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Florian Lemke, Konstantin Ehrhardt, Olha Popelyshyn

Support and resistance of public officials towards current eGovernment initiatives – A case study on Ukraine and Germany

Abstract

This article provides insights on how German and Ukrainian public sector employees perceive and position themselves towards current eGovernment initiatives. After presenting the academic literature on the roles of individual public servants in transformative change processes in public administration, the eGovernment approaches followed by Germany and Ukraine are explained. The results of a survey ($n = 74$) conducted among public servants in both countries provide information on their perceived contribution to and participation in the digitisation of government service delivery, as well as reasons and causes for motivation or frustration in this context. By analysing the survey responses and identifying potential impediments of successful eGovernment implementation, the authors provide recommendations for action for executives that drive digital transformation, such as organising tool-specific training and Single Points of Contact for employees after introducing new processes and software, adjusting educational programmes for new public servants, and establishing a feedback and knowledge-sharing culture when creating new e-services.

Keywords: eGovernment, Motivation, Ukraine, Germany, Public Sector Digitisation

Zusammenfassung

Unterstützung und Ablehnung von Angestellten des öffentlichen Sektors gegenüber aktuellen eGovernment-Initiativen – eine vergleichende Fallstudie über die Ukraine und Deutschland

Dieser Artikel gibt Einblicke, wie Beschäftigte des öffentlichen Sektors in der Ukraine und Deutschland aktuelle eGovernment-Initiativen wahrnehmen und sich zu ihnen positionieren. Nach einer Darstellung wissenschaftlicher Literatur zur Rolle von Beschäftigten in transformativen Veränderungsprozessen in der öffentlichen Verwaltung werden die von Deutschland und der Ukraine verfolgten eGovernment-Ansätze erläutert. Die Ergebnisse einer durchgeführten Befragung von ($n = 74$) Staatsbediensteten in beiden Ländern geben Aufschluss über deren wahrgenommene Partizipation sowie Gründe und Ursachen für Motivation oder Frustration im Kontext der Digitalisierung der staatlichen Leistungserbringung. Auf Basis einer Analyse der Rückmeldungen des Fragebogens und der Identifizierung geäußelter potenzieller Hindernisse für eine erfolgreiche eGovernment-Implementierung geben die Autoren Handlungsempfehlungen für Führungskräfte, welche die digitale Transformation vorantreiben möchten, wie beispielsweise die Etablierung von tool-spezifischen Schulungen und einheitlichen Ansprechpartnern für Beschäftigte nach der Einführung neuer Prozesse und Software, die Anpassung von Ausbildungsprogrammen für neue Staatsbedienstete und die Etablierung einer Feedback- und Wissens-Kultur im Kontext der Entwicklung neuer digitaler Services.

Schlagworte: eGovernment, Verwaltungsdigitalisierung, Motivation, Ukraine, Deutschland

1 Introduction

Public sector employees have been confronted with changes in the way they work, the way they deliver their work, and especially in the way citizens and firms expect them to work. The increasing development and adoption of digital technologies by both individuals and businesses is causing external pressure on public administration to attune to changing, more efficient, and citizen-centred service needs. Furthermore, the passing of laws and regulations aims to drive the modernisation of government processes and eGovernment adoption (Jun & Weare, 2011; Kuipers, Higgs, Kickert, Tummers, Grandia & Van der Voet, 2014). Digital initiatives have been set up in several countries to respond to these shifting expectations. Yet, the change from a bureaucracy-oriented towards a service-oriented public administration has caused uncertainty from the public sector officials' perspective: eGovernment does not only involve the mere digitisation of services but also transforms processes and structures in public administration (Janowski, 2015; Layne & Lee, 2001). As a result, public sector employees are exposed to significant changes in their work environments (Bannister & Connolly, 2014; Castelnovo, 2013; Karkin & Janssen, 2014). However, a view of public servants as mere recipients of change would be simplistic since they are not only affected by the digitisation of services. Rather, they also play a vital role in shaping digital transformation processes in government. Thus, when examining eGovernment holistically, an approach that goes beyond front-end service adaptation and instead focuses on organisations' internal environments, in particular, the roles and actions of public sector employees, is needed.

In the last decades, public administration research on public sector employees has largely focused on their work motives, often subsumed under the concept "*public service motivation*" (Perry & Wise, 1990; Perry, Hondelghem & Wise, 2010; Perry, 2014). While there has been selective research on the roles of individual public servants in organisational change (Fernandez & Rainey, 2006; Stemberger & Jaklic, 2007), little attention has so far been paid to them in the context of eGovernment initiatives. Preliminary research on public sector employees' behaviour in the face of organisational change indicates potential obstacles to the successful implementation of eGovernment: on the one hand, scholars have identified public sector employees to be more risk-averse and more sceptical towards organisational change, and to reject adaptation due to fear of job loss (Dur & Zoutenbier, 2015; Wirtz, Piehler, Thomas & Daiser, 2016; Wirtz, Lütje & Schierz, 2009). According to Bernd Wirtz, Robert Piehler, Marc-Julien Thomas and Peter Daiser (2016), civil servants' risk aversion is the main barrier to implementing digital initiatives. On the other hand, organisational (un-)readiness, as perceived by public sector employees, has been found to be a contributing factor to (un-)successful change efforts (Cinite, Duxbury & Higgins, 2009; Armenakis, Harris & Mossholder, 1993). Given civil servants' dual role of being a change recipient and a change agent, the authors consider this perspective on the individual public sector employee to be relevant to an understanding of why eGovernment initiatives may succeed and/or face impediments. Thus, the aim of this article is to provide insights on how public sector employees perceive both eGovernment initiatives and their roles in the digital transformation of government. The authors have conducted a qualitative survey among German public sector officials, Ukrainian administrators and civil society activists ($n = 74$) to provide first-hand information to this question.

