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Working Paper No. 200, March 2024

The views expressed in this working paper are those of the author(s) and not those of the Peruvian Economic Association. The association itself takes no institutional policy positions.

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Abstract

How do governments' responses to crises change their civil services and shape their future reform agendas? We address this question by conducting interviews with sources that are hard to access but uniquely placed to answer these questions: heads of civil service and similarly senior officials from 14 countries across six continents, speaking during the waning phase of the Covid-19 pandemic. Senior leaders perceived the central challenge of managing the crisis phase of the pandemic as balancing two competing imperatives: greater speed, flexibility, and decentralization of decision-making, but also greater coordination and collaboration across teams and sectors. This required bureaucracies to question their largely hierarchical coordination methods and to transition towards network-based coordination mechanisms, agile methods, and new leadership styles. Senior leaders perceived these changes largely as accelerations of existing reform directions rather than ruptures, and were trying a range of methods to sustain and institutionalize these crisis-induced changes.

Keywords: people management, crisis management, coordination, agile government, leadership, civil service reform

Acknowledgements: aBlavatnik School of Government, University of Oxford, UK; bREDES, ^cUniversidad Peru: del Pacífico, Peru. *Corresponding author martin.williams@bsg.ox.ac.uk. The authors would like to extend our deepest gratitude to the senior public leaders and their organizations around the world who generously shared their time and insights with us, and to many colleagues, far too numerous to name, for helping us to make connections, discussing ideas with us, and providing feedback and guidance. We acknowledge funding from BRAVA Foundation, Lemann Foundation, República.org, and Humanise Institute. Except where otherwise indicated, all opinions expressed in this report are those of the authors and are not necessarily shared by our interviewees or the institutions listed above. The authors report there are no competing interests to declare. This research was approved by the Blavatnik School of Government's ethical review committee. Any errors are ours alone.

The Dual Imperative of Balancing Speed and Coordination in Times of Crisis: Senior Leaders' Perspectives on Civil Service Transformations and Future Reform

Introduction

Crises regularly trigger a rapid set of transformations in civil services, as government bureaucracies have to adapt their structures, processes, and cultures almost overnight. Dozens of studies have examined the immediate impact of emergencies on public servants and organizations specialized on emergency policies and systems (Comfort et al. 2012), and especially focusing on local cases in the United States and Europe (e.g. Kapucu 2006; Waugh and Streib 2001; Christensen et al. 2015). More recently, a notable stream of research has comparatively examined short-term public health and policy responses to the global pandemic (e.g., Brauner et al. 2021; Béland et al. 2021; Hale et al. 2021; OECD 2021; Zhang et al. 2022), or immediate bureaucratic responses to the Covid-19 pandemic focused on single countries (e.g., Christensen and Lægreid, 2020; Agostino et al. 2021; Moon, 2020).

Yet there has been much less research on how crisis-induced bureaucratic changes shape governments' longer term and more comprehensive public management transformations and reform craft (Boin and Lodge 2016; Dunlop et al. 2020). This elusiveness precludes a deeper understanding of bureaucratic effects of crises, which usually lead to turbulent public management and governance scenarios with consequences that persist long after the crisis is overcome and transcend the specific domains of the original emergency (Ansell and Trondal 2018; Boing and 't Hart 2010). Furthermore, except from recent contributions (e.g., Kuhlmann et al. 2021), there are even fewer research insights on this area from a global perspective and a broader set of countries and regions.

We address this gap by conducting a set of semi-structured interviews with individuals who are uniquely placed to reflect on how their civil services reacted to a recent crisis situation: the heads of civil service (or other officials in similarly senior leadership positions) from fourteen countries across six continents who were in office during the Covid-19 pandemic. These senior officials were ideally placed to understand how they and their bureaucracies were affected by this crisis. Understanding their subjective interpretations of what they learned from this experience is important, since these are what drive their decisions about future reform agendas.

Three key insights emerge from our interviews. First, the pandemic forced bureaucracies to respond to a *dual imperative*: to act more quickly and flexibly, and simultaneously to greatly increase the intensity and scope of horizontal collaboration and coordination across institutions and sectors. Moreover, there was a push to decentralize some types of decisions in order to act quickly, but this placed an even higher premium on communication and collaboration, all of which sat uneasily with traditional bureaucratic modes of operation.

Second, surmounting the dual imperative required civil services to transition to the more intensive use of network-based coordination mechanisms as opposed to the traditional hierarchies-based modes of coordination, and to adopt agile managerial approaches and non-traditional leadership practices to accompany them. All these changes typically emerged through a process of muddling through rather than grand reform design (Lindblom, 1959), while also being largely consistent with pre-crisis reform thinking rather than entirely new directions. With respect to the much-discussed role of technology and digital tools during the

crisis phase of the pandemic, the senior leaders we interviewed perceived that they were enablers rather than drivers of the changes described above.

Third, the managerial changes induced by addressing the dual imperative amount to a profound questioning of the structure and functioning of bureaucratic hierarchies and motivated the need to institutionalize them, especially the adoption of higher network coordination and flexibility and agile approaches in the future. Furthermore, senior leaders are mainly trying to sustain these changes through specific personnel management reforms, including training policies focused on strengthening continuous learning and digital and soft skills, more proactive and deliberate planning, and performance appraisal processes driven by civil servants' career development opportunities.

Methodologically, investigating these questions via interviews with a relatively small number of senior leaders from a wide range of countries has both strengths and limitations. We collect and analyze our interview data with a focus on the subjective perceptions and experiences of heads of civil services (although we also triangulate our interview data against secondary sources and existing literature where possible), which are not necessarily representative of all public servants within their countries. Still, the perspectives of senior leaders like heads of civil services are important not because they are statistically representative but because they are the views of one of the most important decision-makers within each country's civil service. In this sense, our paper is an example of the type of interpretative, phenomenological research that Ospina et al. (2018) note is comparatively rare in public administration. To our knowledge, ours is the first paper to interview such a large number of apex civil servants across multiple countries and continents about the impact of the pandemic on reform trajectories, and we are aware of few other studies on any topic in public administration that have managed to conduct in-depth interviews with such senior and difficult-to-access bureaucratic leaders.

