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POLICY BRIEF

Degree of use of digital services in Moldova: realities, challenges and recommendations

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INTRODUCTION

The Republic of Moldova has placed the digitalization of public services among its development priorities. In 2010, the Electronic Governance Agency (AGE) was created, with the aim of advancing technological innovations in government institutions, rethinking administrative processes, and streamlining public services through digital solutions. The current government oversees the Ministry of Economic Development and Digitalization (MDED), with the minister holds holding the status of a deputy prime minister, thus aknowledging the cross-cutting and interinstitutional nature of digital transformation-related issues.

On September 14th, 2023, the Government has approved the National Digital Transformation Strategy 2023-2030, which includes, among its performance indicators, a clause that by the end of 2024 - 75% of all public services will be digitized, and by 2030 - all public services will be digital. Additionally, the Strategy, as a fundamental document in the field of digital transformation, the elements of which are mandatory for implementation by government institutions, highlights the inclusive nature of e-governance, alongside the assurance of distributed responsibility assumed by all institutions, the role of the human factor, educational aspects, the development of digital skills in public institutions, as well as a series of fundamental prerequisites for the development of an authentic digital society across all its facets.

This analytical note explores the degree of use of digital services in the Republic of Moldova and provides a better understanding of the existing challenges in the dimension of promoting these services in society. Starting from the analysis of data provided by MDED and AGE, following requests for information sent by the Institute for European Policies and Reforms (IPRE), the document proposes a series of recommendations for the popularization of digital services among civil society, the business environment businesses, and public institutions.

DIGITAL SERVICES IN MOLDOVA

According to data provided by AGE, on the government portal of public services, there has been placed information on 714 available public services (out of which 283 or 39% are e-Services).

This category of "e-Services" includes both fully automated electronic public services that allow for electronic self-service (services for which providers ensure the complete formalization and scheduling of the service delivery process) and partially automated electronic public services, which means services for which the physical interaction between service providers and beneficiaries is inevitable.

Out of the 283 e-Services, 126 are related to the issuance of permissive documents and 157 are services for citizens and businesses. Out of the 157 public services that could be requested online, 36 (22.92%) are provided in digital format (services for which providers ensure the complete formalization and scheduling of the service delivery process). These include 12 cadastral services and 19 services for issuing civil status documents, apostilles, extracts from the state register of legal entities, proof of no debts to the state budget, personal social insurance account status, criminal

records, detailed criminal records, and contravention records available in digital format, including the option for apostille and home delivery.

Recently, MDED has developed an interactive platform aimed at monitoring and informing the general public about public services for entrepreneurs in the Republic of Moldova. The platform indicates how many of these services are digitalized and their level of utilization. According to MDED data, there are **523 public services** in Moldova offered by **42 public institutions** (ministries, agencies, inspectorates, specialized services, etc.), with **226 of them already digitalized**, representing **43.2%** of the total number.

In this context, we can highlight three distinct categories of institutions based on the number of digitized services within their competence area, with a noticeable variation in the approach to digitalization processes from one institution to another:

1. **Institutions that have digitized all or most of the services provided** (rate of 75% or more): National Road Transport Agency, National Agency for the Regulation of Nuclear and Radiological Activities, Environmental Protection Agency, National Bureau of Statistics, Land Relations and Cadastre Agency, and the Public Property Agency.

2. **Institutions that have partially digitized their services** (rate of 25-75%): Public Services Agency, Agency of Medicines and Medical Devices, Civil Aeronautics Authority, National Regulatory Authority for Electronic Communications and Information Technology, State Agency for Intellectual Property, State Fiscal Service, State Inspectorate of Public Security, Ministry of Economic Development and Digitalization (MDED), Information Technology Service of the Ministry of Internal Affairs, National Institute of Metrology, Chamber of Commerce and Industry, National Accreditation Center and National Health Insurance Company.

3. **Institutions that have digitized only a few public services** (rate of 25% or less) or have not digitized any services: Naval Agency, National Agency for Food Safety, National Public Health Agency, National Technical Surveillance Inspectorate, National Radio Frequency Management Service, Customs Service, Ministry of Infrastructure and Regional Development, State Marking Supervision Authority. At the same time, several important public institutions have not digitized any services in their portfolio, including the Ministry of Education and Research, Ministry of Justice, Ministry of Culture, Ministry of Labor and Social Protection, Geological and Mineral Resources Agency, Investment and Payments Agency for Agriculture, Transplant Agency, National Archives Agency, Agency for Energy Efficiency, National Agency for Quality Assurance in Education and Research, and the National Health Insurance House.

