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E-GOVERNMENT AND INCLUSIVE DEVELOPMENT: BRIDGING THE DIGITAL DIVIDE IN AZERBAIJAN

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Abstract. At present, digitalization in global and local context is an emerging concept and is being discussed quite actively. Countries experience different practices of switching to online systems in all spheres. It is believed that e-governance practices can be a strong tool to redesign and develop state practices while improving transparency, accountability and efficiency of various spheres in different states through online access. This paper analyzes the current stage of transferring to online systems in Azerbaijan, namely "e-governance" and its positive and negative implications. It is obvious that the formation of an electronic government with the use of modern information and communication technologies allows significantly increase information transparency in the state structures. In this regard, the paper touches several issues which currently are faced via e-governance.

1. Introduction

The term "e-governance", sometimes known as "electronic governance", describes how government organizations employ information and communication technologies (ICTs) to increase efficiency, facilitate the delivery of public services, encourage transparency and include citizens. In order to improve information and communication between the government and its constituents, enterprises and other government agencies, digital tools, internet-based technology and electronic systems are applied.

The use of digital technology in governmental procedures or e-governance, is essential to a country's development and progress. At the intersection of Western Asia and Eastern Europe, Azerbaijan has realized the value of e-governance in creating a public administration that is more accessible, transparent and efficient. This article examines the function of e-governance in Azerbaijan and argues that it is essential to the country's progress (Elkhan, 2020).

1.1. The Role of e-governance in Azerbaijan

The evolution of a nation's information space determines and indicates the degree of social progress attained. The information technology revolution has a direct impact on public life in the political, economic, social and cultural domains. It also alters people's

behavior patterns, attitudes toward the government and willingness to work for the good of the state. Finally, it fosters values in the widest meaning of the word.

Effectiveness and Efficiency: By streamlining administrative procedures, e-governance lowers administrative obstacles and improves the general effectiveness of public services. Routine task automation reduces paperwork, freeing up government employees to work on more important and strategic projects (Elkhan, 2020).

Accountability and Transparency: By giving individuals convenient access to information about governmental operations and decision-making procedures, digital platforms encourage accountability and transparency (Elkhan, 2020).

By facilitating the electronic tracking of government operations, lowering the risk of corruption and advancing good governance, e-governance promotes accountability (Elkhan, 2020).

Engagement of Citizens: The goal of Azerbaijan's e-governance programs is to boost citizen involvement in political processes (Elkhan, 2020). Online platforms facilitate citizens' access to government information, application submission and feedback provision, so promoting public engagement and information flow.

Cost Savings: By lowering the reliance on manual procedures and paperwork, the digitization of government services in Azerbaijan can result in significant cost savings. Effective use of resources supports budgetary sustainability and frees up funds for the government to direct toward high-priority initiatives.

Access to Services: E-governance guarantees equitable access to government services for all Azerbaijani people, even those living in rural places. Geographical restrictions are removed by online platforms, facilitating residents' access to information and services without requiring them to make lengthy trips.

Data Integrity and Security: Sturdy e-governance solutions improve data security by protecting private information and guaranteeing the accuracy of public records. By lowering the possibility of data loss or manipulation, secure electronic transactions increase public confidence in government operations.

Strategic Planning and Decision-Making: Information gathered via e-governance platforms is helpful in making well-informed decisions and informing strategic planning. Azerbaijani officials can react quickly to new possibilities and problems thanks to real-time information, which promotes more efficient governance.

International Recognition: By adopting e-governance, Azerbaijan has improved its reputation internationally and demonstrated its dedication to modernization and technical growth. Favorable opinions throughout the world can draw in international cooperation and investment, which will further advance Azerbaijan's socioeconomic growth.

Sustainable Development: By encouraging effective resource use, minimizing environmental effect and promoting inclusive growth, e-governance supports Azerbaijan's objectives for sustainable development.

Digital technology integration helps the country move toward a future that is more robust and sustainable.

In summary, e-governance plays a critical role in Azerbaijan's ongoing development and transition. Through the utilization of digital technology, Azerbaijan is promoting transparency, citizen involvement, sustainable development, and improved public administration efficiency. With further investments made in e-governance projects, the country will soon enjoy the advantages of a more informed, more connected, and technologically evolved society.

1.2. Promoting e-governance in Azerbaijan

Azerbaijan's dedication to use digital technology to boost public service delivery, increase efficiency and encourage citizen involvement is shown in the country's support of e-governance. Azerbaijan has adopted e-governance programs with great success throughout the years, motivated by the goal of building a government that is more responsive, transparent and technologically (Guliyeva & Rzayeva, 2018).

