

Covid-19 as the litmus test of public organisation resilience in turbulent times: lessons learned from the Slovenian context

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Abstract

The COVID-19 crisis has been an unprecedented event for which most public sectors across the globe were not prepared. In order to secure their basic functioning and unhampered service delivery, public organisations had to react quickly and adapt to the new situation. This often required changes of their processes and services, reorganisation of their structure and new or intensified use of technology. Although the impact of the COVID-19 crisis on public sectors has preoccupied academic interest in the last two years, it failed to approach the issue of organisational change in a systematic and holistic way. Thus, the research focus has often been partial concentrating on specific organisational aspects/features, as if they are independent and not part of a larger, closely connected and interdependent system. The paper aims to address this gap by dissecting the impact of the COVID-19 crisis on the overall organisational setup of two Slovenian public organisations at the central level of governance – the Agency of the Republic of Slovenia for Public Legal Records and Related Services AJPES and the Administrative Unit Ljubljana. The key criteria for the selection of these cases are: 1) public organisation at the central level of governance and 2) service delivery as part of the organisational mandate, implying communication (and collaboration) with external and/or internal stakeholders. Moreover, the theoretical framework taken as the basis for their analysis is the Nograšek and Vintar (2014) framework – an upgrade on Leavitt's diamond model. On this basis and contrary to the general perception about the enormous transformational power of the COVID-19 crisis, the paper registers rather limited long-term impact at the central public organisation level – albeit due to different reasons in the case studies analysed. At the theoretical level, the research raises the question of a potential need for a new adaptation of the Leavitt's diamond model for turbulent times.

Key words: Covid-19 pandemic; organisational change; digitalisation; Leavitt's diamond; Slovenia

1 Introduction

COVID-19 has been an unprecedented event for which most public sectors across the globe were not prepared. In order to secure their basic functioning and unhampered service delivery, public organisations had to react quickly and adapt to the new situation. This often required changes of their processes and services, reorganisation of their structure and new or intensified use of technology. The crisis left radical, i.e. second-order change within public organisations (Davis et al. 2021) that will shape their future development and attitude to new similar crises. Also, the crisis showed that in certain cases 'traditional' internal organization, implying hierarchy and functionalist approach, is not capable to address the external national and global challenges (Bastida et al. 2022). Since turbulence and emergency are the new normal, some authors (e.g. Ansell et al. 2021) call for redefinition of our understanding of robust governance and the very idea of leadership. But, to do this properly we need an in-depth and comprehensive understanding of the nature and depth of change the crisis left on public administrations – as the baseline on which we will build our strategy/approach to enhanced resilience. The problem, however, is that despite the significant academic interest, there is a lack of more systematic and holistic approach to the understanding of the impact of the Covid-19 crisis on public sector organisations, beyond partial analysis of specific organisational aspects.

Thus, scholars (Agostino et al. 2021) have analysed the effects and benefits of digital technologies for public service delivery in the absence of onsite services – concluding that they reach out to a greater number of service users and provoke new ways of collaboration. Regarding the latter, Steen and Brandsen (2020) note an increased trend of co-production in areas, which in normal conditions are un conducive to this ‘way of doing things’. But, in contrast to the general perception about the transformative power of the crisis, they argue that without the sense of urgency, emergency regulations and funds “people and institutions will easily slip back into business as usual” (Steen and Brandsen 2020, 854). Other specific organisational aspects of academic interest refer to sustainability efforts of organisations (Lozano and Barreiro-Gen 2021); innovations (Davis et al. 2021); accountability mechanisms (Bastida et al. 2022); efficiency and management of public resources (Martínez-Córdoba et al. 2021); the role of public managers (Shand et al. 2022); etc. Not surprisingly significant attention has been dedicated to telework as the most radical change in the context of the public sector (Bezzina et al. 2021; Edelman, and Millard 2021; Liebermann et al. 2021; Fischer et al. 2023). On this basis, we have been informed that this work arrangement poses greater challenge for supervisors than for the operational staff, while the key success factors for its proper implementation imply employee autonomy and digital skills (Fischer et al. 2023). Moreover, we get an insight into the impact of the COVID-19 crisis on transformational leadership, inter alia potential barriers that hamper the transfer of transformational leadership behaviour to new working arrangements during turbulent time – such as, high workload, time pressure, role conflicts, and communication problems (Liebermann et al. 2021).

This brief discussion reveals that the relevant literature produced in the last couple of years has featured rather partial focus, concentrating on the impact of the crisis on specific organisational aspects/features, as if they are independent and not part of a larger, closely connected and interdependent system. Precisely this is the gap that the paper aims to address by looking closely into the central level of governance in Slovenia. The goal is to provide a comprehensive understanding of the unfolding and quality of organisational change resulting from the COVID-19 crisis, and thus answer the following two research questions:

RQ1: What are the most significant and long-term organisational changes as a direct result of the Covid-19 crisis? How and why did they happen?

RQ2: What organisational features/changes make a public organisation resilient to turbulent events of the scale of the COVID-19 crisis?

The answers are sought by dissecting the impact of the COVID-19 crisis on the overall organisational setup of two Slovenian public organisations at the central level of governance – the Agency of the Republic of Slovenia for Public Legal Records and Related Services AJPES and the Administrative Unit Ljubljana. To achieve this we rely on the theoretical framework of Nograšek and Vintar (2014) recognised as the most suitable adaptation of the Leavitt's diamond for our purpose.

The paper is consisted of six chapters. In the next, second chapter, we justify the choice of the theoretical framework and briefly discuss its main idea. Then, in chapter three, we present the research methodology and the two case studies analysed. Chapters four and five discuss the organisational changes in the two cases with a special view to their long-term effects. In chapter six, we provide a comparative insight into the results of the case studies

through the prism of the Nograšek and Vintar framework. At the end, in the conclusion, we reflect on the research results and provide directions for future research.

2 Theoretical discussion

The Leavitt's diamond model has been the key reference and most comprehensive theoretical framework for understanding organisational change and digitalisation within the public sector (Leavitt 1965; Sarker 2000, Nograšek 2011, Nograšek and Vintar 2014, Shouran et al. 2019). In a nutshell, this idea builds on four interacting components – people, tasks, technology and structure, and the assumption that a change in one triggers change in all others (Leavitt 1965). For instance, an introduction of a new ICT will not imply a change of the technology component, but also of people (e.g. new skills), tasks (e.g. automation of tasks) and structure (e.g. decentralisation).