DEGREE OF USE OF DIGITAL SERVICES

The development of digital solutions by responsible institutions is an ongoing process that requires continuous improvements, including the increase of penetration and usage by citizens. The launch of a digital public service does not necessarily lead to its widespread use by beneficiaries. In our analysis, we have organized statistical data reflecting the degree of utilization of existing public services, focusing on services with

a large number of potential users, including those that could be provided both online and through the institutions' physical offices. From this perspective, we highlight four distinct categories that reflect the degree of usage of existing digitized public services:

1. Digitized public services that are massively and predominantly used compared to the option offered at the institution's physical offices (50% or more of total service requests). These services are largely offered only in an online format or are easily accessible digital services with a very high penetration rate: authorization for the import of medicines, drug registration certificate (Agency of Medicines and Medical Devices), authorization for road transport of goods/INTERBUS carnet (National Road Transport Agency), partial radiological authorization (National Agency for the Regulation of Nuclear and Radiological Activities), waste management authorization (Environmental Protection Agency), statistical/financial reporting (National Bureau of Statistics), registration of taxable objects/standardized forms for special regime primary documents (State Fiscal Service), customs warehouse authorization (Customs Service), provision of topogeodetic materials (Land Relations and Cadastre Agency), initiation/termination of employment relationships (National Health Insurance Company), criminal record for individuals and legal entities (Information Technology Service of the Ministry of Internal Affairs).

2. Public services that are offered both in digital format and through requests at physical offices with a medium level of digital option usage (25-50%): coordination of dangerous goods transport route (National Road Transport Agency), certificate of property value/extract from the state register of legal entities (Public Services Agency), emission permit for pollutants/authorization for forestry clear-cutting (Environmental Protection Agency).

3. Digitized public services with low usage rates of 1-25%: non-scheduled flight authorization (Civil Aeronautics Authority), sanitary-veterinary authorization for means of transport (National Agency for Food Safety), operational sanitary permit for facilities (National Public Health Agency), non-preferential origin certificate for goods (Chamber of Commerce and Industry), nuclear/radiological security certificate (National Agency for the Regulation of Nuclear and Radiological Activities).

4. Digitized public services with negligible or non-existent usage rates (less than 1%): manufacturing authorization for medicines (Agency of Medicines and Medical Devices), individual permit for export/import of strategic goods, information about the property belonging to an individual/legal entity (Public Services Agency), authorization for the installation and operation of radio transmitters (Civil Aeronautics Authority), phytosanitary certificate for export/re-export (National Agency for Food Safety), environmental impact assessment/notification of cross-border waste transport (Environmental Protection Agency), presentation of aggregated data (National Bureau of Statistics), certificate of no arrears to the budget/tax code assignment/online registration of taxpayers (State Fiscal Service), provisional firearm permit/special category vehicle permit (State Inspectorate of Public Security), technical-professional qualification certificate for construction (Ministry of Infrastructure and Regional Development), detailed criminal record/contravention record (Information Technology Service of the Ministry of Internal Affairs), all services of the National Institute of Metrology.

A distinct category among these services consists of digital solutions reported to MDED as developed and functional but with zero users during the reporting period (2022). **The total number of such services is 128, accounting for 56.63% of all reported digital services.**

Therefore, according to the analysis, out of the 226 digital services reported to MDED, 77 services (34.07%), for which requests can be made both digitally and at the institutions' physical offices, had no digital requests in 2022 but had requests at the physical offices with a physical presence.

Additionally, another 51 digital public services (22.56%) have been reported by public institutions to MDED as having zero requests, both online and at the institutions' physical offices.

