opportunities for re- or upskilling. Taking the psychological state of employees on board is important – many employees who have worked for long periods in particular agencies or teams may feel scared by the prospect of change and unwilling to leave long-established relationships – even identities – behind. Taking this as a starting point, OPM has built in ways to engage employees and help them understand that upskilling is not about forced change but about finding "something they can see themselves doing" in the long term.

Building on research on the future of work, OPM also observed that it is rare for entire roles to simply be replaced by automation. In the majority of cases, certain tasks will change but not the whole role. In these cases, it can be tricky to make the case to managers and staff for the need to upskill or reskill. In professions that are going to disappear entirely – such as the IRS example in Box 5.2– upskilling and reskilling is an easier 'sell'.

Use of the toolkit also served to highlight gaps in learning and development: sometimes the type of training that staff need is not easily available in 'off-the-shelf' modules, and learning and development journeys need to be created from scratch. The ability of agencies to meet these learning needs differs across government, indicating the usefulness of some centralised support from OPM.

Finally, upskilling and reskilling are frequently referred to as the natural consequence of displacement of labour, but that is not always the case. When labour is displaced, OPM encourages managers to think in terms of four broad ways to address skills gaps, of which upskilling/reskilling is just one option. The other three are contracting a service provider (for example for some IT needs), finding an employee from another government department or agency (like through a secondment or short-term placement), or hiring a new government employee. All options are valid and should be considered alongside upskilling and reskilling.

Success factors

- The Toolkit identifies several pre-conditions to successful re-skilling, such as leadership support, appropriate resources, and the existence of workforce plans and policies to support reskilling and upskilling.
- The Toolkit notes that agency policies, including collective bargaining agreements, can also affect success.
- Feedback from OPM also centred on the presentation of the Toolkit and how it is framed for agencies. It is important to show how it is different from previous reskilling and upskilling effort, as well as to support management implement a change management process. This may include a focus on the psychological aspects of change and supporting employee wellbeing.
- Because the Toolkit consolidates many types of resources, OPM sought to avoid 'content-dumping' and instead developed a narrative and structure for how the Toolkit should be used. This is a key success factor – curating the information and making it accessible and digestible.
- Re-skilling is perceived differently to up-skilling: initial use of the Toolkit suggests staff may percieve up-skilling negatively if they feel that their new skills will simply add more tasks to their to-do lists. On the other hand, the sentiment around re-skilling was more clear-cut: employees felt that they were making a career change due either to push factors (their old job will soon cease to exist) or pull factors (chance to find meaning in a new professional field while continuing to serve the public interest).
- Begin with jobs where there is clear evidence that job is disappearing or changing substantially

Conclusion

At the time of writing, the tool was still in an experimental phase, meaning it is hard to draw concrete conclusions. OPM acknowledge the need to keep measuring progress and gathering more data. OPM also framed the Toolkit as just one element of a successful 'playbook', or situational checklist that managers can draw on to identify when up- and re-skilling is the best option – and when it is perhaps more appropriate to recruit or 'borrow' talent.

Digital Human Resource Management in South Korea

Introduction

Many OECD countries have tried to leverage digital human resource management (HRM) tools to respond to COVID-19 and prepare for the future. However, most countries struggle to use them effectively. For example, they lack the skills and capabilities to conduct scientific analysis, to drive insights and proactively use HR data for better management decision making and HRM policy development. As mentioned in the first chapter of this volume, 'data scientist' is not yet a common job profile within HR departments in the public sector.

To address this, the Korean government has established and implemented strategic policies for digital HRM. This case study shows how Korea has set up and utilises their electronic HRM system, secures competent digital talents, and improves digital skills and capabilities in the civil service.

Electronic human resource management system: "e-Saram"

Since 2000, the Korean Government has established and developed a standardised electronic HRM system called "e-Saram". "e-Saram" supports government-wide personnel administration and personnel policy tasks of the Ministry of Personnel Management (MPM), by digitising the overall personnel

administration from recruitment to retirement. The system is cloud-based and shares servers and databases, generating ministry-level HR information and integrating databases physically and logically. It integrates and manages data related to HR decisions, salary, performance evaluation, education and training, and services for about 300 000 public officials in 72 central administrative agencies and the electronic processing of overall civil service management. Provided, however, technological security systems allow each ministry to access only its own HR database.

The system provides reliable statistical HR data by occupation, grade, organisation, gender and age on a timely basis to facilitate effective and scientific decision making. In particular, the system offers a feature with its information analytics service based on policy statistics to analyse the current status of personnel, forecast the results, and reflect them in the HR policies. For example, the responsible officials use "e-Saram" to revise HR policies or conduct a simulation of the as-is and to-be of the salary table renewal to understand its impact and as a result save time and energy.

