







NATIONAL

REPORT

Assessing Municipal and Public e-Readiness in Albania



















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National Report

STAR3 is implemented by UNDP in Albania in collaboration with the Ministry of Interior and local governments. The project is supported by the European Union, the Governments of Sweden and Switzerland, USAID, UNDP in Albania, and the Government of Albania. This report has been prepared by IDRA Research & Consulting and Communication Progress in the framework of the STAR3 Project. The views and opinions expressed in this report do not necessarily reflect the views and opinions of UNDP in Albania, or its funding partners.

February 2024













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Abbreviations

ADISA - Agency for the Delivery of Integrated Services in Albania

AI – Artificial Intelligence

ASLG - Agency for Support to Local Government

CAPI - Computer Assisted Personal Interviewing

CSC - Citizen Service Centre

FG - Focus Group

GoA - Government of Albania

HU - Household Unit

ICT – Information and Communication Technology

LGU - Local Government Units

MIS – Management Information System

Mol – Ministry of Interior

MSLG - Minister of State for Local Government

NAIS – National Agency for Information Society

NES – National Education Strategy

NSDI – National Strategy for Development and Integration

OGP – Open Government Partnership

OSSH – One Stop Shop

SPSS – Statistical Package for the Social Sciences

STAR – Support to Territorial Administrative Reform

SQDNE – System of Circulation of Documents with Electronic Signature

ToR - Terms of Reference

UNDP – United Nations Development Programme

VC - Voting Centre

1 Executive Summary

The present report provides a detailed outline of the results from a municipal and public digital readiness assessment conducted across Albanian municipalities from July to December 2023.

The assessment has been commissioned by UNDP Albania in response to the request from the Albanian Ministry of Interior for understanding the present-day digital ecosystem at the local level and inform steps to be taken to ensure a successful digital transformation of that level.

The development of the assessment exercise is informed by the UNDP's Digital Strategy for 2022-2025 and its Digital Transformation Framework. It draws upon the methodologies and principles outlined in the UNDP Digital Readiness Assessment (DRA) framework. Additionally, it incorporates evaluation principles and formats from the World Bank's Digital Government Readiness Assessment (DGRA) Toolkit. This approach ensures a robust methodological basis for the exercise, leveraging insights and best practices from leading frameworks in digital readiness assessment.

Based on the above frameworks, the Digital Readiness is evaluated across various dimensions pertaining to two components¹:

- 1) Municipal Assessment based on two instruments: i) Municipal Institutional Survey and ii) Municipal Employees² Survey
- 2) Public Assessment based on a representative General Public Survey (18+ years old) at municipality level.

The following are the specific pillars for the for each of these components:

| 1. <u>Municipal</u> Digital Readiness Assessment | | | |
|--|---|--|--|
| Pillar | Description | Instrument | |
| Government (Municipal) | vision, strategies, organizational structures, human resources policies, service provision, financial resources, and systems. | Municipal Institutional Survey | |
| Regulations | municipality's awareness and knowledge of key laws regarding digital governance and their practices regarding data management, transparency and security. | Municipal Institutional Survey | |
| Infrastructure | Infrastructure basics needed to enable the secured use/functionality of data, devices, methods, systems, and processes. | Municipal Institutional Survey | |
| People | Policies and practices for the use of technology by municipal employees, their digital capacities, behaviour, and attitude towards the digital tools. (based primarily on "self-assessment" survey of municipal employees). | Primarily: Municipal Employees Survey (Self-assessment) Complementary: Municipal Institutional Survey | |
| User-Centric Service Delivery | municipality's approach to prioritizing the needs, preferences and experiences of individuals or groups they serve. | Primarily: Municipal Institutional Survey Complementary: Municipal Employees Survey (Self-assessment) | |

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¹ Please see the Annex – Extended methodology for more info.

² Employees of central municipality only (not from dependent agencies/structures or administrative units)

| Public Digital Readiness Assessment | | | |
|-------------------------------------|---|----------------------------------|--|
| Pillar | Description | Instrument | |
| Cultural Norms | significance of digital devices in peoples' daily lives and the impact in using these technologies | General Public Survey (18+ y.o.) | |
| Usage | digital engagement and device utilization such as device ownership, internet connectivity, and frequency of device usage for general public. | | |
| Access | ease of access to digital technologies such as internet, computers, mobile phones, e-commerce activities, and other online services. | | |
| Adoption | citizens' willingness to learn and adapt to new digital technologies and confidence in shifting to a digital environment. | | |
| Digital Literacy | peoples' self-perception skills computer usage, internet browsing, emailing, as well as creative skills and ability to use mobile services. | | |
| Protection | individuals' digital security perceptions, comfort, and confidence in interacting in the digital space and sharing personal data and information. | | |

All the above pillars are transformed into a composed index with a score on a scale from 0 to 100, based on the answers to all the evaluation questions under the specific pillar. Dependent on pillars and sub-pillars, a combination of quantitative and qualitative considerations has been used.

The following are the key findings from both the Municipal and Public Readiness Assessments.

Municipal Digital Readiness Assessment

Overall Municipal Readiness (31/100): The average Readiness Score across municipalities is 31 points out of 100, indicating a **limited digital readiness**. Municipalities face significant challenges in infrastructure, regulations, digital governance, and user-centric service delivery. The only exception is Tirana, which stands out with an advanced 73/100 readiness score.

Government (24/100): In terms of "Digital Governance", the terminology surrounding "digitalization" is frequently employed at the local level, albeit with little strategic approach or formal documentation. Although, some bigger municipalities have dedicated departments or sectors for innovation and IT management, the absence of dedicated organizational structures overseeing digitalization or innovation in most municipalities has resulted in scattered and ad-hoc efforts, often proving unsustainable. Despite positive attitudes towards digitalization among executive staff, the lack of a strategic approach has hindered the integration of digital transformation into everyday municipal functions. In terms of "Service Delivery", physical delivery remains the norms, although some efforts have been made in having specific platforms/systems for "service application management" through on-stop-shop approach. However, some successful examples of digital administrative service delivery include the e-permit system for building permits, the coordination of social housing programs through e-Albania and Economic Aid through e central system³. These systems demonstrate the potential for providing digital services with the right tools and regulations in place.

Donor-funded initiatives/projects have touched upon digitalization, but sustainability remains a challenge. Information systems developed for municipal purposes are often discontinued due to data collection issues, lack of staff adoption, and maintenance difficulties.

Financially, most municipalities lack a dedicated budget for digital transformation. The focus is mostly on procuring/financing just basic IT equipment.

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³ From Ministry of Health and Social Protection.

Regulations (25/100): A notable gap in awareness and knowledge is evident, with municipalities lacking comprehensive knowledge of national strategic documents such as the Decentralization Strategy and Digital Agenda. The absence of awareness regarding legal frameworks governing data management, privacy, and cybersecurity raises concerns for future digital transformations. Regarding data and transparency, while there is an awareness and implementation of transparency requirements, the adoption of regulations related to data protection remains low across municipalities.

Infrastructure (19/100): This pillar scores the lowest among all assessment pillars. The equipment landscape reveals a basic IT infrastructure across municipalities, marked by widespread use of unlicensed software and outdated computer devices. The absence of comprehensive documentation and policies for device replacement compromises the reliability of IT systems. Connectivity systems vary across municipalities, with limited functionality and varying internet speeds. Few municipalities have stable electrical networks, and administrative units often operate independently, hindering effective communication. The practices of cyber & information security present substantial challenges, with municipalities lacking i) comprehensive cybersecurity policies, ii) practices of risk assessments, and iii) trained specialists on these issues. The use of unlicensed IT products poses potential risks, and inadequate measures for device protection and network segmentation are evident.

People (67/100): This is the pillar with the highest score in the Municipal assessment. While all the other pillars show "low" or "limited" readiness level, this one, based on self-declared capacities of municipal employee to adopt and deal with digitalization, shows "advanced" readiness. According to the survey of municipal employees, there is a general declared willingness among municipal staff to embrace digitalization. The high utilization of digital tools for communication, collaborative efforts, and daily tasks, declared by them, demonstrates a high level of openness to adapt to new platforms and technologies. When it comes to basic Digital Literacy (using computers, navigating online, managing emails, organizing files, using word or spreadsheets etc) proportions of municipal employees who declare to be at the intermediate level or above, are very high (ranging from 81% to 97%).

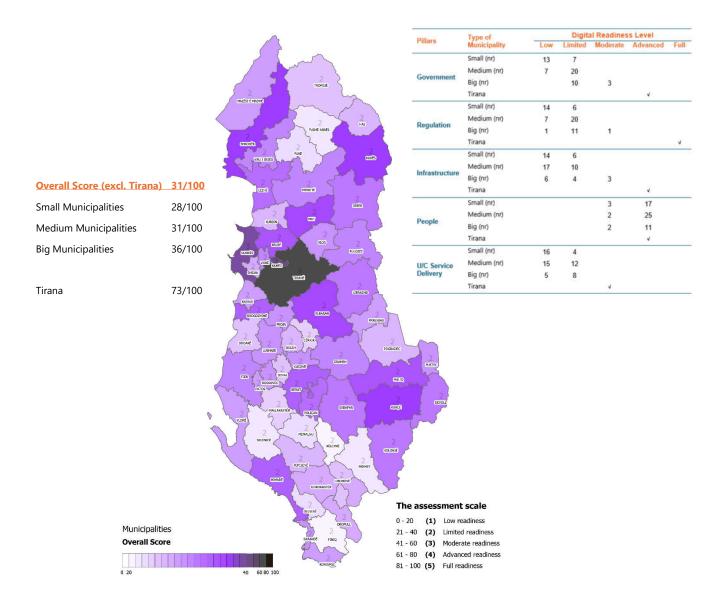
There are however evident gaps when it comes to existing protocols and practices for using digital tools in the municipalities. Most employees declare that there are no usage protocols or guidelines for digital tools (53%) and no trainings on digital practices (69%) provided by the institution. Also, the findings of municipal visits show that a significant gap exists in specialized IT expertise, particularly in smaller municipalities. Furthermore, local governments struggle to attract and retain qualified IT professionals due to competition with the private sector. Specialized IT expertise is often scarce beyond basic maintenance skills, which highlights challenges in building a robust municipal IT workforce.

<u>User-Centric Service Delivery (20/100)</u>: Few municipalities evaluate the user-friendliness or citizen satisfaction of their service delivery. The vast majority of municipalities lack structured mechanisms to gauge citizen satisfaction. More so for digital services, which remain limited in scope and under-developed from a user-centric perspective. The access of vulnerable groups to service delivery, specifically elderly and people with disabilities, presents a significant challenge. These groups encounter obstacles in accessing services due to issues related to office physical infrastructure, distance, inadequate public transportation (especially in rural areas), complex information, and limited communication and information channels.

There is, interestingly, a clash between the perception of Municipal employees on "how able and opened" are the citizens/business to introduction of new local e-services and the declarations of general public respondents, on "how easy or difficult" is for them to deal with such new e-services. Most municipal employees (75%) do not think that citizens/business "have the ability" to use e-services. This contrasts with 63% of the citizens surveyed who declared that dealing with a new e-service would not "be difficult" for them. It appears that Municipal employees' perception about the ability of public to use e-services is much worse than the "reality".

A view on the overall assessment score for Municipal Digital Readiness score for each municipality is presented on the figure below.

Figure 1: Municipal Digital Readiness Score



Public Digital Readiness Assessment

<u>Overall Public Readiness (56/100)</u> - The results show that the Readiness Score for the general population at national level is 56 points out of 100, indicating a **moderate level** of readiness. Considering the key pillars, the Usage pillar (87/100) and Cultural Norms (77/100) score the highest. Access, Digital Literacy and Protection score the lowest (39/100), suggesting a nuanced digital readiness level across the general population.

<u>Cultural Norms (77/100)</u>: The significance of digital devices in citizens' daily lives emerges prominently. A resounding 88% of citizens across municipalities consider smartphones, PCs, laptops, and tablets as crucial components of their daily routines. The positive impact of digital technologies is acknowledged by 86% of citizens. Smartphones claim the top spot as the most indispensable digital tool, deemed a <u>necessity</u> (68% of citizens) or <u>important</u> (25%) followed of PCs, laptops, and tablets (40% - a necessity and 44% - important).

Still, when it comes to some elements of "cultural norms", it comes out that despite the big developments and overall massive usage of e-services, there is still a certain "inertia" in people's preference to "have in-person meetings" when they need a service from a public institution. The older the person, the higher this preference. For people aged 50+ years old, such preference stands at 76%, while it goes down to 50% for people 29-49 years old, and it is much lower (only 29%) for those falling in the segment of 18-29 years old.

<u>Usage (87/100)</u>: Digital engagement and smartphone usage is quite high in Albania. At national level, a striking 90% of citizens declare internet connection in their households. Smartphones emerge as the predominant digital device 97% of households to own at least one. 9 out of 10 citizens use smartphone multiple times daily and access the internet regularly, underscoring the widespread role of these technologies in citizens' lives. It is to be noted however that only 38% of Households declare to have/own a PC/Laptop and only 14% a Tablet PC.

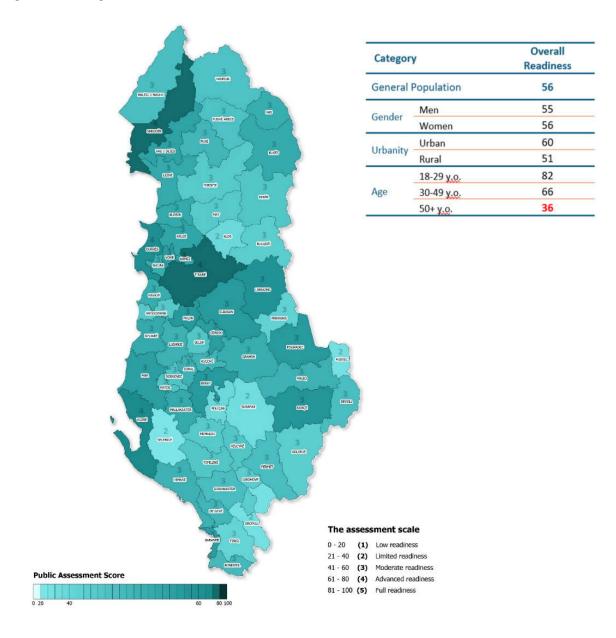
Access (39/100): While citizens vastly use Internet and smartphones, accessing and utilizing the services of the digital world is not so effortless for them. About 60% of citizens find it relatively easy to generally browse the internet for information. However, this number drops to 52% when they are asked about the ease of using computers and mobile phones for activities such as email, document editing and messaging. Even lower is this number (40%) when asked about the easiness of e-commerce activities such as online shopping, bookings, online payments etc). There are notable differences in age and in urbanity for all these online activities with older people and rural inhabitants finding it much harder.

Adoption (54/100): Most of the public (78%) is of the same opinion that the accessibility of public services has improved due to the use of digital technologies (mostly referencing e-Albania). This is another finding which suggests the public does value the positive impact of digital services, although a considerable portion of them would still prefer to have the option of "in person meetings" when they need to get a service. Furthermore, i) there is a relatively high level of openness to embrace and adopt new digital technology tools (66%), ii) a high level of willingness to invest time and effort in learning digital skills (65%) and iii) a relatively high confidence in the abilities to learn and adapt with digital tools (64%). In general, those levels are lower among citizens residing in smaller municipalities, rural areas and among those with older age.

Digital Literacy (39/100): Digital literacy of the general population displays a limited level being among the lowest score among the pillars of Public assessment. Basic computer skills, which include, i) navigating and operating a PC, ii) familiarity with computer terminology and iii) installing and uninstalling apps in computers, are declared to be at least at intermediate level by only 38% of citizens. Internet/web browsing and Email/Communication skills exhibit a similar pattern, with 41% and 40%, respectively, declaring to have at least intermediate skills. Slightly better are Mobile & E-services skills with 47% claiming at least intermediate level. Notably, the Digital Creative sub-pillar which includes, i) creating and editing documents or spreadsheets, ii) preparing visual presentations, iii) using basic image editing or iv: creating graphs and charts, scores much lower. Only 26% of respondents declare to have intermediate or higher skills for this sub-pillar.

Protection (39/100): Digital security perception of individuals is also at a rather limited level according to the survey. This pillar score only 39 points out of 100. While 60% feel comfortable sharing personal information online, and 55% express confidence in managing access to their own personal information, the "safety" perceptions in using online payments via credit/debit cards, reveal a nuanced landscape, with only 42% of respondents feeling secure conducting such activity.

Figure 2: Public Digital Readiness Score



2 Introduction

2.1 National Context

In the last decade, Albania has increasingly invested in establishing a solid e-governance structure and fostering a culture that embraces digital governance. This commitment to digital transformation has made e-governance a tangible reality of the Albanian administrative landscape and has had a profound impact on the way public services are delivered to citizens. This digital leap was further catalysed by the COVID-19 pandemic, which gave a particular boost to the online approach.

Albania has demonstrated significant progress in various digital indices, with a considerable year on year improvement. In 2022, the UN E-Government Index (EGDI) ranked Albania ranked 63rd out of 193 countries in the UN E-Government Index⁴ (EGI), and 22nd out of 193 countries in the UN E-Participation Index.

The strategic focus on digitalization is evident in policy reforms and government action plans, including the National Strategy for Development and European Integration (NSDEI) for 2022-2030 and the Digital Agenda 2022-2026.

The National Strategy for Development and European Integration 2022–2030⁵ is the overarching national development strategy contributing to Albania's broader efforts to align with European Union standards and to enhance its public institutions' functioning, which implicitly includes the necessity for digital transformation as part of such integration. The strategy promotes the increased access to digital technologies and the protection of data in accordance with European Union standards.

The Digital Agenda 2022-2026⁶ promotes a major harmonization with the EU in the field of interoperability and trusted services, and shift to a model of online services, using new technologies and innovative architectures to provide greater value to citizens and businesses. The document aims to build on the significant digitalization progress of the past decade by increasing investments in areas such as advanced computing, data processing, artificial intelligence (AI), cybersecurity, and digital literacy.

Digitalization in Albania has permeated various sectors, including especially public administrative services (real-time, cost-effective services through the e-Albania system), financial services (digitization of banking services and increased use of POS, ATMs, and banking applications), and education (combined platforms for teaching and knowledge management).

The e-Albania portal exemplifies the transformation towards e-governance, offering 1,226 public services online, which constitutes approximately 95% of all public services. This starkly contrasts the mere 14 services available online at the outset of the digitalization efforts a decade ago.

Behind the offered electronic services lies a complex architecture, the Governmental Interoperability Platform, which is the basic architecture that enables the interconnection of electronic registers and the exchange of real-time data. In addition, a special IT internal system has been created to interact with all institutions (System of Circulation of Documents with Electronic Signature (SQDNE)) to electronically exchange all accompanying documents related to a citizen's or business's service request with an electronic signature. Through this system, employees request the necessary documents from the institutions that generate them.

To date, 60 electronic registers interact with each other in real-time, making it possible for 66% of various application fields to be filled in automatically on e-Albania, shortening the time for providing documentation and further simplifying procedures.

As the number and volume of online services increased, the Albanian Government announced in April 2022 that it would close central government service delivery offices and transition exclusively, with only a few exceptions, to online service delivery, starting May 1, 2022. This decision was driven by the objective to combat corruption, enhance efficiency, and encourage the widespread adoption of digital services.

⁴ In Online Services Index, a sub-component of EGDI, Albania was ranked 33rd out of 193 countries.

⁵ https://qbz.gov.al/eli/vendim/2023/02/22/88/59519cb2-2180-4e7e-9d91-68545a68e008;q=2023%2F02%2F22%2F88

⁶ https://akshi.gov.al/wp-content/uploads/2022/06/vendim-2022-06-01-370.pdf

While e-Albania serves as the centralized portal for central government public services, the situation at the local government level is different.

Despite some successful initiatives like the e-permits for construction that have been available in all 61 municipalities since 2016, local governments lag central institutions in digital evolution.

Local governments operate various service delivery systems, including at least four types of one-stop-shop offices (with the STAR model the prevailing one). These systems have not fully replaced traditional manual paper-based service delivery. They are little or not at all connected and integrated with government systems, posing security risks to both hardware and software infrastructure.

However, the progress at the central level could catalyze integrating local governments into the broader digital transformation reform. Bridging the digital divide between local and central government levels will require a gradual and sustainable approach, building upon existing human and infrastructural capacities.

2.2 Rationale

A digital readiness assessment exercise is a foundational step for any organization committed to digital transformation, especially in the current context of a rapid pace of technological advancements and the increasing importance of digital technologies. Such assessment provides a clear picture of the current state and helps identifying areas for improvement, planning and prioritizing initiatives that drive digital maturity and ensure the organization is well-positioned to adapt to and benefit from digital advancements.

For governments, digital transformation can improve the speed and success of engaging citizens – and delivering vital services. It can also lead to efficiencies in cost and time and is an important driver in positioning societies and economies⁷.

Digital transformation is central to achieving the Sustainable Development Goals as it enhances efficiency, inclusivity, and innovation across various development sectors with a direct impact from improving governance and public services to reducing environmental footprints and fostering economic growth. According to the ITU and UNDP, digital technologies can directly advance 70% of the 169 SDG targets, impacting critical areas such as climate action, education, hunger, and poverty⁸.

2.3 Alignment with UN Principles

In September 2015, United Nations Member States unanimously adopted the new global development agenda, transforming our World: the 2030 Agenda for Sustainable Development (General Assembly resolution 70/1), which puts the imperative to "leave no one behind" and to "reach the furthest behind first" at its heart. It not only aims to end poverty and hunger, but also to "combat inequalities within and among countries"; to "build peaceful, just and inclusive societies"; promote gender equality and the empowerment of women and girls" and protect all human rights, including the right to development, so that all human beings can fulfil their potential in dignity and equality in a healthy environment. ⁹

The 2030 Agenda recognizes the risks of "rising inequalities within and among countries", "enormous disparities of opportunity, wealth and power", and persistent "gender inequality" as "immense challenges" confronting the world today. Member States have therefore committed to goals and targets that address discrimination and inequalities within and among countries. Targets include: addressing income inequalities; promoting the social, economic and political inclusion of all; eliminating discriminatory laws, policies and practices; adopting policies, especially fiscal, wage and social protection policies; progressively achieving greater equality; addressing global inequalities, including by improving the regulation and monitoring of global financial markets and institutions; and ensuring enhanced representation of developing countries in decision-making in global international economic and financial institutions.

8 https://www.sdg-digital.org/accelerationagenda

⁷ UNDP's Digital Strategy 2022-2025

⁹ Leaving No One Behind: Equality and Non-Discrimination at the Heart of Sustainable Development, The United Nations System Shared Framework for Action, 2017.

Member States have put "leaving no one behind" at the heart of the 2030 Agenda so that all people in all countries may benefit from development and the full realization of human rights, without discrimination on the basis of sex, age, race, color, language, religion, political or other opinions, national and social origin, property, birth, disability or other status. There is also a special focus on those left furthest behind and the most excluded, including women and girls, children, youth, persons with disabilities, persons living with HIV/AIDs, older persons, indigenous peoples, refugees, internally displaced persons and migrants, among others.