CAUSES OF THE REDUCED DEGREE OF USE OF DIGITAL SERVICES

The limited-scale use of digital services is influenced by several factors, addressing both the elements related to the digital transformation process and how society perceives digital innovations:

1. The low number of users of qualified advanced electronic signatures, which represents the fundamental interface for accessing digital services. According to STISC data from September 2022, there were 129,384 active certificates of the public key for qualified advanced electronic signatures, of which 97,633 (75.45% of the total) were USB tokens: 18,400 were Mobile ID certificates issued by Orange Moldova, 17,725 were Mobile ID certificates issued by Moldcell, and 66 were eID cards issued by the Public Services Agency. It should be noted that although 97,633 STISC certificates were issued, the number of unique users was much lower - 45,870, as many citizens possessed two (13,086), three (1,631) or more (345) certificates, even though holding multiple certificates is not necessary.

2. Insufficient information provided to users and beneficiaries about the existence of developed digital solutions, their functionalities, advantages, and benefits. Many functional digital services are poorly known to end users, with no clear and accessible communication channels for users to obtain additional information about their use or technical assistance, if needed. This is important for the connection between users and developers of public digital solutions, ensuring continuous improvement based on the users' feedback.

3. The complexity, lack of clarity, and non-intuitive interface of digital solutions. If an application or electronic service is characterized by a complex or confusing user interface, service beneficiaries might encounter difficulties in navigating and completing the necessary steps to access and benefit from these services. Poor user interface intuitiveness could lead to frustration and decrease the motivation of service beneficiaries to use the service. When electronic public services are perceived as complicated or unclear, users might be discouraged from using them. People need to perceive the clear value of using digital solutions in lieu of traditional methods. If they do not understand the significant benefits of transitioning to a digital solution, they are less likely to make that transition. Additionally, some electronic public services might

face performance issues, such as slow page loading, response delays, or frequent errors. These problems could create significant barriers or, in some cases, prevent service beneficiaries from accessing and efficiently using public services.

4. People's resistance to change and preference for adherence to traditional methods. People develop routines and habits over time, with them becoming a comfortable part of their lives. Transitioning to digital solutions might require learning new skills or procedures, which could be perceived as an additional effort and, at times, discomfort. Some individuals might have fear or anxiety related to technology. They might feel insecure about using electronic applications or devices and might avoid using them due to these fears. For some people, digital services might not be as accessible as traditional methods. Technological change could impact social and cultural relationships. People might have strong ties to their traditions or communities, and adopting digital solutions might seem like a disruption of these connections.

5. Negative previous experiences with the use of digital services. When users repeatedly encounter errors or delays in the processing of digital services, their trust in these platforms could be significantly affected. The decrease in trust could make the users more reluctant to use or rely on these services in the future, causing them to stick with traditional methods or other options they are familiar with. Negative experiences with the use of digital services could impact not only the perception of these services but also the reputation of the organizations providing them. Users may associate errors and delays with incompetence or negligence on the part of the respective organization, which could affect their relationship and trust in that organization. Negative experiences could lead to the abandonment of digital services in favor of other existing alternatives. Users might seek more reliable or convenient alternatives.

6. Limited access to technology and internet connectivity. In certain circumstances, citizens face significant difficulties in adopting digital solutions, primarily due to limited access to technology and the internet. This limitation could involve the unavailability of smart devices or an inability to connect to the internet. This problem becomes more pressing in rural areas and among individuals with limited financial resources. In rural areas, internet infrastructure might be underdeveloped or even nonexistent, making access to digital services practically impossible. This not only limits citizens' ability to access information or benefit from online government services but could also create a significant digital divide between urban and rural environments. For individuals with limited financial resources, purchasing electronic devices or subscribing to internet services could be financially difficult. This financial barrier could exclude a significant portion of the population from the benefits of electronic public services and contribute to the perpetuation of social and economic inequalities.

7. Insufficient information security. Weak information security in a public electronic service could serve as a barrier against unauthorized access to beneficiaries' personal data and could be a significant impediment in using such services. A lack of confidentiality and personal data protection could lead to consequences of

considerable gravity and could act as a deterrent for citizens when it comes to using the respective public service.

8. Relatively low usage of online payments and e-commerce. Many functional digital services also require different procedures for making electronic payments. If these procedures are not coherent, the full provision of the digital service might not be possible. Another related cause is the lack of trust or fear associated with making online payments, which could lead to reluctance or abandonment of the usage of a digital service. In the end, the usage of digital services and online payments are interdependent: the higher the usage of online payments, the greater the likelihood that a user would want to use more digital services and vice versa.