To grasp better new complexities as well as peculiarities of specific research topics, the Leavitt's model has undergone various adaptations and upgrades during its decades-long application. Sarker (2000), for instance, has adapted the Leavitt's diamond model to be able to better define practical guidelines for managers regarding the implementation of ICT within their organization. Precisely, the upgrade of the model in this case implied redefinition of its original components to capture both 'objective' and 'subjective' realities within an organisation – the former referring to the institutional infrastructure, while the latter to the individual consciousness and perceptions about the model components. Later, the original diamond model was extended by Kovačič et al. (2004) with a fifth element – 'organisational culture'. This upgrade also implied a change of the name of the component 'tasks' into 'processes' with the purpose of capturing the dynamism of this organisational component. Similar as in the original model, the organisational components remained interdependent meaning that changes in one cause changes in the others – e.g. "changes in technology cause changes in processes and consequently in people, culture and structure" (Nograšek 2011, 16). In addition, Wigand (2007) upgraded the Leavitt's model into an Organizational Interaction Diamond (OID) model with the aim of explaining both relations among basic components (people, tasks, technology and structure) and their interactions with the context. The main goal here was to identify the key interactions for maximisation of the benefits from the ICT implementation for the whole organisation (Wigand 2007). Led by a similar goal, Nograšek (2011) adapted the Leavitt's model to identify key changes related to e-government and the role of leadership. This adaptation (Nograšek 2011) implied a step further as it placed the technology component at the centre of the model. This, on the one hand, acknowledged technology as the main trigger for organisational transformation, while, on the other hand, confirmed its co-dependence with the other elements of the model, that is, processes, people, organisational culture and structure.

The common denominator of these adaptations of the Leavitt's diamond model is that they approach organisational transformation and digitalisation as planned strategic efforts/actions, likely and highly controlled by the affected public organisations (Nograšek 2011). Thus, all the different variants of the model have been developed with the purpose of better understanding organisational change in more or less stable environments (Packard et al. 2012). Differently, the Covid-19 crisis triggered organisational changes and digitalisation within public sectors as external contingent event (Lozano and Barreiro-Gen 2021), which did not leave much time and space for planning or long-term strategic action. Thus, the crisis has provided a great opportunity, first, for analysing organisational change

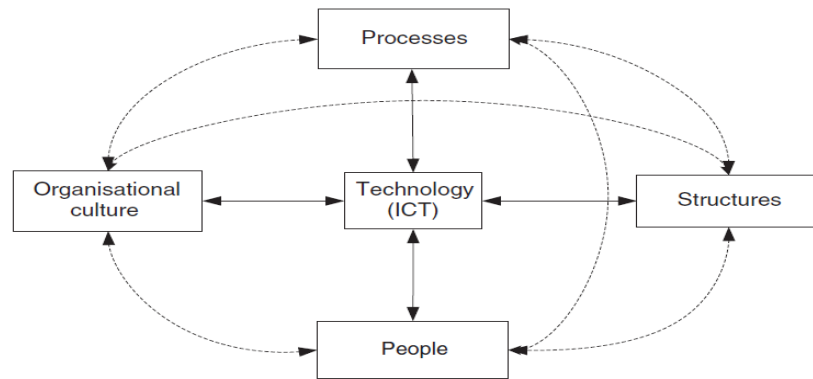
and digitalisation in turbulent times, and, secondly, for revaluation of the existing theoretical frameworks which have helped us by now approach this issue.

2.1 Theoretical framework of the paper

To analyse the substance and level of organisational change within the Slovenian context, we rely on the Nograšek and Vintar (2014) upgrade of the Leavitt's diamond model. Their upgraded framework is based on three main assumptions:

- “Organisational culture” is included as additional element – following the arguments of Kovačič et al. (2004);
- ICT has a central role as the key trigger and driver of organisational transformation;
- ICT is dependent on the other components of the organisation (processes, people, structures, culture) (see figure 1).

Figure 1: The central role of technology presumed by the Nograšek and Vintar (2014) upgraded model



Source: Nograšek and Vintar (2014)

The key advantage of their framework, in comparison to other upgrades of the Leavitt's diamond model, is that it provides basis for the analysis of both the ‘nature’ and ‘depth’ of organisational change. Originally, the Nograšek and Vintar (2014) framework captures three levels of change: workplace, organisational, and inter-organisational levels. Our research, however, focuses only on the first two levels, as we are interested in tracing internal change within individual central level institutions. Moreover, their framework foresees a set of attributes referring to specific changes within each of the four organisational components – processes, people, culture and structure, additionally organised according to the two levels of change we are interested in analysing (1st and 2nd order change, see Table 1).

Table 1: Attributes of organisational change according to different organisational components and depth of change

	Processes	People	Culture	Structure
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Second-order change	Organisational level	<ul style="list-style-type: none"> - Vertical integration - Horizontal integration - Information flows - Process control - Process management - Sourcing 	<ul style="list-style-type: none"> - Leadership style - Recruitment, dismissal, replacement and redeployment - Communication channels - New competences and skills 	<ul style="list-style-type: none"> - Artefacts - Espoused values - Basic underlying assumptions - Behaviour 	<ul style="list-style-type: none"> - Formalisation - Specialisation - Standardisation - Centralisation - Decentralisation - Hierarchical authority - Complexity - Flexibility
First-order change	Workplace level	<ul style="list-style-type: none"> - Automatisation of activities - Elimination of unnecessary activities - Transference of activities - Coordination of activities - Information flows 	<ul style="list-style-type: none"> - Work complexity - Extent of work per employee - Communication channels - New competences and skills 	<ul style="list-style-type: none"> - Artefacts - Behaviour 	<ul style="list-style-type: none"> - Formalisation - Specialisation - Standardisation

Although designed for understanding organisational change in the era of e-government (where the initial input comes from the pressure/endeavours for digitalisation), this framework resonates strongly with the situation during the COVID-19 crisis as the main response and strategy for ‘normalisation’ has been (expected to be) pursued through the introduction of new ways of (or enhanced) use of technology (Dwivedi et al. 2020; Nagel 2020; Davis et al. 2021). Moreover, some authors (Davis et al. 2021) have even explicitly noted technology as the starting input and key driver to organisational change during the COVID-19 crisis. In ‘normal conditions’, however, the implementation of ICT in the public sector is seen as an instrument for improvement of service delivery, better responsiveness and transparency of the public sector (Shouran et al. 2019). However, in a time of crisis, as the COVID-19 pandemic has shown, the main aim of ICT is securing an unhampered performance of the basic tasks of the public sector. This different underlying motivation for the use of ICT might have a different effect on the substance and quality of organisational change in crisis compared to normal times.

Preliminary research (e.g. Shkalenko and Fadeeva, 2020) indicates that the COVID-19 crisis has contributed to a wider and more profound implementation and use of digital technologies, in comparison to any previous crisis or strategic efforts undertaken by states. Both mandatory and voluntary ‘anti-covid’ measures contributed to a situation where a significant part of the workforce works from home – an unprecedented and unimaginable scenario for any other previous period (Nagel 2020). This has changed the dominant perception that ‘traditional office’ jobs cannot be performed online (Brakman et al. 2020), which would have not been possible without the central role of technology.

Although digitalisation has been a strategic goal of governments long before the crisis, the global pandemic has contributed to much faster implementation of ICT, than in normal conditions (Dwivedi et al. 2020; Gabryelczyk 2020). People who would not otherwise use technology in new ways (or more intensively) were simply forced to

rapidly adapt (Nagel 2020). Even at higher organisational level, the COVID-19 pandemic has forced many organisations to undergo significant transformation, to rethink key elements of their processes and use of technology in order to maintain operations (Aristovnik et al. 2020, Dwivedi et al. 2020, Nagel 2020). Hence, ICT has served as a ‘first aid’ that enabled societies to function as normal as possible during this precarious time.