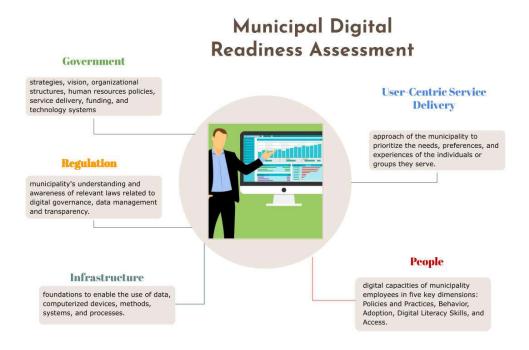
The digitalization effort of LGUs in Albania aligns seamlessly with the "leaving no one behind" UN policy, emphasizing inclusivity and equitable development. By prioritizing inclusive digital transformation at the local level, the assessment helps to bridge the digital divide and ensure that the benefits of technological advancement reach all segments of its population. This initiative takes in specific consideration vulnerable groups such as the youth, women, the elderly and disabled. The assessment includes targeted questions crafted to gauge the current accessibility of local services. The findings derived from these assessment areas serve as a foundation for recommendations designed to address and improve the accessibility of services for those in vulnerable circumstances.

2.4 Methodology¹⁰

2.4.1 Municipal e-Readiness Assessment

Assessment

The Municipal e-Readiness assessment is based on the UNDP's Digital Strategy 2022 – 2025 and its Digital Transformation Framework and includes five pillars: (1) Government; (2) Regulation; (3) Infrastructure; (4) People; (5) User Centric Service Delivery.



The Evaluation Matrix used to conduct this assessment is based on the UNDP Digital Readiness Assessment (DRA) framework, World Bank Digital Government Readiness Assessment (DGRA) Toolkit in terms of evaluation principles and formats. Specifically, the pillars, assessment questions and approach are all based on the UNDP DRA. The toolkit

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¹⁰ For more information on the methodology please see Annex 1: Extended Methodology

which transforms pillars into questions and then provides a way to quantify answers and then to qualitatively analyze them is adapted from the WB DGRA toolkit.

The toolkit allows both qualitative and quantitative result analysis. Responses are required to the questions in each section with the following options: YES/NO/Absent/Non-Applicable (Absent = no information available in the assessment, non-Applicable = not applicable question for the client country). The qualitative analysis is delivered mainly through the assessment report which is based on the responses, the comments provided from the municipalities, and further expert views or research.

Scoring

Each Municipality is submitted to a score from 0 – 100, based on quantification of each question composing subpillars, and each sub-pillar composing pillars. The score of each pillar is calculated as the simple average of its subpillars. For example, the score of Government (Municipal) pillar is calculated as the average of the scores of the subpillars - Governance, Human Resources Management, Services, Funding and Procurement and Technology Systems. The overall Municipal Score is calculated as the simple average of the score of the five pillars (Government, Regulation, Infrastructure, People Capacities, User Centric Service Delivery).

The score ranges are divided further into five groups:

| 1. | Low Digital Readiness (0-20 points): | Municipalities in this range have very limited digital |
|----|--|---|
| | readiness. | |
| 2. | Limited Digital Readiness (21 – 40 points): | Municipalities in this range are in the early stages of digital |
| | transformation. | |
| 3. | Moderate Digital Readiness (41-60 points): | Municipalities in this range have moderate digital readiness. |
| 4. | Advanced Digital Readiness (61-80 points): | Municipalities in this range have advanced digital readiness. |
| 5. | Full Digital Readiness (81 – 100 points): | Municipalities in this range are leaders in digital readiness. |

Analysis

The analysis is based on the average score of each pillar and sub pillar. Based on the evaluation matrix, the score provides a quantification of the situation, while the comments and the insights from the field experts provide context to that score, identifying patterns, and relationships in the data.

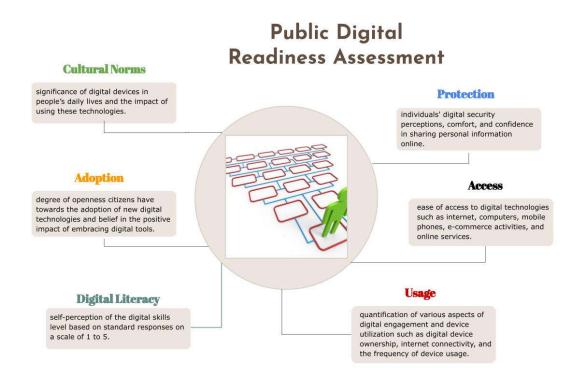
2.4.2 Public e-Readiness Assessment

Assessment

The assessment consists of physical interviews of citizens in a randomly and population-proportional sample in each municipality on their perception, behaviors, and readiness vis-à-vis the online services, the likely transformation of their respective local governments, and the overall digital ecosystem. The assessment includes six pillars: (1) Cultural Norms; (2) Adoption; (3) Digital Literacy; (4) Usage; (5) Access; and (6) Protection.

A comprehensive questionnaire was formulated and administered through in-person interviews with the citizens. The questionnaire was segmented into various modules, with each one focusing on a specific sub-pillar. The composition of each module consists of a set of questions to fully assess citizens' perspective for each of the sub-pillars individually.

The sampling conducted is a multi-stage stratified cluster sampling (stratification by administrative unit and stratification by urban – rural division). The survey is representative of the municipality population. A total of 11 000 interviews are conducted in 61 municipalities. Based on the size of the municipality the sample of the municipality is divided into 100 interviews for small municipalities; 150 for medium municipalities; 250 – 400 for big municipalities and 800 interviews for Tirana.



Scoring

Similar to the Municipal Digital Assessment, each Municipality is submitted to a score from 0-100, based on quantifying of each survey question composing sub-pillars and pillars. Each of the pillars is subject to the same scoring system, meaning that each of them will have a score from 0-100. The overall Public Digital Readiness Score for each Municipality is calculated as the simple average of the score of the six pillars.

Analysis

For each of the Pillars of the assessment the analysis is divided into two parts. The first part is the score, and the analysis of the score based on the methodology described above. This means that insights are provided for each score, and a comparison is made with the average score of similar municipalities. The second part is the analysis of the survey results.

Weighting

The quota sample for each type of the municipality, based on size is presented below:

- 100 interviews for municipalities with population from 0-20,000 inhabitants
- 150 interviews for municipalities with population from 20,001-50,000 inhabitants
- 250 interviews for municipalities with population from 50,001-100,000 inhabitants
- 400 interviews for municipalities with population from 100,001-200,000 inhabitants
- 800 interviews for Tirana municipality

The results at the national level, are then **weighted based on the population proportion of the Municipality**. The share of inhabitants is calculated based on the official data obtained from INSTAT.

3 Municipal Assessment Results

3.1 Matrix of Pillars and Sub-pillars assessed

| PILLARS | SUB-PILLARS | Short Description |
|--|---------------------------------------|---|
| | 3.3.1 Digital Governance | Existence of a municipal vision, strategies, and frameworks to advance digitalization and technology |
| | 3.3.2 HR Management | Policies and practices for Human Resource management with focus on technology positions |
| 3.3 Government | 3.3.3 Services | Ongoing and planned digitalization and e-government initiatives from the local government perspectives. |
| | 3.3.4 Finance and Procurement | Funding sources for digital initiatives, including IT operations and management |
| | 3.3.5 Technology Systems | Existence of local government digital systems and processes. |
| 3.4 Regulations | 3.4.1 Awareness & Knowledge | Knowledge and awareness of key legal components related to digitalization (Decentralization Strategy, Digital Agenda, Open Data, Public Information Law, Data Protection, Cybersecurity Law). |
| | 3.4.2 Data & Transparency | Policies and practices on data management and transparency. |
| | 3.5.1 Equipment | The state of the municipality's back-end infrastructure, policies, and practices in place |
| 3.5 Infrastructure | 3.5.2 Connectivity Systems | Availability and quality of broadband internet access as well as the quality of the electrical supply and reliability. |
| | 3.5.3 Cyber & Information Security | Cybersecurity protection policy and implementation practices (technical and administrative measures, compliance, risk assessment procedures, incident monitoring, response, and management) |
| | 3.6.1 Policies and practices | Policies, procedures, and practices to support the use of digital tools and technologies for service delivery. |
| | 3.6.2 Behavior | The level of usage of digital tools and technologies in the work of municipal employees |
| 3.6 People | 3.6.3 Adoption | Level of adoption of digital technologies by municipality employees |
| | 3.6.4 Digital literacy | A self-assessment of the municipal employees of the level of proficiency with different digital technologies |
| | 3.6.5 Access | Level of access municipal employees have to digital tools and technologies |
| 3.7 User-Centric Service Delivery municipality's | 3.7.1 User engagement & feedback | Engagement and feedback of citizens for the local government services |
| approach to prioritizing the needs, | 3.7.2 Inclusivity | Inclusive delivery of local government services, concerning access of vulnerable groups |
| preferences and experiences of individuals or groups they serve. | 3.7.3 Adoption of electronic services | Perception of the municipal employees on the possibility of adoption of electronic services by the citizens of the municipality |

3.2 Overall Results¹¹ All Municipalities (excl. Tirana) **Tirana** Overall Score 31 73 24 69 M1. Government M2. Regulations 25 81 M3. Infrastructure **77** 19 M4. People 67 79 M5. U/C Service Delivery 20 60 KUKES MALIQ KORÇÊ The assessment scale (1) Low readiness Municipalities Limited readiness Overall Score Moderate readiness 61 - 80 (4) Advanced readiness 81 - 100 (5) Full readiness 0 20 60 80 100

 $^{^{\}rm 11}$ Tirana is excluded from the average as a clear outlier for all pillars

The overall results show that the total Readiness Score is 31 out of 100. This suggests that on average, municipalities have Limited Digital Readiness. Considering the key pillars, the People Capacities Pillar performs better, with 67 out of 100 points. Other pillars perform quite poorly, suggesting that the limited digital readiness of the municipalities is a multidimensional problem.

M1 Government (24/100)

Digitalization efforts lack a strategic approach and sustainable implementation across most municipalities. There are limited structures that oversee innovation or digital transformation, resulting in scattered and ad-hoc efforts, while donor funded interventions have produced unsustainable IT systems due to data collection issues and lack of staff training and system maintenance.

M2 Regulations (25/100)

Municipalities lack awareness of national strategic documents related to decentralization and digitalization. Further, knowledge gaps exist concerning laws governing data management privacy and there is limited adoption of regulations and practices for data protection, open data and cybersecurity across municipalities.

M3 Infrastructure (19/100)

Municipalities face equipment deficiencies, with outdated devices and inadequate server facilities. Connectivity systems are lacking between administrative units, relying primarily on phone communication and cybersecurity policies, measures and trainings are absent, posing potential vulnerabilities in digital infrastructure.

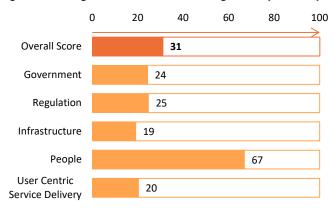
M4 People (67/100)

Municipal employees demonstrate readiness in adopting digital technologies for daily tasks and communication. However, there's a shortage of specialized IT expertise within municipalities, with basic IT skills primarily for maintenance purposes. Lack of career prospects, skill development and low salaries discourage IT professionals from working in municipalities.

M5 User-Centric Service Delivery (20/100)

Very few municipalities evaluate user-friendliness or citizen satisfaction of service delivery platforms. Digital information services are primarily promoted through social media, with limited accessibility features for vulnerable groups. Also, elderly individuals and those with disabilities face barriers in accessing public services due to infrastructure limitations and insufficient communication channels.

Figure 3: Average Overall score and average score per each pillar.



What stands out is the municipality of Tirana, which in terms of overall score and each pillar performs much better than other municipalities. The municipality of Tirana has an overall score of 73 out of 100, making it the only Municipality with Advanced Digital Readiness.

Otherwise, differences across municipalities based on their size typology are quite small. Considering the overall score there are only some differences between small and big municipalities.

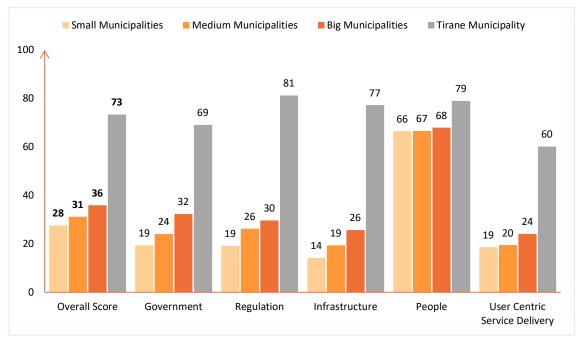
Based on the pillars, these differences are more identifiable when looking at the Government Pillar and the Infrastructure Pillar. However, the performance of big municipalities in all pillars (except People) does not allow them to be considered, as a group, moderately ready.

The case of the People pillar is almost identical when considering the small, medium, and big municipalities. Although the essential digital skills are present in almost all municipalities, what stands out is the lack of IT expertise.

Assessing e-Readiness National Report

Municipalities need the essential digital skills to conduct daily operations, and on the other hand need IT expertise to build and maintain systems.

Figure 4: Average overall score and average score per pillar, categorized by size of municipality.



Government (excl. Tirana) **Tirana** 3.3 Government 24 Overall Score 69 3.3.1 Digital Governance 87 21 3.3.2 HR Management 49 63 3.3.3 Services 21 69 3.3.4 Finance/Procur 27 100 27 3.3.5 Technology Systems 5 MALÉST E MADHE KUKES MIROITÉ MAT KLOS BULQIZE LIBRAZHD ELBASAN GRAMSH MALEQ DEVOLL POLIÇAN KORÇE KOLONJÉ The assessment scale 0 - 20 (1) Low readiness Municipalities 21 - 40 (2) Limited readiness Government index 41 - 60 (3) Moderate readiness 61 - 80 (4) Advanced readiness 81 - 100 (5) Full readiness

Government pillar is composed by 5 (five) sub-pillars as following:

- 1. *Digital Governance sub-pillar* assesses whether there is a municipal vision, strategies, and frameworks to advance digitalization and technology.
- 2. Human Resources Management sub-pillar investigates policies and practices for Human Resource management with focus on technology positions at municipal level.
- 3. Services sub-pillar identifies ongoing and future digitalization and e-government initiatives from the local government perspectives.
- 4. Finance and Procurement sub-pillar reviews funding sources for digital initiatives, including IT operations and management.
- 5. *Technology Systems sub-pillar* assesses the existence of local government digital systems and processes.

Figure 5: Average municipal score for the Government pillar¹²

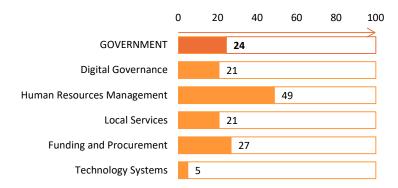
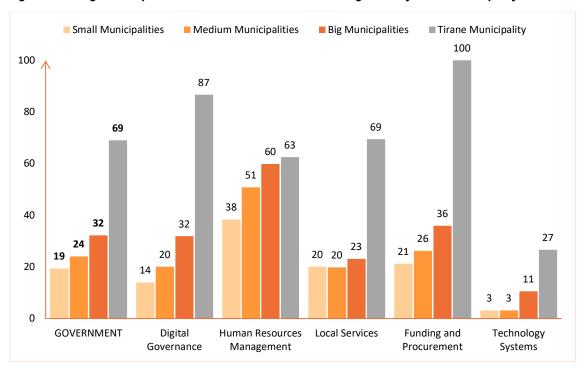


Figure 6: Average municipal score for the Government Pillar, categorized by size of municipality



¹² Tirana is excluded from the average as a clear outlier for all pillars.

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3.3.1 Digital Governance

"Digitalization" or "digital transformation" is a terminology well used at the local level but with little to no strategic approach or documentation. With very few exceptions of some big municipalities (like irana or Korça to a certain extent) such a concept is not part of any local strategy developed at municipal level. Municipal higher executive staff are familiar with the principal concept and express their willingness and positive approach towards "digitalization" but their efforts in this direction so far, in general have been scattered, ad-hoc and not sustainable.

In general, there are no structures at municipal level that oversee "digitalization" or "innovation "that see Digital innovation firstly strategic approach and then operationalize and link it with everyday functions and services provided by the Municipalities. The difference is mainly across big municipalities such as Tirana, Korca, Shkodra and Elbasan. For example, the Municipality of Tirana has a General Directorate dedicated to Innovation, Information Technology and GIS. The Municipality of Shkodra and Elbasan have a directory on IT and IT system management. Korca Municipality has an Innovation Sector, although the actual functions of the staff are linked mostly towards managing the ICT program¹³ implemented by the municipality.

Across most municipalities, there are no dedicated structures covering Information Technology tasks, but rather one or two IT Specialist positions usually included in other department/sectors. In general, these positions cover basic IT tasks (maintenance of computers, internet, and peripheral devices). These functions and tasks are also reflected in the internal regulation of the municipality and/or job description.

There have been several "initiatives/projects" funded by donors that have touched upon digitalization at the local level, but the overall conclusion from the evaluation is that in general these initiatives have not produced sustainable results. Information systems have been built for municipal purposes; software programs developed; only to be discontinued once the project has been completed. The reasons vary, but the main ones are:

- the discrepancy between the "theoretical" concepts and the reality/context of how these IT systems would be populated with necessary and continuous data in order to produce results. It might be easy to build an IT tool with the help of donor projects, but if there is no process or procedures to collect and produce data which "feed" the system, the tool itself is of little use. The lack of structured "registries" at local level (assets, people, businesses, properties) which would feed these systems, or the lack of connectivity to "central registries" of central government, make them very vulnerable towards sustainability.
- Ability of Municipal staff to use these systems without the "help" of the funded projects.
- o Ability of Municipalities to maintain these systems themselves or having the financial resources to do this through third parties. While this latter reason seems to be the most "quoted" from municipal staff (lack of budget to maintain and develop further) it is the opinion of the evaluation that in most cases it is not really related to budgeting issues (as the budgets required are not prohibitively high) but rather an issue of full adoption, endorsement and complete understanding of functioning of these systems, which than makes Municipalities "unsure" to fund something for which they are not certain how to use and develop further. There are cases where the municipalities have seen the value of these systems and have continued to "pay" for their maintenance themselves (Case of Shkodra, Korca or Patos) and these budgets range from 7 to 30K euro a year (not very big budgets).
- In most cases there is a lack of documentation/manuals for these systems and a complete procedure for handover is missing, so after a while, taking into account also changes in the municipal staff, nobody is able to recall where the systems are and how to use them.

In general, the staff of municipalities are of younger age (so a generational shift has happened at the local level) and "digital literacy" of this new generation is quite acceptable as they are familiar with the use of technology in general. There are no major issues of using computers, internet, mobile apps, and basic applications. It is mostly a matter of providing the right "tools" to use and making sure that there is comprehensive system documentation, internal regulations, and most importantly continuous training on these tools.

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¹³ ICT Program for schools

In terms of "digital administrative service delivery" there are now practices in place which show that with the right tools and most importantly with specific regulations in place which ensure the procedures and responsibilities of users, local governments are able to provide such "digital" services. Such cases are:

- E-permit¹⁴ system through e-Albania. All municipalities are obliged to use the e-permit system to issue and manage building permits at the local level. This system is being used by municipal staff and it is functional, although the procedures are not very simple.
- Social Housing administrative services through e-Albania. Another system "at central level" through which
 municipalities coordinate online the process of applying and benefiting from the social housing program.
- Economic Aid through a central system of the Ministry of Health and Social Protection. The applications
 which are handled from the Municipalities, are conducted though this system which then provides the
 "score in points" for the applicant in order to qualify for the scheme.
- The use of SQDNE system for institutional electronic communication and document processing. There are several cases where municipalities are asked by central institutions to produce documentation using the central SQDNE system with electronic signature.

3.3.2 Human Resource Management

Regarding IT-related positions within municipalities, recruitment generally adheres to the established civil service law procedures. However, certain exceptions exist, particularly in smaller municipalities, where not all (or sometime none) municipal staff has civil servant status, making it challenging to follow the recruitment procedures. Nevertheless, it's noteworthy that the Human Resource Departments of Local Governmental Units comply with legal requirements and procedures of civil service law on recruitment and human resource management. Most municipalities have a simple job description format for IT positions. There are exceptions whereby the municipality has drafted a comprehensive description, however, the tasks implemented are much simpler than what is defined in the job description.

Regarding the employment of IT experts with appropriate qualifications, most municipalities do not report on any significant issues in terms of filling the IT specialist position. There is, however, often a need for staffing for digital transformation initiatives. Also, municipalities note the difficulty in attracting and retaining staff, in general¹⁵. Certain challenges arise in smaller, remote municipalities due to limitations in the salary scales associated with the relevant category of municipalities. In terms of third-party contracting for IT-related positions, the primary focus is typically on system maintenance or webpage management across municipalities. None of the municipalities have adopted specific policies or practices aimed at minimizing IT staff retention and competing with the private sector. Instead, municipalities generally adhere to legal provisions, offering dedicated salary supplements for IT positions and substituting work on holidays or overtime with compensatory time off, as prescribed by law. While local governmental units enjoy a degree of autonomy, as mandated by law, they face limitations in developing policies or practices that effectively limit staff turnover toward the private sector due to existing restrictions of salary structure regulations. Municipalities typically do not provide dedicated training programs for digital education. Instead, limited training sessions on digital education are occasionally organized by the Albanian School of Public Administration (ASPA) or within the framework of specific projects in which municipalities are beneficiaries.

3.3.3 Services

Overall, municipalities do not have any digital mechanism, interface or platform that serves to provide local public administrative services to citizens or businesses in a comprehensive way, while the current local administrative

¹⁴ Electronic service which makes it possible to apply online for procedures related to local urban planning, offered through the e-Albania platform.

¹⁵ An exception to this trend can be observed in Tirana Municipality, which has managed to maintain an adequate IT workforce for digital transformation despite experiencing turnovers toward the private sector

services, which are offered by e-Albania (such as e-permits) are not sufficient to solve the needs of the municipality in the efficient provision of services.

Across most municipalities, there is a lack of an Administrative Public Services Inventory offered to citizens and business, containing all the necessary (relevant information) including a description, required documentation, etc. In some cases, municipalities have a simple list of services offered, but this is not comprehensive, and the municipalities are unable to report on a decisive number or typology of services offered.

The services provided by the municipalities do not go beyond Level 1¹⁶ (information). Thus, almost all administrative services are delivered physically. The only digitalized step of the procedure is the system for "application management", which is made through UNDP's and USAID One-Stop-Shop platforms. However, even in this case, in the vast majority of municipalities that have such a system, only the first registration of the application in the system works, while the whole process than "gets off" the system and is implemented paper-based within the structures of the Municipality. The argument most often used by the staff in municipalities is that the need "to protocol and archive" physically all the correspondence to municipality (according to the Law on Archives) obliges them to use paper-based system in order to comply. In this case they would have to do "double work", use the paper-based system, and then scan and register everything in the one-stop-shop system.

3.3.4 Finance and Procurement

Most municipalities do not have any budget for digital transformation, or any objective related to this topic. On the contrary, the budget of municipalities, regardless of size, is rather basic – it focuses only on the IT basic infrastructure, and more specifically on the purchase and maintenance of PC or laptops, or in few cases, on servers. The municipal budgets as a norm do not foresee any digital solutions for the public service delivery.