The remainder of the article proceeds as follows. We first situate our study with respect to the existing bodies of literature on how bureaucracies change during crises and whether and how these changes persist after the crisis. After laying out our empirical methodology, we then present our findings in two main empirical sections: on the dual imperative of greater coordination and the need for speed and flexibility in the context of the pandemic; and how this experience shaped senior leaders' views on the future agenda for reform. We conclude with brief reflections on the implications of our findings for scholars and practitioners.

Theory and evidence on crisis management and reform

Crisis response and bureaucratic adaptation

Much of the empirical studies on public management adaptations due to crises focus on immediate changes and particularly on specialized emergency response agencies (e.g., Kapucu 2006; Jaeger et al. 2007; Waugh & Streib, 2001). And this pattern also includes the notably stream of Covid-19 public administration research (e.g., Christensen and Lægreid, 2020; Agostino et al. 2021; Moon, 2020). Still, there is much to learn from this research since bureaucratic adaptations due to governments' emergency responses shape subsequent public management transformations and reform once the crisis' sense of threat and urgency decline. We review next the main insights on bureaucratic adaptations driven by governments' emergency and crisis responses.

Governments' crisis response depends primarily on effectively embracing intra- and interorganizational coordination mechanisms to successfully achieve policy outcomes (Drabek 1985; Comfort and Kapucu 2006; Kettl 2003; Zhong et al. 2022), which tend to be more multilaterally defined in contemporary transboundary crises as they transcend agencies' specific policy arenas (Boin and Lodge, 2016; Ansell et al. 2010; Rittel and Webber 1973). The emergency management literature distinguishes two different coordination mechanisms (Drabek and McEntire 2003). A hierarchy-driven coordination form involves the use of instrumental authority, centralization, and clear-cut chains of command and control, responsibilities and lines of accountability (Hood 2005; Peters 1998). Network-based coordination, on the other hand, entails mutual interdependence and trust among actors, and it may emerge spontaneously among organizations (Peters 1998; Verhoest et al. 2007). Various studies highlight the role of hierarchies as a coordination mechanism during emergency responses (e.g., Bouckaert 2020, Lie 2011), while numerous others have underscored the value of network-driven coordination in these scenarios (e.g., Caruson and MacManus 2006; Kapucu 2005). A growing body of research, nonetheless, has recognized the necessity of hybrid coordination, combining the top-down authority-based method with processes that are more horizontal and relationship-based (e.g., Bardach 2006; Christensen et al. 2016; Moynihan 2009; Zhong et al. 2022).

In addition, governments' emergency responses require different management practices to operate during crises as traditional hierarchies, rank and standard managerial procedures are not as effective as they are in normal circumstances (Boin and 't Hart 2010; Comfort 2007). Crisis-induced bureaucratic adaptations —as well as the institutional syncretism to sustain and deepen them—require flexible, agile, decentralized and more informal managerial institutions (Ansell and Trondal 2018). Also, technology and digital tools are more heavily used during emergencies to inform managerial and policy decision-making, to continue delivering public services, to assist with information sharing and transparency, to inform, engage and educate citizens, and to strengthen communication and coordination (Kapucu 2006; Lee-Geiller and Lee 2022; Jaeger et al. 2007; Agostino et al. 2021; Roseth et al. 2021).

Finally, governments' emergency responses also require new leadership practices, mindset, and skills to operate in new disrupted organizational and institutional environments and to shift from standard service delivery to innovative solutions (Waugh and Streib, 2001; Kapucu and Van Wart 2008; Brooks et al. 2012; Van der Wal 2020; Ansell et al. 2021). As Boin and 't Hart Hart (2003:546) put it: "[w]hether they like it or not, crisis management has become a leadership issue". Management research, for instance, has consistently underscored the strong influence of leaders on followers' working experiences during the Covid-19 pandemic (Bolino et al. 2023). This has also been the case in the public sector (e.g., Shand et al. 2023; Salehi et al. 2023), and especially in the context of remote work (Park et al. 2023; Gómez et al. 2022; Fuenzalida et al. 2022).

Longer-term effects of crisis response

Crises such as natural disasters, conflict and violent incidents, human-caused accidents, and health emergencies regularly place extraordinary demands upon the civil service. Governments need to continue offering public goods and services to citizens under disrupted operational scenarios, and some face even more or new service demands induced by the crisis (e.g., OECDb 2021; Pizarro et al. 2022).

The disturbances triggered by crises regularly turn into more serious turbulent governance and management scenarios "characterized by surprising, inconsistent, and uncertain events" (Ansell et al. 2021:949). Turbulences, as Ansell and Trondal (2018:47) point out, have the distinctive feature of pushing public organizations and leaders to "make rather difficult tradeoffs, pulling them in contradictory, even paradoxical, directions". However, only a few studies have specifically inquired into how these trade-offs produced by turbulences emerge in the public service or the strategies governments use to manage them (e.g., Masters and 't Hart 2012; Li, Zheng and Lui 2022).

One of the foremost dilemmas bureaucratic organizations and leaders face when coping with turbulences and crises is the stability-adaptation tension (Ansell and Trondal 2018), also coined as the crisis-reform thesis (Boin and 't Hart 2003). Turbulent environments and crises tend to prompt public organizations and leaders to quickly stabilize and return to normality and, at the same time, produce demands for change and reform. Turbulences could reinforce path-dependencies to pre-existing managerial practices and policies due to the pressure for rapid—and ideally proven—responses. Therefore, in the context of unprecedented levels of speed and responsiveness to changing and unexpected circumstances, organizations tend to reproduce solutions from their repertoire perceived as effective (Weick 1998). Also, previous managerial institutions are usually established and promoted by laws and sustained by organizational and individual inertia and repetition, which frequently precludes the success of post-crisis reform efforts (Boin and 't Hart, 2003).