Although the Nograšek and Vintar (2014) framework gives a key role to technology, at the same time, fails to closely operationalise this element (in terms of specific attributes) as it does with the other model elements. Hence, to better understand the changes in the area of technology resulting from the COVID-19 crisis, we complement their framework by a reference to Mergel et al. (2019, 12), who define different degrees of digital change within organisations:

- Digitization – implies “transition from analogue to digital services with a 1:1 change in the delivery more and the addition of a technological channel of delivery”;
- Digitalization – refers to potential changes in the processes beyond mere digitizing of existing processes and forms; and
- Digital transformation captures the cultural, organizational, and relational changes that significantly change the properties/features of the organisation and its ways of doing things.

3 Research methodology

To understand organisational change resulting from the COVID-19 crisis and thus answer the research questions we dive deep into the experience of two Slovenian public organisations at the central level of governance. For this purpose we use the case study methodology – recognised as the most appropriate for investigation of a contemporary phenomenon within its real-life context, for which we lack an understanding (i.e. the impact of the COVID-19 crisis), and with the purpose of studying ‘how’ and ‘why’ some events occur (Yin 2003). Precisely, we analyse two Slovenian public organisations at the central level of governance – the Agency of the Republic of Slovenia for Public Legal Records and Related Services AJPES and the Administrative Unit Ljubljana, selected based on the following criteria:

- Public organisation at the central level of governance; and
- Service delivery as part of the organisational mandate, implying communication (and collaboration) with external and/or internal stakeholders.

Thus, we aim to understand the long-term organizational changes resulting from the COVID-19 crisis and the features that make public organizations resilient to turbulent events of such a scale. The choice of the cases is in particular convenient for the latter, since the case of AJPES captures a ‘positive example’, i.e. successful organisational response to the crisis, whereas the Administrative Unit of Ljubljana stands out as a case that struggled, i.e., have had a harder time dealing with the crisis and its consequences.

The key data gathering method, in addition to qualitative analysis of relevant documents, are semi-structured interviews conducted on the basis of a predefined questionnaire (see annex). The questionnaire captures three main

accepts: the organisational features of the organisation before the crisis; problems and changes during the acute crisis; and long-term impact of the crisis of the organisational properties/features.

On this basis, 13 anonymous interviews were conducted in the period of October and November 2022. In the context of AJPES we interviewed seven employees – 1 at the top-level management, 4 middle management, 1 head of unit and 1 operational staff. The interviews within the Administrative Unit Ljubljana were conducted with five employees – 1 representative of the previous leadership, 3 heads of departments, and 1 operational staff. The results of all interviews were later coded based on the attributes of organisational change divided according to the nature and depth of change presented in Table 1.

In the next two sub-chapter, we briefly present the general characteristics of the two cases and the state-of-the-art before the crisis, which serves as the baseline for the analysis of the substance and level of change resulting directly from the COVID-19 crisis.

3.1 The case of the Agency of the Republic of Slovenia for Public Legal Records and Related Services AJPES

AJPES is a public agency – a legal entity of public law founded by the Republic of Slovenia, responsible for obtaining and managing data on business entities, as well as offering these data to the public. Specifically, the main tasks of AJPES (2022) refer to registry keeping; collection, processing and publication of annual reports; statistical research and data collection; credit rating operations and other commercial activities.

In terms of its **structure**, AJPES consists 13 organizational units, which employ 216 public servants. The Central Office – responsible for the strategic development, administrative work and general regulation of the organisation, is placed in Ljubljana, while the AJPES branches are placed in 12 cities/towns over Slovenia. The key bodies governing the organisation are the 5-Member Council and the Managing Director (AJPES 2022) – both appointed by the Government. The director represents AJPES, organizes and manages work/operations of the whole organisation including the Central Office. The organisation features a hierarchical organisational structure with clearly defined roles and a predominantly top-down decision-making process. The centralised decision-making is justified by the principle of legality and the fact that the work of AJPES is largely dictated by the legal and normative frameworks at both the national and EU levels. The strong centralisation has been pointed out as an advantage, which during the Covid-19 crisis secured consistency in the work of all branches, which cover significant geographical area.

Since its establishment, AJPES has not faced significant fluctuation of **staff**. The only staff fluctuations were noted within the IT department as younger employees have often left for better-paid comparable jobs in the private sector. This stability has reflected as a relatively old average age (48 years) of employees. The only reform affecting this organisational element was the 2019 staff reorganisation among the AJPES branches, which aimed to establish the SPOT points.¹ Although before the crisis staff did not have an experience with work from home, they did face emergency situations (of a smaller scale, e.g. the 2014 sleet) or enormous workload, which required

¹ The Slovenian business Points provide support and information about the establishment and operation of economic subjects on the territory of the Republic of Slovenia (for more see SPOT.GOV 13. 6. 2023).

temporary staff reorganizations and more flexible work arrangements for securing unhampered performance of the organisation. Practically, this meant that employees from different branches signed-in into the system and worked 'remotely' to assist their colleagues from other branches, who needed help due to overload or an emergency.

This, however, would have not been possible without the development and investments in the area of **technology**. AJPES was digitally oriented and had its services digitalized long before the COVID-19 crisis. The organisation has a relatively big IT department, which supported these developments. Although, its 20 posts systematised are not always fully occupied (due to staff fluctuations), the very existence of this department represents a crucial organisational asset that enables fast adaptation to unpredicted crises (including the COVID-19 crisis). But in contrast to the technological possibilities and support, before the crisis the majority service users preferred 'analogue' service provision and face-to-face (or phone) communication.

In addition to being digitalised, the AJPES **processes** are centrally managed by the Central Office. Twice a year, they are subjected to internal and external audits – the latter being a requirement in the context of the ISO 9001 standard for quality management (obtained before the Covid-19 crisis). Additional evaluations of AJPES processes are conducted in the context of legislative changes, with the purpose of evaluating their impact and/or making additional adjustments.

In 2018, as a requirement of the ISO 9001 standard, AJPES adopted a business continuity plan, which obliged the organisation to unhampered continuous performance and service provision regardless of external conditions. The very interest of the organisation to secure continuous functioning is rooted in its experience with previous crises (though of a smaller scale than COVID-19). Namely, the 2014 sleet that affected the Postojna region, led to power cut-off of the regional AJPES branch. The problem was quickly solved by the other branches, who took over the work of the Postojna branch (a valuable experience used in context of the COVID-19 crisis).

The business continuity plan foresees the establishment of a professional body within AJPES (consisted of the director and heads of departments) responsible for taking care of the continuous performance of the organization. Twice a year this body updates the plan according to the needs and/or findings of the internal and external audits. Moreover, the business continuity plan presupposes testing at least once a year.

In terms of the **organisational culture**, AJPES has closely collaborated with different external actors – e.g. other public institutions (such as the Ministries of Economy or Finance) in the context of the preparation of legal amendments; or research activities (with the Statistical office SURS). Coordination and collaboration with external stakeholders is particularly prominent during the data-gathering for the annual reports – AJPES database covers approximately 155,000 annual reports.