On the procurement standards, the municipality adheres to standardized procurement practices established at the central level, ensuring uniformity across public institutions, which include a procurement plan that assesses annual IT needs based on the municipality's financial capacity.

3.3.5 Technology Systems

In general, municipalities do not have any digital system for managing administrative tasks, municipal workflow, and internal processes. All processes in the municipalities are mostly managed in the traditional way, while some internal attempts include usage of cloud services for a more efficient workflow. Even in such cases the efforts are mostly based on individual attempts rather than any planned (or strategic) effort.

The most used systems in municipalities are based on central procedures and include: AFMIS (Automated Financial Management Information System) for budgetary and financial functions, as well as HRMIS (Human Resource Management Information System) for HR management¹⁷; SQDNE (Document Circulation System with Electronic Signature). Even for these systems there are issues in ensuring that responsible/designated municipal employees continuously access, use and update these.

No municipality (except Tirana) has the comprehensive ownership or usage of a Digital Administrative Task Management System, workflow, or internal process management system been observed. Typically, municipalities operate through written communication procedures on paper and maintain records for internal data management in tables using the Microsoft Excel program.

Municipalities lack adequate documentation for the management of their information systems or programs, even when these are used in a limited or disconnected manner from one another.

Municipalities lack proper procedures for managing changes in access to systems and data based on employees' roles. An evident consequence of this deficiency is the challenge in utilizing the mentioned central platforms,

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¹⁶ Not including here centralized services offered through the e-Albania platform, such as e-permits

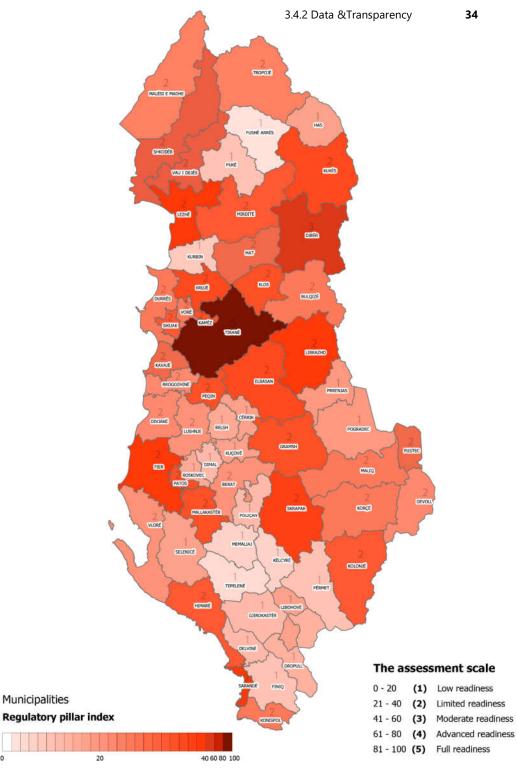
¹⁷ Currently stopped in most municipalities though.

influenced by staff changes or role modifications. The continuity of work does not build upon the achieved results at a developmental stage, nor does it involve their thorough analysis.

There is a lack of digital processes, consequently making it challenging to discuss adhered standards, Key Performance Indicators (KPIs), or measurement units for their performance and effectiveness.

3.4 Regulations

| Regulations | (excl. Tirana) | <u>Tirana</u> |
|----------------------------|----------------|---------------|
| Overall Score | 25 | 81 |
| 3.4.1 Awareness & Knowledg | ge 15 | 88 |
| 3.4.2 Data &Transparency | 34 | 75 |



Regulations pillar is composed by two sub-pillars:

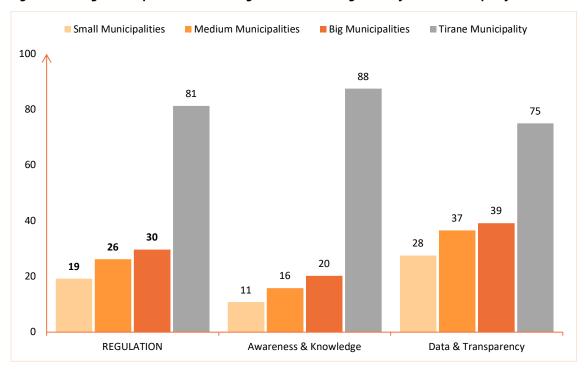
Awareness & Knowledge sub-pillar examines the municipality's understanding of key legal components
related digitalization. This includes awareness of the Decentralization Strategy's third objective of
digitalizing local public services, knowledge about the Digital Agenda of Albania, the familiarity with Law
on Open Data and Reuse of Public Information, Law on Data Protection, and the Law on Cybersecurity.

2. Data & Transparency sub-pillar focuses on the municipality's data management and transparency practices. It assesses the existence of a comprehensive data strategy or policy, the presence and periodic revision of a transparency program, the designation of a coordinator for right-to-information requests, and the availability of the coordinator's contact information. The assessment also considers the use of electronic platforms for managing requests and complaints and sharing regulatory acts, documents, and decisions for public consultation.

Figure 7: Average municipal score for the Regulation Pillar¹⁸



Figure 8: Average municipal score for the Regulation Pillar, categorized by size of municipality



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¹⁸ Tirana is excluded from the average as a clear outlier for all pillars.

3.4.1 Awareness & Knowledge

There is a significant gap in municipal knowledge and preparedness regarding strategic documents in force at the national level. Very few municipalities are aware of the existence of the Decentralization Strategy, recently approved. The same applies to the Digital Agenda. Keeping in mind that the third pillar of the Strategy is dedicated to the digitalization of services at the local level, this gap in knowledge pertaining to the digital transformation is problematic, showing a lack of ability to connect initiatives taken at the central/national level to the local one. This finding underscores the need for targeted interventions and strategic initiatives to enhance municipal awareness and engagement in these strategic domains.

Knowledge on essential legal framework governing data management privacy and cyber security is lacking across almost all municipalities.

There is 'peripheral knowledge' on the law protecting personal data, but this is sporadic at best and only connected to specific cases for information requests by the citizens.

This gap in knowledge raises serious concerns regarding future digital transformations at the local level and it is imperative that these issues are addressed so that municipalities are equipped to meet legal requirements and protect sensitive data effectively.

3.4.2 Data & Transparency

While awareness and adoption of transparency requirements is evident in all municipalities, there remains a notable gap in the adoption of regulations and practices related to data protection. A few exceptions to this trend can be observed in some municipalities (such as Tirana or Fier where regulations on data protection and data privacy policies have been implemented.

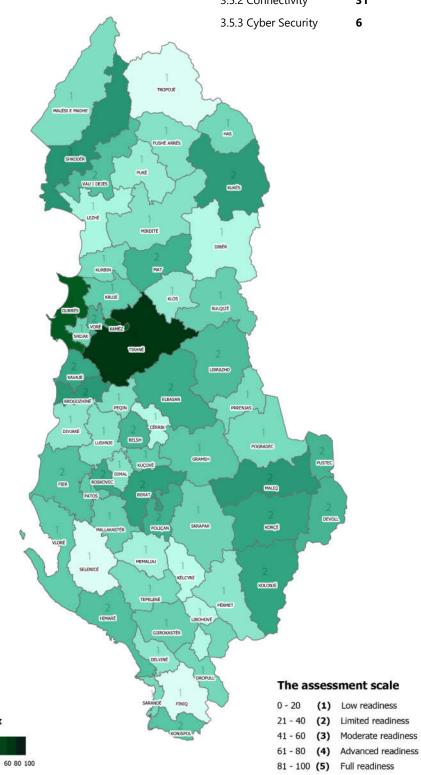
When it comes to the awareness of open data laws and their associated requirements, there is a general lack of understanding across municipalities. An exception to this pattern is the Tirana Municipality, which not only displays awareness but has also established a dedicated structure and its own open data platform to comply with open data regulations.

3.5 Infrastructure

Municipalities

Infrastructure index

| Infrastructure | (excl. Tirana) | Tirana |
|----------------------|----------------|--------|
| Overall Score | 19 | 77 |
| 3.5.1 Equipment | 20 | 67 |
| 3.5.2 Connectivity | 31 | 96 |
| 3.5.3 Cyber Security | , 6 | 69 |



Infrastructure pillar is composed by 3 (three) sub-pillars:

 Equipment sub-pillar assesses the state of municipal governments' back-end infrastructure including facilities and equipment, policies, and practices in place for replacing, upgrading obsolete IT infrastructure as well as measures for disaster recovery.

- Connectivity Systems' sub-pillar investigates the availability and quality of broadband internet access
 and mobile internet, as well as quality of electrical supply, reliability, and distribution, at the municipal
 level.
- Cyber & Information Security pillar looks at cybersecurity policies and implementation practices (technical and administrative measures, compliance, risk assessment procedures, incident monitoring, response, and management)

Figure 9: Average municipal score for the Infrastructure Pillar¹⁹

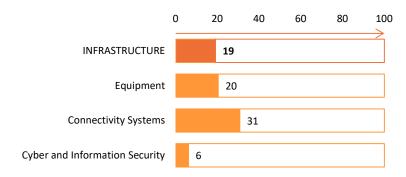
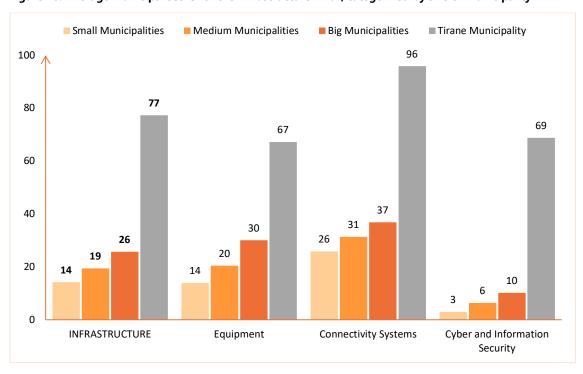


Figure 10: Average municipal score for the Infrastructure Pillar, categorized by size of municipality



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¹⁹ Tirana is excluded from the average as a clear outlier for all pillars.

3.5.1 Equipment

The IT infrastructure across municipalities is basic (excluding a small number of bigger municipalities). Generally, municipalities have a simple access network, consisting mainly of outdated switches and routers that lack reliability in ensuring connectivity services due to their amortization and an unsuitable type for redundancy creation. It is rare to observe municipalities having dedicated servers and storage devices for backup purposes.

The absence of a dedicated technological environment (data center) is apparent. In general, technological devices are not housed in a dedicated space. Even in those rare instances where devices are located in a dedicated room, this environment fails to meet the minimal requirements of a data center, lacking entry authorization, proper cooling, and video surveillance (except few cases such as Shkodra and Tirana municipality, which have a data center meeting technical standards).

The absence of comprehensive documentation and policies for the replacement of technological devices is notable. Despite having a basic inventory of devices, precise and updated documentation for the IT infrastructure is lacking. Additionally, there is a deficiency in policies governing the replacement, enhancement, and maintenance of IT devices. New acquisitions are driven by immediate needs rather than a strategic, long-term approach to ensure ongoing alignment with the evolving needs of the municipality.

The lack of contemporary standard-compliant hardware is evident. Generally, employees are equipped with computer devices that meet basic work requirements, but there is widespread use of unlicensed software, including operating systems, basic Office packages, and other necessary programs. Additionally, computer devices are often outdated in terms of hardware generation, compromising their reliability for sustained functionality.

The lack of data storage and recovery procedures in case of disaster is evident. Municipalities completely lack procedures and policies for data preservation. In the rare instances where data storage in a secondary environment existed, the process was rudimentary, involving the local copying and storage of sensitive financial data on external USBs or HDDs. This practice was more dependent on the attentiveness of the individual handling the data than on adherence to a standardized policy or procedure.

3.5.2 Connectivity Systems

In general, INTRANET does not really function within the municipalities themselves, while this network does not exist in the administrative units.

The internet speed in most municipalities varies from 50-100 Mbps and around 20-50 Mbps across administrative units. It seems that this speed is sufficient for the current needs of the municipalities. However, should there be a digital transformation effort implemented, the speed needs to be upgraded. Administrative units seem disconnected from the municipality center as there is no connectivity system between them (in terms of work processes), while communication is almost entirely through phone calls. To keep the connectivity systems working, very few municipalities have stable electrical networks (such as UPS).

3.5.3 Cyber and Information Security

In general, municipalities do not have a cyber protection policy for their digital infrastructure/systems. They have not carried out any risk assessment to identify potential cyber security threats and specific vulnerabilities of the municipal digital infrastructure, or to keep any register of cyber incidents at municipal level. In general, the person responsible for cyber security is the one responsible for the IT maintenance, but no specific training has been issued to them, or any manual of practices and procedures has been handed – making the position entirely dependent on the individual efforts of an employee not even having cyber security on their job description.

On the other hand, there are certain practices that are present in the municipalities coming from central level after the large-scale cyber-attack that happened a while ago. Such practices are mostly in the form of fractional advice given from time to time: such as how to protect from phishing; or how to protect emails by password policy etc. However, there is a great willingness to adopt any measures that are delivered from the central level.

The technical staff has very little knowledge in this field. The lack of knowledge arises as a result of these main reasons:

- Absence of a Cybersecurity Specialist or the integration of Information Security tasks into IT specialists in the organic structure of local government administrations.
- Lack of proper training in the field of Cybersecurity.
- Lack of engaging external auditors or evaluators to assess the cybersecurity risk situation or conduct vulnerability testing on the infrastructure and electronic services.

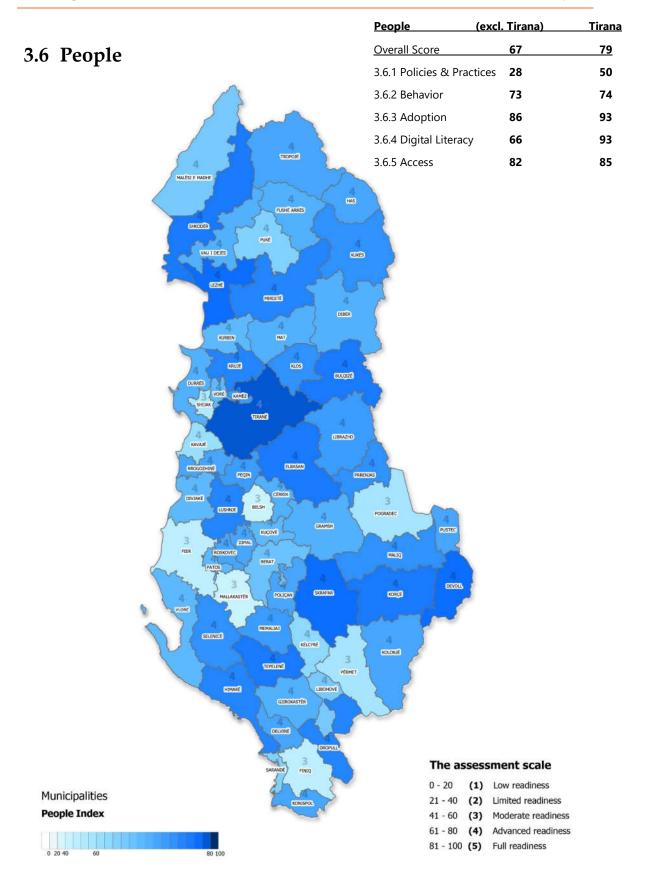
Given the situation, it is impossible to perform a risk assessment regarding information security or develop policies for risk management and security by the current technical staff in municipalities.

Lack of licensed IT products. Widespread use of operating systems, basic Office packages, or various applications is observed in an unlicensed manner (cracked), thereby posing a potential risk for the behavior of local systems and the systems with which users interact online in their daily work.

Lack of a password security policy, their strength, and the time for periodic changes. The absence of a central hub like a Domain Controller for managing municipality users further complicates the work, as all users and passwords are local to PCs, simple in composition, and easily breakable.

Lack of Network segmentation. In some specific cases, network segmentation into different subnets for users and CCTV has been identified, but it has been at very basic levels that do not provide a comprehensive network segmentation scheme and the establishment of security between different user groups and digital infrastructure.

Lack of protective measures for technological devices. In the context of a perimeter defense system, municipalities do not utilize the latest-generation Firewalls that automatically update threat lists, thereby preventing unauthorized access to the infrastructure. Moreover, there is an absence of a central antivirus system, with only a few instances where local antivirus software on specific PCs is employed, often relying on basic antivirus protection provided by the Windows operating system.



People pillar is composed by 5 sub-pillars:

1. **Policies and Practices** sub-pillar examines whether municipalities have in place the necessary policies, procedures, and practices to support the use of digital tools and technologies for service delivery

- 2. **Behavior** sub-pillar is concerned with how employees actually use digital tools and technologies in their work. Based on a battery of questions in a self-assessment²⁰ questionnaire of municipal employes
- Adoption sub-pillar measures the level of adoption of digital technologies by municipality employees.
 Based on a battery of questions in a self-assessment questionnaire of municipal employes
- 4. **Digital Literacy** sub-pillar includes a self-assessment of the municipal employees of the level of proficiency with different digital technologies. Based on a battery of questions in a self-assessment questionnaire of municipal employes
- 5. **Access** sub-pillar investigates the level of access municipal employees have to digital tools and technologies. Based on a battery of questions in a self-assessment questionnaire of municipal employes

The People pillar scores 67 out of 100 points. This pillar has by far the highest score compared to all other Municipal Readiness pillars. One of the main reasons might be that most of the sub-pillars composing it, are based on a series of questions posed to selected municipal employees through a self-assessment questionnaire. A self-assessment exercise of this nature risks to "inflate" or "overestimate" skills and abilities. In any case it also shows a certain level of confidence in the digital capacities that municipal employees have. It also serves to have a a common ground for comparison and aggregation of results at municipality and national level.

Considering differences between municipalities, in the case of this pillar, the municipality of Tirana does not have the same gap as in other pillars. The score of the municipality of Tirana for this pillar is 79 while the difference between the small, medium, and big municipalities is small (1 point per each). This is because in terms of behavior, adoption, and access there is not much difference between municipalities. As explained, the staff does in general use digital technologies, is willing to adapt to new technologies related to their job and have at least adequate access to digital technologies to conduct their current job, regardless of municipal size. The municipality of Tirana, does however, perform better in terms of policies and practices, as it has some guidelines for using digital tools and also periodic trainings on digital policies.

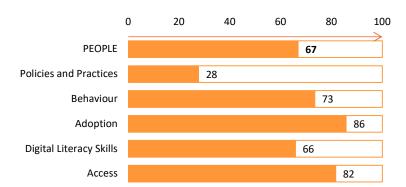


Figure 11: Average municipal score for the People pillar²¹

3.6.1 Policies and Practices (28/100)

This sub-pillar scores the worst under the People pillar. Most municipal employees surveyed (53%) declare that they are not aware of any protocols or guidelines for using digital tools in their work for service delivery. Almost

²⁰ While self-assessment feedback, where answers are sourced from randomly selected respondents, offers an additional angle and a ground-level perspective that may enrich the overall assessment, it is important to be aware of its limitations regarding sometime an overestimation of the digital self-capabilities

²¹ Tirana is excluded from the average to keep the same method of comparison throughout the pillars.

70% declare that they have not received any training regarding digital policies and practices within the municipality. Similarly, about 65% do not feel adequately informed about the expectations and requirements outlined in digital policies and practices.

In addition, municipalities (with a few exceptions) have not adopted any code of ethics on service delivery which would guide employees and set some standards to follow. Some municipalities have addressed this matter by either incorporating a general code of ethics or by including some provisions in their internal regulations. In municipalities where ADISA offices were co-located, there is a notable practice of displaying the citizen charter within their one-stop shop offices. Additionally, municipalities that have been part of UNDP projects on citizen charters also adopt this practice.

3.6.2 Behavior (73/100)

Municipal employees, as shown by their survey responses, generally reflect a positive inclination towards digital technology adoption and utilization within the workplace. A significant majority of employees agree that they frequently use digital technologies for communication (75%), for collaboration with colleagues (73%), and completing tasks at work (77%).

Moreover, a notable proportion (82%) indicate their reliance on the internet for updating knowledge or skills, indicating a proactive approach to professional development. It has to be noted though that, comparatively, a smaller percentage of employees (57%) feel confident in dealing with problems that arise with digital tools. It appears that one of the main reasons why employees find difficulties in dealing with problems that arise with digital tools is due to insufficient training sessions and missing standard operating procedures.

3.6.3 Adoption (86/100)

This sub-pillar shows the highest score within the People pillar, indicating a high level of declared "adoption practices" towards digitalization. Municipal employees exhibit a willingness to invest time and effort in acquiring the necessary digital skills required for future tools and are eager to assume new roles integral to the acceptance and implementation of upcoming digital innovations.

About 9 in 10 municipal employees declares that they are "open to embracing and adopting new digital tools that may be introduced in the municipality". A similar proportion (89%) declares that they are "willing to invest time and effort in learning and acquiring new digital skills required". They do not see any issues with "adapting and modifying their work processes to incorporate new digital tools effectively" (86% declare to be open to adapt). They also show "confidence in their ability to learn new digital tools" (87%). Even if there might be some "inflation" on this self-declared attitude, it is telling that also 89% of municipal employees agree that "embracing future digital tools will bring about positive changes and improvements in our work efficiency and outcomes".

3.6.4 Digital Literacy (66/100)

In the realm of work-related computer skills, employees generally demonstrate proficiency in various components such as basic computer skills, internet browsing, email communication, word processing, spreadsheet utilization, and presentation skills based on their self-assessment.

Basic computer skills which include activities such as: i) navigating and operating computers, ii) understanding computer terminology, iii) searching for information online, iv) managing emails or v) managing files and folders, according their self-declaration, score high among municipal employees. However, while employees excel in these areas, there are certain activities where improvement could be targeted. For instance, spreadsheet skills demonstrate a comparatively lower proficiency level, particularly in tasks like creating charts and graphs, Presentation skills also show potential for enhancement.

However, while Municipal employees declare good level of basic Digital Literacy, the municipal institutional survey reveals that Municipalities in general suffer from the lack of qualified and technically skilled IT professionals. This is especially true for smaller municipalities. Specialized IT professionals crucial for supporting the digital

transformation of local government services are predominantly oriented toward the private sector, mostly concentrated in Tirana. Several key issues contribute to this scenario: notably low salaries in municipalities without corresponding increments based on tenure or additional skill acquisition, a lack of career prospects for youth in municipal employment, and limited opportunities for skill enhancement in basic roles.

The municipal institutional survey also shows that i) Municipalities cannot easily access talent from local Universities and businesses and confirms that ii) Municipalities themselves do not have any targeted internal digital education and training programs for their employees.

3.6.5 Access (82/100)

In assessing access to digital tools within the municipal workforce, employees declare robust accessibility to basic hardware and software (office suites, email clients etc.), indicating a solid foundation in terms of such basic physical resources. However, even in the case of these resources, most of employees (52%) declare that they do not receive any training to increase their proficiency. This underscores a critical need for enhanced training initiatives and ongoing support systems to bridge this accessibility deficit and empower employees to leverage digital tools effectively.