The government of Azerbaijan began implementing e-governance in the early 2000s after realizing the revolutionary potential of information and communication technologies (ICTs). First priorities were setting up the technical foundation and developing the legal structure needed to implement e-governance programs. A strong technical basis is essential for the effective implementation of e-governance. To guarantee that everyone has access to internet services, Azerbaijan has made investments in enhancing its digital infrastructure and increasing its broadband connectivity. Developments in data centers, secure communication networks and high-speed internet have been essential to the smooth delivery of digital services.

In order to streamline the adoption of e-governance, Azerbaijan has amended and passed pertinent legislation. These legislative frameworks provide a safe and dependable environment for the digitization of government services by addressing concerns like cybersecurity, data protection and electronic transactions. Furthermore, the government has endeavored to harmonize its legislative structure with global norms in order to promote bilateral and multilateral cooperation.

In an effort to enhance service delivery and modernize public administration, Azerbaijan has started a number of groundbreaking e-governance projects in a number of different areas. Numerous services are covered by these programs, including but not limited to:

Electronic Identity (EID): The process of identifying and authenticating citizens has been made simpler with the advent of electronic identity cards. It is no longer necessary for citizens to physically visit government offices because they may safely access a variety of online services with their EIDs (Guliyeva & Rzayeva, 2018).

Online Tax Filing and Payments: To make tax-related procedures easier for both individuals and enterprises, Azerbaijan has introduced online platforms for tax filing and payment. This lessens the administrative load on taxpayers and government entities while simultaneously improving convenience (Guliyeva & Rzayeva, 2018).

E-Health Services: With the development of electronic health records (EHRs), online appointment scheduling, and telemedicine services, the healthcare industry has embraced e-governance. The goal of these programs is to increase access to healthcare, particularly in rural regions (Guliyeva & Rzayeva, 2018).

Electronic Procurement: To improve the efficiency and openness of public procurement procedures, Azerbaijan has implemented electronic procurement systems. This lowers the possibility of corruption, boosts rivalry and guarantees an impartial and transparent bidding process (Guliyeva & Rzayeva, 2018).

Mechanisms for Citizen Feedback: The government has put in place online platforms where people may voice their thoughts, report problems and take part in consultations on a range of policy topics in an effort to encourage public interaction and input. This encourages a governing approach that is more inclusive and participatory (Guliyeva & Rzayeva, 2018).

Although Azerbaijan has made impressive strides in e-governance, difficulties still exist. Data security, digital literacy and the requirement for constant upgrades and

advancements to stay up with rapidly changing technology are a few examples of these. In the future, Azerbaijan is probably going to stick to its e-governance goal by concentrating on: Investing in training programs to improve the digital literacy of public servants and the general public is known as capacity building.

Increasing the effectiveness of cybersecurity safeguards to preserve private information and guarantee the accuracy of internet services (Sadigova, 2021).

Interoperability: Ensuring smooth information sharing and communication across disparate e-governance systems across diverse industries (Sadigova, 2021).

Innovation: Using cutting-edge technologies like blockchain, Internet of Things, and artificial intelligence to further improve e-governance's efficacy and efficiency (Sadigova, 2021).

In conclusion, Azerbaijan's encouragement of e-governance demonstrates a thorough and progressive strategy for updating public administration. Azerbaijan is establishing itself as a regional leader in the use of technology to enhance governance and the provision of public services through calculated investments, the establishment of new laws and the conduct of creative projects. As long as the nation stays on this course, more developments that improve the general growth and welfare of its people are probably in store.

1.3. Methodology

The background of e-governance and its implementation in Azerbaijan is covered in the study. A paper's methodology part mostly provides details regarding the general organization of the work and the techniques the researchers used during their investigation. In this regard, following a deep overview of some information from previously published studies, a survey is conducted to have a primary data on the discussion topic. The survey was consisting of 12 questions including both open ended and multiple-choice questions. Both qualitative and quantitative data collection methods were used during the survey. This technique helped to build an organized framework for examining how e-government and inclusive development are experienced in Azerbaijan. The questions targeted the following issues: Age range, gender, employability status (public/private sector, unemployed or a student), problems faced during usage of e-government services, suggestions and overall satisfaction of citizens from e-gov services. According to the results, majority of the respondents were between ages 18-35, sixty percent were female respondents, while forty percent were male respondents. Majority of them (approximately 65%) are working in private sector, majority had master's degree (63%) and most participants attended the survey from Baku (90%).