Moreover, "e-Saram" enables each government agency to manage a variety of HR-related tasks electronically. The civil servants in charge of HR of each agency can deal with all HR services including recruitment, promotion, salary, education and training, and welfare benefits with the system. Managers can use the system to manage their division or agency efficiently. The HR data of the affiliated staff can be identified directly and if necessary, managers can use the talent search function to discover the right person for a specific task. In addition, overall civil service management such as work schedule, compensation, and overtime management can be processed on the system. The accumulated HR information in the system is linked with the business systems of different ministries including the National Human Resources Database (NHRDB), the Resident Registration System, National Human Resources Development Institute (NHI), Government Employees Pension Service (GEPS), Korea Financial Telecommunications & Clearings Institute (KFTC) and major administrative information systems.

 "e-Saram" has played an important role in responding to the COVID-19 pandemic in an effective and resilient way. During the COVID-19 pandemic, the remote work service has been provided on the system so that civil servants can handle essential tasks. Furthermore, the Special Guidelines for Civil Service Management Code for the prevention of the spread of the COVID-19 were reflected into the system promptly to support teleworking, sick leave and official leave. "e-Saram" also provided support for the transfer of about 1 300 public servants by providing data and information about health officials scattered in each government agency while the Korea Disease Control and Prevention Agency (KDCA) was launched in 2020.

Digital skills and capabilities

As digital transformation speeds up, it is getting more and more crucial to secure competent digital talents in the government and cultivate digital skills and capabilities of civil servants. The promise of new technology to improve government service delivery will only be achieved with a commensurate investment in the capabilities of civil servants, as argued in the first chapter of this report. In this respect, the Korean government has implemented a variety of recruitment and training policies to improve digital skills and capabilities of civil servants.

The digital talents of the Korean government are selected through various recruitment channels. First of all, they are mainly selected through 'open competitive recruitment' and 'career competitive recruitment'. In open competitive recruitment, the selection of digital talents is made through a written test including data structure theory, database theory, software engineering and information system security as the test subjects and an interview. Career competitive recruitment is generally conducted through document screening and an interview for digital experts with private sector careers, certificates or degrees. In addition, government headhunting is carried out based on the National Human Resources Database[3] to discover and recruit top digital talents. It mainly targets manager-level or higher positions for which it is difficult to recruit suitable talent through the two other recruitment channels. Recently, the Korean

government has selected the Director of the Big data & Statistics Division in the Statistics Korea (KOSTAT) and the Director of the Big Data Analytics Division in the Ministry of the Interior and Safety (MOIS) through government headhunting or career competitive recruitment. Furthermore, a new job category for data-base administration under the job group for computing was created in the government in 2020 to discover and utilise professional digital talents for the government.

The Korean government has provided systematic education and training to enhance the digital skills and capabilities of civil servants that are necessary for whole-of-government digital transformation. The NHI provides a digital training package including pre-learning courses through the government e-learning platform, main learning courses through regular training curricula, and post-learning through the online community for training graduates. The digital training courses the NHI provides can be categorised into three main types: DNA Academy, Information Capability, and Information Security. The courses are aimed at improving digital literacy focused on data analytics. These customised digital training courses appropriate for different digital capability level, jobs and roles are offered to civil servants.

Table 5.3. Main types of digital training courses provided by the NHI

Types	Main Content
DNA Academy	• Understanding changes in the future society centred on Information and Communications Technology (ICT) • Artificial Intelligence (AI), and big data technology
Information Capability	• Information business management • Web programming
Information Security	• Personal information and information security policy • Cyber threat and attack trend

In 2020, the NHI signed a memorandum of understanding (MOU) for innovation of public human resources development with the Korea Advanced Institute of Science & Technology (KAIST) to foster talents who lead digital government transformation. According to this MOU, civil servants can take online education of the KAIST reflecting new ICT trend such as AI, big data and network through the government e-learning platform.

Conclusion

In response to digital transformation, the Korean government has made strenuous efforts to establish a smart electronic HRM system and secure and foster competent digital talents in the public service. As a cloud-based integrated information system, "e-Saram" has offered innovative efficiency and convenience over personnel management and also made data-driven HRM possible by managing HR data from ministries on a real-time basis. The Korean government has discovered and selected competent digital talents through various recruitment channels such as the open competitive recruitment, career competitive recruitment, and government headhunting. Systematic education and training has been provided to enhance the digital skills and capabilities of civil servants through the customised digital training courses and the government e-learning platform. This case shows how Korea's digital HRM is implemented in harmony between "people" and "system".
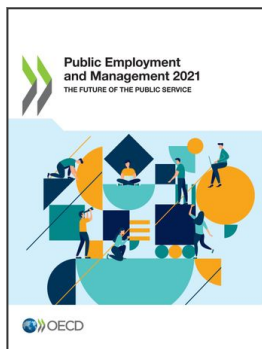
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Notes

1 https://www.apsc.gov.au/initiatives-and-programs/aps-workforce-strategy-2025

2 https://www.opm.gov/information-management/privacy-policy/privacy-policy/cedar.pdf

3 The National Human Resources Database is a national personal information management system that collects and manages information on public office candidates to ensure the recruitment of top talents for major public positions. The MPM is operating it with about 350 000 specialists in a wide range of areas, including academia, business, the legal community, and NGOs.