Overall, while access to digital tools is relatively strong, addressing deficiencies in network connectivity, mobile device utilization for work purposes, and particularly training and support mechanisms will be instrumental in ensuring comprehensive digital readiness across the municipal workforce.

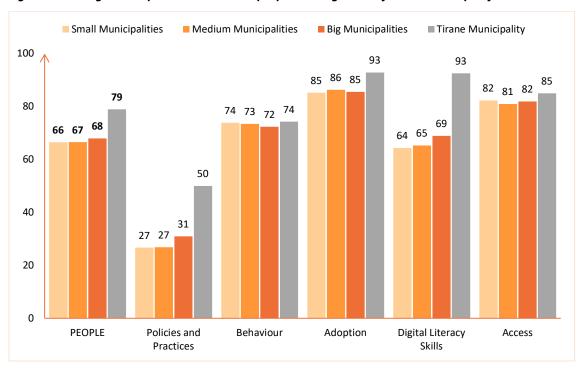


Figure 12: Average municipal score for the People pillar, categorized by size of municipality

Tirana

(excl. Tirana)

U/C Services

3.7 User Centric Service Delivery Overall Score 20 60 3.7.1 User engagement 3 100 3.7.2 Inclusivity 34 49 31 3.7.3 Adoption of e-services **24** VAU T DEJES KUKES MIRDITÉ DIBER MALEQ KORÇÊ POLICAN The assessment scale (1) Low readiness 0 - 20 Municipalities 21 - 40 (2) Limited readiness **User Centric Design** 41 - 60 (3) Moderate readiness 61 - 80 (4) Advanced readiness 81 - 100 (5) Full readiness

User-Centric Service Delivery pillar, which explores the approach of the municipality to prioritize the needs, preferences, and experiences of the individuals or groups they serve, is composed by 3 (three) sub-pillars:

- User Engagement & Feedback sub pillar focuses on the engagement and feedback of citizens for the local government services.
- Inclusivity sub pillar focuses on the inclusive delivery of local government services, concerning access of vulnerable groups.
- Adoption of Electronic Services sub pillar focuses on the perception of the municipal employees on the
 possibility of adoption of electronic services by the citizens of the municipality.

The User Centric Pillar scores only 20 points out of 100, being at the border of "low" readiness for Municipalities (excluding Tirana). The issue at hand is that the topic appears to be rather "advanced" for the public service delivery at local level. The user centric approach was first introduced with the establishment of ADISA offices and has since persisted in digital services as well, but the level of adoption of such measures is still far from optimal, and almost completely missing at the level of local government.

Comparing municipalities by size, the municipality of Tirana stands out. The score for the User Centric Services pillar is 60 for this municipality, reaching higher boundaries of the moderate readiness level. The differences between the small and big municipalities are rather small. On the Inclusivity sub pillar there is also a difference between the municipality of Tirana and other municipalities.

However, interestingly on the sub-pillar of Adoption of Electronic Services, which is based on the perception of Municipal employees on how well the citizens/business would cope with introduction of electronic services, the difference between Tirana and other Municipalities is rather small. This suggests that the "perceived" resistance of citizens and businesses in adopting digital public services is at very similar levels municipal staff from all types of Municipality.

USER CENTRIC SERVICE DELIVERY

20

User Engagement & Feedback

Inclusivity

34

Adoption of Electronic Service

Figure 13: Average municipal score for the User Centric Service Delivery Pillar²²

3.7.1 User engagement & feedback (3/100)

This sub-pillar scores only 3 points out of 100 showing almost no existence of any kind of user engagement (be it citizens or businesses) and feedback mechanism in all municipalities to test and improve the quality of their services. Tirana municipality is a completely different reality with a dedicated framework to monitor and assess citizen satisfaction, with the quality of service delivery.

3.7.2 Inclusivity (34/100)

Regarding service delivery through multiple channels, the majority of municipalities primarily leverage social media platforms to promote their information services. However, certain municipalities, such as Tirana, Mat and Shkodra,

²² Tirana is excluded from the average as a clear outlier for all pillars.

stand out for their proactive approach by developing mobile applications²³ to enhance service information accessibility.

Tirana Municipality, in particular, has established a dedicated green line number for citizen inquiries, contrasting with other municipalities that rely on designated coordinators' contact details or official email addresses for information requests. Notably, none of the municipalities have implemented website features tailored to accommodate vulnerable groups or individuals with limited capabilities, highlighting a crucial area for improvement in accessibility and inclusivity.

The access of vulnerable groups, specifically elderly individuals and people with disabilities, presents a significant challenge. These groups encounter obstacles in accessing local public services due to issues related to physical infrastructure, distance, inadequate public transportation (especially in rural areas), complex information, and limited communication channels.

3.7.3 Adoption of electronic services (24/100)

It is noteworthy that the perception of Municipalities (exhibited by the management and technical level representatives) is that "citizens are resistant" towards adoption of electronic service delivery. Such a perception is interestingly uniform among all types of municipalities, small or big. This resistance, according to municipal representatives, stems from a lack of necessary skills or familiarity with digital tools and technologies among certain

segments of the population. Moreover, they also mention inadequate access to reliable internet connections and essential devices restrict citizens' and businesses' engagement with digital services, thus limiting their ability to fully utilize and benefit from these offerings. It is very interesting to "compare" these perceptions about service users (general population) with the findings from the public surveys. There seems to be, from the part of the Municipalities, an overestimation of perceived "resistance" of public towards electronic services. The results of the

"Clash" of realities

Most municipal employees (75%) do not think that citizens/business "have the ability" to use e-services. This contrasts with 63% of the citizens surveyed who declared that dealing with a new e-service would not "be difficult" for them.

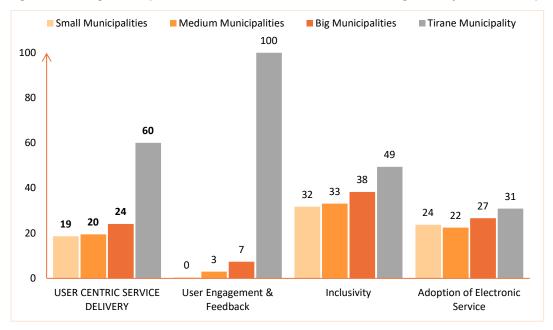
public survey show that, while there are issues with elderly and rural segments, in general the public shows a high level of openness to embrace and adopt new digital technology tools²⁴.

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²³ Some examples are: i) Tirana Municipality has developed a mobile app called <u>eTirana</u>, in which among other things one could access services information cards for approximately 200 services offered by the Municipality, or ii) <u>iShkodra</u> a mobile app of Municipality of Shkodra with various informations on municipal budget and other notifications, as well as information abou "My Dues" in terms of municipal taxes and tariffs etc.

²⁴ See also next section - Public Assessment results.

Figure 14: Average municipal score for the User Centric Service Pillar, categorized by size of municipality

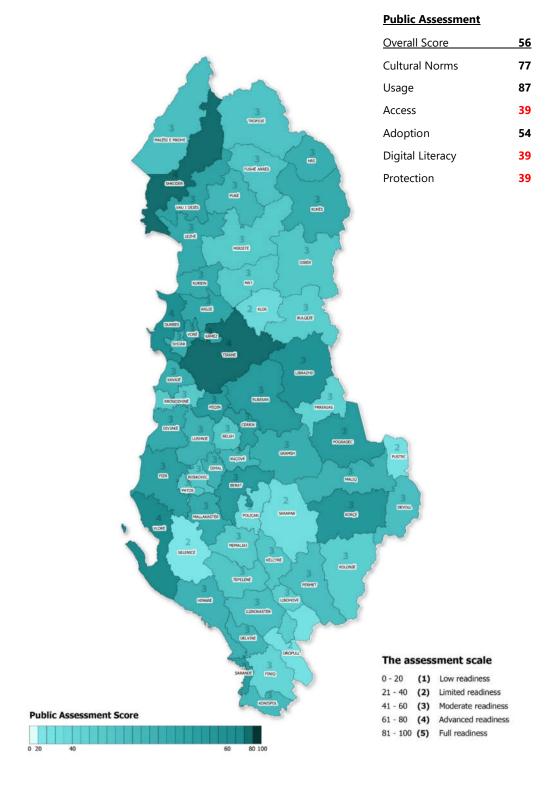


4 Public Assessment Results

4.1 Matrix of pillars

| PILLARS | Short Description | | | | |
|---|---|---|--|--|--|
| 4.3 Cultural Norms assess individuals' perceptions towards digital devices | The citizens are asked a series of questions to share their opinions on i) the importance of digital devices, ii) the necessity of smartphones in today's world, iii) necessity of PCs/laptops/tablets, and iv) the impact of using these technologies (positive or negative). | | | | |
| 4.4 Usage Quantifies digital engagement and device utilization among the respondents | Based on questions about i) digital device ownership, ii) internet connectivity, iii) the frequency of device usage and iv) the frequency of internet usage. This pillar's score is evaluated based on a set of criteria, considering respondents who meet the following conditions: having internet access AND owning at least one digital device (Smartphone/PC/Tablet) AND using their device and internet several times per week. | | | | |
| 4.5 Access Assess individuals' level of accessibility for digital technologies | It investigates through a series of questions how effortless it is for residents to i) browse the internet, ii) utilize computers and mobile phones for daily tasks and iii) engage in e-commerce activities. | | | | |
| 4.6 Adoption Assesses individual's degree of openness to adopt new digital skills and tools | The citizens are asked about i) the impact of digital devices on the accessibility of public services. In addition, they are asked a battery of questions to measure ii) their openness to embrace new digital technologies, iii) willingness to invest time in acquiring digital skills, iv) confidence in adapting to new technologies, and v) their opinion on embracing digital tools. Responses are assessed on a Likert scale and the pillar's score is calculated as the percentage of respondents who think that digital devices have had a positive impact on the accessibility of public services in the first statement and "Strongly Agree" or "Agree" in the last four statements. | | | | |
| 4.7 Digital literacy Assesses individuals' digital skills | 4.7.1. Basic Computer Skills | Assess the individual's skills to i) navigate and operate a PC, ii) are familiar with computer terminology and concepts, iii) know how to install and uninstall software applications on a computer | | | |
| | 4.7.2 Internet and Web Browsing Skills | Assess the individuals' skills i) to connect to the internet, ii) search for information online and iii) ability to evaluate the reliability of online sources | | | |
| | 4.7.3 Email and Communication Skills | Assess the individual's skills to i) compose and send emails, ii)use email features (cc, attachments, etc) | | | |
| | 4.7.4 Digital Creative Skills | Assess the individual's skills to i) create and edit documents, ii) create and format spreadsheets, charts, iii) create and deliver presentations, iv) use basic image editing software, v) use design software, and vi) create charts and graphs | | | |
| | 4.7.5 Mobile and E-services | Assess the individual's skills to i) install applications in their smartphones, ii) navigate through applications in smartphones and iii) do online shopping via credit or debit cards | | | |
| 4.8 Protection assesses individuals' digital security perceptions | A battery of questions that evaluate the comfort and confidence levels in i) sharing personal information online and ii) managing access to it. In addition, they explore, iii) the sense of safety when conducting online payments and iv) exchanging electronic documents. Responses are assessed on a Likert scale and the pillar's score is calculated as the percentage of respondents who all statements as "Very confident" or "Confident" in the first two statements and "Very safe" or "Safe" in the last two statements. | | | | |

4.2 Overall Results



The overall results show that the total Readiness Score is 56 out of 100. This suggests that, on average, the Albanian public has Moderate Digital Readiness. Considering the key pillars, the Usage Pillar scores the highest, with 87 out of 100 points. Access, Digital Literacy and Protection Pillar score the lowest evaluation, suggesting a nuanced digital readiness level across the general public.

P.1 Cultural Norms (77/100)

The public exhibits a substantial reliance on digital devices, perceiving their usage as positively impacting their daily lives. As a result, possessing access to a digital device is deemed crucial by a significant portion of the population. The primary digital devices considered vital include smartphones, followed closely by personal computers or laptops and tablets.

P.2 Usage (87/100)

A substantial portion of the public enjoys internet access/connection within their households. Nearly all citizens have a smartphone in their households, followed by personal computers and tablets, even though with a significant difference from smartphone ownership. Moreover, there is a remarkably high frequency of daily smartphone usage, mirroring the equally robust pattern observed in internet usage.

P.3 Access (39/100)

The public face significant difficulties when using internet to browse or search for information. Further, difficulties are evident in accessing digital devices for routine activities like document preparation, email communication, messaging, and more. Substantial hurdles are faced by a significant portion of the public when attempting to access the internet for e-commerce activities. Citizens residing in small municipalities face more difficulties than their counterparts in medium and bigger municipalities.

P.4 Adoption (54/100)

The majority of the public is of the same opinion that the accessibility of public services in their community has improved due to digital technologies. Furthermore, there is a notable readiness among the public, indicating a high level of openness to embrace and adopt new digital technology tools. More than half of the public expresses a strong confidence in their ability to learn and adapt to these new digital tools. Citizens residing in small municipalities are less willing and able to adapt to new digital technologies than those living in medium and bigger municipalities.

P.5 Digital Literacy (39/100)

the public confronts challenges in acquiring basic computer skills. More than half of the public encounters difficulty in connecting to the internet and browsing for information. Similarly, using email features is perceived as challenging, comparable to the internet and web browsing component. The digital creative aspect, encompassing tasks such as document and image editing, spreadsheet management, and graph/table creation, garners the lowest evaluation among all components. Despite widespread smartphone ownership, a notable segment of the public lacks the necessary skills to use them, with an even larger share lacking proficiency for e-commerce activities.

P.6 Protection (39/100)

The public maintains a relatively moderate level of confidentiality when sharing personal information online. Similarly, citizens encounter challenges in managing access to their online personal information, with older individuals and those residing in smaller municipalities often facing more difficulties. The perception of safety is notably lower when it comes to making online payments via credit or debit cards, as well as exchanging electronic documents or files online.

Figure 15: Average score of Public e-Readiness Assessment

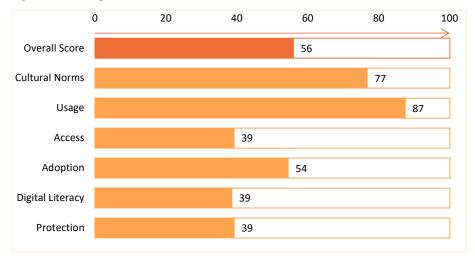
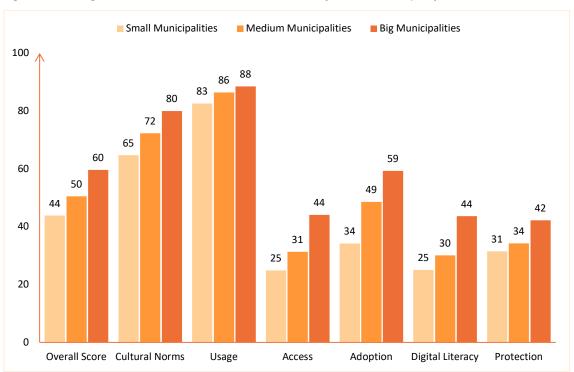
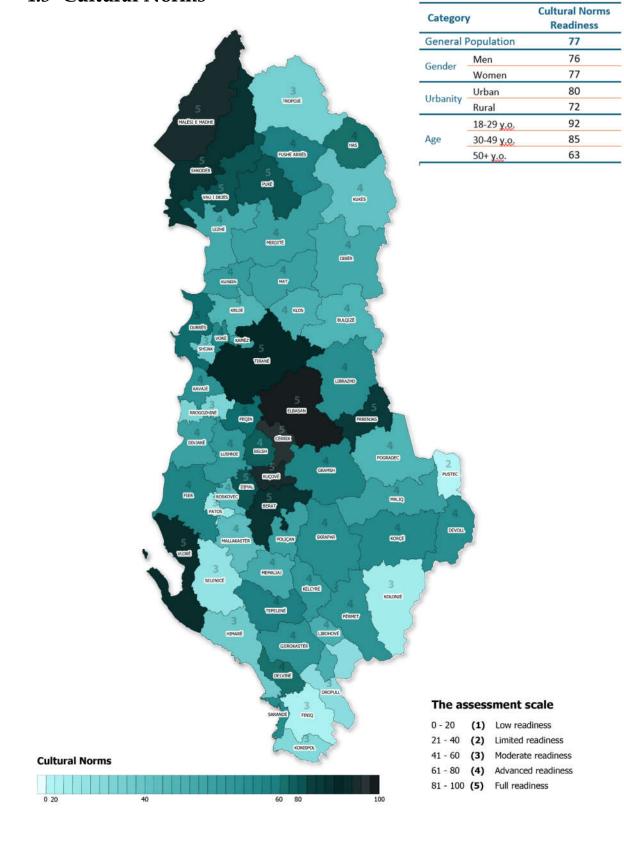


Figure 16: Average score of Public e-Readiness Assessment by size on municipality



4.3 Cultural Norms



Cultural norms measure the significance of digital devices in our daily lives. The citizens are asked to share their opinions on the importance of digital devices, the necessity of smartphones and PCs/laptops/tablets, and the impact of using these technologies.

4.3.1 Importance of Digital Device Usage

Digital devices play an important role in the daily life of Albanian citizens. About one out of two citizens declared that the use of digital devices is "very important" and an additional 36% percent argued to be "important". Only 9% of the citizens argued that the usage of digital devices is relatively not important for daily activities. The results by municipality size show that the percentage of citizens who praise the importance of digital device for their daily life is higher in bigger municipalities compared to small municipalities.

100% ■ Not important at all 80% Not important 60% Neutral 40% Important 20% ■ Very important 0% Small Overall Medium Big Municipality

Figure 17: Based on your opinion, how important do you think is the usage of digital devices (smartphones/PCs/laptops/tablets) in your daily life?

4.3.2 Opinion on the impact of digital technologies

Digital technologies have relatively a positive impact according to the Albanian public. About 29% of the public thinks that the impact of digital technology usage is "very positive" and 57% thinks it is "positive". The share of the public who believes that digital technologies have relatively negative effects is small, 6%. Meanwhile, 7% of the public holds a neutral stand declaring its impact is nor positive neither negative. The percentage of people living in big municipalities and believe that digital technology usage will have a positive impact is larger than the percentage of people living in smaller municipalities.

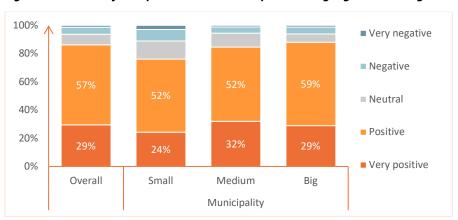


Figure 18: Based on your opinion, what is the impact of using digital technologies?

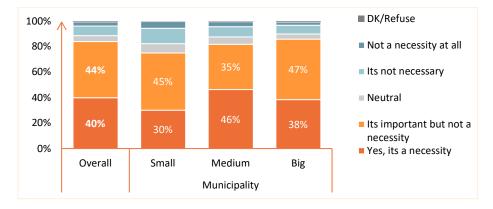
4.3.3 Access to Smartphone, PC/laptops and Tablets a necessity

Smartphones are the main digital device that the Albanian citizens consider a necessity in today's word (see figures below). About 68% of the citizens consider smartphones a necessity and 25% consider them important but not a necessity. Although, a significant share of citizens considers PC/Laptop/Tablet a necessity as well, four out of ten citizens. Results by municipality size show a similar trend with big municipalities having the highest percentage and small municipalities having the lowest percentage.

■ Not a necessity at all 80% Its not necessary 60% Neutral 40% 68% Its important but not a 20% necessity Yes, its a necessity 0% Overall Small Medium Big Municipality

Figure 19: Do you consider having a smartphone a necessity in today's world?





4.3.4 Other findings

The main channel of getting information is traditional media, television, 67% of citizens use it to get informed, followed by, social media (i.e. Facebook, Instagram, TikTok, X-Twitter, etc.) (65%) and websites (50%) which provide different types of information (see Table 1). Results by age category show different preferences for each age group. Citizens aged 18-49 years old mainly preferred channel of information is social media, followed by websites. Meanwhile, the most preferred channel for older citizens (50+ years old) is television. In addition, television remains the most preferred channel for citizens living rural areas, while those living in urban area have social media as their most preferred channel of information. Citizens who consider themselves having a disability²⁵ have television as their preferred channel, while citizens who do not have a disability prefer both type of channels traditional and modern equally. Getting informed by newspapers and radio are the least preferred channels (see Table 1).

The results in Table 2 below show, while the majority of people think that digital tools are a necessity and that their effect in today's world is positive, there is an "inertia" attitude with most of the citizens (55%) declaring to prefer "to go in person" when they need information from a public institution compared to other "digital" channels. These

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²⁵ Explain Disability according to the QNR definition explained to the citizens

other channels of information follow with mobile applications (30% declare to prefer it), phone calls (27%) and social media (25%). Results by age groups show that the younger the person the less preferred is "in person meeting" for information purposes. Only 24% of 18-29 years old, prefer this channel, compared to 47% of 30-49 years old and then a significantly higher 75% of 50+ years old (see table 2)

For those that choose in-person meetings as a preferred channel of information, the main factors they cite are: i) difficulty to use online tools (89%), lack of information (86%), lack of skills to use other tools (84%), habits (81%) and trustworthiness (65%). Meanwhile the main factors that motivate the citizens to choose applications as a preferred channel of information are: easiness of access (61%), accuracy of information (46%), timeliness (46%), and variety of contents (45%).

Similarly, when people are asked "what channels of communication are most preferred" when they need a service from a public institution (Municipality or Central Government) still "the in-person meetings" are cited as the most preferred channel of communication by 57% of respondents (see Table 3). The age difference is clear even in this case, with older people preferring this channel of communication much more than younger people.

Table 1: What are your most preferred channels of getting information? (by age, urbanity and disability)

| Channels Overall | Overall | Age | | | Urbanity | | Disability | |
|-------------------|---------|-----------------|-----------------|---------------|----------|-------|------------|-----|
| | | 18-29 years old | 30-49 years old | 50+ years old | Urban | Rural | Yes | No |
| Television | 67% | 35% | 61% | 87% | 67% | 67% | 86% | 66% |
| Social media | 65% | 88% | 80% | 43% | 71% | 58% | 36% | 66% |
| Websites | 50% | 78% | 63% | 26% | 54% | 45% | 22% | 51% |
| Online Panels | 37% | 61% | 48% | 17% | 42% | 31% | 17% | 38% |
| News applications | 24% | 30% | 30% | 17% | 29% | 18% | 10% | 25% |
| Email newsletters | 11% | 19% | 15% | 4% | 13% | 8% | 4% | 11% |
| Radio | 3% | 2% | 3% | 3% | 3% | 2% | 2% | 3% |
| Newspaper | 3% | 1% | 2% | 4% | 3% | 2% | 2% | 3% |

Table 2: If you need information from a public institution (municipality, Central Government) which are the most preferred channels of getting information that you use?

| Channels | Overall | Age | | | Urbanity | | |
|--------------------|---------|-----------------|-----------------|---------------|----------|-------|--|
| | | 18-29 years old | 30-49 years old | 50+ years old | Urban | Rural | |
| In-person meetings | 55% | 24% | 47% | 75% | 53% | 57% | |
| Apps | 30% | 47% | 39% | 15% | 36% | 23% | |
| Phone calls | 27% | 24% | 31% | 26% | 25% | 30% | |
| Social media | 25% | 38% | 31% | 16% | 28% | 23% | |
| Website | 15% | 28% | 18% | 6% | 19% | 9% | |
| Email | 11% | 21% | 15% | 3% | 13% | 8% | |
| Text messages | 8% | 12% | 11% | 4% | 8% | 8% | |
| Other | 2% | 0.3% | 1% | 3% | 2% | 1% | |

Figure 21: What factors motivate your preferences for the information channels?