RECOMMENDATIONS FOR INCREASING THE USE OF DIGITAL SERVICES IN MOLDOVA

Digital solutions do not function efficiently if they are too complex, hard to understand, and have unclear or ambiguous designs. Ultimately, developers of digital solutions need to understand that these solutions are not intended only for narrowly specialized professionals. They are intended for all users and should, to the possible extent, be developed in a simple and intuitive manner. It is essential for public service providers to be responsive to the suggestions of public service beneficiaries and continuously improve their electronic public services to meet the needs and expectations of citizens and the business environment.

In this context, IPRE proposes a series of recommendations for decision-makers:

1. Increasing the number of users of digital signature certificates available in Moldova, including by organizing campaigns to inform users about the functionalities of digital signatures, the advantages they offer as access keys for all existing and prospective digital services. Actions are needed to simplify the procedures for obtaining digital signatures and renewing the respective certificates.

2. Monetizing the use of digital signatures is a factor that hinders their widespread use. Identifying possibilities to minimize the costs of obtaining and renewing digital signature certificates is necessary, as well as the use of digital signatures, including the removal of clauses limiting the number of digital signatures a citizen can apply.

3. Developing digital signature certificates based on the MobiSign smartphone application, which is in the process of implementation and launch, can serve as a significant catalyst for the widespread use of digital services. The completion of audit procedures and the launch of MobiSign, accompanied by an extensive information campaign on how the solution works and how the security of processes and data is ensured, are necessary. An illustrative example in this regard is the Estonian SmartID application, which, being very intuitive, readily available to every citizen on smartphones, and free of charge, quickly surpassed other existing digital signature options (eID and MobileID).

4. Developing digital solutions without considering the opinions of direct beneficiaries is a misguided perspective that directly affects the penetration and use

of these solutions. This applies to both detailed consultation with users of specialized solutions (for example, consulting doctors directly in the development of solutions in the healthcare system, teachers in the field of education, etc.) and consulting end beneficiaries on how the solutions should look and what functionalities they should have. By analogy, patients should be consulted in the case of digital solutions in the healthcare system, and students and parents should be consulted in the case of solutions in the field of education.

5. Increasing the number of digital ambassadors who provide relevant information to any citizen is vital. From this perspective, the establishment of 100 unique service delivery centers (CUPS) in rural regions of the Republic of Moldova by the end of 2023, in cooperation with local authorities, by the Agency for e-Government, is commendable. It is crucial for CUPS specialists to prioritize informing citizens about digital solutions and how they can be used. In larger cities, specialists from the Multifunctional Centers of the Public Services Agency can play a fundamental role in this regard. Other institutions that can be involved in this educational process include libraries, schools, universities, and non-governmental organizations.

6. Promoting digital leadership. Specialists from a ministry, agency, municipality, or regional council will not use digital solutions if the administration of these entities refuses or boycotts their use. Clearer administrative protocols are necessary to limit the ability of decision-makers to halt or boycott the widespread implementation of digital solutions. At the same time, improving the digital skills of public sector employees and local authorities is necessary, including addressing the digital divide between urban and rural areas.

7. Informing citizens about the security of their personal data used in the development of digital solutions, who accesses their data and why, and what limitations exist, is essential. The objective of cybersecurity should be not only the direct responsibility of the specialized national institution (STISC), but also of basic cybersecurity programs within all state and educational institutions in the country.

8. Developing digital education programs in educational institutions according to age-specific and current trends is crucial. Closer cooperation in this regard between educational institutions, the IT industry and telecommunications is needed. Educational institutions should have greater freedom and flexibility in selecting specialized digital programs. The concept of lifelong digital education should become an integral part of the education system.

9. Increasing nationwide internet coverage. Despite having a solid internet connectivity network, internet accessibility remains a current issue, especially in rural regions, those far from major infrastructure and road networks, or those with lower incomes. Increasing accessibility to fast internet access, developing free internet access points following the European Union's "WiFi4EU" model, and making connectivity devices accessible in public places (schools, libraries, municipalities) can minimize the exclusion of certain categories of citizens from the benefits of digital solutions.

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