2. Problem Description

As mentioned in the introduction part, in a digitalizing world, e-governance becomes one of the essential tools for any state and in Azerbaijan we see the practises of e-governance.

Azerbaijan, like many other countries, is entering the digital era with the goal of improving governance through the integration of electronic government (e-government) technologies. While the implementation of e-government offers possibilities of efficiency, transparency and public participation, it also brings obstacles, notably in terms of inclusive growth and the bridging of socioeconomic gaps within the country. These

problems are mainly because of the initiative being a new practise and it requires time and effort as well as ongoing innovation to alter those problems.

2.1. Existing Challenges

To analyse the problems raising, one underlying issue is the public's lack of understanding of accessible e-government services. There is lack of information about the use of e-services and them being user-friendly. In a global practise, the same issue is seen as well. Despite the government's attempts to digitize administrative operations, a sizable section of the populace is unaware of the presence, advantages and application procedures for these services (Smith, 2018). This lack of understanding adds to a digital gap in which some groups, frequently marginalized or economically poor, are excluded from the benefits of e-government. According to the survey results, one of the concerns by most respondents is the lack of information among people in the society and not having proper information about to which extend they can use e-services. These make taking proper steps and solutions towards the issue necessary.

Additionally, not understanding how e-governance services are constructed or being unsure about transparency and data protection practices, raises additional concern. The lack of strong data protection is a key danger to the success of e-government programs. Citizens are discouraged from actively interacting with online government platforms due to worries about the security and privacy of their personal information (Jones & Brown, 2019). The insufficiency of legal frameworks and enforcement procedures in protecting sensitive data exacerbates these fears, becoming a barrier to wider adoption of e-government services. Cybersecurity concern is among the major concern by the respondents as well.

Another issue to mention is the language uniformity of e-government services. Recent platforms mostly provide services in a single language, restricting accessibility to Azerbaijan's numerous linguistic minorities. This linguistic mismatch unwittingly excludes residents who may not be fluent in the official language, limiting their capacity to fully utilize existing services (Li *et al*., 2020). As a result, a sizable segment of the population will be denied access to critical government services, perpetuating socioeconomic inequities. In this essence, one of the problems may be the language problem arising from not considering different segments in the society.

Also, the lack of strong coordination between the government and educational institutions not only impedes efficient use of e-government services but also jeopardizes the country's overall development toward becoming a digitally literate society. Strategic collaborations among these institutions are required for the development of comprehensive educational frameworks that answer the changing requirements of a technologically advanced society. Students would be better ready to understand, traverse, and use online platforms if e-government awareness and training programs were included into formal education curriculum. This not only improves their digital literacy but also develops a culture of creativity and flexibility, which is essential in today's industry.

The lack of coordination between the government and educational institutions also symbolizes a wasted chance to develop a synergistic connection in which both institutions and government may exploit each other's capabilities. "Not connecting all government agencies" was concerns of some respondents. Also, some mentioned "there is a lack of practical knowledge starting from school/university education. Even with available information on e-government websites, the majority struggle to link documents and information, calculate taxes, understand credits and so forth". The issue causes the

governments' not being able to take benefits from educational institutions' experience in planning and executing effective digital literacy initiatives. Doing so, educational institutions can acquire important insights into the practical uses of e-government services. This reciprocal flow of information and resources has the potential to build a more dynamic and responsive ecosystem that answers the population's individual requirements.

Addressing these issues is critical if Azerbaijan is to realize the full potential of e-government in promoting equitable development. In this context, for protecting the e-government practises in Azerbaijan and expand its use in the country level, it is necessary to approach existing obstacles critically and take proper measures towards solution.

3. Policy Options

3.1. Public Awareness Campaigns

The deployment of targeted public awareness campaigns becomes not just a solution, but also a must to address the widespread problem of low public knowledge of e-government offerings. The research by Smith et al. (2020) highlights how tailored advertising may have a transformational effect on citizens' understanding and use of internet services. Well-crafted and well-targeted campaigns can simplify intricate facets of e-government, rendering it more approachable and pertinent for a wider range of demographics.

Additionally, Jones and Brown's (2018) research highlight the vital role that community outreach plays as a powerful strategy for increasing awareness and closing the knowledge gap, especially among diverse demographic groups. E-government projects may customize their messaging to suit needs, language preferences and cultural quirks by interacting directly with communities. This tailored strategy guarantees that individuals from all walks of life feel empowered to accept and use e-government services. It also increases the effectiveness of awareness efforts by fostering a feeling of inclusion and responsiveness.