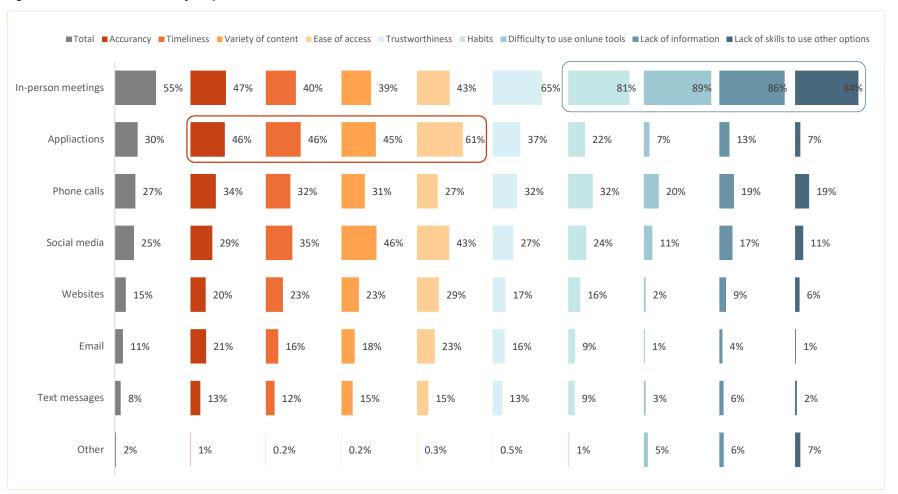
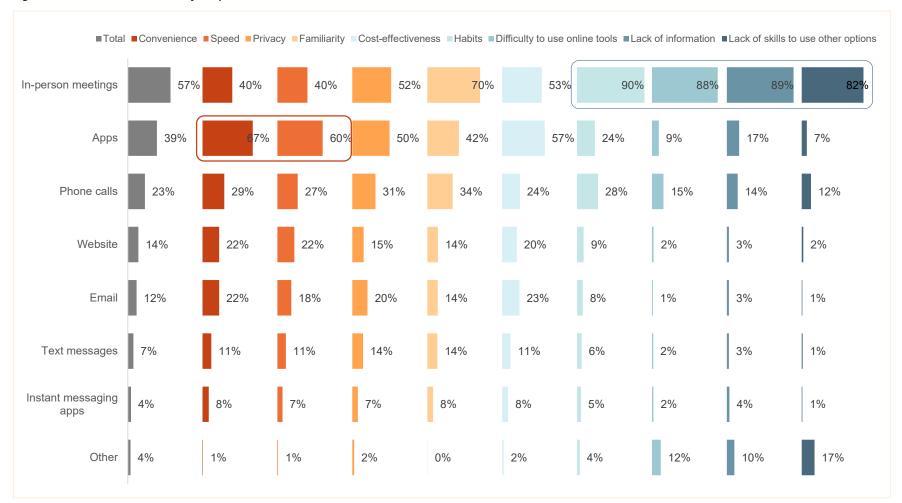


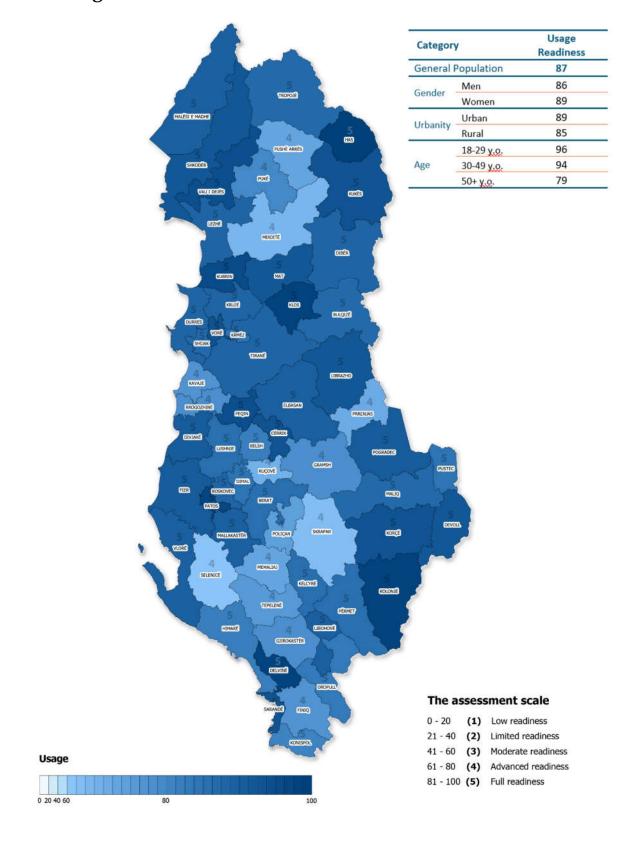
Table 3: If you need a service from a public institution (municipality, Central Government) which are the most preferred channels of communication that you use?

| Channels | Overall | Age | | | Urbanity | | |
|--------------------|---------|-----------------|-----------------|---------------|----------|-------|--|
| | | 18-29 years old | 30-49 years old | 50+ years old | Urban | Rural | |
| In-person meetings | 57% | 29% | 50% | 76% | 53% | 62% | |
| Apps | 39% | 62% | 49% | 21% | 45% | 31% | |
| Phone calls | 23% | 23% | 24% | 22% | 21% | 26% | |
| Social media | 14% | 25% | 18% | 6% | 18% | 9% | |
| Website | 12% | 22% | 16% | 4% | 14% | 9% | |
| Email | 7% | 11% | 10% | 3% | 8% | 7% | |
| Text messages | 4% | 6% | 6% | 2% | 6% | 2% | |
| Other | 4% | 1% | 3% | 6% | 5% | 2% | |

Figure 22: What factors motivate your preferences for the communication channels?



4.4 Usage



Usage pillar assesses and quantifies various aspects of digital engagement and device utilization such as digital device ownership, internet connectivity, and the frequency of device usage. This pillar's score is evaluated based on a set of criteria, considering respondents who meet the following conditions: having internet access, owning at least one digital device (Smartphone/PC/Tablet), using their device and internet several times per week.

4.4.1 Household internet connection

Nine out of ten citizens in Albania declared that they have internet access or connection in their households. The results by municipality size show that 85% of the households in the small municipalities have internet access in their household which is slightly lower compared to the households in medium and big municipalities. Meanwhile the results by urbanity show a slight difference between urban and rural areas. About 91% of the citizens living in urban claim to have internet access in their households compared to 89% of the citizens living in rural areas.

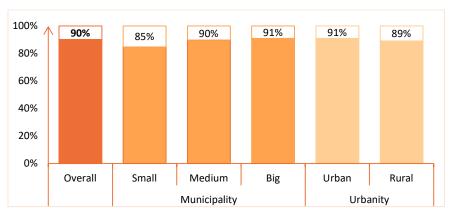


Figure 23: Does your household have internet connection? (not including internet in smartphone)

4.4.2 Digital devices in households

Smartphones are becoming more and more present in the daily life of the Albanian citizens. An overwhelming majority of citizens, precisely 97%, affirm the presence of smartphones within their households. This high level of ownership underscores the growing significance of smartphones in the daily lives of Albanian residents, which was shown in Cultural Norms section too. Even though smartphones are the most owned or used digital device, 38% of citizens own or use PC or laptop. Finally, tablets are the least owned digital device, precisely 14%. The results by municipality size show no significant difference between the municipalities when looking at smartphones or tables. Meanwhile the ownership or usage of PC or laptops is higher among households in big municipalities compare to their counterparts in medium and small municipalities.

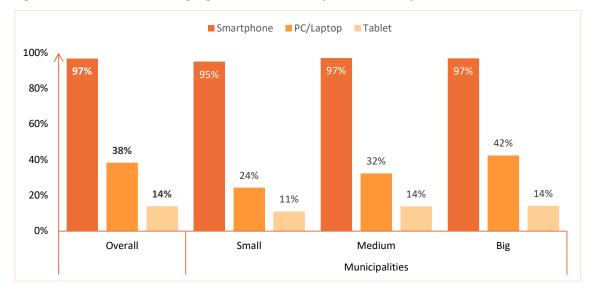


Figure 24: Which of the following digital devices/tools do you have/use in your household?

4.4.3 Frequency of smartphone usage

According to our survey findings, a noteworthy 92% of smartphone owners/users reported utilizing their devices multiple times a day, which shows the pervasive and frequent nature of smartphone usage among the Albanian citizens.

Examining the data via municipality size, our findings reveal that residents of big municipalities exhibit a slightly higher frequency of smartphone usage throughout the day, with a significant 94% engaging with their devices regularly. In contrast, individuals residing in smaller municipalities, while still active smartphone users, register a slightly lower frequency at 86%.

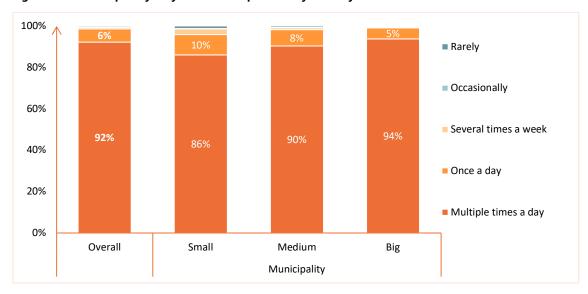


Figure 25: How frequently do you use Smartphones in your daily life?

A robust 98% of individuals who possess or utilize smartphones also enjoy internet access through their devices. Importantly, our analysis across municipality sizes highlights a uniform accessibility trend among citizens irrespective of their residence.

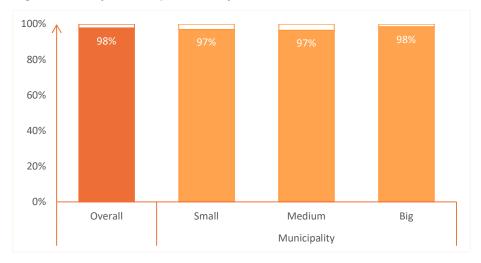


Figure 26: Does your Smartphone usually have internet access?

4.4.4 Frequency of internet usage

The data reveals that majority of citizens, 89%, with internet access incorporate it into their daily routines, accessing the internet multiple times a day, while 8% engage with it once a day. Exploring the internet usage patterns based on municipality size shows nuanced trends. In small municipalities, 83% of residents with internet access in their households utilize it multiple times a day, indicating a robust but slightly lower frequency compared to their counterparts in medium-sized municipalities (86%). Notably, citizens in big municipalities exhibit the highest frequency, with 91% navigating on internet for different purposes.

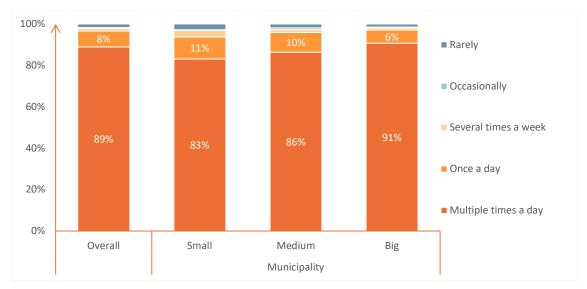


Figure 27: How frequently do you use the internet?

4.4.5 Other Findings

When it comes to digital devices like personal computers, laptops and tables the regular daily usage drops significantly. Personal computers or laptops are used multiple times a day by 37% of PC or laptop owners or users. Meanwhile the percentage of tablet frequent daily users is even smaller, precisely 27% (see Figure 28 and 29).

The primary purposes for citizens utilizing the internet include communication (92%), social media engagement (76%), information and research activities (62%), entertainment (32%), and other purposes as detailed in the figure

below. When examining age-related trends, it becomes evident that individuals in the 18-29 age group exhibit a higher propensity for using social media, particularly when compared to their older counterparts aged 50 and above. Notably, one-third of young citizens (18-29 years old) engage in online shopping using credit and debit cards, a significantly higher proportion compared to the 4% observed among older citizens.

Furthermore, an urban-rural analysis unveils a similar order between the purposes of internet usage among both groups, however there is significant differences between the percentages for each purpose. Only 21% of citizens declare to utilize the internet for government services, such as tax payments and passport applications, highlighting a potential area for increased digital engagement. Similarly, a mere 8% leverage the internet for municipal services, such as paying municipal taxes and reporting issues.

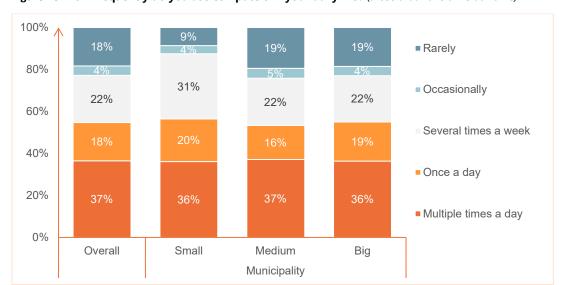
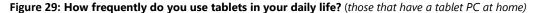


Figure 28: How frequently do you use computers in your daily life? (those that have a PC at home)



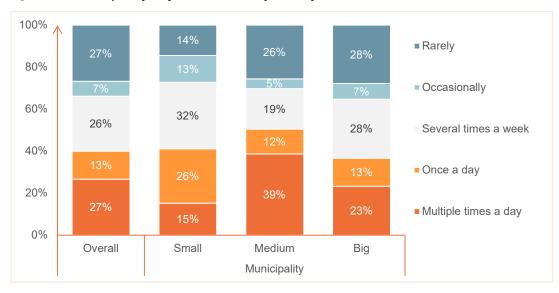
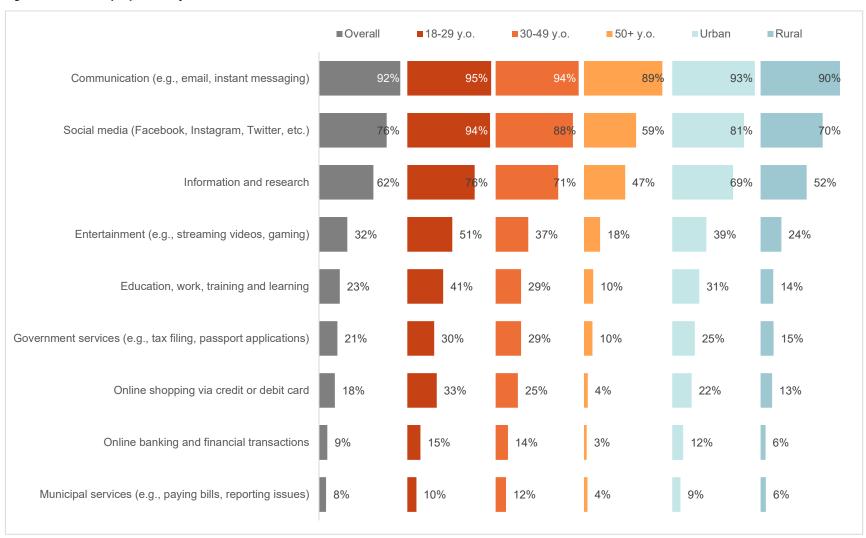
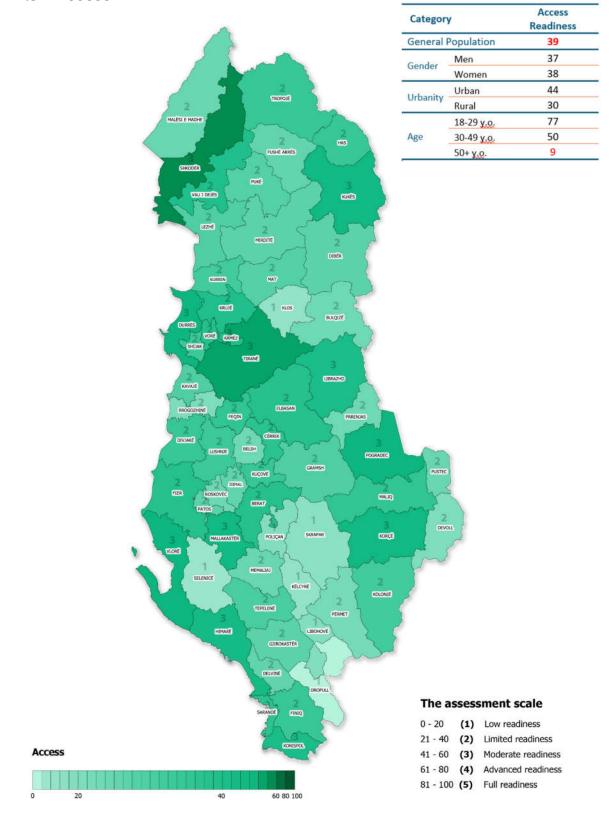


Figure 30: For what purposes do you use the internet?



4.5 Access



Access measures the ease of digital technologies access for general public. It investigates how effortless it is for citizens to browse the internet, use computers and mobile phones for daily tasks, and engage in e-commerce activities.

4.5.1 Easiness to use internet for general browsing

Internet usage for general browsing and information search is reported as relatively easy by 60% of surveyed citizens, while 30% find it comparatively challenging, and 9% maintain a neutral stance. Noteworthy disparities emerge when examining these perceptions across municipality sizes. In small municipalities, 51% of residents find internet usage for browsing and information search relatively easy, in contrast to 73% in bigger municipalities.

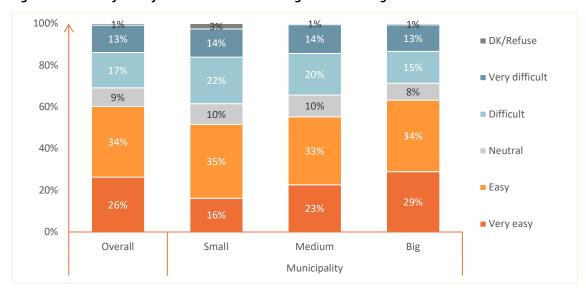


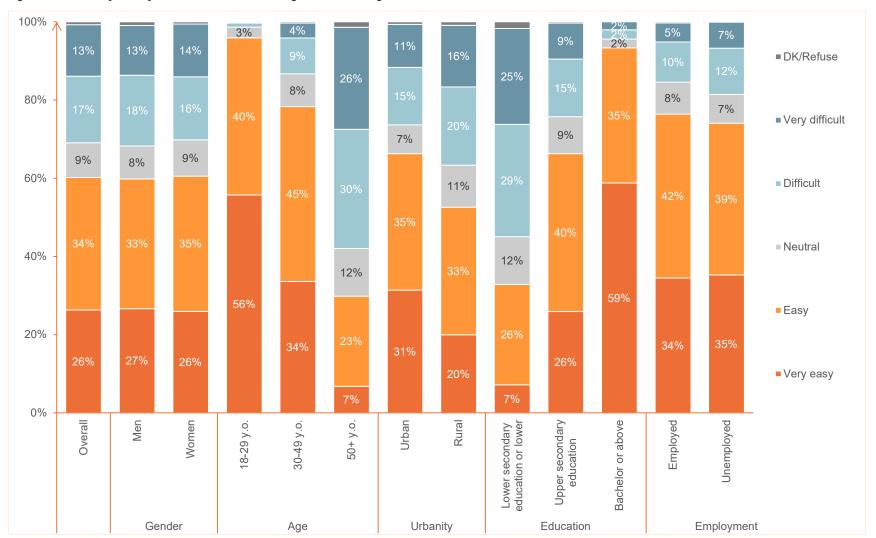
Figure 31: How easy is for you to use the internet for general browsing and information search?

Gender-based analysis indicates no significant differences between men and women. However, a considerable divergence surfaces in age groups, with a decreasing trend from younger to older citizens. A striking 96% of young citizens find internet usage easy, compared to 79% among those aged 30-49, and a mere 30% among those aged 50 and older.

Urban-rural distinctions reveal that citizens in urban areas (66%) find internet usage for browsing and information search easier than their rural counterparts (53%). Education positively correlates with ease of internet usage, where completion bachelor's degree demonstrates greater ease compared to those with upper secondary school and lower secondary school education.

Employment status shows no significant differences between employed and unemployed citizens, while individuals out of the labor force find internet usage more challenging. Additionally, citizens with disabilities (67%) encounter greater difficulty in internet usage for general browsing compared to those without disabilities (29%).

Figure 32: How easy is for you to use the internet for general browsing and information search?



4.5.2 Easiness to use digital devices

The ease of utilizing computers and smartphones for daily activities, such as sending emails, preparing documents, messaging, and attending meetings, is reported by 52% of surveyed citizens as relatively straightforward. Conversely, 40% find these tasks comparatively challenging, with 8% maintaining a neutral stance. A distinct pattern emerges when observing these perspectives across municipality sizes, with 41% of residents in small municipalities finding the use of computers and smartphones for daily activities relatively easy, contrasting with the 55% observed in bigger municipalities.

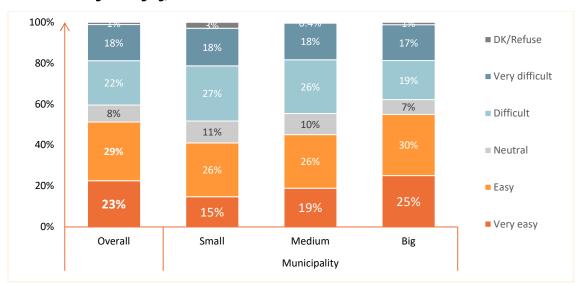


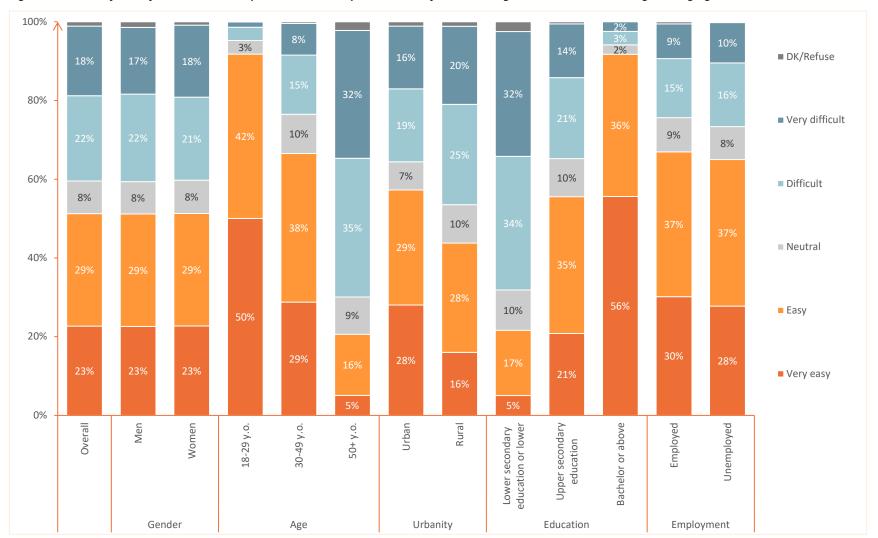
Figure 33: How easy is for you to use the computers and mobile phones for daily activities (e.g., email, document editing, messaging)?