At the same time, crises and turbulences create the prospect of substantial policy and bureaucratic transformations (Kingdon 1984). Crisis and turbulent scenarios change rapidly, inconsistently, and unpredictably and thus public organizations seek accomplishing their goals by adapting their structures and operations to match the crisis-imposed environmental conditions (Thompson 1967). The bureaucratic adaptations motivated by this mismatch between the demands of changing conditions of turbulent environments and bureaucratic capacity to address them involve calling into question those pre-existent managerial policies and practices no longer effective in these contexts. Furthermore, many of the bureaucratic adaptations to face a crisis, originally intended to be temporary, may transcend the initial disrupted scenario since a restoration of the normal managerial practices and policies old equilibrium may be neither possible nor interesting for public leaders (Ansell et al. 2021).

Public leaders may pursue bureaucratic changes and reform craft after the genesis of crises through a series of gradual policy changes (Lindblom 1959) or, alternatively, via "punctuated equilibria" (Baumgartner and Jones 2009). This means, dramatic transformations occurring episodically after large periods of relative stability and as a result of the pressure for change that crisis puts on existing policies and institutions. Bureaucratic transformation and reform might also follow a pattern of "institutional syncretism", which is between incremental moderate changes and dramatic episodic transformations (Ansell and Trondal 2018). This process involves repurposing, remaking, or recombining existing managerial policies and practices in dynamic and improvisational ways.

Notwithstanding the aforementioned scarcity of research on bureaucratic changes and reform transcending crises, evidence examining U.S. civil service reform subsequent to the 9/11 terrorist attacks illustrate that they hardly fit into either incremental changes or punctuated equilibria (Thompson 2021). Furthermore, the study of bureaucratic reform processes from Nordic countries suggest that they tend to be characterized by institutional syncretism and thus

are the result of recombining crisis-driven adaptations and previous planned reforms (Greve et al. 2020).

In this recombination process, public leaders might want to sustain, deepen, or roll back early-stage bureaucratic adaptations driven by immediate emergency responses. Therefore, it is key to understand the strategic thinking behind this decision and how efforts to sustain or deepen these adaptations are layered on top of pre-existing reform efforts and managerial policies and practices. These issues are the focus of our study.

Methods and interview sample

Interview recruitment methodology and sample details

This paper mainly uses primary data collected through semi-structured interviews with heads of civil services or similarly senior leaders around the world. We do our best to report their testimonies and perceptions faithfully but also discuss them with a critical eye. In parallel, we draw on secondary data from extensive desk research on grey literature and governmental reports to inform and complement the analysis of our primary data collection. Our research design, data collection, and analysis integrate many of the good practices for conducting qualitative research in public administration proposed by Ospina et al. (2018).

The recruitment method used to reach out to government officials included three stages. First, we used direct targeting to identify the heads of civil services (or equivalently, senior officers responsible for system-wide administration, leadership and people management) from different countries, aiming for a diverse sample representing low-, middle-, and high-income countries across all continents. For this purpose, we mainly relied on our own academic and professional networks, as well as those of our institutions. Second, we sent 18 heads of civil services an official invitation via email, introducing the study and asking for their participation. In cases in which the head of civil service or equivalent was not available, we used snowball sampling and/or asked them to connect us with their direct subordinate or the person they considered would be better able to answer our questions. Third, we provided those who accepted to participate with an interview protocol as well as a consent form prior to conducting the interview via videocall. Interviews are all reported anonymously and were conducted between August 2021 and March 2022. Appendix A provides further details about the sampling and selection process.

The final sample of interviewees is constituted of 14 heads of civil services or other senior leaders from countries on the six continents (Table 1). Figure 1 highlights in red the countries of provenance of our interviewees. They are Ghana and Uganda on the African continent; Uruguay, Argentina, Brazil, Peru, Colombia and Chile in South America; the United States in North America; Singapore and Qatar in Asia; the United Kingdom and Spain in Europe; and Australia.

Table 1. Respondents by role type

Respondents' role type	Number of respondents
Heads of Civil Service (e.g. Minister, Secretary,	9
Chief Officer)	
Directors of sub-units within the civil service	2
Senior officials responsible for people management	2
Head of national public administration school	1

Source: Authors

Figure 1. Countries included in sample



Source: Authors

This is the first study to interview senior leadership-level public servants across multiple countries and continents about the mid to long term impacts of the Covid-19 pandemic on bureaucracies and their reforms. Our choice of methodological approach responds to two main gaps in the academic and policy literature. First, by targeting high-level public officials, we obtain valuable and unique primary data. It is rare for studies to be able to interview this many highly placed officials, particularly including respondents from low- and middle-income countries that are traditionally underrepresented in public administration research (Bertelli et al. 2020). While our sample of countries we cover is not globally representative, it nonetheless represents the largest and most diverse collection of countries for which such interviews have been conducted, and thus the closest picture to date of global thinking on pandemic-related reform thinking. Second, our study's focus on the medium- to long-term time horizon (rather than on the immediate reaction to the initial phase of the pandemic) complements other research conducted on how the pandemic has affected civil services worldwide (e.g., Schuster et al. 2020) by giving leaders time to reflect on which aspects of these emergency responses were most important and are likely to persist. It also allows us to draw on newly released secondary data and government documents to contextualize officials' interview responses and complement the qualitative results of the primary data collection.