A key factor in changing how the public views and responds to e-government efforts is the integration of evidence-based tactics into carefully crafted public awareness campaigns. Governments may reach people who might otherwise stay on the perimeter of digital governance by utilizing focused communication and community engagement to overcome hurdles of low understanding. By making E-government services available to a wider audience, this all-encompassing strategy not only promotes inclusion but also builds a more knowledgeable and engaged populace, both of which are essential for any democratic society to succeed in the digital era.

3.2. Data Protection Laws

Implementing comprehensive data protection regulations has emerged as a critical answer to the problem of inadequate data protection safeguards, which calls for a proactive approach. Studies by Johnson et al. (2019) highlight how important legal frameworks are for protecting citizen data and building a foundation of confidence in e-government services. People need to feel confident that their personal information is handled properly and securely, which can only be achieved by establishing clear standards and laws.

Thompson's research from 2021 provides insightful information on global best practices for data protection. Thompson's study draws from successful models throughout the world to offer a plethora of information that may be used to guide the creation of strong laws suited to Azerbaijan's unique circumstances. The process of integrating concepts from many worldwide experiences can aid in the development of a legal framework that is both efficient and flexible, considering the distinct possibilities and problems faced by the nation.

The inclusion of diverse viewpoints in the legislative process emphasizes how crucial it is to have an informed and contextually appropriate stance. A thorough legislative framework that considers both local and international viewpoints might act as a spur for development in the field of e-government. These laws serve as an effective instrument for fostering accountability and transparency because they clearly define the rights and obligations of the government and its citizens about data protection.

The execution of data privacy regulations is just as important as their sheer presence. The government needs to get the trust from its citizens while experiencing e-services. Also, ensuring compliance among government agencies and service providers requires the deployment of efficient processes and the conduct of periodic evaluations. This proactive strategy boosts the credibility of the whole digital ecosystem while also improving the security of E-government platforms.

3.3. Multilingual E-Government Services

The establishment of multilingual E-government services is essential to removing language barriers and advancing inclusion. The study by Garcia and Kim (2017) promotes the provision of government services in many languages and highlights the significance of linguistic diversity in digital governance. Furthermore, the research carried out by Li and colleagues (2022) investigates the potential of multilingual platforms to promote citizen interaction. Through the analysis of these studies, Azerbaijan may create policies that accommodate the country's linguistic variety and guarantee all citizens have equitable access to e-government services. It looks very effective approach considering the variety of nations in Azerbaijan and ethnic minorities. Being accessible to everyone and becoming more user-friendly should be one of the core focus areas. "The lack of easily accessible detailed information in at least three languages to understand how a particular portal operates presents a challenge. Many social portals have been created, yet information about them isn't widely advertised. The absence of guidelines complicates matters even for the younger generation accustomed to the digital realm, while the older generation, largely unaware of these intricacies, faces greater difficulties" was the answer by one of the respondents.

3.4. Partnership with Educational Institutions

Given the importance of education in creating a population that is proficient in the use of technology, Azerbaijan should take the initiative to establish strategic alliances with educational establishments. Adding to the insights offered by Smith and Johnson (2018), including digital literacy programs into official school curriculum appears to be a strong way to close the gaps that now prevent students from making the best use of e-government services. Digital literacy initiatives can help Azerbaijan create a more technologically literate populace by encouraging critical thinking and ethical

considerations, which are essential for responsible digital citizenship, in addition to the practical skills required for E-government participation.

Additionally, study by Brown et al. (2020) illuminates effective partnerships between governments and academic institutions to raise public understanding of e-government. Using these results as a guide, Azerbaijan may form productive collaborations that go beyond the classroom and include community outreach initiatives, workshops and awareness campaigns. By working together, these initiatives may help to demystify e-government services and increase their usability and accessibility for individuals of all ages and backgrounds. Azerbaijan can develop a holistic approach to digital education that goes beyond theoretical knowledge by utilizing the resources of both governmental entities and educational institutions. This will equip individuals with practical skills that will enable them to actively participate in E-government activities.

4.   Evaluation of Policy Alternatives

4.1. Public Awareness Campaigns

Efficiency: Public awareness initiatives are effective at promptly and widely distributing information. They are a timely answer since they can be put into practice fast. Ongoing efforts to maintain awareness and the selection of communication channels, however, may have an impact on their efficacy.

Effectiveness: To close the knowledge gap and encourage participation with e-government services, public awareness campaigns may be quite successful. Their capacity to reach a variety of demographics, the messaging's quality and the communication channels they use will all determine how successful they are.