Gender-based analysis reveals no significant differences between men and women. However, age-related disparities are pronounced, exhibiting a declining trend from younger to older citizens. Therefore, 92% of young citizens find computer and smartphone usage for daily activities easy, in contrast to 67% among those aged 30-49, and a mere 21% among those aged 50 and older.

Urban-rural distinctions underscore that citizens in urban areas (57%) find computer and smartphone usage easier than their rural counterparts (44%). The correlation with education is evident, where citizens with a bachelor's degree demonstrate greater ease compared to those with upper secondary school and lower secondary school education.

While employment status shows no significant differences between employed and unemployed citizens, individuals out of the labor force find computer and smartphone usage for daily activities quite challenging. Additionally, citizens with disabilities (73%) encounter greater difficulty in computer and smartphone usage compared to those without disabilities (37%).

Figure 34: How easy is for you to use the computers and mobile phones for daily activities (e.g., email, document editing, messaging)?



4.5.3 Easiness to use internet for e-commerce activities

The use of internet for e-commerce activities, including online shopping via credit or debit cards, banking transactions, or booking flight tickets, is perceived as relatively easy by only 40% of the surveyed citizens. In contrast, 48% find these tasks comparatively challenging, Noteworthy variations arise when observing these perspectives across municipality sizes, with 27% of residents in small municipalities finding internet usage for e-commerce relatively easy, compared to 45% in bigger municipalities.

100% 5% 5% ■ DK/Refuse 26% 26% 25% 80% 30% ■ Very difficult 60% Difficult 5% 7% 40% 10% ■ Neutral 10% 20% Easy 17% 0% Very easy Small Overall Medium Big Municipality

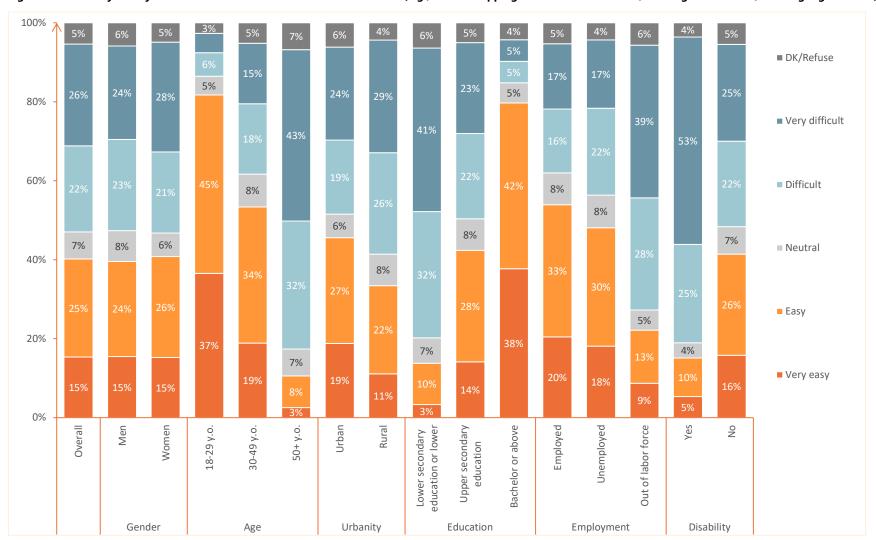
Figure 35: How easy is for you to use the internet for e-commerce activities (e.g., online shopping via credit or debit card, banking transactions, booking flight tickets)?

While gender-based analysis reveals no significant differences between men and women, notable distinctions emerge across age groups, exhibiting a diminishing trend from younger to older citizens. Remarkably, 82% of young citizens find e-commerce activities as "easy or very easy", contrasting with 53% among those aged 30-49, and a mere 11% among those aged 50 and older.

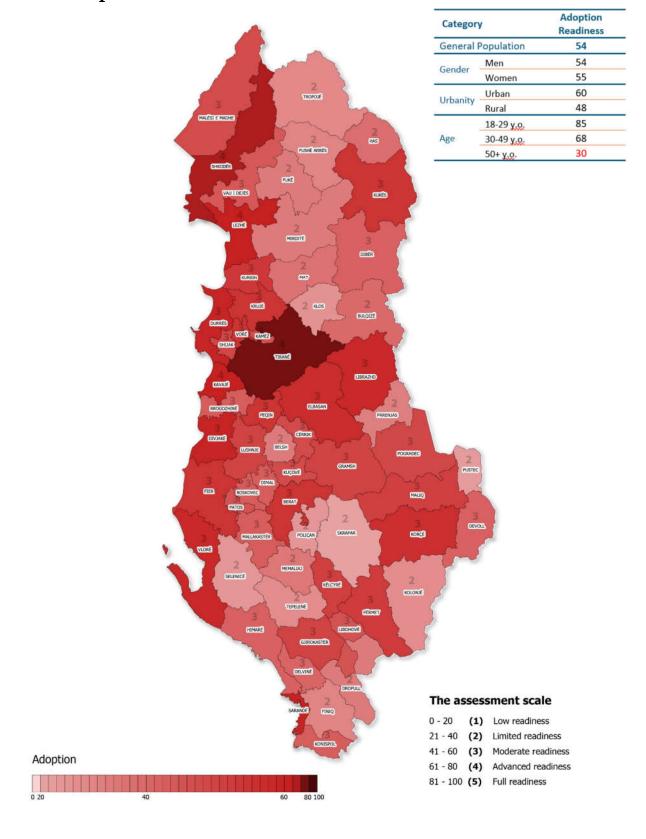
Urban-rural analysis highlight that citizens in urban areas (46%) find internet usage for e-commerce easier than their rural counterparts (33%). Educational attainment demonstrates a positive correlation with ease of internet usage for e-commerce, where completion of a bachelor's degree indicates greater ease compared to those with upper secondary school and lower secondary school education.

While employment status shows no significant differences between employed and unemployed citizens, individuals out of the labor force find e-commerce activities quite challenging. Additionally, citizens with disabilities (78%) encounter greater difficulty in internet usage for e-commerce activities compared to those without disabilities (29%).

Figure 36: How easy is for you to use the internet for e-commerce activities (e.g., online shopping via credit or debit card, banking transactions, booking flight tickets)?



4.6 Adoption



Adoption pillar measures the degree of openness that the citizens have towards the adoption of new digital technologies. The citizens are asked about their willingness to invest time in acquiring digital skills, confidence in adapting to new technologies, and belief in the positive impact of embracing digital tools.

4.6.1 Digital technologies improving public services' access

A significant 78% of the Albanian public perceives an improvement in the accessibility of public services, indicating a positive trend in the integration of digital technologies. However, when evaluating opinions across different municipality sizes, a contrast emerges, with 65% of citizens in smaller municipalities expressing this sentiment, compared to a higher percentage of 80% among their counterparts in bigger municipalities.

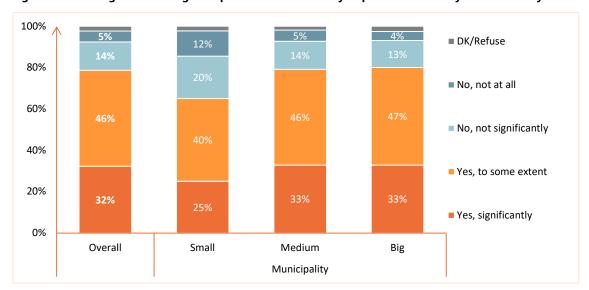


Figure 37: Have digital technologies improved the accessibility of public services in your community?

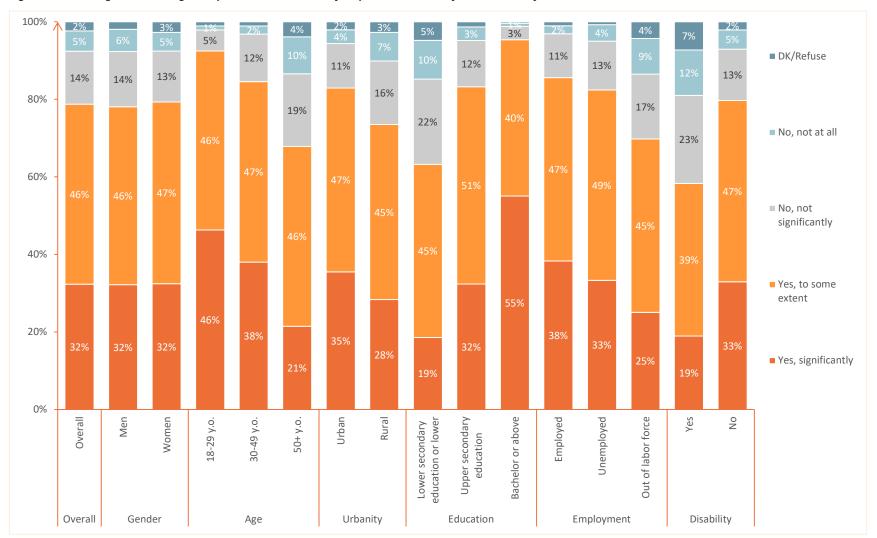
Gender-based analysis reveals no substantial differences between men and women in their perceptions of digital technology's impact on public services. Conversely, age-related distinctions are notable, showcasing a decreasing trend in the perception of improvement from younger to older citizens. Despite this trend, a substantial majority of older citizens also acknowledge a positive impact, with 76% of those aged 50 + years old, affirming improved accessibility, compared to an impressive 92% among young citizens.

Urban-rural disparities become evident, as 83% of citizens in urban areas believe that public services have improved due to the evolution and implementation of digital technologies, in contrast to 73% (still significantly high) of those residing in rural areas.

Education emerges as a significant factor influencing perceptions, with a positive correlation between the highest level of completed education and the belief in the improvement of public services through digital technologies.

Results by employment status show that the impact is more pronounced among employed citizens (85%) compared to those out of the labor force (70%). Moreover, citizens with disabilities exhibit a nuanced perspective, with 58% acknowledging a positive impact on public services, compared to a higher 80% among citizens without disabilities.

Figure 38: Have digital technologies improved the accessibility of public services in your community?

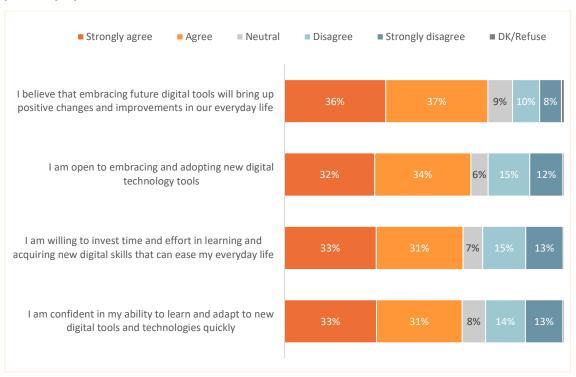


4.6.2 Adoption of new digital tools

The sentiment toward future digital tools among citizens is largely optimistic, with 73% expressing a belief that such tools will bring about positive changes and improvements in their everyday lives. Conversely, the willingness to actively embrace new digital technology tools stands at 66%, indicating a somewhat cautious openness to technological innovation.

Intriguingly, 64% of Albanian citizens demonstrate a proactive stance, expressing a readiness to invest both time and effort in acquiring new digital skills that could enhance their daily lives. This underscores a collective commitment to personal development in the face of evolving technological landscapes. Furthermore, a comparable percentage of citizens convey confidence in their ability to swiftly learn and adapt to emerging digital tools and technologies, emphasizing a sense of adaptability and agility in the face of technological advancements.

Figure 39: How much do you agree with the following statements on the adoption of new digital tools in your everyday life?



When examining citizen perspectives based on municipality size, a discernible trend emerges, indicating that residents in bigger municipalities exhibit a greater inclination to embrace and adopt new digital technological tools. This is reflected not only in their openness to adopting these tools but also in their willingness to invest time and effort to acquire digital skills that enhance their daily lives. Notably, the analysis also reveals distinctions between urban and rural areas, with citizens residing in urban locales displaying a heightened openness and eagerness to invest time and adapt to new digital skills compared to their counterparts in rural areas.

While there are no significant differences between men and women, an insightful pattern emerges when considering age groups. Notably, 94% of young citizens hold the belief that embracing future digital tools will usher in positive changes and improvements in their daily lives. In contrast, a somewhat lower percentage of citizens aged 30-49 years old, standing at 84%, share this perspective, and the percentage further decreases to 54% among citizens aged 50 and older.

Furthermore, a generational divide becomes evident, with younger citizens showcasing a heightened openness and willingness to invest time and effort in acquiring new digital skills that enhance their daily lives. This contrasts with

older citizens, who, apart from potentially having less time to invest, exhibit a lower level of confidence in their ability to learn and adapt to new digital technologies.

Figure 40: How much do you agree with the following statements on the adoption of new digital tools in your everyday life? By municipality size and urbanity (showing only the % of strongly agree and agree)

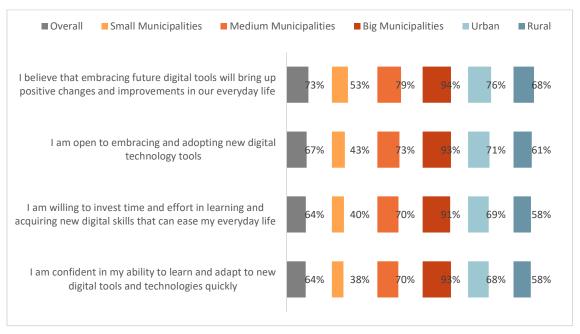
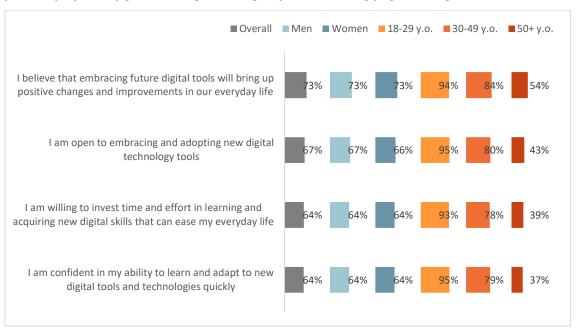
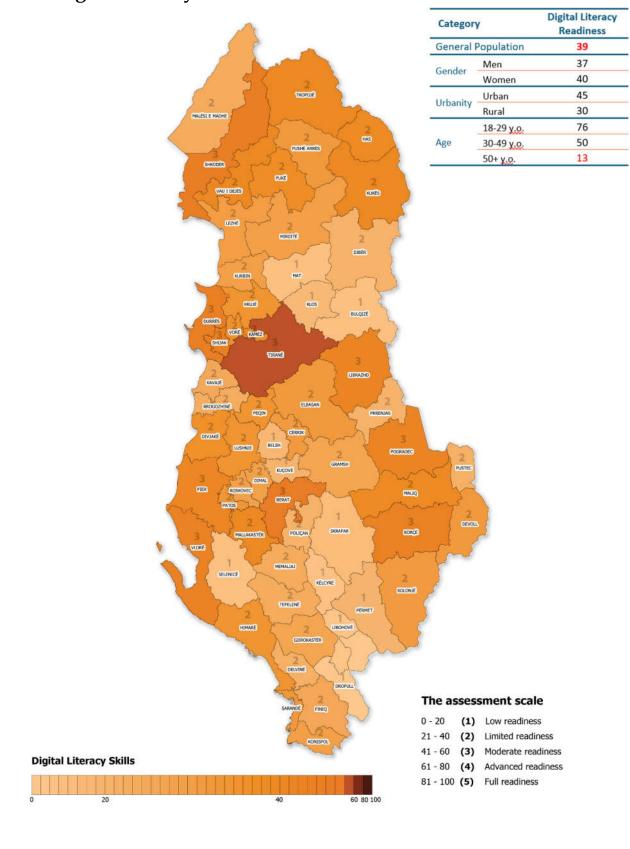


Figure 41: How much do you agree with the following statements on the adoption of new digital tools in your everyday life? By gender and age (showing only the % of strongly agree and agree)



4.7 Digital Literacy



Digital literacy measures the skill level of the citizens of municipalities based on five sub-pillars. Each sub-pillar consists of certain tasks and the respondents are asked to rate their skills for each task on a scale of 1 to 5, ranging from Novice to Expert.

Figure 42: Digital literacy components

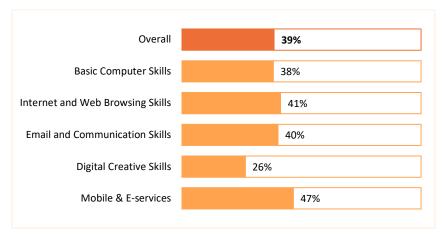
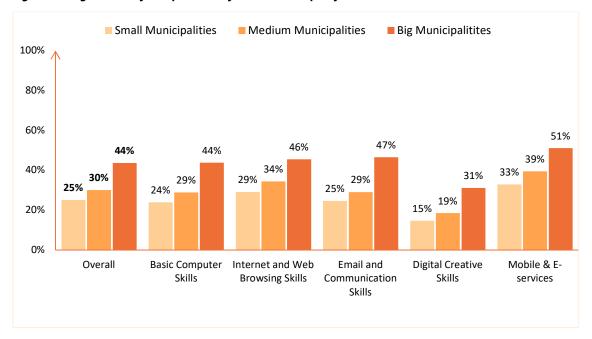


Figure 43: Digital literacy components, by size of municipality



4.7.1 Basic Computer Skills

According to the findings of the analysis, 38% of citizens exhibit proficiency in at least intermediate-level computer skills. Approximately 44% of the population possesses the ability to navigate and operate a computer at an intermediate level. However, there is a notable decline, by 7 percentage points, in the portion of citizens familiar with computer terminology and concepts. Furthermore, the percentage of citizens with the know-how to install and uninstall software applications experiences an even more substantial decrease, contributing to a significant gap in citizens' computer skills.

0% 20% 40% 60% 80% 100%

Basic Computer Skills

Navigating and operating a computer

44%

Familiarity with computer terminology and concepts

37%

Know how to install and uninstall software apps on a computer

Figure 44: Basic computer skills (% of citizens above average)

Residents of smaller municipalities demonstrate less proficiency in basic computer skills compared to their counterparts in bigger municipalities. Specifically, only 25% of citizens in smaller municipalities possess at least intermediate computer skills, contrasting with 29% in medium-sized municipalities and 44% in bigger municipalities.

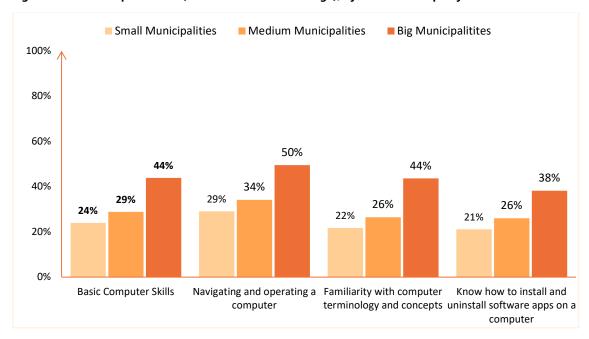


Figure 45: Basic computer skills (% of citizens above average), by size of municipality

Within the usage segment, it was observed that 90% of households in Albania possess internet access/connection, and nearly all citizens have a smartphone at their disposal. However, mere ownership doesn't guarantee proficient utilization of these digital technologies.

4.7.2 Internet and Web Browsing Skills

In the internet and web browsing sub-pillar, only 41% of citizens exhibit at least intermediate skills. Proficiency levels vary across tasks, with 47% of citizens demonstrating at least intermediate skills in searching for information using search engines, followed by 43% in the ability to connect to the internet. Evaluating the credibility and reliability of online sources proves challenging for 67% of the Albanian public, as indicated by survey findings.

Geographic disparities persist, with citizens in smaller municipalities encountering more difficulties compared to their counterparts in bigger municipalities.

0% 20% 40% 60% 80% 100%

Internet and Web Browsing Skills

41%

Connect to the internet and set up a wireless network

43%

47%

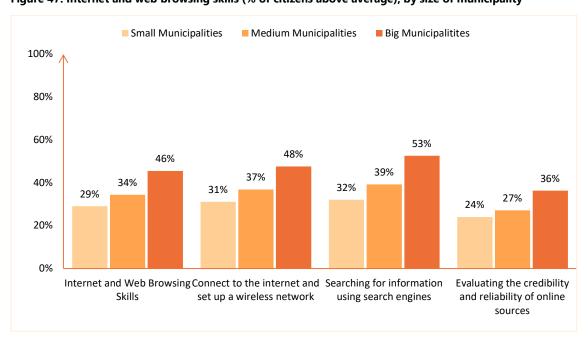
33%

Figure 46: Internet and web browsing skills (% of citizens above average)

Searching for information using search engines

Evaluating the credibility and reliability of online sources





4.7.3 Email and Communication Skills

Four out of ten citizens possess at least intermediate skills for communication through email, with a slightly higher but statistically insignificant percentage (42%) demonstrating proficiency in composing, sending, and managing emails. Conversely, a smaller percentage exhibits the same level of proficiency in using advanced email features, such as sending attachments, forwarding, and sending meeting invitations. When examining municipality size, marginal differences are noted between residents of small and medium municipalities. However, a significant gap in email and communication skills emerges between citizens in bigger municipalities like Tirana, Durres, Shkoder, and Vlore compared to their counterparts. A substantial 47% of the public in bigger municipalities exhibit proficient skills in using email as a communication channel, contrasting with 25% and 29% of those in small and medium municipalities, respectively.

O% 20% 40% 60% 80% 100%

Email and Communication Skills

40%

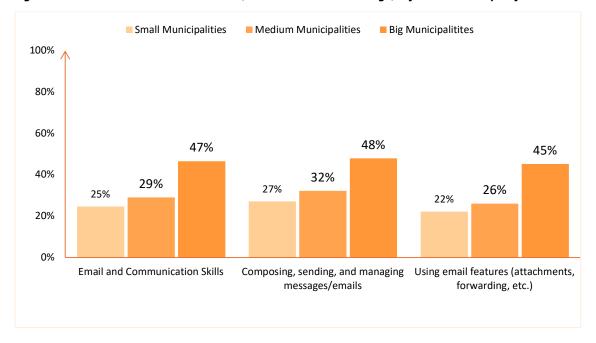
Composing, sending, and managing messages/emails

42%

Using email features (attachments, forwarding, etc.)

Figure 48: Email and communication skills (% of citizens above average)

Figure 49: Email and communication skills (% of citizens above average), by size of municipality



4.7.4 Digital Creative Skills

Within the digital creative skills sub-pillar, respondents assessed their proficiency through six distinct tasks. A modest 26% of respondents indicated having at least intermediate digital creative skills. Notably, 35% of citizens demonstrated proficiency in creating and editing documents using word processing software like Word, while a slightly lower percentage, 30%, displayed proficiency in using software such as Excel to create and format spreadsheets. However, a mere 23% felt confident in creating charts and graphs to visualize data. Additionally, approximately 27% of the public exhibited at least intermediate skills in crafting and delivering engaging presentations through software like PowerPoint.