This article is structured as follows: firstly, findings on the role of public sector employees in organisational change processes will be presented. Secondly, the methodical approach to questionnaire design and data collection will be explained. Thirdly, the digital initiatives of Germany and Ukraine will be outlined with emphasis on differences in approaches. Fourthly, the results from our comparative case analyses on how government services digitisation approaches are perceived by public sector employees and how they support or resist the process of digital transformation in the public sector will be presented. Lastly, limitations will be briefly outlined and recommendations for action given based on the findings.

2 eGovernment: A transformative change process affecting public servants

The use of the terms “*digitisation*” and “*digital transformation*” is both omnipresent and highly contested in contemporary public administration research. We, therefore, consider it important to provide an explanation of their meanings. Referring to Tomasz Janowski’s *Digital Government Evolution model* (2015), *digitisation* describes “*the development, operation, and maintenance of the technological environment, including the availability of technological capabilities, services, and infrastructure within and between government organizations*” (Janowski, 2015, p. 226). The digitisation stage also lays the foundation for the next stage of digital government involving changes in organisational structures and processes: *eGovernment* or (Digital) *Transformation*. According to Janowski, eGovernment reflects a higher level aiming not only at digitised service delivery but also “*improving internal processes, structures and working practices of a government organization through the application of digital technology [...] often tak[ing] place as part of a larger institutional reform in the public sector*” (Janowski, 2015, p. 226).

Following New Public Management principles (Rose, Persson, Heeager & Irani, 2015) and Digital-Era Governance (Margetts & Dunleavy, 2013; Tassabehji, Hackney & Popovič, 2006), public administration research has largely focused on the citizens’ and firms’ perspective on eGovernment. Numerous (potential) benefits of eGovernment for those actors have been highlighted by scholars, including better accessibility and quality of services and information (Castelnovo, 2013; Pirannejad, 2011), increased efficiency and effectiveness in government service provision, and more transparent and collaborative service delivery (Bannister & Connolly, 2014; Karkin & Janssen, 2014). However, discussion of the individual public servants’ role in eGovernment initiatives has been sparse. When understanding eGovernment initiatives as a transformative change, research so far on organisational change in public administration and the role of public servants indicates that more attention should be paid to the role of public sector employees in eGovernment initiatives (Fernandez & Rainey, 2006; Stemberger & Jaklic, 2007).

Broad employee commitment to organisational objectives is essential for the success of change efforts (Hameed, Khan, Sabharwal, Ghulam & Hameed, 2019; Kuipers, Higgs, Kickert, Tummers, Grandia & Van der Voet, 2014). Past research, however, indicates that public sector employee behaviour is often marked by risk aversion, scepticism, and resistance in the face of organisational change (Wirtz, Piehler, Thomas &

Daiser, 2016; Dur & Zoutenbier, 2015; Wirtz, Lütje & Schierz, 2009). Apart from those factors, perceived organisational unreadiness hinders the implementation of desired changes according to Armenakis, Harris and Mossholder (1993). In response to that, Inta Cinite, Linda E. Duxbury and Chris Higgins (2009) have identified factors influencing perceived readiness for change in the public sector. Senior managers' dedication to change and ability to get employee buy-in for structural changes was observed to influence perceived organisational readiness. Insufficient communication and adverse repercussions of implemented changes on work were respectively identified as factors influencing perceived unreadiness (Cinite, Duxbury & Higgins, 2009). One can conclude that public sector managers must also exemplify digital change and convey the importance of digital transformation and middle management as an interface between planning on a strategic and implementing at an operative level. Overall, public sector agencies must create an accommodating environment to prevent or break up distanced attitudes towards structural change among public sector employees to facilitate the successful realisation of eGovernment.

Both the German eGovernment initiative of the Online Access Act (in German: Onlinezugangsgesetz – OZG) and the Ukrainian government digitisation efforts (Digital Agenda 2020) initiate organisational transformation in public sector settings. With survey data on public servants' perception of government digitisation in Germany and Ukraine, the authors aim to identify which factors (can) contribute to employee commitment to change and which may spark eGovernment implementation-impeding scepticism and resistance.

3 Research method

In the eGovernment field, comparative research has largely focused on comparing the status quo in eGovernment across countries in terms of technical implementation and citizen adoption (Carter & Weerakkody, 2008; Chatfield & Alhjurán, 2009). This article adds value to the scientific discourse by focussing on the employee, and thus, the human side of government digitisation which has so far found little academic resonance. Drawing upon two country cases allows for a comparative perspective on how the different eGovernment directives are perceived at an individual level.

For this study, a questionnaire was chosen as research method. Structured data collection in surveys facilitates a systematic comparison of the two country cases in a most-different cases design (Yin, 2018). Furthermore, respondents may provide more honest answers compared to personal interviews, due to higher ascribed confidentiality and anonymity (Fricker & Schonlau, 2002). This point is particularly relevant as some of the questions address sensitive topics directly related to their professional work experiences.