Moreover, the communication with external actors, i.e. service users in the pre-COVID period was guided by a cultural codex and values aimed at getting closer (inter alia physically) to clients. This was largely reflected on the organisational architecture. Thus, interior design solutions made sure that public servants and service users were at the same level when communicating, and that there were no physical barriers between them.

Regarding the **internal organisational culture** has been noted a strong sense of loyalty, collaboration and solidarity among AJPES employees. When it comes to a higher workload within one branch, usually other branches (i.e. their heads) offer help, without the intervention of the top leadership (who is only informed and always supportive of such actions). The positive climate within AJPES has been regularly confirmed by the annual measurements of organisational energy (Organzacijska energija 2022).

3.2 The case of the Administrative Unit Ljubljana

Slovenia has 58 administrative unites established with the purpose of performing the tasks of state administration (State Administration Act 2002). The key aim of this system of deconcentrated administrative units (usually covering the area of one or several local communities) is to enable “cost-effectiveness and efficiency in performing administrative tasks” (Gov.si 2023). Within this system, the Administrative Unit Ljubljana is the largest administrative unit.

In terms of its **structure**, it is a classical public organisation – with clear systematization of posts and strict hierarchy. This implies a clear definition of roles, set of competences, and scope of work at both individual and departmental levels. Although some of the heads of departments avoided the word “centralised” and used “clear structure” to describe the Administrative Unit, they did point out the key role of managers within the organisation.

The key reform that affected the structure of the organisation was launched in the period before the crisis; it referred to the abolishment of the system of decentralised branches – Bežigrad, Center, Moste-Polje, Šiška in Vič-Rudnik and their centralisation at one location in Bežigrad (STA 2020). This physical centralisation later had a spill-over effect on the unification of the criteria and better standardisation of service provision. The latter was deemed important as a response to the criticism of double standards stemming from the different approach to same matters/procedures (e.g. building permits) by different branches. The reform additionally improved the level and quality of communication among employees working on same processes, which also positively affected their standardisation.

Despite the criticism of ‘double standards’, the **processes** and services provided by the Administrative Unit are considered clearly regulated – building on a clearly defined framework, as basis for public servants to issue decisions and provide services. This relatively high level of process regulation leaves small space for autonomy for civil servants to approach each case according to its specifics. In addition to their clear regulation, the processes and services performed by the Administrative Unit Ljubljana are relatively stable – any potential changes usually emerge from the obligations stemming from the harmonisation with the EU law (e.g. transposition and implementation of EU directives). Their stability is also ascribed to the fact that the services delivered fall under the prime authority of other state organs – ministries (e.g. for infrastructure, interior, labour etc.), meaning that the Administrative Unit is not their owner and therefore, does not have a direct authority over their renewal.

In the years before the crisis, the Administrative Unit struggled with significant backlogs, which were annually, for the past 10 years, increasing by 50 % and thus, disproportionately affecting certain departments (e.g. for foreigners, ID documents, and drivers licences). The key reason that contributed to the accumulation of backlogs was the lack of **staff** – a problem puzzling the Administrative Unit Ljubljana for a long time before the COVID-

19 crisis. Although its reasons changed over time, the problem as such remained. For instance, in the aftermath of the 2008 economic crisis, the public sector was regarded as a stable and safe working environment (that cannot go bankrupt), which contributed to a significant offer and interest among active employment seekers. Due to the limited employment opportunities, they were ready to accept lower-level positions – e.g. people with a 7th level of education applied for frontline work posts that required 5th level. But, regardless of the offer, the recruitment of new staff was put on hold due to the rigid legal framework adopted for securing the stability of public finances and spending – the Public Finance Balancing Act (ZUJF) (2012). Later, before the onset of the Covid-19 crisis, the situation drastically changed as the greatest challenge for the Administrative Unit Ljubljana became finding qualified staff that would be interested to work there. The low salaries were not considered proportional to the responsibilities and workload expected from employees. Moreover, the attraction of the Administrative Unit Ljubljana as an employer diminished, since frontline public servants had a significantly larger workload and less ‘kind’ working conditions,² in comparison to their counterparts from other administrative units. Although in 2019, the Administrative Unit employed additional staff in the department for foreign citizens – recognised as the most affected by this problem, the backlogs (despite the small decrease) and significant pressure on employees remained. This further perpetuated the fluctuations of educated, qualified staff, who saw the Administrative Unit Ljubljana as a temporary job, until finding something better.

With regard to **technology**, it seems as if the trend and pressures for digitalisation circumvented the Administrative Unit Ljubljana – thus, leaving most of the services ‘analogue’. As a specific technology used in this context, the interviewees mentioned phone and e-mail communication. In particular the latter, the fact that service users could address the Administrative Unit Ljubljana via email, was referred to as a significant step towards digitalisation (which is very indicative of the understanding and level of digitalisation within the Administrative Unit). Beside the outdated computer equipment, the key technology used within the Administrative Unit Ljubljana was the one legally prescribed for service delivery – e.g. the technology for taking fingerprints, signatures and biometrical data. Moreover, the Administrative Unit Ljubljana had never had its own IT department, but depended on the IT support provided by the Ministry of Public Administration (MPA), where only two employees are assigned to provide technical support. In a nutshell, as the main technology related challenges in the ‘pre-COVID’ period were noted: the low number of (fully) digitalised public services; general impression that some services cannot be digitalised under any conditions; preference of service users to face-to-face communication (regardless of the online alternatives via the portal e-Uprava); and the lack of interoperability connecting different databases belonging to different state organs.

Moreover, some of the technology related problems, such as the lack of inter-organizational cooperation between the IT staff from the Ministry of Public Administration and employees of the Administrative unit touched upon aspects of the **organisational culture**. Usually, the latter are either not included or disregarded in the development

² The Administrative Unit Ljubljana differs from other administrative units, as the only one that works in two-shifts and is open in the afternoons (until 6 p.m.). Not surprisingly, the biggest crowd in the Administrative Unit Ljubljana was noted around 5 p.m. – when most people finished work and took time to arrange their documents before heading home. To service them, frontline public servants often had to work until 10 p.m. In 2019, this changed, when the (at that time) new head of the Administrative Unit Ljubljana adopted a decision requiring that at a certain time (usually around 5 p.m.) frontline public servants would stop taking new clients in order to be able to process the received applications by the end of the official working hours. On daily basis, this decision was in the hands of the manager on duty, who had to make sure that frontline public servants finish on time.

of online solutions for the services provided by the Administrative Unit. However, this seems to be a general pattern and attitude as other state institutions underestimate administrative units as organs placed at the end of the service delivery chain. In addition to the lack of inter-organizational communication, the Administrative Unit Ljubljana struggled with the problem of internal silos, which was partly addressed by the centralisation reform mentioned above. Regardless of the initial resistance, the benefits of the reform were recognised as easier communication and consultation among staff and unification/standardisation of the practices of service delivery.