While examining the perceptions of senior leaders thus has its advantages, it also entails obvious limitations. The first is the relatively small sample of very senior leaders it is possible for any one study to reach, and the risk that our network-driven convenience sample of countries may not be fully representative of the whole world. While our study includes a larger number of such senior officials from a broader range of countries than we are aware of in existing studies, this is nonetheless a limitation. A second key challenge of relying on senior leaders' perceptions is that leaders themselves may have biased or inaccurate views or may omit certain information in order to paint a more positive picture of their civil services. We can address this to some extent by analyzing interview responses with a critical lens and triangulating them against other secondary literature, but our ability to do so is obviously limited. That said, the perspectives of the senior leadership of countries' civil services matter not because it is objective or statistically representative of the rest of the civil service, but

because they are the views of the most important decision-maker within it. We therefore treat our interview data mainly as potentially subjective perceptions rather than unbiased facts while emphasizing that these perceptions and interpretations themselves are meaningful because they guide the actions of the influential individuals who hold them.

Structure, conduct, and analysis of interviews

Interviews were approximately one hour long, conducted by two or three interviewers and semi-structured with an interview protocol indicating the main themes and topics sent to the participants in advance. The two main themes/sections of the protocol were: 1) challenges that civil services were tackling due to Covid-19 and how governments were responding to them, including questions on technological adoption, workplace rearrangement, and management practices; and 2) issues and opportunities of the mainstreaming of Covid-19-related changes and the implications for civil services in the mid-to-long-term term future (i.e., approximately the next five years). Appendix B exhibits the full interview protocol.

We used multiple coding to help us analyze, interpret and systematize the qualitative data, following a conventional content analysis (Barbour 2001; Hsieh and Shannon 2005) – see Appendix C for further detail. Codes were then iteratively updated as analysis and writing progressed. Our coding was a starting point for our identification of major patterns and trends in the interview data, but our subsequent analysis, reporting, and discussion uses the content of these interviews in a qualitative fashion that allows us to take greater advantage of the nuances and depth of this data than would be permitted by a rigid reliance on our coding and categorization alone. This is consistent with our primarily interpretative approach to our analysis (c.f. Ospina et al. 2018). Our reporting and analysis below are thus based on our synthesis of these interviews, with selected quotations and examples included for illustrative and expository purposes.

The dual imperative: speed and flexibility, and effective coordination and collaboration

Interviewees unanimously agreed that the crisis response phase of the pandemic forced their bureaucracies to dramatically increase their intensity and scope of collaboration, entailing a vast expansion of interactions both among public organizations and with their private and civic counterparts. The number and diversity of actors involved in these coordination efforts, some of them unexpected, involved new challenges and required new methods for coordination and management. This challenge represents the intercurrence of turbulent environments speaks to the attribute of "intercurrence" of turbulent environments contexts.

At the same time, the response to the pandemic required an unprecedented level of speed and responsiveness to the "shifting parameters" of the crisis (Ansell & Trondal 2018). Bureaucracies responded to this by carefully decentralizing and delegating an increasing number of decisions internally. This also led senior leaders to question and sometimes try to remake traditional hierarchical modes of decision-making. "It is really important that we think carefully about where decisions need to be made within organizations. What sorts of things need to be made kind of in a whole of government, standardized way; versus where can we allow flexibility and allow decisions to be made at a lower level in the organization?" (US interview). This decentralization of decision-making was often implemented through informal staff empowerment initiatives, such as joint brainstorming for solutions, within existing structures and procedural frameworks. In Ghana, for instance: "I have encouraged my colleagues to do the same thing [write their ideas for change]. So every three months, we ask

what new have you produced here? And we need to formalize some of these things." (Ghana interview).

Senior civil servants thus perceived that managing these two simultaneous imperatives – effective coordination and collaboration on the one hand and speed and decentralization on the other – proved the central dilemma of the turbulent environment produced by the pandemic crisis. As one interviewee explained, "Our public service over the past 20 months had to orchestrate and put together many multi-agency operations. We had to, almost overnight, get agencies to pull resources, irrespective of organizational boundaries and some of the protocols we have in place. We have to override many of these things just to quickly respond to the crisis." (Singapore interview). Leaders were thus confronted with a difficult trade-off: whether to prioritize time-intensive consultation and coordination across teams and organizations at the expense of speed and responsiveness to local information, or vice versa.

Hybrid coordination mechanisms to address the dual imperative

Across all countries, senior leaders emphasized that the trade-off of speed and flexibility versus effective collaboration was handled mainly by using hybrid coordination mechanisms involving a more intensive use of networks –as opposed to traditional hierarchies. Countries thus adopted a variety of institutional mechanisms to strengthen network coordination at the operational and strategic levels, including setting up ad hoc cross-sectoral taskforces and advisory boards; alignment of information-related processes across organizations, particularly via IT and data sharing and use; and the intensification of whole-of-government approaches to inform coordination efforts. In Australia and Colombia, for instance, consultative processes that linked a range of civil servants and political leaders more closely, such as transversal teams, were put in place to determine policy trajectories, especially related to remote work. While similar mechanisms already existed to some extent in all countries, the pandemic saw a dramatic expansion and intensification of their use. "One of the good things of the pandemic is that it forced us to do things that always were very hard to implement, such as database interoperability, sharing information between the different agencies and working in a collaborative manner, when the organizational tradition usually leads to jurisdictions solely looking at themselves." (Argentina interview).

This transition was not easy as it challenged the bureaucratic structures established, which inertially promoted hierarchies as a coordination mechanism. A key challenge civil services encountered in doing this was the ambiguity and misalignment of goals across different stakeholders and information management processes (Bouckaert et al. 2016), which had to be addressed head-on for these structures and processes to function effectively. As one senior leader explained, "I don't have the straight answers to this yet but we are definitely thinking deeply about because when you talk about matrix organizations, it has to do with aligning incentive structures, aligning the recognition and rewards, and these are not trivial questions." (Singapore Interview). These pre-existent hierarchies-prone structures led to skepticism about the use of collaborative practices: "my manager supports collaborating to get work done, right. Well, only 60% say yes to that, so we clearly haven't done a great job at promoting people who think that way when partnering and working Outside their organizational silos, and I think this is a really good opportunity to change that." (US Interview). Furthermore, the quest for interorganizational collaboration even strengthened centrally driven coordination mechanisms. As one interviewee illustrates: "we actually are able to engage at the leadership level and across organizational boundaries more effectively sometimes when we're dealing with kind of a crisis situation. So I think making sure that we've empowered the centre of government to lead coordination for these sorts of issues. It's been a really important thing to be sure that we are coordinating a whole of government response." (US interview)

Other bureaucratic adaptations to deal with the dual imperative: agile approaches and new leadership practices

Senior leaders also underscored other ways to surmount this trade-off of speed and flexibility versus effective coordination and collaboration that triggered prospective critical reflections on managerial and leadership styles in civil services and a reinterpretation of governments' technology and digital transformation processes.