The questionnaire was used to gain information about the relevance that the interviewed actors personally ascribe to administrative digitisation as a result of action. It also aims to clarify how the respondents assess the importance of their own actions for administrative digitisation and how they assess the relevance of action for administrative digitisation and vice versa. To this end, information is needed on which changes the respondents ascribe to approaches of government services digitisation and how they evaluate these changes. In addition, identifying conformities and unconformities of

compared data on, first, individual reasons for motivation and frustration at work and, second, estimated effects of the introduced digital initiatives, helps to recognise which aspects of the analysed digitisation approaches are motivating and/or frustrating. This research aims to answer the overall research question for this article: *How do different approaches of government services digitisation impact the attitude of public sector employees?*

The questionnaire was divided into four sections. The first section was designed to collect general information on the respondents (e.g. age group, gender) and their ties to the public sector (e.g. job profile, length of service). The questions in the second part focused on participation in and contribution to government service digitisation (e.g. *"Have you been asked for your opinion on new digital services or digital processes before or during the implementation?"* and *"What do you do right now to improve your daily routine towards digitisation/e-governance at work?"*). The third section's questions mainly sought to determine the relevance that respondents personally attach to government services digitisation. Both the third and fourth section served to identify reasons for the respondents' motivation and frustration in the workplace (e.g. *"What motivates you at work? Please describe."*; *"What frustrates you at work? Please describe."*; and *"In your opinion, will you benefit personally from the digitisation of public services?"*) and to obtain information on how changes through government services digitisation are perceived and evaluated (e.g. *"What is your opinion on the so-far achieved outcomes of the digital initiative? Are you satisfied?"*) to draw conclusions about the respondents' attitudes and opinions about digital initiatives.

Overall, a balance of open and closed questions was heeded when designing the questionnaire. Closed questions were used to determine attitudes and opinions through Likert scales on the one hand, and to create a more structured questionnaire for the purpose of a more systematic case comparison. Open questions were intended to give the respondents an opportunity to provide more detailed and in-depth answers, for instance, to justify an attitude (Reja, Manfreda, Hlebec & Vehovar, 2003). A digital form was prepared in German and Ukrainian and published in topic-specific groups, such as topic-specific eGovernment networks, lobby groups and science networks for modern governments, with relations to eGovernment of administrative staff, personal networks, and public sector institutions.

In the following sections, the initiatives for government service digitisation in both Germany and Ukraine will be introduced and compared through highlighting the inherent differences between their approaches. These countries were chosen due to their different approaches towards implementing eGovernment, the authors' academic and professional country-specific public administration expertise, and the possibility to utilise established personal network ties with public administrators for survey dissemination. In the next section a first comparative analysis of survey data will be provided.

4 Country review

Germany and Ukraine cooperate closely when it comes to economic partnership and their import and export of goods. So far, however, there have been only a few project-based cooperation efforts at the public administration level. The German Federal Ministry for Economic Cooperation and Development (BMZ) quantifies the German finan-

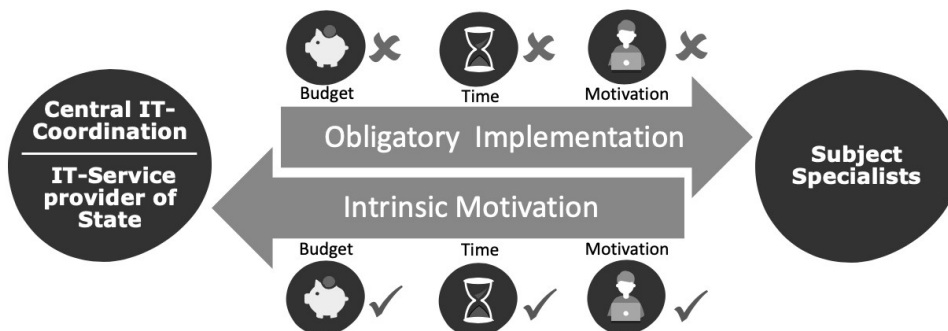
cial support for 18 completed and ongoing projects supporting public administration at an organisational level in Ukraine at a total of EUR 195,3 million since 2007 (BMZ 2020). When looking at the projects, there has not been any cooperation on digitising public sector administration.

In 2014, the Ukrainian government approved a decentralisation reform as a step towards the European model of governance (Udovychenko, Melnychuk, Gnatiuk & Ostapenko, 2017). At the same time, the e-Governance Academy, an Estonian non-profit think tank and consultancy, began assisting the Ukrainian government with the development of e-services at the local level. Estonia is at the forefront of public administration digitisation and has made major steps to create a digital society. Therefore, Ukrainian government officials and representatives of several civil society organisations work closely together with Estonian institutions, think tanks (e-Governance Academy, 2020), and other foreign donors. Compared to Germany, Ukrainian efforts on sharing and intensifying knowledge transfer on digitising government, at the EU-level, have significantly increased.

In Germany, the existing structures of federal states have created sustainable ideas, a constant race between them, and challenges that have been supported by the decentralised political system. It is therefore of importance that the *Online Access Act* has been supported by all states at a national level.

Comparing the federal state of Germany and the republic of Ukraine shows the similarities in their more-or-less established administrative divisions and structures but distinguishes them when it comes to efforts on digitisation and user-centric views of modern public administration. In implementing new digital services for their citizens, they follow different initial approaches that are either driven by civil society in the case of Ukraine or by legislation as seen in Germany. Overall, digital transformation has necessitated and cultivates new approaches to work and requires new public administration strategies in both countries.

The OZG implementation is a law-enacted, top-down approach that makes an emergence of tensions in the process of planning and implementing digitisation a highly probable scenario (Mergel, 2019). The lack of participation and information of policymakers and high government officials may lead to a loss of motivation or even resistance by public sector employees. The Strategy for Public Administration Reform in Ukraine on the other hand focuses on the decentralisation of primary public services and development of administrative service centres (The World Bank, 2018; Deputy Prime Minister of Ukraine, 2018). While prioritising the quality and accessibility of public service delivery, the needs and readiness of public officials have not been addressed.

Figure 1: Change in motivation due to the implementation of the OZG in Germany

Source: Own figure.