4 Organisational changes as a response to the COVID-19 crisis in the case of the Agency of the Republic of Slovenia for Public Legal Records and Related Services AJPES

Work from home and the establishment of a system of reorganisation/rotation of frontline public servants at the level of the AJPES branches were the **very first responses** to the Covid-19 crisis. Differently from the Central Office where the work process was organized predominantly from home, the branches responsible for service provision had frontline public servants physically present at their premises. Before the introduction of the PCT requirement, there were two teams of frontline public servants rotating based on a duty schedule. The idea was that the two teams never meet, so in case of illness within one, there is a backup team to secure unhampered work of the branch. Practically, this implied a hybrid arrangement as one team worked from home, while the other at the branch premises. Beside securing continuous performance of the organisation during the period of acute crisis, the ‘rotation’ was also regarded as the most fair solution from the aspect of staff – since those at the branches faced more work and pressure than those working from home.

Work from home, however, was never imposed, but only recommended. The leadership was well aware that work from home requires not only technical equipment, but also additional conditions for the employees to productively perform their work. When the latter were not fulfilled due to different reasons (e.g. lack of a working space or home-schooling due to the physical closure of schools), AJPES used other legal options such as payed temporary lay-offs (čakanje na delo). Moreover, the introduction of work from home implied adoption of a proper legal framework, regulating inter alia operative/practical aspects, e.g. reporting to the Labour inspectorate as the responsible institution to monitor the implementation. Thus, based on the national legal guidelines and conclusions of the internal analysis of the situation, AJPES specified its internal policy and conditions regarding work from home, including the establishment of a new monitoring system of staff performance. This relied on weekly reports, which general format was defined by the Central Office, while it was further specified by the heads of the branches to better suit its purpose at this organisational level.

Although the crisis did not bring any **tangible changes to the organizational structure**, the interviews did note **strengthening of the top-down approach** during the acute crisis, manifesting as enhanced role of the Central Office. This development was recognised in a positive light, as a factor securing effective and efficient performance of the organisation during the crisis.

As to the **processes and services provided**, the limited changes affected mainly their form and not their substance. Thus, the changes related primarily to the observance of the health protection requirements and the implementation

of the temporary measures introduced by the ‘anti-crisis’ legislation with the purpose of mitigating the consequences of the crisis. A concrete change adopted in the context of the latter was the temporary prolongation of the deadline for annual reports that economic subjects needed to submit to AJPES (from 31.3 to 30.5.). This particular measure provided additional period for AJPES staff to prepare and thus avoid backlogs. The ‘anti-Covid legislation’ also loosened the requirements regarding the submission of signed documents, enabling AJPES employees to accept photocopied applications. Similarly, adaptations were made regarding the identification process of service users and the process of handing over decisions/documents – regarding the former, AJPES did not ask for a personal identification document, while for the latter, decisions/documents were not necessarily delivered to a secure mailbox. The key success factor that enabled quick and easy adaptation was that all AJPES employees before the crisis had qualified electronic signature and used it more intensively during this period.

At more operational level, AJPES introduced an ordering system for service users; different official hours (then in ‘normal conditions’), and regular disinfections of the premises upon visits of service users. By providing up to date information on its web page with references to NIJZ recommendations, AJPES endeavoured to encourage service users to resort to digital services.

To minimise physical contact internally, **communication took place mainly through digital channels** (MC Teams). Moreover, the AJPS IT sector provided significant support in terms of equipment, remote access, training about the use of MC Teams and publishing of relevant information (such as user manuals) on the AJPES portal. Within a period of one week, the IT sector managed to enable 190 employees (out of total 222) with a remote access to the AJPES system. At the level of the branches, private phones of employees working from home were connected to work phones, thus securing unhampered work process and communication with service users. The shift from analogue to online setting was facilitated by the fact that AJPES processes were largely digitalised.

Eventually, **the changes within the element “culture” happened at two levels – at the level of relationships and artifacts**. Regarding the former, instead of alienating employees, the Covid crisis brought them closer together. The positive climate within the organisation was confirmed by the award “good organizational energy” that AJPES got in 2022 (Organizacijska energija 2022). More interestingly, the user satisfaction surveys, the organisation regularly conducts, showed that the COVID-19 crisis did not negatively affect user satisfaction – on the contrary, service users praised the easy access to all relevant information via phone or the AJPES web page during the state of epidemic (AJPES 2023). The most visible trace within the element “culture” is noted on the architecture, i.e. the interior of the organisation. As a direct requirement stemming from the health protection measures, the organization had to physically divide the space and impair communication between employees and service users.

4.1 Long-term changes of the Agency of the Republic of Slovenia for Public Legal Records and Related Services AJPES

The long-term impact of the COVID-19 crisis is noted regarding three elements of the Norgašek and Vintar (2014) model: “technology”, “people” and “culture”. Although during the acute crisis, AJPES noted increased electronic communication with service users and digital service delivery, in its aftermath, this trend reversed as the majority service users (similar as in the period prior to the crisis) still prefer to arrange their obligations face-to-face. Nevertheless, new technologies for communication (internally and with other state institutions) have stayed for

good and been accepted as a standard way of communication in addition to face-to-face. The main advantages of this change are inclusion of larger number of attendees, meeting efficiency, and time- and financial savings for both the organisation and staff. Nevertheless, AJPES favours a balanced approach, that is, a combination of both electronic and in-person communication.

More radical changes are noted in the areas of “culture” and “people”. Although in the case of the former the changes represented a step back from the user-friendly environment promoted since the independence of the country, they have been positively accepted by the staff from the branches. The other radical change falls within the scope of the element “people” and refers to the acceptance, regulation and implementation of a more flexible work arrangement – work from home. Since the main barrier to the introduction of work from home was the lack of legal basis, this was successfully addressed at both state and organisational levels. It should be stressed, however, that work from home is not considered a workers’ right, but an arrangement that can be used only if the nature of work tasks allows it and in an agreement with a superior.

5 Organisational changes as a response to the COVID-19 crisis in the case of the Administrative Unit Ljubljana

Upon the declaration of the state of epidemic, the Administrative Unit Ljubljana closed its doors for around three weeks. Thus, the **very first measure** undertaken by the organisation for preventing the spread of the virus was **keeping employees at home**. In this initial period, featuring high uncertainty, only couple of public servants were present in the premises to answer phone calls while service delivery was put on halt. A crisis group was established with the mandate to coordinate and organise the work process. The key tasks of this temporary crisis organ were to determine lists of employees, their shifts and tasks, as well as to regularly update the list of health protection equipment. The head of the Administrative Unit enjoyed the greatest influence over these decisions, which were later implemented at the lower levels (by the relevant sectors). Thus, the crisis **further strengthen the already hierarchical and centralised structure of the organisation**.

During the acute crisis was completed the reform that abolished the system of decentralised branches. Although this reform was not causally related to the COVID-19 crisis, it was certainly sped up by it. Another reform implemented in the midst of the crisis, which similarly as the previous was not causally related to the COVID-19 crisis, referred to the merger of all counters (okenca) under one department. Although prepared much before the crisis with the purpose of better managing the disproportional workload of certain counters, it did have a positive effect on the organisation of work during this precarious period. Namely, this reform enabled easier redistribution of work from the counters overwhelmed by applications, to the other counters with a lower intensity of work.