On the other hand, editing and modifying images posed a significant challenge for a substantial 77% of the Albanian public. Further, an immense 79% of respondents lacked the ability to use design software for creating visually appealing graphics or layouts. Results by municipality size show significant different between the citizens living in each of the municipality categories. Notably, there exists a 4-percentage-point disparity between citizens in small municipalities compared to those in medium-sized municipalities concerning proficient digital creative

skills. This gap widens when comparing citizens in big municipalities to those in small municipalities. Specifically, the percentage of citizens with at least intermediate digital creative skills in big municipalities is double that of those residing in smaller municipalities.

Figure 50: Digital creative skills (% of citizens above average)

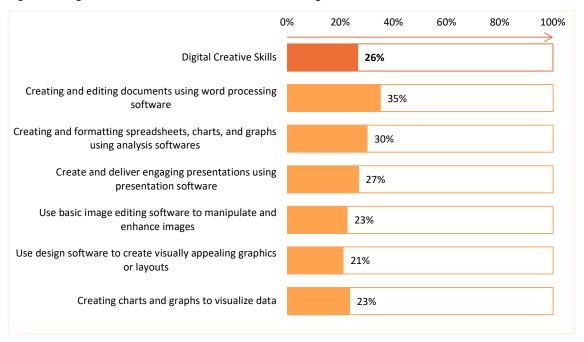
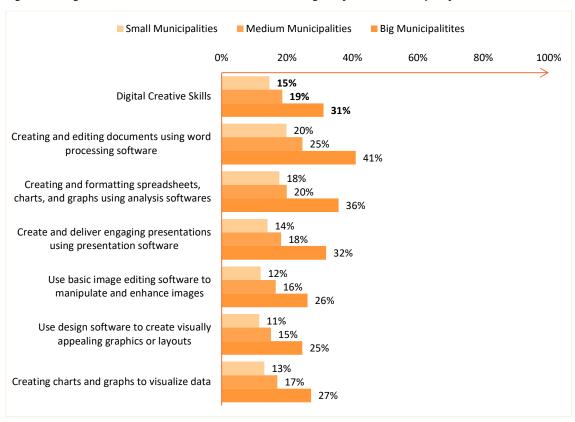


Figure 51: Digital creative skills (% of citizens above average), by size of municipality



National Report

4.7.5 Mobile and E-services

Within the mobile and e-services sub-pillar, proficiency is assessed in tasks such as installing and navigating applications on a smartphone, as well as engaging in e-commerce activities including online shopping and online banking. Less than half of the citizens exhibit at least intermediate skills in mobile navigation and e-commerce. Notably, there exists a substantial disparity between these two domains. Approximately 59% of citizens demonstrate proficient skills in navigating and using social media applications on a smartphone, whereas a slightly smaller percentage, 51%, possess the necessary skills to install and download applications on a mobile device.

Conversely, a mere three out of ten citizens exhibit at least intermediate skills in e-commerce activities, encompassing tasks such as online shopping and booking flight tickets, as well as online banking. Once again, a noteworthy difference in mobile and e-commerce skills is evident between citizens in bigger municipalities and their counterparts in small and medium municipalities.

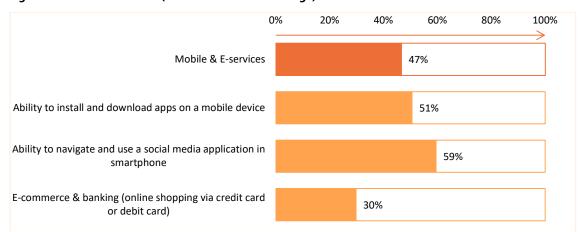
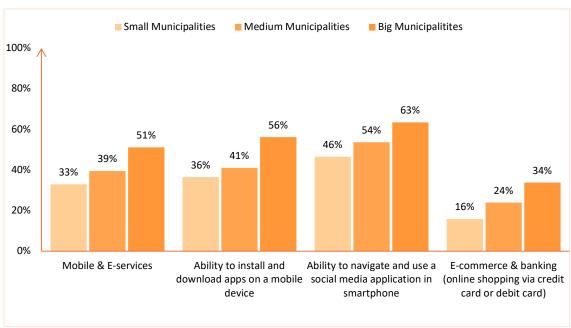
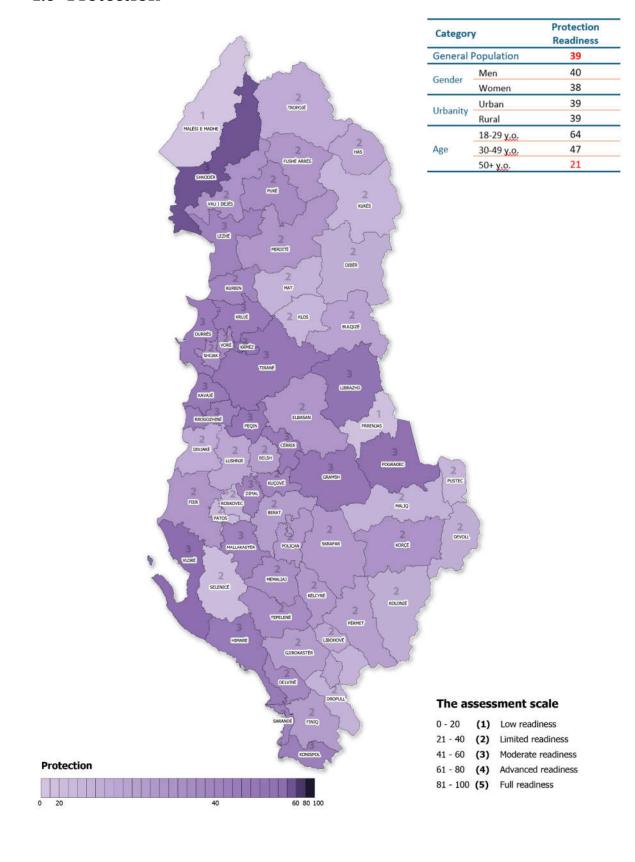


Figure 52: Mobile e-services (% of citizens above average)





4.8 Protection



Protection pillar assesses individuals' digital security perceptions. It evaluates the comfort and confidence levels in sharing personal information online and managing access to it. In addition, it measures the sense of safety when conducting online payments and exchanging electronic documents.

4.8.1 Comfort Levels in Online Personal Information Sharing

In general, a majority of individuals, constituting 60%, express a sense of comfort when it comes to sharing personal information online, where 19% of the public expresses a very comfortable level of sharing personal information online and 41% a comfortable level. Interestingly, this comfort level remains consistent across municipalities of varying sizes, whether small, medium, or big.

Upon disaggregating the results by gender, no notable disparities emerge between men and women. However, when examining the data by age, a significant distinction becomes apparent, particularly among younger individuals aged 18-29. A substantial three-quarters of this demographic express comfort in sharing information online. In comparison, the comfort level decreases to 65% for those aged 30-49 and further drops to 50% for individuals aged 50 and above. This implies a generational trend wherein younger people exhibit a higher comfort level with online information sharing.

Furthermore, disparities arise based on education level, with those possessing higher education feeling more at ease sharing information online compared to their less educated counterparts. Additionally, individuals without disabilities demonstrate a higher comfort level in sharing personal information online compared to those with disabilities.

Conversely, results based on urbanity reveal no significant differences, indicating that comfort levels with online information sharing remain consistent across various urban and rural settings.

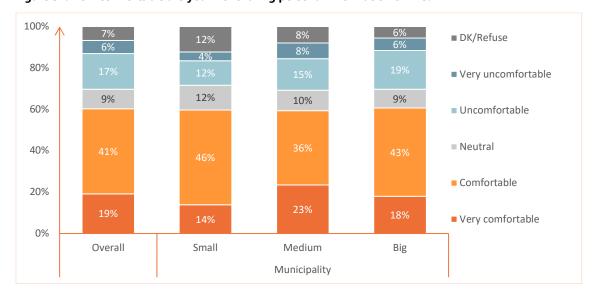
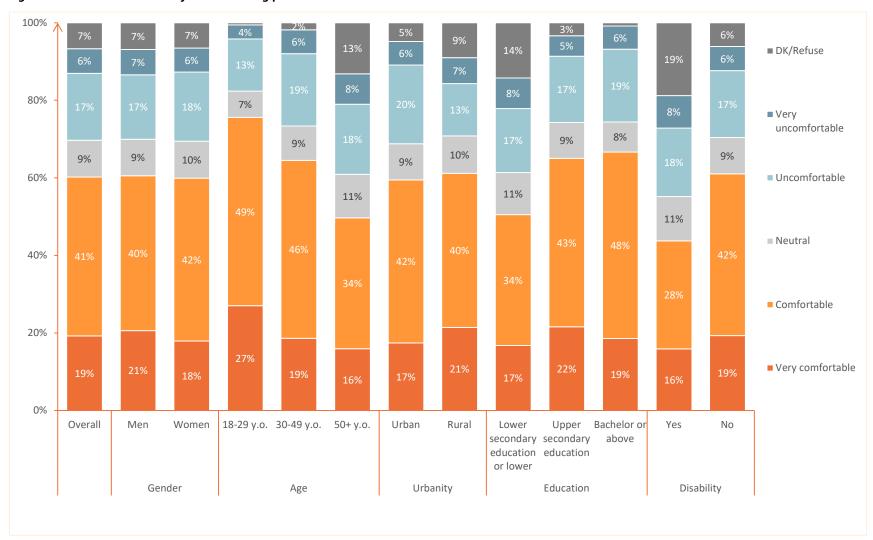


Figure 54: How comfortable are you with sharing personal information online?

Figure 55: How comfortable are you with sharing personal information online?



4.8.2 Confidence Level in Online Information Management

In general, the outcomes remain consistent regarding individuals' confidence in handling access to personal information online, encompassing tasks such as saving passwords, usernames, and email addresses, as illustrated in the figure below, where 55% of respondents affirm their confidence in these activities. Notably, individuals residing in medium-sized municipalities exhibit a higher level of confidence compared to those in smaller and bigger municipalities. Specifically, 22% of individuals in medium municipalities express feeling very confident in managing access to personal information online, contrasting with 14% in smaller municipalities and 15% in bigger ones who report similar levels of confidence.

Upon closer examination of the results, no notable distinctions emerge when dissecting the data based on gender or urbanity. However, variations do appear when disaggregating the data by age, education, and disability status. Specifically, younger individuals consistently demonstrate a higher level of confidence in managing access to personal information online compared to respondents aged 30-49 and even more so when contrasted with those aged 50 and above. This suggests a recurring trend where the younger demographic exhibits greater assurance in handling online personal information. Those who are more educated are more confident as well; 65% of those with upper secondary education and 67% of those with bachelor and above are confident when managing access to their personal information online compared to 51% of those with lower secondary education. In addition, those individuals who do not have a disability are more confident (61%) compared to those who have (44%).

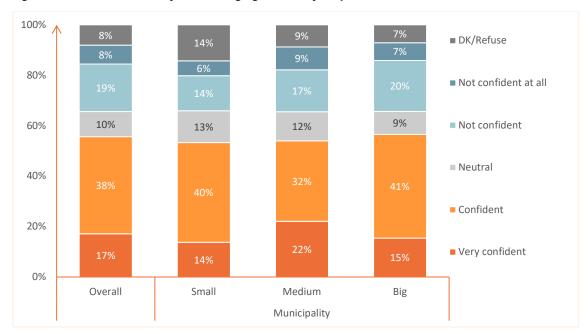
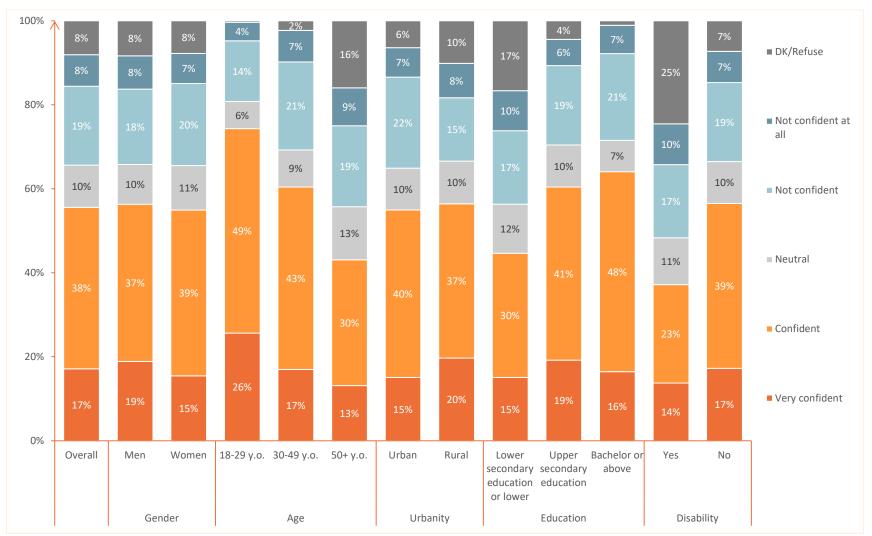


Figure 56: How confident are you in managing access to your personal information online?

Figure 57: How confident are you in managing access to your personal information online?



4.8.3 Assessing Perceived Safety: Online Payment Confidence Levels

In general, 43% of individuals express a sense of security when engaging in online payments using credit or debit cards. However, the perception of safety in this context exhibits variation across municipalities, with respondents from medium and big municipalities indicating a higher level of comfort compared to those in small municipalities. To delve into the specifics, 38% of residents in medium-sized municipalities feel secure when making online payments with credit or debit cards, a figure quite similar to the 36% reported in small municipalities. Conversely, in big municipalities, the proportion is notably higher, with almost one in two residents feeling the same sense of safety in online payments. This nuanced analysis highlights the divergence in perceived safety levels among individuals based on the size of their respective municipalities.

In addition, the data reveals that no significant differences emerge when analyzing the results by gender and urbanity. However, substantial variations become apparent when considering different age groups. Notably, younger respondents aged 18-29 exhibit a significant level of confidence and a feeling of safety when making online payments via credit or debit cards, with 67% expressing assurance. This contrasts with respondents aged 30-49 at 50% and particularly with those aged 50 and above, where only 24% share the same sense of confidence.

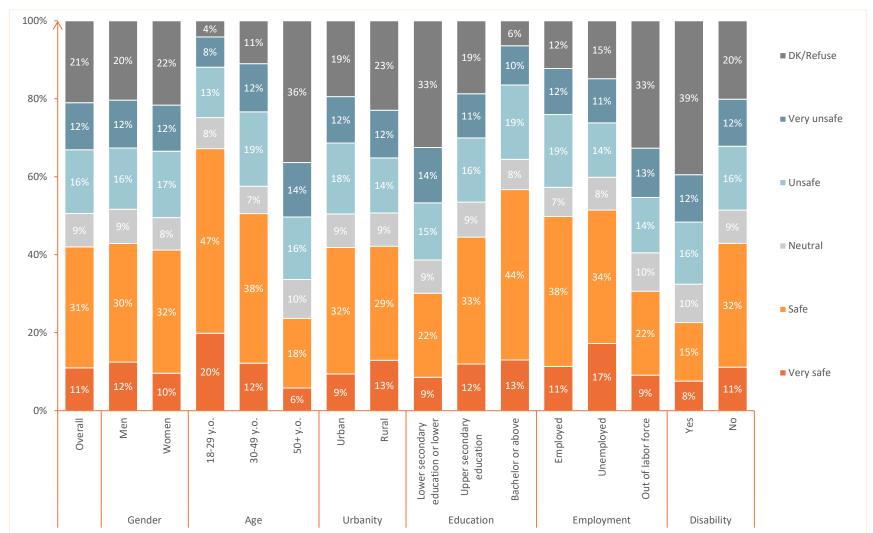
Moreover, differences manifest in the context of education levels. Individuals with lower secondary education express a significantly lower sense of safety (31%) compared to those with upper secondary education (45%) and those with a bachelor's degree or above (57%).

Furthermore, when considering employment status, individuals who are employed or unemployed exhibit similar patterns of confidence and safety in online payments. However, a notable distinction arises for those out of the labor force, who seem to feel less secure when making online payments using credit or debit cards. This detailed analysis sheds light on the nuanced variations in safety perceptions related to online payments based on age, education, and employment status.



Figure 58: How safe do you feel when making online payments via credit or debit cards?

Figure 59: How safe do you feel when making online payments via credit or debit cards?



4.8.4 Assessing the Safety of Online Document and File Exchanges

In the study, 50% of the participants express a feeling of safety when exchanging electronic documents or files online. Remarkably, no notable differences are observed between municipalities, urban and rural settings, or gender. However, age groups emerge as a significant factor, unveiling distinctions between the perceptions of younger and older participants. Notably, individuals aged 18-29 exhibit a high level of confidence, with 71% considering the exchange of documents online as safe. In contrast, respondents aged 30-49 express a slightly lower level of confidence at 56%, while the older demographic of 50 and above reports a notably lower feeling of safety at 34%.

Educational backgrounds also contribute to variations in safety perceptions, with individuals possessing lower education levels expressing less confidence. One-third of those with lower secondary education feel safe when sharing documents online, while this proportion increases to 50% for individuals with upper secondary education and even further to 64% for those with a bachelor's degree or above.

When examining employment status, differences in safety perceptions are evident. Individuals out of the workforce exhibit a lower sense of safety when sharing documents or files online compared to those who are employed. This nuanced exploration of the data sheds light on the diverse factors influencing individuals' perceptions of safety in the context of exchanging electronic documents online.

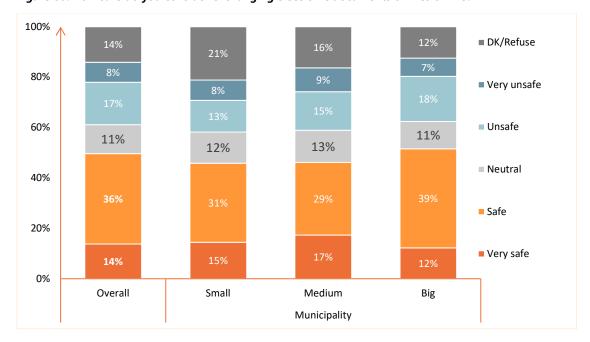
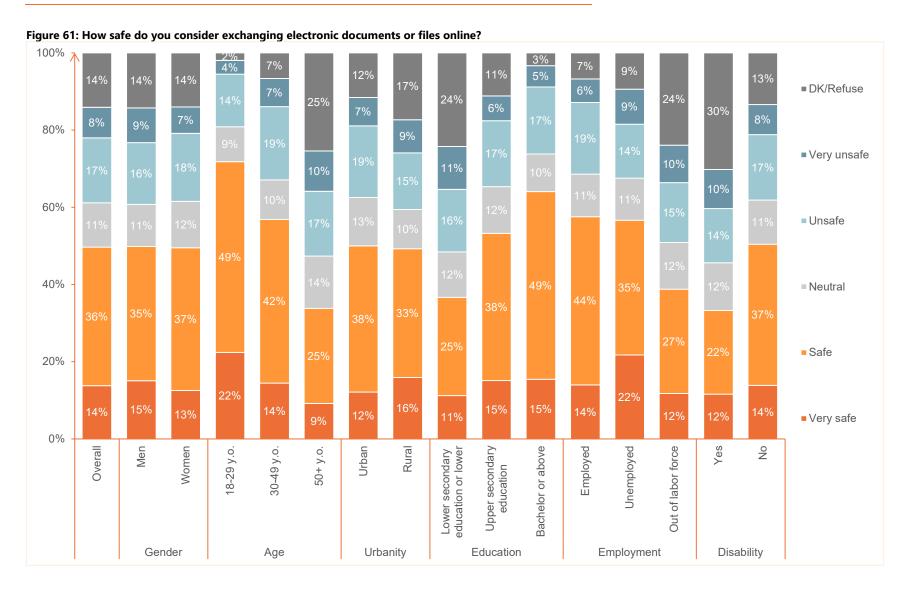


Figure 60: How safe do you consider exchanging electronic documents or files online?



5 Annex

5.1 Annex 1: Extended Methodology

5.1.1 Municipal e-Readiness Assessment

Assessment

The first component is Municipal e-Readiness assessment, which is conducted for all 61 Municipalities. The assessment is based on the UNDP's Digital Strategy 2022 – 2025 and its Digital Transformation Framework. The assessment includes five pillars: (1) Government; (2) Regulation; (3) Infrastructure; (4) People; (5) User Centric Service Delivery.

The Evaluation Matrix used to conduct this assessment is based on the UNDP Digital Readiness Assessment (DRA) framework World Bank Digital Government Readiness Assessment (DGRA) Toolkit in terms of **evaluation principles and formats**. Specifically, the pillars, assessment questions and approach are all based on the UNDP DRA. The toolkit which transforms pillars into questions and then provides a way to quantify answers and then to qualitatively analyze them is adapted from the WB DGRA toolkit.

The toolkit allows both qualitative and quantitative result analysis. Responses are required to the questions in each section with the following options: YES/NO/Absent/Non-Applicable (Absent = no information available in the assessment, non-Applicable = not applicable question for the client country). The qualitative analysis is delivered mainly through the assessment report which is based on the responses, the comments provided from the municipalities, and further expert views or research.

Besides the Evaluation Matrix, a questionnaire was distributed to municipal employees to account for the People (or People Capacities) Pillar. The results of the questionnaire are then integrated into the Evaluation Matrix, specifically for the sub pillars Behavior, Adoption, Digital Literacy, and Access.

Scoring

Having a top-down approach, each Municipality is submitted to a score from 0 - 100, based on quantification of each question. Each of the pillars is subject to the same scoring system, meaning that each of them will have a score from 0 - 100. The overall Municipal Score is calculated as the simple average of the score of the five pillars (Government, Regulation, Infrastructure, People Capacities, User Centric Service Delivery).

We divide the score of the municipality into 5 groups:

- 6. Low Digital Readiness (0-20 points): Municipalities in this range have very limited digital readiness.
- 7. Limited Digital Readiness (21 40 points): Municipalities in this range are in the early stages of digital transformation.
- 8. Moderate Digital Readiness (41-60 points): Municipalities in this range have moderate digital readiness.
- 9. Advanced Digital Readiness (61-80 points): Municipalities in this range have advanced digital readiness.
- 10. Full Digital Readiness (81 100 points): Municipalities in this range are leaders in digital readiness.

This top-down approach is detailed by the sub pillars. Each of the sub pillars will have a score of 0-100. Each of the pillars is composed of sub pillars. **The score of each pillar is calculated as the simple average of its sub pillars.** I.e., the score of Government is calculated as the average of the scores of the sub pillars - Governance, Human Resources Management, Services, Funding and Procurement and Technology Systems.

The scoring of the sub pillars is calculated based on the answers provided through the Evaluation Matrix. Each sub pillar is composed of a set of YES/NO/N/A questions and if the answer is YES there is a scale of 1-4

evaluating the degree of accomplishment. Each of the questions pertaining to the sub pillar is evaluated on a scale of 0 - 100, specifically:

- If the answer is YES and the scale 4, the question receives 100 points.
- If the answer is YES and the scale 3, the question receives 75 points.
- If the answer is YES and the scale 2, the question receives 50 points.
- If the answer is YES and the scale 1, the question receives 25 points.
- If the answer is NO, the question receives 0 points.
- If the answer is N/A is not included in the scoring of the sub pillar.