4.1 The case of Germany

Germany is currently implementing a nation-wide programme to comply with the OZG, which states that all major administrative services must be digitised by 2022. This requires multi-level collaboration between federal, state, and local government institutions and public administration stakeholders. By clustering to-be-digitised services in thematic areas under the leadership of one federal state and one federal ministry each, all federal states have a stake in public administration digitisation efforts. On the federal state level, services are prioritised by their digitisation potential. Services with the highest priority ascribed are developed in design sprint format, aiming to create user-centric digital services. Public servants fulfil the role of the product owner, creating ownership for public administration (Dribbisch, 2019). However, relatively little attention has so far been paid to subject specialists who have a crucial role in service implementation in the OZG rollout.

Specialists are those public officials who support IT projects in both conceptual and technical implementation of new online services. During the implementation of IT projects in the German administration, it became apparent that there might be a change in motivation due to the legal implementation of the OZG. Before, public officials developed ideas and digital initiatives that focused on the rollout of specialist processes but lacked in user-centration. Resources such as budget, time, and motivation were given due to their intrinsic motivation to implement a more efficient, simplified, and standardised service less prone to errors. *Figure 1* displays the initial situation for the technical implementation of modern eGovernment services in Germany. The OZG challenges specialists, who lack knowledge on IT project management, and central government departments for the IT coordination of states, which provide knowledge and budget, but have insufficient knowledge in specific subjects such as waste, environment, and legislation. Bringing those challenges to a point, the motivation of specialists in the concept phase and the phase of technical implementation has been a pivotal factor for the success of the OZG.

The OZG entered into force on 18 August 2017 and aims to provide the administrative services of the federal and state governments electronically via administrative

portals. The definition of users of digital administrative services is of importance, as users are exclusively those who use administrative services – for example, citizens and companies – and not the administrative officials of the German state. Thus, it appears that this change from a backend-user's perspective to a frontend-user's perspective is causing a pivot in the German principles of government service delivery since their beginnings. This digital transformation requires organisational and procedural change management. A new approach on how to communicate the upcoming changes to public sector employees is needed to change their mindset and encourage their active participation. Limited communication as well as participatory elements could cause a risk to motivational aspects of change. This shows the limited extent of the German administration's digital transformation. Digitisation is only mandatory from the user's point of view.

The OZG is hybrid in its implementation, as the federal government and the states jointly regulate the implementation strategy and elementary law of administrative digitisation. For the first time, the focus will be on the subsequent use of federally developed online services. The online services developed by the federal states are to experience a rapid nationwide rollout based on IT communication standards and interfaces that have been created. The Act defines the responsibility of the federal government, with the participation of the IT Planning Council, to determine the IT components. It is nevertheless possible that the delivery of online services may deviate from these specifications if those services use suitable IT components for operation in the portal network.

The law emphasises the central decision-making power of the Federal Ministry of the Interior, Building and Community and stipulates that the definition of standards can be carried out without the consent of the German Federal Council. A top-down approach to the definition of IT communication and IT security standards is thus clearly recognisable. Therefore, the IT Planning Council's mission is to cover the coordination and cooperation between the federal and state governments on issues of information technology, the adoption of IT interoperability and IT security standards; the management of central eGovernment projects in Germany and the planning and development of the core network, to be set up and operated by the Federation (IT-Planning Council, 2020a). The Second German Commission on Federal Reform intended to bring together existing organisations at federal, state, and local levels in a streamlined structure and make them more efficient, more effective, and better able to respond quickly to changing needs in IT infrastructures and digital society (IT-Planning Council, 2020b).

In the conception and technical implementation of new online services, the digital transformation in the individual federal states is structured by the definition of standards and framework conditions set by the Federal Ministry of the Interior, Building and Community. The content of the actual online services – their scope and depth of digitisation – will continue to be determined in individual states. Ideally, an online service developed in a lead state should be made reliably available and legally compliant across all states with the help of minimal content and technical adjustments via appropriate administrative agreements, thus enabling a fast rollout.

Many things will change for public sector employees in the coming years and decades. Employees will be confronted with a conflict of interest that now puts the user in the centre of attention rather than the administration as a key organisation. Standardised and automated digital processes and workflows will massively change work rou-

tines and legal foundations in the public sector, as they will reveal new possibilities for digitisation. Therefore, it must be ensured that, contrary to the current situation, public sector employees become part of the digital transformation and that the process of digitisation brings added value for all parties involved.

4.2 The case of Ukraine

Ukraine, meanwhile, seeks to complete the digitisation of its own country by 2024. The eGovernment movement in Ukraine began in 2014, but one of the first orders of the Cabinet of Ministers in Ukraine, “*On the Approval of the Concept of E-Services System Development in Ukraine*”, was adopted only in 2016. In contrast to the German procedure of e-service implementation, in Ukraine, various non-state actors have a stake in public sector digitisation. Since government officials often lack IT expertise and a supportive environment, civil society organisations have stepped forward as innovators (The World Bank, 2018; Popelyshyn, Tsap, Pappel & Draheim, 2019).

The Ukrainian way of eGovernment implementation can be evaluated as rather uncoordinated and fragmented, but also implicitly supported by receptive state actors. A multi-stakeholder approach was applied when developing a digitisation state policy (Novachenko, Bielska, Afonin, Lashkina, Kozhemiakina & Diachenko, 2020). It implies that the purpose of a government body is to identify, harmonise, and satisfy stakeholders’ interests.

The digitisation strategy in Ukraine aims at aligning its public sector administration with the same level found within other European countries. One of the ways to achieve this is through the involvement of different social groups in policy planning and implementation, which will lead to all-inclusive public sector digitisation. For better efficiency, it is expected that every government institution will focus on societal expectations and maintain a high level of accountability (Cabinet of Ministers of Ukraine, 2016).