In terms of work tasks, the Administrative Unit Ljubljana was dealing, initially, with cases, which did not require physical presence of service users. **Processes**, where presence was required – e.g. public hearings, were adapted to abide by the health protection requirements. Thus, their form (i.e. the way they were conducted) changed, while their substance remained the same. **The most ‘radical’ change here referred to the introduction of the ordering system aimed at controlling the access to the Administrative Unit**. The goal of this reform was to enable better

management of the enormous daily fluctuation of people within the Administrative Unit. Moreover, in the period of acute crisis, the Administrative Unit provided limited number of services – only those recognised “urgent” (e.g. driver licences for professional drivers). The non-delivery on “non-urgent services” contributed to **piling up of applications and additional backlogs**. Moreover, backlogs resulted also from some of the measures adopted at the central level of governance. Namely, the decision of the government to ban movement from the municipality of residence to other municipalities (Official Gazette, 2020), contributed to an enormous increase of applications for temporary residence change. Many people who had a vacation home in the mountains or seaside decided to change their residency to be allowed crossing municipalities.

The peculiarity of the Administrative Unit of Ljubljana is that during the crisis it endeavoured to function as in ‘normal conditions’. **The majority of public servants who worked were physically present in its premises** – based on a system of shifts and rotations, while an **insignificant number worked from home**. Often the organisation disregarded the general guidelines limiting the physical presence within the premises to 20% and the leadership actively sought a legal advice to justify this decision. The key reasons for not introducing work from home was the resistance of the previous leadership and the nature of work – considered incompatible to this work arrangement (due to lack of digitalisation). Moreover, the size of the organisation was seen as additional liability, making remote access a significant risk that could endanger data security and protection. Since the remote access implied insight into many different databases with sensitive personal data beyond the premises of the organisation, it raised fears of potential misuses, which were addressed by keeping the old ways of doing things.

Thus, **technology has been since always the weakest link of the Administrative Unit Ljubljana**. Indicative of this is the small number of computer equipment provided during the acute crisis, as well as the approval of a small number of requests for remote access. Although the remote accesses as such was not regarded as a problem – since the Ministry of Public Administration was very prompt in enabling it (in 2-3 days), the lack of suitable computer equipment was. **The only technology that was widely distributed among employees were computer cameras**, which were mainly used for attending online trainings (organised by other institutions). Also electronic channels for communications – MC Teams, Zoom, were used solely for this purpose.

However, the Administrative Unit of Ljubljana could have not remained immune to outside technology oriented pressures during the crisis, which led to: 1) **increased use of e-mail communication by service users** and 2) **‘normalisation’ i.e. acceptance of digital signature** on documents issued by the Administrative Unit. The former, although at first glance a positive change, turned out to be rather a challenge than a benefit for the Administrative Unit. Actually, the frequent use of this “new” channel of communication brought an additional workload for staff. Due to improper digitalisation – as backstage processes were not digitalised beyond the electronic submission of applications, this (email communication) emerged to be an additional channel for public servants to manually handle. Hence, as a response to this challenge and with the purpose of accelerating processes, the use of electronic signature increased and staff were no longer required to scan documents.

This had a revers positive effect on the attitudes of service users, who became more open to the use of electronic signatures and electronic channels. However, the crisis affected the culture of the organisation internally in a more negative way as people got more introvert, cautious and antisocial. In addition, this contributed to some tensions

among staff, as part of them did not believe in the virus and refused to obey the health protection requirements (e.g. wearing a mask).

5.1 Long-term changes of the Administrative Unit Ljubljana

The Administrative Unit Ljubljana survived the crisis without significant organisational changes. The organisation showed a lack of agility, innovation and capacity for adaptation. It tried to function as in normal conditions, which made it emerged from the crisis in far worse shape than before. To be fair, the Administrative Unit of Ljubljana did not have much choice, as any authority over the introduction of more substantial changes regarding its organisation (“structure”) is in the hands of the Ministry of Public Administration, while regarding its services (the element “processes”) in the hands of the line ministries.

With the change of the government in 2022, the Minister of Public Administration announced a structural reform of the whole system of administrative units (G. K. 2022; The Slovenia Times 2022). A work group was formed (G. C. 2023) to improve and unify the process of service delivery across different administrative units, as well as solve the long waiting times within the larger administrative units (including the Administrative Unit Ljubljana). As a priority that needs special attention were pointed out services related to foreign citizens – this also implied preparation of amendments to the Law on Foreigners.

As a systemic solution to the problem of backlogs, the government prepares legislative changes to amend the Act on State Administration (Al. Ma. 2023), which should enable transfer of territorial authority among administrative units. Practically this means that when an administrative unit faces a large number of cases and is not able to solve them in a reasonable time, it could transfer them to other less burdened units.

Hence, as the most significant long-term change resulting directly from the COVID-19 crisis is noted the implementation of the ordering system – in the area “processes”. Regardless of its positive effects, mainly noted in the context of the element “organisational culture”, the ordering system has not solved the problem of backlogs. It mainly contributed to a calmer atmosphere within the premises of the Administrative Unit and consequently more time and better work environment for frontline public servants to do their job.

6 Discussion

In contrast to the expectations set by the Nograšek and Vintar theoretical framework, both analysed cases showed that the initial impetus for organisational change happened in the element “people” – not “technology”.

In the case of AJPES, the very first change referred to “work from home” and reorganisation/rotation of frontline public servants of the branches. This had a spill-over effect on the element “technology”, as the second step undertaken by the organisation implied provision of equipment and remote access. In addition, changes in the element “technology” had a reverse effect on the element “people” by radically changing communication channels among staff with the introduction of MC Teams. Eventually, the changes in both areas – “technology” and “people”, affected the organisational “culture” – overwhelmed by the fear of the unknown and potential alienation, both the management and staff actively endeavoured to stay connected and close together.

Although the change in the case of the Administrative Unit Ljubljana was limited, they also initially occurred in the area “people” – with staff reorganisation and the establishment of a rotation system. Without the wider introduction of work from home, this implied a lower number of employees actively working, which affected the element “processes” by prioritising the delivery of “urgent” services. This not only increased the already significant backlogs, but also additionally deteriorated the working conditions, which negatively affected the element “organisational culture”. The unfavourable working environment in combination with low salaries, had reverse effect on the element “staff” – stimulating fluctuations of employees and painting an image of the Administrative Unit as an unattractive employer.

Table 2 comparatively presents the depth and nature of the long-term changes noted in the two cases through the prism of the Nograšek and Vintar (2014) attributes featuring each of the four organisational elements – processes, people, culture and structure. With yellow colour are marked the changes of the Administrative Unit Ljubljana, while with blue the changes in the case of AJPES. The green colour indicates type of change noted in both cases.