Subsequently, the score of each sub pillar is the average score of each question belonging to that sub pillar.

In the case of the People sub pillars the score is calculated based on the results of the questionnaire:

- Policies and Practices score is calculated partly on two questions posed to the municipality and four
 question included in the municipality employee questionnaire. Based on "Yes" and "No" question they
 examine if employees are aware specific guidelines or protocols for using digital tools and technologies,
 have received training in this regard, feel sufficiently informed about the expectations and requirements
 and receive updates or notices about changes. The points for each question are based on the percentage
 of "Yes" answers.
- Behavior score is calculated based on 5 statements in the municipality employee questionnaire. The statements are of the same nature, having an answer on a scale of 1 5, from completely disagree to completely agree. For each question the percentage of employees who "agree" or "totally agree" with the question are calculated. Then the score of the sub pillar is calculated as the average of this percentage for the 5 statements. I.e., if the average percentage of these statements is 85%, the score is 85.
- Adoption score is calculated the same as above, with the only difference that has 6 statements.
- Digital Literacy score is calculated based on 16 statements in the municipality employee questionnaire.
 The statements are of the same nature, having an answer on a scale of 1 5, for which employees for statements related to their digital literacy capabilities choose whether they are Novice (1), Beginner (2), Intermediate (3), Advanced (4) or Expert (5). For each statement is calculated as the percentage of employees who evaluate themselves at least Intermediate for that specific skill. Then the score of the sub pillar is calculated as the average of this percentage for these statements.
- Access score is calculated based on six statements in the municipality employee questionnaire. The statements are of the same nature, having an answer on a scale of 1 4: Limited access (1); Partial access (2); Adequate access (3) and Full access (4). For each statement is calculated the percentage of employees who evaluate access as being "adequate" or "full". Then the score of the sub pillar is calculated as the average of this percentage for these statements.

For the User Centric Service Design:

- The **sub pillar Inclusivity** has also some of the questions which are captured from the employee questionnaire. Out of 7 questions for this sub pillar, 4 questions are calculated from the questionnaire results. In this case the score of each sub pillar is the average score of each question belonging to this sub pillar, but the score of the 4 questions is calculated from the questionnaire. These questions are on a scale of 1 5, from "not at all accessible" to "fully accessible". The score of each question is calculated as the percentage of respondents who evaluate the statement as "mostly accessible (4)" or "fully accessible (5)".
- The **sub pillar Adoption of Electronic Service** is also captured from the employee questionnaire. The first two questions, considering the resistance of citizens and businesses to adoption of electronic services, are calculated as the percentage of respondents who evaluate the statement as "very low (1)" or "low (2)" out of a 5-point scale from very low to very high. On the other hand, the last question rates the ability of the citizens of their municipality to use electronic services. The score is measured as the percentage of respondents who evaluate the statement as "high (4)" or "very high (5)" out of a 5-point scale from very low to very high. In both cases the scoring principle of percentages turning into scores applies (from 0 –

100% to 0 - 100 points). Then the sub pillar score is evaluated as the average of the scores of the aforementioned questions.

Analysis

The analysis part contains a thorough examination and interpretation of the data collected and the results of each pillar and its sub-pillar. The analysis is based on the average score of each pillar and sub pillar. Based on the evaluation matrix, the score provides a quantification of the situation, while the comments and the insights from the field experts provide context to that score, identifying patterns, and relationships in the data.

5.1.2 Public e-Readiness Assessment

Assessment

The Public e-Readiness Assessment consists of physical interviews of citizens in a randomly and population-proportional sample in each municipality on their perception, behaviors, and readiness vis-à-vis the online services, the likely transformation of their respective local governments, and the overall digital ecosystem. The assessment includes seven pillars: (1) Cultural Norms; (2) Adoption; (3) Digital Literacy; (4) Usage; (5) Access; (6) Protection.

To execute the assessment, a comprehensive questionnaire was formulated and administered through in-person interviews with the citizens. The questionnaire is segmented into various modules, with each one focusing on a specific sub-pillar under the overarching "People" pillar. The composition of each module consists of a set of questions in order to fully assess citizens' perspective for each of the sub-pillars individually.

The sampling conducted is a multi-stage stratified cluster sampling (stratification by administrative unit and stratification by urban – rural division). The survey is representative of the municipality population. A total of 11 000 interviews are conducted in 61 municipalities. Based on the size of the municipality the sample of the municipality is divided in 100 interviews for small municipalities; 150 for medium municipalities; 250 – 400 for big municipalities and 800 interviews for Tirana.

Scoring

Similar to the Municipal e-Readiness Assessment, each Municipality is submitted to a score from 0 - 100, based on quantifying of each question. Each of the pillars is subject to the same scoring system, meaning that each of them will have a score from 0 - 100. The overall Municipal Score is calculated as the simple average of the score of the seven pillars.

The scoring of each pillar is dependent on certain questions from the questionnaire.

Cultural Norms

The score for the cultural norms pillar is based on 4 questions/statements from the questionnaire.

- Based on your opinion, how important do you think is the usage of digital devices (smartphones/PCs/laptops/tablets) in your daily life?
- 2. Do you consider having a smartphone a necessity in today's world?
- 3. Do you consider having access to a PC/laptop/tablet a necessity in today's world?
- 4. Based on your opinion, what is the impact of using digital technologies?

Each question is evaluated on a scale of 1 to 5: (1) Very important; (2) Important; (3) Neutral; (4) Not important; (5) Not important at all.

The score is calculated as the percentage of respondents who for evaluate all statements as "Very important" or "Important" (percentage to the total sample for the municipality).

Adoption

The adoption module is composed of several questions. Out of this the main body from which the score is evaluated is composed of four statements:

- 1. I am open to embracing and adopting new digital technology tools.
- I am willing to invest time and effort in learning and acquiring new digital skills that can ease my everyday life.
- 3. I am confident in my ability to learn and adapt to new digital tools and technologies quickly.
- 4. I believe that embracing future digital tools will bring up positive changes and improvements in our everyday life.

Each question is valued on a scale of 1 to 5: (1) Strongly agree; (2) Agree; (3) Neutral; (4) Disagree; (5) Strongly disagree.

The score of the pillar is calculated as the percentage of respondents who answer ALL the statements as "Strongly agree" or "Agree" (percentage to the total sample for the municipality).

Digital Literacy

Digital Literacy score is calculated based on 17 statements of the questionnaire. The statements are of the same nature, having an answer on a scale of 1-5, for which citizens for statements related to their digital literacy capabilities choose whether they are Novice (1), Beginner (2), Intermediate (3), Advanced (4) or Expert (5). For each statement is calculated as the percentage of citizens who evaluate themselves at least Intermediate for that specific skill. Then the score of the sub pillar is calculated as the average of this percentage for these statements.

Usage

The usage module is composed of various questions. Question is related to ownership of devices, internet, and frequency of usage of devices.

Based on a set of questions the score of the pillar is evaluated as the percentage of respondents who **fulfil all the following criteria**:

- Have internet.
- Have a least one digital device (between PC/Smartphone/Tablet)
- Use the device they have at least several times per week (out of a frequency scale: Multiple times a day; Once a day; Several times a week; Occasionally; Rarely).
- Use the internet at least several times per week (out of a frequency scale: Multiple times a day; Once a day; Several times a week; Occasionally; Rarely).

Access

The score for the access norms pillar is based on 4 questions/statements from the questionnaire.

- 1. How easy is for you to use the internet for general browsing and information search?
- 2. How easy is for you to use computers and mobile phones for daily activities (e.g., email, document editing, messaging)?
- 3. How easy is for you to use the internet for e-commerce activities (e.g., online shopping via credit or debit card, banking transactions, booking flight tickets)?
- 4. How easy is for you to use e-Albania, or other governmental online services?

Each question is evaluated on a scale of 1 to 5: (1) Very easy; (2) Easy; (3) Neutral; (4) Difficult; (5) Very difficult.

The score of the pillar is calculated as the percentage of respondents who evaluate all the statements as "Very easy" or "Easy" (percentage to the total sample for the municipality).

Protection

The score for the protection norms pillar is based on 4 questions/statements from the questionnaire.

1. How comfortable are you with sharing personal information online?

2. How confident are you in managing access to your personal information online?

The scale of these question is: (1) Very confident; (2) Confident; (3) Neutral; (4) Not confident; (5) Not confident at all.

- 3. How safe do you feel when making online payments via credit or debit cards?
- 4. How safe do you consider exchanging electronic documents or files online?

The scale of these question is: (1) Very safe; (2) Safe; (3) Neutral; (4) Not safe; (5) Very Safe.

The score of the pillar is calculated as the percentage of respondents who answer for the first two statements as "Very confident" or "Confident" and for the last two statements as "Very safe" or "Safe".

Analysis

For each of the Pillars of the assessment the analysis is divided into two parts. The first part is the score, and the analysis of the score based on the methodology described above. This means that insights are provided for each score, and a comparison is made with the average score of similar municipalities. The second part is the analysis of the survey results. As described not all questions are part score of one pillar. So, for each component other results are presented, providing more context to the score, and details about public e-readiness.

5.2 Annex 3: Municipalities Category by Size

| Catego | ory | Municipalities | Size |
|--------|------------------|----------------|--------|
| 1. Up | to 20,000 | 20 | Small |
| 2. 21 | ,001 to 50,000 | 27 | Medium |
| 3. 50 | ,001 to 100,000 | 7 | Big |
| 4. 10 | 0,001 to 200,000 | 6 | |
| 5. ov | er 200,000 | 1 | Tirana |
| Total | | 61 | |

| No. | Municipality | Category (population) | Size |
|-----|----------------|-----------------------|--------|
| 1 | BELSH | up to 20,000 | Small |
| 2 | BERAT | 50,001 to 100,000 | Big |
| 3 | BULQIZE | 21,001 to 50,000 | Medium |
| 4 | CERRIK | 21,001 to 50,000 | Medium |
| 5 | DELVINE | up to 20,000 | Small |
| 6 | DEVOLL/BILISHT | 21,001 to 50,000 | Medium |
| 7 | DIBER/PESHKOPI | 50,001 to 100,000 | Big |
| 8 | DIMAL | 21,001 to 50,000 | Medium |
| 9 | DIVJAKE | 21,001 to 50,000 | Medium |
| 10 | DROPULL | up to 20,000 | Small |
| 11 | DURRES | 100,001 to 200,000 | Big |
| 12 | ELBASAN | 100,001 to 200,000 | Big |
| 13 | FIER | 100,001 to 200,000 | Big |
| 14 | FINIQ/LIVADHJA | up to 20,000 | Small |
| 15 | FUSHE ARRES | up to 20,000 | Small |
| 16 | GJIROKASTER | 21,001 to 50,000 | Medium |
| 17 | GRAMSH | 21,001 to 50,000 | Medium |

| 18 HIMARE up to 20,000 Small 19 KAMEZ 100,001 to 200,000 Small 20 KAVAJE 21,001 to 50,000 Big 21 KELCYRE up to 20,000 Medium 22 KLOS up to 20,000 Small 23 KOLONJE/ERSEKE up to 20,000 Small 24 KONISPOL up to 20,000 Small 25 KORCE 50,001 to 100,000 Small 26 KRUJE 50,001 to 100,000 Big 27 KRUME up to 20,000 Medium 29 KUKES 21,001 to 50,000 Medium 30 KURBIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNIE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium | No. | Municipality | Category (population) | Size |
|--|-----|-----------------------|-----------------------|--------|
| 20 KAVAJE 21,001 to 50,000 Big 21 KELCYRE up to 20,000 Medium 22 KLOS up to 20,000 Small 23 KOLONJE/ERSEKE up to 20,000 Small 24 KONISPOL up to 20,000 Small 25 KORCE 50,001 to 100,000 Small 26 KRUJE 50,001 to 100,000 Big 27 KRUME up to 20,000 Medium 28 KUCOVE 21,001 to 50,000 Medium 30 KURSIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium | 18 | HIMARE | up to 20,000 | Small |
| 21 KELCYRE up to 20,000 Medium 22 KLOS up to 20,000 Small 23 KOLONJE/ERSEKE up to 20,000 Small 24 KONISPOL up to 20,000 Small 25 KORCE 50,001 to 100,000 Small 26 KRUJE 50,001 to 100,000 Big 27 KRUME up to 20,000 Medium 28 KUCOVE 21,001 to 50,000 Medium 29 KUKES 21,001 to 50,000 Medium 30 KURBIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medi | 19 | KAMEZ | 100,001 to 200,000 | Small |
| 22 KLOS up to 20,000 Small 23 KOLONJE/ERSEKE up to 20,000 Small 24 KONISPOL up to 20,000 Small 25 KORCE 50,001 to 100,000 Small 26 KRUJE 50,001 to 100,000 Big 27 KRUME up to 20,000 Medium 28 KUCOVE 21,001 to 50,000 Medium 29 KUKES 21,001 to 50,000 Medium 30 KURBIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNUE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 < | 20 | KAVAJE | 21,001 to 50,000 | Big |
| 23 KOLONJE/ERSEKE Up to 20,000 Small | 21 | KELCYRE | up to 20,000 | Medium |
| 24 | 22 | KLOS | up to 20,000 | Small |
| 25 KORCE 50,001 to 100,000 Small 26 KRUJE 50,001 to 100,000 Big 27 KRUME up to 20,000 Big 28 KUCOVE 21,001 to 50,000 Medium 29 KUKES 21,001 to 50,000 Medium 30 KURBIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 | 23 | KOLONJE/ERSEKE | up to 20,000 | Small |
| 26 KRUJE 50,001 to 100,000 Big 27 KRUME up to 20,000 Big 28 KUCOVE 21,001 to 50,000 Medium 29 KUKES 21,001 to 50,000 Medium 30 KURBIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BUREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 | 24 | KONISPOL | up to 20,000 | Small |
| 27 KRUME up to 20,000 Big 28 KUCOVE 21,001 to 50,000 Medium 29 KUKES 21,001 to 50,000 Medium 30 KURBIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 | 25 | KORCE | 50,001 to 100,000 | Small |
| 28 KUCOVE 21,001 to 50,000 Medium 29 KUKES 21,001 to 50,000 Medium 30 KURBIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 | 26 | KRUJE | 50,001 to 100,000 | Big |
| 29 KUKES 21,001 to 50,000 Medium 30 KURBIN/LAC 21,001 to 50,000 Medium 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 <td>27</td> <td>KRUME</td> <td>up to 20,000</td> <td>Big</td> | 27 | KRUME | up to 20,000 | Big |
| 30 KURBIN/LAC 21,001 to 50,000 Medium 31 | 28 | KUCOVE | 21,001 to 50,000 | Medium |
| 31 LEZHE 50,001 to 100,000 Big 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 29 | KUKES | 21,001 to 50,000 | Medium |
| 32 LIBOHOVE up to 20,000 Small 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 30 | KURBIN/LAC | 21,001 to 50,000 | Medium |
| 33 LIBRAZHD 21,001 to 50,000 Medium 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 31 | LEZHE | 50,001 to 100,000 | Big |
| 34 LUSHNJE 50,001 to 100,000 Big 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 32 | LIBOHOVE | up to 20,000 | Small |
| 35 MALESI E MADHE/KOPLIK 21,001 to 50,000 Medium 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 33 | LIBRAZHD | 21,001 to 50,000 | Medium |
| 36 MALIQ 21,001 to 50,000 Medium 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 34 | LUSHNJE | 50,001 to 100,000 | Big |
| 37 MALLAKASTER/BALLSH 21,001 to 50,000 Medium 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 35 | Malesi e madhe/koplik | 21,001 to 50,000 | Medium |
| 38 MAT/BURREL 21,001 to 50,000 Medium 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 36 | MALIQ | 21,001 to 50,000 | Medium |
| 39 MEMALIAJ up to 20,000 Small 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 37 | MALLAKASTER/BALLSH | 21,001 to 50,000 | Medium |
| 40 MIRDITE/RRESHEN 21,001 to 50,000 Medium 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 38 | MAT/BURREL | 21,001 to 50,000 | Medium |
| 41 PATOS 21,001 to 50,000 Medium 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 39 | MEMALIAJ | up to 20,000 | Small |
| 42 PEQIN 21,001 to 50,000 Medium 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 40 | MIRDITE/RRESHEN | 21,001 to 50,000 | Medium |
| 43 PERMET up to 20,000 Small 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 41 | PATOS | 21,001 to 50,000 | Medium |
| 44 POGRADEC 50,001 to 100,000 Big 45 POLICAN up to 20,000 Small | 42 | PEQIN | 21,001 to 50,000 | Medium |
| 45 POLICAN up to 20,000 Small | 43 | PERMET | up to 20,000 | Small |
| | 44 | POGRADEC | 50,001 to 100,000 | Big |
| 46 PRRENJAS 21,001 to 50,000 Medium | 45 | POLICAN | up to 20,000 | Small |
| | 46 | PRRENJAS | 21,001 to 50,000 | Medium |

| No. | Municipality | Category (population) | Size |
|-----|----------------------|-----------------------|--------|
| 47 | PUKE | up to 20,000 | Small |
| 48 | PUSTEC | up to 20,000 | Small |
| 49 | ROSKOVEC | 21,001 to 50,000 | Medium |
| 50 | RROGOZHINE | 21,001 to 50,000 | Medium |
| 51 | SARANDE | 21,001 to 50,000 | Medium |
| 52 | SELENICE | up to 20,000 | Small |
| 53 | SHIJAK | 21,001 to 50,000 | Medium |
| 54 | SHKODER | 100,001 to 200,000 | Big |
| 55 | SKRAPAR/COROVODE | up to 20,000 | Small |
| 56 | TEPELENE | up to 20,000 | Small |
| 57 | TIRANE | over 200,000 | Tirana |
| 58 | TROPOJE/BAJRAM CURRI | 21,001 to 50,000 | Medium |
| 59 | VAU I DEJES | 21,001 to 50,000 | Medium |
| 60 | VLORE | 100,001 to 200,000 | Big |
| 61 | VORE | 21,001 to 50,000 | Medium |

5.3 Annex 4: List of municipalities by municipality digital ereadiness

| | Municipality Pillars | | | | | |
|------------------|----------------------|-----------------|----------------|----------|-------------------------|---------------|
| Municipality | Government | Regulation | Infrastructure | People | U/C Service Delivery | Overall Score |
| Belsh | 29 | 18 | 25 | 53 | 10 | 27 |
| Berat | 29 | 22 | 34 | 65 | 31 | 36 |
| Bulqizë | 27 | 27 | 17 | 72 | 26 | 33 |
| Cërrik | 14 | 19 | 5 | 67 | 18 | 25 |
| Delvinë | 15 | 16 | 11 | 68 | 12 | 24 |
| Devoll | 27 | 23 | 25 | 73 | 21 | 34 |
| Dibër | 26 | 41 | 5 | 67 | 30 | 34 |
| Dimal | 19 | 16 | 12 | 68 | 15 | 26 |
| Divjake | 10 | 23 | 11 | 66 | 21 | 26 |
| Dropull | 21 | 17 | 15 | 71 | 19 | 28 |
| Durres | 32 | 27 | 47 | 67 | 38 | 42 |
| Elbasan | 32 | 34 | 29 | 72 | 20 | 38 |
| Fier | 32 | 39 | 23 | 57 | 15 | 33 |
| Finiq | 20 | 13 | 0 | 57 | 18 | 21 |
| Fushë - Arrëz | 12 | 7 | 12 | 67 | 18 | 23 |
| Gjirokastër | 18 | 16 | 17 | 67 | 19 | 28 |
| Gramsh | 25 | 33 | 20 | 67 | 20 | 33 |
| Has | 16 | 19 | 15 | 68 | 16 | 27 |
| Himarë | 35 | 30 | 23 | 71 | 20 | 36 |
| Kamëz | 43 | 32 | 53 | 69 | 23 | 44 |
| Kavajë | 18 | 28 | 32 | 61 | 16 | 31 |
| Kelcyre | 9 | 11 | 3 | 62 | 20 | 21 |
| Klos | 28 | 33 | 10 | 70 | 20 | 32 |
| Kolonjë | 22 | 30 | 33 | 68 | 17 | 34 |
| Konispol | 19 | 27 | 21 | 68 | 21 | 31 |
| Korçë | 41 | 27 | 33 | 72 | 26 | 40 |
| Krujë | 46 | 34 | 18 | 71 | 16 | 37 |
| Kuçovë | 23 | 19 | 18 | 66 | 25 | 30 |
| Kukës | 32 | 34 | 35 | 70 | 29 | 40 |
| Kurbin | 24 | 12 | 14 | 66 | 21 | 27 |
| Lezhë | 28 | 39 | 7 | 73 | 27 | 35 |
| Libohovë | 19 | 19 | 5 | 64 | 24 | 26 |
| Librazhd | 25 | 38 | 24 | 69 | 14 | 34 |
| Lushnjë | 31 | 21 | 12 | 71 | 16 | 30 |
| Malesi E Madhe | 34 | 25 | 13 | 64 | 11 | 29 |
| Maliq | 30 | 23 27 | 36 | 70 | 22 | 37 |
| Mallakastër | 12 | 32 | 17 | 53 | 10 | 25 |
| Mat | 32 | 28 | 26 | 67 | 35 | 38 |
| Memaliaj | 14 | <u>28</u> 11 | 8 | 69 | 35 18 | 24 |
| | | | | | | |
| Mirditë Patos | 27 | 30 22 | 12 | 71 | 23 | 33 |
| Patos | 23 | 32 33 | 18 13 | 66 69 | 16 15 | 31 30 |

| Municipality | Government | Regulation | Infrastructure | People | U/C Service Delivery | Overall Score |
|--------------|------------|------------|----------------|--------|-------------------------|---------------|
| Përmet | 14 | 13 | 11 | 60 | 18 | 23 |
| Pogradec | 24 | 20 | 14 | 60 | 15 | 27 |
| Poliçan | 33 | 16 | 26 | 68 | 30 | 35 |
| Prrenjas | 27 | 20 | 14 | 70 | 22 | 31 |
| Pukë | 19 | 13 | 9 | 63 | 17 | 24 |
| Pustec | 13 | 28 | 25 | 68 | 14 | 30 |
| Roskovec | 25 | 18 | 30 | 68 | 19 | 32 |
| Rrogozhinë | 36 | 24 | 36 | 68 | 19 | 36 |
| Sarandë | 30 | 38 | 14 | 63 | 16 | 32 |
| Selenicë | 15 | 19 | 0 | 70 | 13 | 23 |
| Shijak | 23 | 31 | 16 | 59 | 13 | 28 |
| Shkoder | 34 | 29 | 41 | 72 | 24 | 40 |
| Skrapar | 27 | 35 | 16 | 73 | 20 | 34 |
| Tepelenë | 11 | 9 | 14 | 72 | 30 | 27 |
| Tiranë | 69 | 81 | 77 | 79 | 60 | 73 |
| Tropojë | 10 | 26 | 0 | 68 | 25 | 26 |
| Vau i Dejës | 25 | 29 | 22 | 67 | 22 | 33 |
| Vlorë | 21 | 21 | 18 | 66 | 32 | 31 |
| Vorë | 30 | 27 | 25 | 66 | 16 | 33 |