Based on The World Bank’s eGovernment assessment of Ukraine, The Cabinet of Ministers of Ukraine has the leading role in eGovernment policy. However, its main function in this area is to approve strategies, while the State eGovernment Agency (SEGA) coordinates policy making and implementation. Decisions of SEGA are mandatory for execution by central, regional, and local authorities as well as for businesses. SEGA has various functions, such as suggesting improvements to legislation, providing methodological and legal information, providing organisational support to various actors involved, and participating in international collaboration (The World Bank, 2018). The list of functions is broad and covers both policy making and implementation, which raises concerns about the capacity of SEGA.

Since the beginning of the digitisation process, Ukraine has benefited from EU consultants and donor support. The e-Governance Academy helped to develop policies and guidance for local eGovernment initiatives in Ukraine. Moreover, inspired by Estonian X-tee (formerly X-Road), Ukraine has developed a similar secure data exchange solution, Trembita, which is a backbone of the eGovernment system (e-Governance Academy, 2019). The system harmonises IT standards for new e-services, provides the necessary level of security, and facilitates unified interactions between IT systems while leaving enough room for flexibility. The process of e-services implementation in

Ukraine is also decentralised. Most eGovernment initiatives at the local level are coming from the cooperation of Ukrainian civil society organisations and foreign donors, such as USAID (United States Agency for International Development), UKAID (UK Department for International Development), and the East Europe Foundation. Even SEGA is benefiting from foreign donors' support.

The TAPAS (Transparency and Accountability in Public Administration and Services) project serves as an example of one of the most fruitful cooperation efforts with foreign donors. It covers three main directions of sub-projects in the field of e-procurement, open data, and e-services (TAPAS, 2019).

Another promising project – a result of the cooperation between the Ukrainian government, SEGA, civil society organisations, and foreign donors – is the recently launched online portal and mobile application of public services, “*Diia*”, from the Ukrainian word for action. The project has an ambitious goal to make all public services accessible to citizens of Ukraine by 2024 (PlanDiia 2.0).

The Public Administration Reform on Civil Servants from 2018 is focused on the improvement and modernisation of selection procedures and criteria for public sector employees, such as digital competencies (Bélanger & Carter, 2006; Hooda & Singla, 2020), analytical and communication skills, and English language proficiency (Cabinet of Ministers of Ukraine, 2016). However, there is no action plan on how to improve the qualifications of currently employed officials, which leaves them behind in the digitisation process. Lack of ability and qualification to keep up with the pace of new e-services implementation can potentially result in decreased efficiency and confusion in public service provision. Public sector employees do not receive the necessary training and, hence, cannot facilitate electronic public service delivery for citizens (Cabinet of Ministers of Ukraine, 2016). Consequently, it diminishes the value of their work and distorts their perception of their own role in the process.

The Ukrainian public sector faces several problems that slow down the digitisation and integration of technologies into the day-to-day usage of public sector employees. One of the most significant problems is the lack of qualified staff with sufficient IT skills necessary for the maintenance of IT infrastructure in the public sector. In addition, financial compensation is relatively low, which results in the high turnover of qualified personnel (Cabinet of Ministers of Ukraine, 2016). Regardless of the rapid growth and well-thought technical design of new e-services, such factors as inclusion and readiness are necessary prerequisites for successful digitisation in Ukraine.

5 Comparison & analysis

The survey carried out for this scientific article was available online between 4 February 2020 and 14 February 2020. The dissemination of this questionnaire was partly published in topic-specific groups of administrative staff with relation to eGovernment, the researchers' own networks, and, at the same time, institutions, such as government agencies, science networks and lobby groups were contacted and asked to share links to the questionnaire. During those ten days, 74 people participated in the survey.

The survey was structured in four subsections to bundle questions in a thematic framework. First, general information on the respondents was collected. In the next part, participants were explicitly classified by the topic and their points of contact with

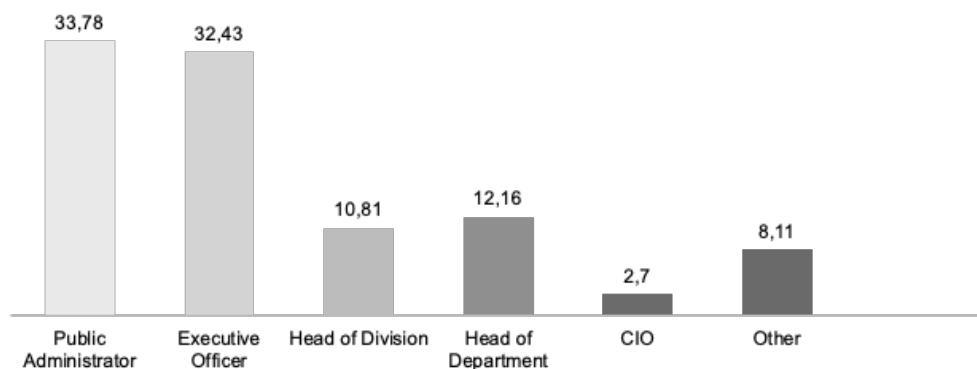
digital initiatives. In the third part, personal motives and goals regarding digitisation and participation in digital initiatives were inquired. The last section focused on the area of personal motivation and the desired results of these digital initiatives.

At the end of the survey period, the following picture emerged: 43% [total of 32] of the responses came from Ukraine and 57% [total of 42] from Germany. The gender distribution was 57% female and 43% male respondents. This represents the basic gender distribution in public administrations in Germany and Ukraine, with Ukrainians showing a slightly higher proportion of female administrative staff.

In the anonymous survey, the age distribution was divided into three groups, with 39% of respondents in the cohort of persons under 35, 45% aged 36 to 49, and 16% older than 49. The distribution of affiliation in the multi-level government system showed that 15% of the respondents were located at the federal level, 26% at the state level, and 59% at the municipal level. Seven people had an affiliation with NGOs or other institutions.