Table 2: depth and nature of changes in the Administrative Unit Ljubljana and AJPES

		Processes	People	Culture	Structure
Second level change	Organisational level	Vertical integration	Leadership style	Artefacts	Formalisation
		Horizontal integration	Recruitment, dismissal, replacement, and redeployment	Espoused values	Specialisation
		Information flows	Communication channels	Basic underlying assumptions	Standardisation
		Process control	New competencies and skills	Behaviour	Centralisation
		Process management			Decentralisation
		Sourcing			Hierarchical authority
Complexity					
Flexibility					
First level change	Workplace level	Automatisation of activities	Work complexity	Artefacts	Formalisation
		Elimination of unnecessary activities	Extent of work per employee	Behaviour	Specialisation
		Transference of activities	Communication channels		Standardisation
		Coordination of activities	New competencies and skills		
		Information flows			

On this basis, we conclude that most of the changes within the element “processes” were of temporary nature in both cases. The only long-term changes referred to the establishment of a new “process control” system for monitoring staff performance from home in the case of AJPES; and the “outsourced” ordering system (including the call centre) of the Administrative Unit Ljubljana.

In both cases, the most substantial and visible changes are registered within the element **“people”**. In the case of AJPES we note change of **“communication channels”** – as traditional communication was to some extent replaced by electronic communication (MC Teams). The often use of this new digital tool reflected on the production of significant and easy accessible knowledge through the AJPES portal, as well as trained staff with **“new competences and skills”**. In the case of the Administrative Unit Ljubljana, the staff reorganisation in the period of acute crisis (implying lower number of employees actively included in the processes of service provision), had long-term negative consequences that contributed to the increase of (already significant) backlogs and **“extent of work per employee”**. Moreover, the crisis contributed to increased use of **“electronic communications”** – specifically e-mail communication (e.g. for the submission of applications), which due to the lack of digitalisation of backstage processes reflected as increased **“work complexity”** for staff.

The changes within the element **“culture”**, in the case of AJPES capture second-level changes of **“artefacts”** and **“basic underlying assumptions”**. The former refer to the interior of the organisation – precisely, the resurrection of physical barriers between service users and public servants. Regarding the latter, the possibility of remote access and work from home seem to have put a tacit pressure on employees to avoid taking a sick leave in case of mild illness symptoms (praised as a sign of loyalty to the organisation). Differently, the case of the Administrative Unit Ljubljana features first-order rather ‘antagonistic’ changes related to the attribute **“behaviour”**. On the one hand, the introduction of the ordering system – and consequently the control of service users present in the premises of the Administrative Unit, improved the work environment for the staff behind the counters. However, on the other hand, the backlogs generated by the changes within the element “people” deteriorated the work conditions, and thus provided an additional argument (besides the low salary) for staff fluctuations.

Despite the pressures towards greater centralisation, we conclude that the element “structure” was in both cases left intact. While in the context of AJPES, the temporary strengthening of **“centralisation”** was the necessary and most effective response to the emerging challenges during the acute crisis; in the case of the Administrative Unit Ljubljana, was a result of the previously launched reforms – not the crisis as such. The crisis only supported these reforms in a sense that it confirmed their rationale and to a certain extent sped up their implementation.

Based on the definition of different degrees of digital change (Mergel et al. 2019), we note a lack of **“technology”** change in the two cases – albeit due to different reasons. Since the Administrative Unit Ljubljana tried to function as in normal conditions, the COVID-19 crisis did not provoke significant changes beyond the more often use of electronic signature – thus, it did not contribute even to the lowest level of technological change, implying **“digitization”**. Still today, the organisation uses old IT equipment and has most of its backstage processes analogue. In contrast, the lack of change in the case of AJPES was due to the ‘favourable’ starting position of the organisation, which was long before the COVID-19 crisis digitally oriented – its services were largely digitalised; staff was digitally literate and equipped for provision of online services. Therefore, the COVID-19 crisis affected only the introduction and intensity of use of new electronic channels for communication.

Eventually, in terms of the depth of changes, we conclude that AJPES endured both first- and second-level change. The latter captures the introduction of work from home – specifically the adoption of its legal and normative basis, and the introduction of MC Teams as an alternative channel to face-to-face communication. Not surprisingly, in

the case of the Administrative Unit Ljubljana the limited change is manifested as a first-level change – primarily at the workplace level.

7 Conclusion

The analysis of the two cases shows limited long-term impact of the COVID-19 crisis at the central governance level. This is especially evident in the case of the Administrative Unit Ljubljana, which survived the crisis without any significant organisational changes beyond the deterioration and deepening of the problems from the period before the crisis. Therefore, the answer to the first research question “What are the most significant and long-term organisational changes as a direct result of the Covid-19 crisis?” derives mainly from the experience of AJPES. Although even in this case the COVID-19 crisis did not provoke organisational transformation, we still note two rather radical changes that are going to stay for good – the introduction of work from home and MC Teams as a legitimate alternative channel to face-to-face communication. However, in addition to the specific experience of AJPES, the long-term nature of these changes should be understood also in the light of the general shift – at the global (EU) and national (Slovenian) levels, towards the normalisation of the hybrid way of work as a standard within the contemporary work environment (Crahay et al. 2021; Ministry of Public Administration 2022).

Although this is not sufficient for drawing more universal conclusions about the COVID-19 induced organisational changes at the central level of governance, the very choice of the case studies and their comparison provides an insightful input into the second research questions “What organisational features/changes make a public organisation resilient to turbulent events of the scale of the Covid-19 crisis?” Namely, the Administrative Unit of Ljubljana was severely affected by the crisis, as it lacked capacity (e.g. both hardware and software equipment, digitalised processes, staff etc.) to cope with the emerging challenges. Differently, AJPES showed incredible adaptation capacity to the new situation, which enabled unhampered performance and service provision; and thus successful survival of the Covid-19 crisis. The key asset in the case of the latter was the existence of a crisis management (stemming from the obligations from the ISO standard) and high level of digitalisation. The awareness that nothing is stable and that agility is a prerogative, made AJPES invest in its organisational development (e.g. by fulfilling quality standards – ISO, assessing organisational energy, etc.). Moreover, in the aftermath of the COVID-19 crisis (during the conduct of the interviews), AJPES was already actively preparing to a new economic crisis. This shows a remarkable organisational learning capacity and ability of AJPES to capitalise on past experiences to build its resilience and successfully solve present challenges – for instance, the experience with the 2014 sleet was a crucial reference for the organisation to reorganise its work process during the Covid-19 crisis. The second key asset is undoubtedly the digital orientation and capacity of the organisation, which emerged as the basic condition for achieving the goal (and obligation) of unhampered business process during the COVID-19 crisis.

To be fair, the Administrative Unit Ljubljana had a relatively limited space to act differently, as any authority over the introduction of more substantial changes regarding its organisation is in the hands of the Ministry of Public Administration, while regarding its services in the hands of line ministries. This reveals a lack of autonomy as a potential barrier to dealing effectively with (the consequences of) the crisis. Nevertheless, it seems as if potential long-term organisational changes from the lessons learned of the crisis are yet to come, as the Ministry of Public

Administration announced a structural reform of the whole system of administrative units (including the Administrative Unit Ljubljana).