First, civil services also face the dual imperative by adopting agile or agile-like approaches. As reflected by senior civil service leaders worldwide, many bureaucracies that had previously started to consider agility began to experiment with them tentatively by placing a higher premium on rapid communication, enhancing feedback mechanisms, and broadening the scope of individual jobs and working routines. For example, one interviewee explained: "I think one of the things that this pandemic has taught us is that the likelihood that you are going to get it right the first time is low. You need to acknowledge that it is a fluid situation, that we are learning new things all the time, and that we are going to be committed to iterating and adapting and adjusting our policies and our routines based on how things are playing out on the ground" (US interview).

A clear illustration of the use of agile approaches is how civil services adopted remote work, which both enabled previously unthinkable practices but were also constrained by existing culture. For example, one interviewee explained: "I think that is powerful as a new way of working [across silos and rigid routines] (...) it has always been there, but until virtual became the default kind of way of working, it didn't nearly take the potential that I think it's going to hold going forward." (US interview). At the same time, one interviewee lamented how organizational culture and the lack of trust impeded the realization of potential gains: "This has to do with a cultural theme, this harmful culture in which, when you go home on time, you are suspected not to work or produce enough. So, not having this direct control of people made continuing remote work really challenging in some institutions because there is a lack of trust." (Peru interview). In several countries, particularly low- and middle-income ones, basic connectivity and IT infrastructure issues also hampered effective operations and the adoption of agile methods in the context of remote work.

Senior leaders themselves acknowledged increasingly embracing an approach of joint learning-by-doing in balancing the dual imperatives of coordination and speed: "I remember we had to write from the hotel rooms, work on circulars where we started these flexible working hours, deciding quickly. It was like doing and learning at the same time because we had never had anything like that." (Ghana interview).

This finding thus connects to previous research underscoring the adoption of agile ways of working during crises (Van der Wal 2020; Janssen and van der Voort 2020), and single-case studies suggesting agility as an organizational strategy to cope with a volatile, uncertain, and unpredictable environments—such as those produced by the Covid-19 pandemic (e.g., Moon 2020; Janssen and van der Voort 2020, Capano and Toth 2022; Ansell et al. 2021).

More importantly, agile practices' adoption during the pandemic led senior leaders to think critically and acknowledge that their managerial approaches in civil service are no longer

effective considering contemporary and future policy problems. As one interviewee commented: "Things change very fast and not only due to Covid-19. Even three-year plans don't work anymore. You can only plan annually, and you focus on outcomes and then you rebase yourself, adapt, change and move." (Qatar interview). This urge for change embodies the transformational nature of agile methods, as noted by Mergel et al. (2020), who defines them as "a new package of routines and processes embedded within formal work groups and structures... a mindset that initiates a cultural change in bureaucratic command and control organizations. Agile administrations are open to reforms, adaptation to the changing environment, public values, and public needs." (Mergel et al. 2020:161-163).

Second, managing the changes and challenges induced by dual imperative also required interviewees to adapt and perceive their leadership styles in new ways. Our interviewees perceived that not only did the pandemic induce changes in work routines and processes but also in the meaning of good leadership within the public service. Leaders had to rely more on transformative, inclusive, and compassionate –rather than transactional– leadership practices (Kuhnert and Lewis 1987, Dutton et al. 2014, Randel et al. 2018), especially because of the new demands for agility as well as because remote work imposed practical limitations on their ability to monitor staff. While this was partly driven by necessity, for many leaders, it was also a strategic choice because it encouraged the creation of more inclusive communications routines, greater decision-making autonomy, and moving away from rigid pre-pandemic personnel evaluation metrics. "Rather than a controlling leadership that focuses on whether the person is sitting [at their desk] or not, we need more seductive and motivating leaders, especially since we have a new generation that has different objectives." (Chile interview). This new leadership style also has to encompass a greater concern for individual welfare, which came under greater stress than ever: "The head of civil service himself is asking every leader to adopt a system of prioritizing and looking into the workload of our public officers. We are at this point even convening what we call learning circles where senior leaders at the Permanent Secretary and CEO levels come together to share personal experiences about coping with their own mental health, about how they think about self-care or how they are supporting the mental health of our own workforce." (Singapore Interview).

Third, all our interviewees agreed that digital tools had played an essential role in how their bureaucracies addressed the dual imperative and adapted to the pandemic. Yet, more importantly, this role made senior leaders reinterpret technology and digital transformation processes in government as they view them as *enabling* rather than *driving* change. Indeed, the most fundamental transformations in interviewees' eyes were the coordination-related changes to organizational processes, (people) management, and leadership discussed previously. For example, one interviewee remarked: "I do think this ability to partner with different groups is really a potentially transformational change that is enabled more going forward. I think the need to get together physically has been such a limiting factor in whom we partner with and how we work, that if we move to a more virtual way of working it creates huge opportunities for how we work with different partner organizations." (US interview) Another reflected: "If you would have told me that I had to assemble a new unit with six new senior team leaders of 300 people, and I had to have done that virtually, I would have said no, that is not possible because of everything I know about leadership: you know, we need to be in the same space, we need to do this, we need to do that. But I did do it." (United Kingdom interview)