Respondents were also asked about hierarchical positioning in their institutions (*Figure 2*). A concentration of respondents is found in the executive area, where participants are affected by initiatives of digitisation primarily at their workplace rather than initiating them themselves. A focus on this cohort supports the questioning of this article, which explicitly addresses the motivational effects of specialists. When asked about the duration of current activities in the public sector, many of the participants (50%) have been working in this field for more than ten years. Fifteen of the participants stated that they have been working in the public sector for up to ten years, twelve for up to five years, and ten for up to two years.

Figure 2: Which of the following roles in government describes your position the best? (in percent)



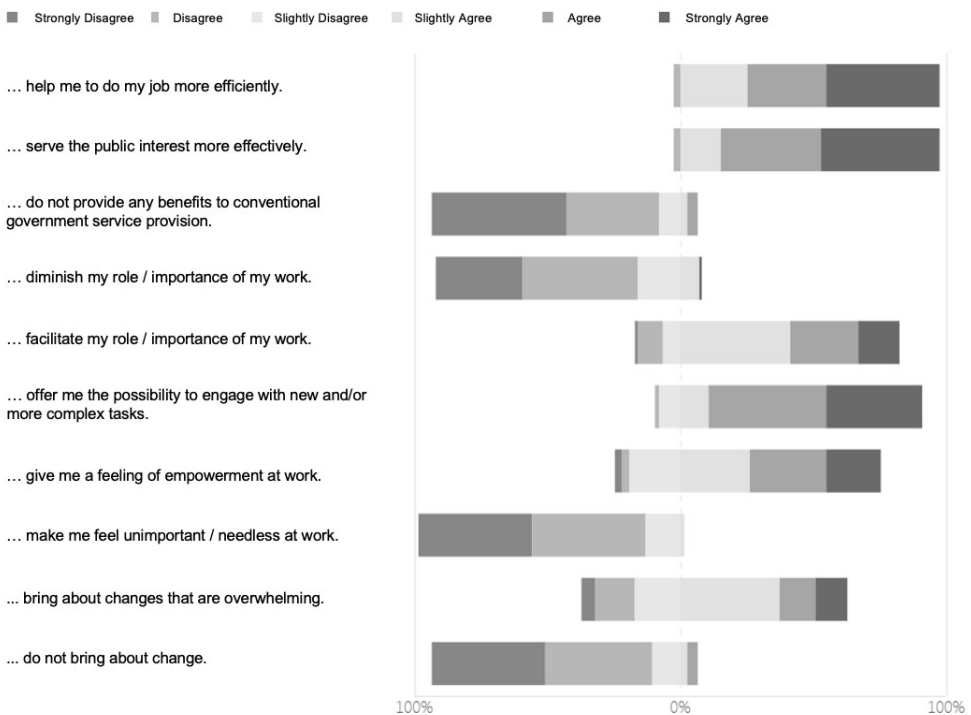
Source: Own figure.

Answers to the second part of the questionnaire have given a better overview of the respondents' involvement in the digitisation process in their country. Among 74 respondents, 77% are involved in the digital initiatives in their organisation and only 23% are not. Nevertheless, one third of the respondents mentioned that their organisation did not ask their opinion or willingness to contribute during the implementation of new e-services. *Figure 3* provides insight into how public employees view eGovern-

ment services in relation to their work. Overall, 93% of respondents expressed the willingness to contribute to the digital initiative at their workplace, either by sharing knowledge (66%) or participating in the decision-making process (59%). This might be forced by the way the research group distributed the questionnaire over eGovernment expert networks online. The readiness and skills of the respondents regarding digitisation were also evaluated. Only 28% of the respondents claimed they did not need additional training, while the other 72% indicated that training was needed to improve technical skills and learn new processes. Respondents are anticipating positive changes, such as an increase in efficiency and the ability to focus on the most important tasks. To understand the contribution of public sector employees, they were asked about daily work routines and how digitisation helps to improve them. Most of the answers have common tendencies, such as: testing and using the new tools, exchanging knowledge, participating in training, and spreading awareness about new digital initiatives.

Figure 3: Respondents' feedback on the implementation of eGovernment services in the public sector

E-Government Services ...



Source: Own figure.

The third part of the survey seeks to determine what motivates and frustrates respondents at work during the digitisation process. Particularly worth mentioning is that the motivation of German and Ukrainian respondents differs. Respondents from Germany

are mostly driven by the meaning of their work, the ability to make personal contributions, feelings of appreciation, flexibility, work atmosphere, and visible work impact. For instance, one German respondent explained that his motivation depended on the following factors: *“Good, innovative working atmosphere; support from ministers and state secretaries for one’s work; user satisfaction if it was possible to make a concrete contribution to administrative simplification/reduction of bureaucracy; when users/citizens feel that the administration supports/enables meaningful actions on the ground.”* On the other hand, Ukrainian public sector employees are mainly motivated by the financial aspect of their work and the social safety net it provides. However, when it comes to Ukrainian NGOs or civil society employees, they are more motivated to see the results of public sector digitisation and the broad picture of implementing eGovernment. Their motivation is mainly driven by new ideas on how to utilise digital technologies for creating better public services and a more favourable environment in terms of policies. One Ukrainian respondent replied that she was motivated by the *“possibility to be involved in the project management [of digital initiatives], from the beginning to the end; by the idea to see the final result of the product or service.”*