The original contribution of the paper is that it counter argues the dominant perception about the transformative power of the COVID-19 crisis, by drawing a different picture of a limited organisational change as a direct consequence of the crisis. The research results are even more interesting as the two organisations studied had not only differed in terms of their starting position, but also in terms of how they survived the crisis. Moreover, the paper opens a debate about the potential need of a new adaptation of the Leavitt's diamond model, which will better explain the unfolding of organisational change in turbulent time of crisis. Differently from the initial expectations and basic assumption of the Nograšek and Vintar adaptation of the diamond model, our research finds that in a time of crisis the element "people" might emerge as more prominent than "technology". This implies that the initial organisational efforts are predominantly concentrated in the element "staff", while "technology" comes as the second step in support of 'staff related' changes. However, the key limitation of the paper lays in the small number of cases, which capture only the central level of governance and one national context. For more universal conclusions that will contribute to the re-evaluation of the existing adaptations of the diamond model and eventually the creation of a new 'crisis variant', future research should focus on a larger number of empirical cases of public organisations across different levels of governance and national contexts.

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Annex

SEMI-STRUCTURED INTERVIEW –QUESTIONNAIRE

Before starting the interview explain our LA project, provide the interviewee with the information sheet and make sure they sign the consent form.

PART A: OPENING QUESTION

1. Could you please describe your present work role within the organisation?

Goal: to identify the role of the interviewee within the organisation.

PART B: PRE COVID-19 – ORGANISATION CONTEXT AND BACKGROUND

This first part aims to capture the key features of the organisation – specifically regarding its structure, staff, culture, processes and use of technology, before the Covid-19 crisis.

2. How would you describe your organisation before the Covid-19 crisis?³

³ Questions 3–7 are not mandatory to be asked! They should be asked, if the interviewee fails to provide information about a certain organisational element.

Guidance for the researcher: Here we want the interviewee to capture the situation with regard to all five organisational elements: technology, processes, staff, structure and culture. Leave the interviewee to talk and say what they think is most relevant. However, if after they finish, you still feel that certain element was not mentioned or properly addressed please ask (one or more of) the following questions (3, 4, 5, 6, or 7).

3. How would you assess the use of technology in terms of type, intensity and purpose before the Covid-19 crisis?
4. How would you describe processes, including services provided by your organisation, before the Covid-19 crisis?

Guidance for the researcher: If the interviewee is not sure how to start or what to say, explain that we are interested to learn about the level of regulation/formalisation of procedures and services within the organisation; level of integration (vertical and horizontally) of their processes; level of autonomy in the context of service provision and/or process renewals; outsourcing of services/processes (e.g. IT), etc.

5. How would you describe the situation with the staff of your organisation before the Covid-19 crisis?

Guidance for the researcher: If the question is not clear or the interviewee is not sure what to say, explain that we are interested to hear their thoughts about capacity, availability and competence of staff before the crisis.

6. How would you describe the structure of your organisation before the Covid-19 crisis?

Guidance for the researcher: If the question is not clear to the interviewee, explain that we are interested in learning how they see the internal organisational structure – e.g. centralised vs. decentralised; decision-making within the organisation; how are tasks assigned to different departments and/or people in the organisation; the way tasks are coordinated; etc.

7. How would you describe the culture within your organisation before the Covid-19 crisis?

Guidance for the researcher: If the interviewee is not sure how to start or what to say, explain that we are interested in learning about the key values to which their institution was adhering before the crisis; how they saw the internal atmosphere within their organisation in terms of communication/collaboration within and among different units; how they saw their relationship with external actors (i.e. other institutions, citizens, NGOs, business) – e.g. as collaborative, strictly regulated, etc.

PART C: DURING THE COVID-19 CRISIS – ORGANISATIONAL CHANGES

This second group of questions refers to the period during the acute crisis. It aims to capture the main problems faced by the organisation and measures adopted for their mitigation.

8. Was there an aspect within your organisation that ‘normally’ functioned during the crisis – implying that it did not require any changes?

Guidance for the researcher: In case of a positive answer ask for further explanation about the reasons for this situation.

9. What were the main problems and challenges your organisation faced due to the Covid-19 crisis? Which part, i.e. aspect of you organisation was most severely affected?

Guidance for the researcher: The key information that we want to get here is about different organisational aspects and shortcomings that prevented the very functioning and/or service delivery of the organisation. The data gathered here will be later (in the context of the preparation of the report) analysed through the prism of the 5 organisational elements (technology, people, processes, structure or culture).

10. What was the very first intervention within your organisation due to the Covid-19 crisis, i.e. where within your organisation occurred the very initial input to change as a response to the Covid-19 crisis?
11. What were the key measures adopted for tackling the problems and challenges within your organisation as a result of the Covid-19 crisis?

Guidance for the researcher: Make sure that the interviewee refers to both measures adopted at the national level and internally by the organisation. If the focus is placed only on the former, ask specifically about measures adopted at the level of the organisation. In case of the lack of such measures try to identify the reason why (e.g. lack of autonomy).

12. What changes did your organisation make in the area of technology during the Covid-19 crisis?

Guidance for the researcher: The answer here should provide information about the use of new technologies or intensified use of existing technologies for new purposes. Make sure that the interviewee identifies the **object** and **purpose** of the digital/technology change noted. When referring to the “object” of the technology change we have in mind issues such as: processes (e.g. tasks or communication); services; products; relationships (e.g. with service users or within the PA); technology; or the business model (Mergel, et al. 2019). When referring to the “purpose” of the technology change, we have in mind issues such as: digitization of processes/services; digitization of physical documents (e.g. books or files); digitization of relationship (e.g. with users or within PA); use of new technology; and development of new competences (Mergel, et al. 2019).

13. What changes did your organisation make that affected the staff during the Covid-19 crisis?

Guidance for the researcher: In this context we are interested to hear about any changes related to recruitment, dismissal, replacement, and redeployment of staff; duties, complexity of tasks, workload; communication and collaboration among employees; new type of leadership; new competencies and skills; etc.

14. What changes did your organisation make with regard to its organisational structure during the Covid-19 crisis?

Guidance for the researcher: Here we are interested in learning about any trends of formalisation, specialisation, standardisation, centralisation, decentralisation, change of

decision making and criteria for decision-making, hierarchical authority, complexity, flexibility etc.

15. What changes did your organisation make with regard to its processes and/or services during the Covid-19 crisis?

Guidance for the researcher: *Here we are interested in identifying issues such as changes regarding easier access of users, vertical/horizontal integration, information flows, process control and management, sourcing, automisation of activities, elimination of unnecessary activities, transference of activities, coordination of activities.*

16. What changed regarding the organisational culture during the Covid-19 crisis?

Guidance for the researcher: *Here we are interested in identifying changes regarding organisation's stated values, underlying assumptions and rules of behaviour.*

PART D: THE POST COVID-19 PERIOD - EFFECTS OF THE CHANGES

The last group of questions aim to capture the effects of the measures and changes adopted during the Covid-19 crisis. The goal is to identify any long-term impact on the organisation.

17. How would you assess the changes that occurred during the Covid-19 crisis – as of permanent or rather temporal nature?
18. Which changes have left long-term marks on your organisation or are expected to affect future developments within your organisation?
19. Would you say that the Covid-19 crisis contributed to digital transformation of your organisation? Please elaborate on why/why not.
20. What are the key lessons learned for your organisation from the Covid-19 crisis?
21. Do you think that now your organisation is more resilient to future crises? Please elaborate why/why not.
22. (If appropriate) Is there anyone else you think it will be useful to speak to?