This represents an important nuance to narratives about digital transformation in civil services worldwide: rather than the availability and advancement of digital tools themselves driving change, senior leaders perceive the fundamental impetus for change as coming from the

changing environment in which they operate. Indeed, digital technology featured most prominently in governments' pandemic responses in the near-overnight shift to remote work in many civil services (Roseth et al. 2021; Gomez et. al 2022; Fuenzalida et al. 2022) and the rapid digitalization of (some) public services (Eom and Lee 2022; Pizarro et al. 2022). These crucial roles have also been underscored in some pre-pandemic literature emergency management (e.g., Kapucu 2006). Much of the existing literature has emphasized the pandemic's role in driving digital transformation in government and sparking the adoption of new technologies (e.g., Agostino et al. 2021; Eom and Lee 2022), and the adoption of information technology in general has widely been considered a driver for organizational and managerial changes inside governments and for the need for new skills (OECDc 2021; Roseth et al. 2021).

Impacts on future reform agendas

What, then, do senior civil service leaders see as key elements of the reform agenda after their countries' responses to the most acute phase of the pandemic crisis? There is naturally a significant amount of idiosyncratic variation across countries in the specific changes and tools envisioned, but most interviewees expressed a keen interest in sustaining, deepening, and institutionalizing the perceived improvements adopted when dealing with the dual imperative of speed and flexibility versus effective coordination and collaboration, particularly the greater use of network-based coordination and agile approaches. Additionally, senior leaders envision updating personnel management policies to respond to the demands of these new approaches. The remainder of this section discusses these two threads.

First, the senior leaders we interviewed report their overriding priority emerging from the pandemic as being how to sustain both the increased scope of network coordination and collaboration and the greater degree of agility that emerged. They were broadly positive about these new management practices and how they contributed to their civil services' emergency response to the pandemic. As one interviewee reflected: "And this responsiveness is not given as civil services normally are not very nimble and agile by design. It is basically how to ensure that whatever civil services structure you have, or systems you have, could become an agile and nimble tab of systems and operators and workers in order for them to be able to move fast? That is the design principles that we are working on currently to re-engineer our civil services." (Qatar interview). Some civil services have even started to take action to carryover the use of agile methods. For instance, the US federal civil service has increased its use of rapid "pulse surveys" as a critical mechanism being put in place to "regularly adjust and adapt policies based on feedback", particularly with respect to the transition into more stable and longer-term forms of remote or hybrid working (US interview).

Yet, sustaining the use of network coordination and agile approaches in civil services is far from straightforward and requires changing *de facto* rather than *de jure* practices: "It is all difficult and it is all interlinked actually. In the end, it is about changing culture, which is really hard to do. Even if you have the leadership to make these changes, once you get down into the middle layers, you have a lot of civil servants, public servants articulated in similar blocks inside each organization, and they are very comfortable with the way they are doing things." (Australia interview). Also, as reflected by senior service leaders, continuing these transformations over time entails "... a deeper question of do we need to more fundamentally look at our governance structures? How do you look at decision rights, and you know, how do we organize ourselves to be ready for the future?" (Singapore interview).

A second consistent thread of future reform thinking, as reflected by senior leaders, is the push for changes in personnel management to complement the shift towards network-based coordination, flexibility, and agility discussed above. This was often expressed by senior leaders as a critical reflection on their current civil services' learning opportunities and a search for ways to institutionalize the ideal of ongoing skill development on particular skills. As one interviewee explained: "People learn absolutely loads as individual and teams, but did we consciously take the time to? You know, discuss what people had learned and then apply that into a continuously improving and self-improving organization? Possibly not." (UK interview). Another reflected: "Do we provide continuous learning and continuous upgrading of skills that allow public services staff to stay capable? That's one of the things that we are very focused on" (Australia interview). Moreover, one senior leader from Singapore this effort to extend and reshape training policies: "The area I mentioned is really HR workforce and I mentioned about democratizing all the learning and development opportunities and we are mounting this in really a big way. So we are looking at how we tier some of these development opportunities: Short term emergent programs that last for weeks, geek projects that last for months, interagency work, secondments to agencies 1-2 years and we are also trying to open up more channels for public officers should be attached out to the private sector so that we make sure we learn from also the best in class companies in terms of practices, innovation, agility and bring these lessons back to the public service." (...). We want to make sure that these opportunities are not just the privilege of those on the talent schemes or administrative service, but for every single public officer." (Singapore Interview).

With respect to training content, interviewees all included digital skills (both basic and advanced) within the set of competencies that urgently need to be better integrated into training curricula, but many also spoke about soft skills. This dual focus was perhaps best encapsulated by our interviewee from Singapore, who explained that: "We have set up what we call a digital academy. This was a work in progress, but the pandemic accelerated things. A lot of the courses that the digital academy has developed and co-created with many of the leaders are because we really want to harness the best in class in terms of the latest knowledge and skills in AI, in data science, in digital, in data analytics and bring it back and adapt it for the context. At the basic level, there are mandatory data literacy, and cybersecurity courses that every single public officer has to go for. Then, we are also looking at tiering, and thinking about how to build up a tier of future leaders who would be our digital leaders of tomorrow." (Singapore interview). At the same time, the perceived new needs extend far beyond specifically digital skills: "the challenge is that technology and the operating context is changing so fast, many jobs are evolving, are being made obsolete. The question is how, as an employer, do we establish a good system of soft skills, identification skills, development and also institute a sort of mental agility in our workforce? One where you can have a long public service career, but you might not stay in one organization for like 10-20 years counting. You can have a long career in public service in different jobs and gaining different sort of experiences and skills and pivoting along the way." (Singapore interview). This focus on the combination of flexibility, new modes of leadership, and digital skills echoes the transformations of the pandemic era described above, which many leaders have taken as a lesson for the future.