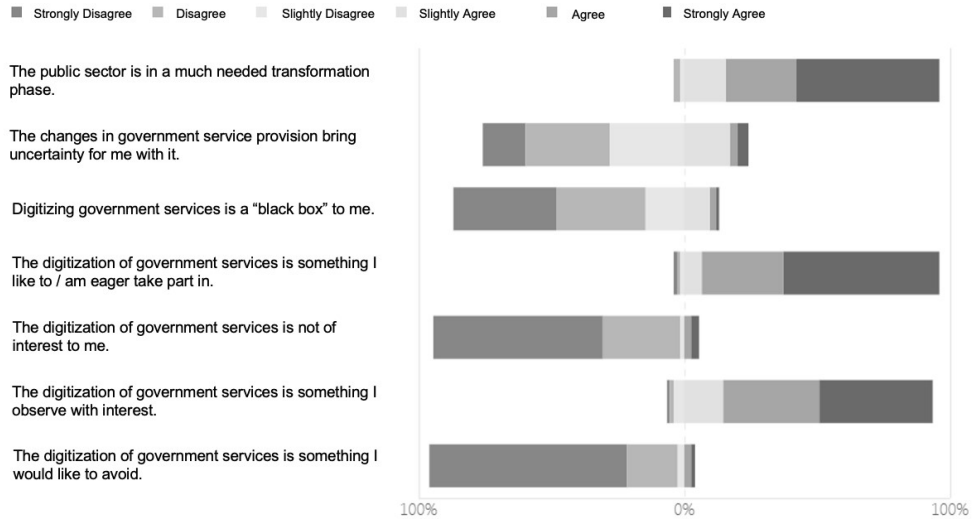
Part three also investigates the respondents’ expectations and general feedback regarding changes in the public sector as shown in *Figure 4*. Some of the respondents emphasised that technologies enabled better cooperation, efficiency, and speed. At the same time, they allowed them to focus on content and quality, instead of time-consuming work process optimisation and coordination. From a citizens’ perspective, the digitisation of public services will ensure transparency and eliminate bureaucratic burdens. For example, as one respondent suggested, *“more agile working methods, a stronger focus on content instead of processes and coordination”* drove change.

Open question findings helped to outline the main sources of frustration and barriers when implementing digital services in the public sector. One of them, for both Germany and Ukraine, is the adherence to traditional or rather outdated methods of work, hierarchical organisational structures, and silos. They are obstacles to the adoption of new digital initiatives and significantly slow down the process of change. Other obstacles have been defined by the complexity and urgent need for legal certainty of eGovernment e-services. A head of department said that *“from the perspective of a person who wants to stimulate change, change in the administrative context is highly complex, as many political and legal issues need to be considered.”* Another respondent outlined the *“inability and intercultural communication problems vis-à-vis parts of the residual hierarchy, which is surprisingly often incapable of thinking in systems [...]. Helplessness, when infrastructure problems are recognized but there is no lever to fix them, because ‘only the willing’ should work, even if clear showstoppers can be named. The basic principle ‘the prophet is not valid in his own country.’”* German respondents consider management’s incompetence and lack of adequate strategies and digital programmes at the state level as the biggest challenge to digitisation. They outline the involvement of external consultancies as a weakness in public sector digitisation processes. One of the replies from Germany formulates the frustration caused by strategic planning problems as follows: *“From unrealistic political timelines, the gap between aspirations and reality, planning errors, planning uncertainty, proprietary standard software is becoming worse and worse and unreliable or too complex, as well as the quality of eGovernment software is often poor, especially with regard to information security.”* Unlike Germany, Ukrainian respondents emphasised the lack of re-

sources (such as hardware, quality internet connection, and financial compensation) and support of the government when creating new digital public services. Both groups agreed that the attitude of government officials must be changed, so that they can become the force of change.

Figure 4: Respondents' general feedback on digital transformation in the public sector

Please provide your own opinion towards Digital Transformation in the Public Sector.



Source: Own figure.

The last part aims to analyse the opinions of German and Ukrainian respondents regarding the achieved milestones in public sector digitisation. Besides that, respondents were asked to share suggestions on how to change or improve the overall process when implementing digital solutions in public administration. Among 63 received answers, only 3% are completely satisfied with the digital changes at their workplaces, 73% have rather negative attitudes, and the rest (24%) are neutral or partially satisfied. The achieved milestones have been mainly superficial as one of the respondents mentioned: *"It's more like tapping the plaster of an old house and only then you see how much the brickwork needs to be renovated. This also goes as far as the organisational processes and decision-making in the administration itself."* German respondents who think of the changes as positive ones accentuate the decreased processing time, more service-oriented administration, simplicity, and better user satisfaction.

The ones who think that changes have a negative effect complain about a lack of expertise, coordination between departments, and transparency. Ukrainian respondents show low levels of satisfaction, or even confusion. One of the Ukrainian respondents explained that *"the process is decentralized, and many services appear without agreement between different service creators/developers."* Apart from that, the main concern of those who are not satisfied is the low participation of the end-users (i.e. citizens) that is preceded by the lack of expertise and motivation of the officials. German respondents point out that projects on public infrastructure or IT, initiated at the federal and

state levels, are usually delayed, which slows down progress. One of them criticised, *“in too many places only analog processes are translated into a digital language without using digital mechanics. In many places, the problem is that the perspective of the ignorant user is not sufficiently taken into account. [...] As long as people feel that a digital form is even worse than an analog one, there are a lot of things wrong that have nothing to do with digitality.”*