The personnel management reform intend was additionally reflected in thinking both about the content of training programs as well as career management: "Mobility is the tough one, we have talent that leave below the senior officers, so we're trying to think about how we do that bit differently. In terms of our senior executive service, we are now looking quite seriously how we move people around the system, not for mobility's sake but for their development's sake. Also for successful planning of the officers and for the system sake, to make sure the

right people are in the right job at the right time. So it is quite complex, lots of different moving parts." (Australia interview)

Beyond skills development, though, many senior leaders also highlighted the processes of strategic personnel planning and performance appraisal as key areas for change in the coming years. For instance, one interviewee stated that: "We need to do a lot more deliberate planning so that everyone has the benefit of the skills, the knowledge, the networks to be effective in situations like that; a lot of our work on apprenticeships, on induction, on the fast stream, on leadership development, is informed by that sort of crisis response; and intervening much earlier in career pathways so that you're not having to remedially give people procedural knowledge and domain knowledge." (United Kingdom interview). Another expressed the view that: "HR needs to dedicate itself to new edges, that are consequences of the pandemic, for instance creating [a] manual of different functions at new levels of competencies (...) Understand that there are new skills in the working world, that there are new careers, that we need to change the manuals of functions because now we need to have an expert in data reading. This is not contemplated in the current manuals of functions, such as the experts in cybersecurity, and the expert in blockchain. So necessarily, entities need to revoke the old manuals, revoke their human resources structures." (Colombia Interview). Several interviewees also remarked that the agility they sought to create during their pandemic responses - and now seek to sustain and deepen - sat uneasily with rigid staff evaluation processes, with evaluation processes that are more focused on identifying development opportunities and new competence areas seen by some as a potential solution (e.g., Brazil, Chile, Uruguay interviews).

Conclusion

In this article, we have detailed how senior leaders of civil services worldwide adapted to the dual imperative imposed by governments' emergency response to the pandemic: greater speed, flexibility, and decentralization of decision-making on the one hand, and greater coordination and collaboration on the other. This led them to make a range of bureaucratic adaptations, many of which revolved around the common theme of questioning and remaking the traditionally hierarchical structures and norms of their institutions in order to move towards more network-driven coordination and agile practices. However, senior leaders perceived this more as a continuation or acceleration of pre-pandemic incremental changes rather than as something totally new, and digital technologies were seen as crucial enablers rather than drivers of these changes. Institutionalizing and deepening these changes is now at the top of the agenda for each of the senior leaders we interviewed.

Of course, the degree to which civil services are successful at implementing these envisioned reforms and achieving the desired changes is an open question. Our interviews took place between August 2021 and March 2022, when the transition from the acute phase of the pandemic crisis had only just begun or, in some countries, was only in the planning stage. Similarly, the specific reforms pursued and prioritized by different countries will doubtless be different. But what the perspectives of the senior leaders we interviewed emphasize is the sense of urgency that the response to the pandemic crisis imbued for transforming operational and personnel management in civil services worldwide. While many (if not most) of the envisioned reforms are not new *per se*, leaders all drew a direct line between the lessons they learned from responding to the emergency and their approach to envisioning the future of their institutions in a post-crisis world. This distinction in public leaders' thinking is crucial for effective reform craft after crises (Boin and 't Hart 2003).

To the best of our knowledge, this is the first academic study to investigate the experiences, perceptions, and interpretations of very senior civil servants across multiple countries and continents about the medium- and long-term impacts of the Covid-19 pandemic on their bureaucracies and their reform agendas. It thus builds on previous studies that have inquired public leaders' perspectives about the pandemic in single countries (Wilson, 2020), and that are primarily based on secondary information such as administrative or survey data (Forster and Heinzel 2021; Glenn et al. 2020). While our sample of countries is not globally representative, it nonetheless represents the largest and most diverse collection of countries for which interviews with senior leaders have been conducted, and thus the closest picture to date of global thinking on mid-to long effects of the Covid-19 crisis on bureaucracies and future reforms.

More broadly, we hope that our article illustrates the value of taking an interpretative approach to studying not just *what* happened during the pandemic or other crisis situations, but also *how* civil servants interpret and make meaning of these experiences. These interpretations are intrinsically important for scholars to understand because they shape retrospective learning and prospective thinking about future situations. They are thus a crucial part of modelling and predicting bureaucratic behavior, and – when the individuals in question sit at the apex of entire civil services – for understanding the frontier of reform efforts in countries around the world.

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Appendix A Interviewee recruitment

The selection of countries participating in the study followed an overarching criterion: Heads of Civil Service were targeted based on [the academic institution conducting the study]'s academic and professional networks. In order to obtain a more diverse sample of countries, three additional selection criteria were considered: 1) geographical representation, aiming to expand territorial coverage to developing and developed countries on all continents; 2) an intentional overrepresentation of developing countries to minimize the lack of data publicly available; 3) other additional diversity criteria such as cultural influences on bureaucracies, size of bureaucracies, and systems of government (federal vs. non-federal).

Once the countries were selected, 18 countries were contacted. The research team first sent formal invites for an interview via email to the 8 Heads of Civil Service we were able to contact without the support of intermediaries. Subsequently, the research team sent formal invites for another 10 Heads of Civil Service with the support of intermediaries at the [academic institution conducting the study] (faculty, researchers, and doctoral students). In cases in which Heads of Civil Service were not available, we used snowball sampling for targeting and asked them to connect us with their direct subordinate or the person they considered would be better able to answer our questions. With a formal acceptance from the Head of Civil Service or other officials, the research team sent an interview protocol and a consent form to be signed by the interviewee prior to the interview via videocall.

A total of 14 interviews were conducted between August 2021 and March 2022. When interviews were held in languages other than English, the University of Oxford's Language Centre translated the transcript into English. Some quotations were lightly edited for clarity or grammar in order to improve readability, just in cases where this could be done without affecting meaning.