The survey was finalised with an open question where respondents could share their ideas about the changes in the approach/process when launching a new digital initiative at the national level. Both German and Ukrainian respondents agreed on the need to improve strategy, external communication, cooperation between different departments/institutions, qualification of public sector employees, and to create awareness of the changes. The German group of respondents suggests focussing more on the development of a well-structured national strategy and user-centricity. A respondent stated that *“digitisation must be seen and implemented as a replacement, not as a supplement to existing procedures. It must be implemented more consistently”. “Internal competencies instead of outsourcing everything to [consulting companies] need to be established. That means being able to think in architectures, building strategic maps, adapting insights from abroad, networking with the civic-tech scene (Code for Germany, etc.), so that the administration adapts to them, not the other way around.”* Ukrainian respondents emphasised the need for personnel training before releasing a new public e-service. Also, a point was made on the involvement of qualified public sector specialists who would take over as advisers within the decision-making process. Handling diverse users' inquiries will help to customise e-services and prevent possible issues based on their experience. Challenges need to be overcome such as the use of existing, but unstructured and non-standardised data that could be used to build new e-services more easily for citizens. Due to the COVID-19 pandemic's impact on digitisation, the drawbacks of new electronic services in the public sector will be slightly diminished and the understanding of the need to use and further develop them increased. The growth of online services caused by the pandemic might not gain the unlimited trust of users, but it will increase the demand and its benefits (Wegrich, 2020).

6 Conclusion and recommendations for action

eGovernment has pushed established public administration structures into a transformative change process affecting public servants. Due to the current initiatives from Ukraine and the law-enacted initiative in Germany, the role of public administration has changed. The public sector has been urged to digitally transform to meet the new requirements of citizens and businesses. Modern service-oriented societies and ways of working show a great influence on the development and perception of public administration. The requirement for a user-centric digital administration influences digital transformation and has a strong impact on the satisfaction level and motivation of public sector employees. The survey has gathered useful information to outline factors on how public servants see impediments to successful eGovernment implementation.

The study conducted is subject to several limitations. Given that the chosen research method is a survey, there is a possibility that inaccurate information has been provided by respondents. As survey responses in German and Ukrainian had to be

translated into English, there has potentially been information lost in the data analysis process. Furthermore, having gathered responses from 74 persons, this article cannot and does not aim to provide a generalised and universal evaluation of current eGovernment initiatives in Germany and Ukraine from the public sector employees' perspective. Because these findings are limited to public sector employees in Germany and Ukraine, further research on eGovernment initiatives in other countries is required for validation.

The survey responses accentuate the difference in approaches to eGovernment implementation in Germany and Ukraine, as well as in the attitudes of public sector employees. The main driver of digitisation in Germany is the government, while in Ukraine most initiatives come from civil society organisations. For German government officials, professional self-realisation is fundamental. Their motivation depends on a favourable work environment to fulfil their potential, ability to contribute to the project, atmosphere at their workplace, and visibility of digitisation impact. On the contrary, Ukrainian public officials are motivated by reasonable financial compensation and other social aid when working in the public sector. An exception is NGOs and civil society organisations since they are motivated to see successful outcomes of digitisation as well as the benefits to Ukrainian society.

Despite the differences, respondents have pointed to the recently observed flaws in the process of digitisation which are common to the public sector in both states. In Germany and Ukraine, deficient communication and cooperation between departments and institutions lead to inconsistencies in the implementation of digital initiatives. In the respondents' opinion, there are no attainable and comprehensive digitisation strategies at the national level. Due to a lack of transparency in the digitisation processes, public sector employees have limited opportunities to contribute or to share their knowledge and expertise, which decreases their value in the process. Public sector employees of each side feel a lack of digital competencies and clarity of new processes that affect their confidence and productivity while working with the recently introduced e-services.

To summarise, all the above-mentioned challenges are slowing down the process of digitisation and hence, reducing efficiency. Based on the survey analysis, the authors have derived recommendations for action. These recommendations especially address executive officers in the public sector and should support them in their future decision-making processes. The implementation of IT projects has demonstrated that policy makers and public officials in general will not be able to lead this process of digital transformation in public organisational structures. The recommendations cover three main areas of change: communication and transparency, training, and co-creation. In these areas, executive officers can play a steering role.

First, communication between citizens and other involved stakeholders needs improvement. Communication at all levels and with all parties is a crucial factor for the development of digital initiatives in the public sector. While keeping accountability and transparency for every achieved milestone, governments will increase the involvement, participation, and interest of all stakeholders. To facilitate communication, an open-source live dashboard based on the specific project key performance indicators (KPIs) should be created to visualise project results. As a prerequisite of productive communication, a fair feedback culture has to be established between departments and institutions. It can be introduced in the form of experience sharing and open dialogue

between public sector employees and former project members. This ensures that challenges from previous projects can be identified in time to mitigate or even avoid corresponding project risks.

Secondly, an adjustment of the training contents is of utmost importance to remain competitive, and for the public sector to have its professional opinion independent of consultancies. Therefore, organising tool-specific training and setting up Single Points of Contacts (SPOCs) in departments after introducing new processes and software is fundamental. As mentioned before, the curriculum for educating new public sector employees in terms of digitisation and administrative informatics requires a fundamental professional revision. Close cooperation with industry or NGOs would be beneficial. Compared to the Ukrainian requirements for government officials, Germany did not adopt any federal legislation regarding the changes in digital transformation for public sector employees. Only isolated initiatives at the state level have set up new and updated the current curricula for study programmes with a focus on information technology.

Lastly, co-creation is an important building block for increasing the participation of public sector employees in the process of digitisation. It is of great importance to involve public sector employees in the decision-making process when establishing new e-services or legislation. However, care must be taken to ensure that this is an assessment and an exchange of experience among public sector employees and that there is no decision-making power in setting new laws, as this would risk blocking digitisation through the rigid perception of public administration.

These recommendations make clear how necessary the involvement of public officials is during each stage of digital transformation. They need to be involved when forming digital strategies and policies for digital programmes, which include and guide digitisation projects. There is an urge for clear actions to highlight feasible solutions.

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