Appendix B. Semi-structured interview protocol

The general interview guidelines that were sent to interviewees prior to the interviews are available below:

Thank you for taking the time to participate in this interview. This interview is part of a multicountry study being conducted by the [academic institution] on how civil services are responding to the challenges posed by the COVID-19 pandemic. The study aims to understand the needs, challenges, and responses of civil services around the world in this crucial period, and the findings will be used for research and policy recommendations to governments in facing novel challenges to the public sector in the future.

Topic 1: Challenges and responses to the COVID-19 pandemic

Objective: Explore the challenges civil services are facing due to the Covid-19 pandemic; how they are responding to them via technological adoptions, workplace rearrangements, and management practices; and how their responses are affecting employee learning, well-being, and performance.

- 1. Main lessons learned so far in responding to the challenges posed by COVID-19 to the civil service.
- 2. Major challenges posed by COVID-19 on civil service's functions and performance
- 3. COVID-19 effects on public employees' wellbeing, motivation, performance and organizational learning.
- 4. Changes on technology adoption, workplace rearrangements, and management practices.

Topic 2: People management challenges in the mid-term

Objective: Explore the issues concerning the mainstreaming of COVID-19 related reforms and the mid-term challenges facing civil services.

- 1. From changes adopted as a response to COVID-19 challenges, the most likely to be mainstreamed.
- 2. Main challenges on people management for the next five years.

Appendix C. Coding process

Coding took place in two main stages:

- 1. Multiple coding of all over 50% of the qualitative data, meaning two team members coded one transcript independently and then compared their codes and the coding frames. One member of the authorship team first coded all the interviews, while seven others participated coding one transcript. Thus, the codes and the coding frames were adjusted as a result of the seven bilateral meetings held.
- 2. The codes and the coding frames were presented and discussed with the research team in two subsequent meetings.

The analysis of the data took place in a collaborative way through discussion groups and team meetings to discuss the coding system and the data available. The main criteria used to determine the themes and subthemes were:

- The number of mentions in the interviews. To minimize coding bias and harmonize interpretations, the same data was shared among the team members and then discussed. This technique helped to reduce the interpretation bias of each team member by trying to find a common ground.
- Juxtaposing interview data against the extant theoretical and empirical literature on relevant topics in public administration and related fields, in order to ground the discussions in existing literature while also identifying points of novelty or disjuncture.

The extended coding frame extracted from the first coding exercise available below provides examples of the themes and sub-themes that were coded from the data. Among the main themes were government collaboration and collaboration, digitalization and leadership and new management practices.

This coding process guided the identification of key themes, which were later used to elaborate the analysis of each theme and structure the article.

Figure C1. Coding Frame

Code Name	Files	References
Digitalization and remote work benefits (unintended)	14	148
Engagement & Collaboration	11	28
Decentralization	12	25
Inclusivity	11	25
Concrete well-being measures	8	21
Working arrangements	4	6

Training and evaluating more people	7	18
Cost reduction	7	14
Better service delivery	6	11
Time-management	4	8
Mobility	5	8
Better information management	3	6
Reducing corruption	1	2
Government collaboration with different sectors	11	36
Intersectorial collaboration	9	23
Public-private partnership	5	9
Contractors and IT professionals	2	2
Intrasectorial collaboration	5	12
Associations and syndicates	6	8
Performance & Productivity	6	8
Continuity	5	6
Output reduction	3	4
Higher performance	1	3
Unproductive work	2	2
Changes to be maintained in the future	1	3
Hybrid-flexible work	13	63
Technology prevalence and digitalization	14	53
Better management practices	11	47
Feedback mechanisms	8	24
Incentive-motivation structures	8	17
Duty	11	24
Communications	12	23
Money	4	6

Purpose	3	3
Safety	2	2
Employees' well-being policies	12	28
New workers profiles	9	26
Reshaping traditional working methods	13	49
New recruitment processes	12	22
New skills	6	19
Democratization of the tasks	6	18
New evaluation processes	6	15
Shorter work contracts	3	5
Higher education	3	4
Workplace and departments rearrangement	9	17
Resources management	5	11
New Leadership	7	10
Leaders' supervision importance	13	55
Transmit and create trust	11	23
Receive clear orientations and training	4	8
Focus on mission	4	7
Future challenges of public sector	1	1
Adapting to change-innovation	12	72
Training	13	43
Attract and retain talent, motivation	11	34
Mindsdet (cultural) change	11	27
New rules and regulations	5	11
Resilience	1	1
Regular Communication with employees and stakeholders	10	27

Flexible working	5	22
Finding new evaluation methods	4	16
Need for IT investment	9	16
Aligning service delivery to citizens' need	3	9
Balancing Ambition Business and Covid (ABC)	2	7
Need for clearer responsibilities	4	6
Key lessons	0	0
Developing adaptability and agility	14	75
Leadership and HR importance	14	70
Integrating well-being programs	4	7
Trust and transparency importance	14	66
Transparent communication	12	36
Cooperation	12	60
Modernization and reshaping needed	10	60
Developing efficiency and speed	13	52
Whole of government approach possible	10	46
Acceleration of existing dynamics- Impetus	12	38
Need for new regulations	5	36
Need for inclusivity & empathy	9	32
Institutional learning crucial	11	27
Technological learning	14	42
Online Training	5	7
E-reporting	2	2
Online evaluation processes	2	2
Tax adjustments to allow more IT use	1	1
Autonomy needed	4	8

Difficulties related to COVID-19	0	0
Well-being	10	26
Health and safety	11	26
Isolation	8	15
Personal and worklife balance	11	22
Alignment between different agencies	9	22
Ill-defined roles and responsibilities	9	20
Communications issues	11	19
Lack of regulations	6	17
Lack of infrastructures	6	16
Transforming tradi knowledge	5	14
Discrepancy between policymaking and realities on the ground	5	11
Financial costs	4	11
Cultural habits clashes	6	11
Multidimensionality	7	11
Reduction of workforce	8	9
Measuring productivity	3	4