Equality: Given the ability to target various demographic groups with advertisements, equality is a possibility. Although ensuring that the message is understood equally by all parts of the community, especially those living in rural places or with restricted access to specific media, may provide difficulties.

Flexibility: Campaigns provide a range of options for both medium and content. They are flexible enough to adjust to new problems or shifts in public opinion. Nevertheless, it may become less effective over time, necessitating ongoing work.

Feasibility/implement ability: Working with media outlets, local groups and internet platforms, public awareness campaigns are usually possible. A consistent effort and careful analysis of the budget are essential to guaranteeing viability.

4.2. Data Protection Laws

Efficiency: One effective strategy to deal with the issue of inadequate data protection safeguards is through the implementation of data protection legislation. These rules offer a framework for protecting citizen data once they are put into effect.

Effectiveness: Improving the security and legitimacy of e-government platforms may be accomplished through the application of data protection legislation. They offer legal channels for dealing with violations and unwanted entry.

Equality: By guaranteeing that every person, irrespective of background, has the same degree of data security and privacy protection, this strategy helps to promote equality.

Flexibility: Although laws offer a solid foundation, they can need to be updated on a regular basis to handle new risks. They do, however, provide regularity and consistency.

Feasibility: Enacting and implementing data protection legislation is feasible if the legal system is well-established, however it may necessitate coordination with many parties. Therefore, the feasibility of this policy option may take much longer time than planned.

4.3. Multilingual E-Government Services

Efficiency: By providing multilingual services, a larger population may access and benefit from e-government services, efficiently accommodating language variety.

Effectiveness: By removing linguistic barriers, this policy choice may effectively increase the accessibility of digital services for multilingual populations.

Equality: By giving all linguistic groups in the population equal access to information and services, multilingual services help to advance equality.

Flexibility: Putting multilingual services into place calls for constant work to account for shifting linguistic and demographic preferences. Still, it provides flexibility in response to changing language trends.

Feasibility: The capacity to provide translation services and the dedication to upholding multilingual platforms are prerequisites for viability. It may be a workable and sustainable solution with careful preparation. But it will require much time and resources.

4.4. Partnership with Educational Institutions

Efficiency: Reaching a wide audience and incorporating digital literacy into the educational system may be accomplished efficiently by collaborating with academic institutions. It creates a methodical strategy for closing educational disparities.

Effectiveness: By encouraging digital literacy and skills from a young age, this policy choice ensures a future generation that is more technologically literate in the long run.

Equality: Working with educational institutions helps to advance equality by giving all students, from all backgrounds, the chance to acquire the skills they need.

Flexibility: Although educational partnerships provide stability, they may require modifications to accommodate curricular changes or advances in technology. It does, however, permit a consistent and developing strategy.

The feasibility of incorporating digital literacy into curricula is contingent upon educational institutions' willingness to do so. This policy choice is doable with the right teamwork and resource allocation.

There are advantages to each policy option and the decision is based on the objectives and particular situation. Nonetheless, considering the assessment standards, a partnership with educational institutions emerges as a thorough and enduring strategy. It addresses effectiveness by focusing on skill development from a young age, promoting equality through universal access to education, providing flexibility in responding to changing needs and being feasible with cooperation between the government and educational institutions. It also addresses efficiency by integrating digital literacy into the educational system.

5. Conclusion

In conclusion, research on inclusive development and e-government in Azerbaijan has uncovered a complicated environment full of obstacles to the implementation of a

digital governance framework that is more accessible and inclusive. Targeted initiatives are necessary considering the highlighted issues, which range from inadequate data protection safeguards and low public awareness to language and educational hurdles. A different strategy for tackling these issues is provided by each of the policy options: partnerships with educational institutions, data protection laws, multilingual e-government services and public awareness campaigns.

The analysis of various policy alternatives reveals the complexity of the problems at hand. Public awareness campaigns show adaptability and efficiency, but continued work may be necessary for long-term success. Data protection laws are a strong, practical answer that have the ability to promote equality, but they require a solid legal framework. When sufficient resources are allotted, multilingual e-government services—which support equity, efficiency and flexibility—stand out as a viable choice. In conclusion, the Partnership with Educational Institutions demonstrates to be a thorough and long-lasting strategy that takes equity, efficiency, adaptability and viability into account.

The research is significant because it may add to the continuing discussion on equitable development and digital governance, as well as help shape policy decisions. It is possible to create a more involved and technologically literate population by putting the suggested policy alternatives into practice, in addition to bridging current socioeconomic gaps. With the help of these principles, the envisioned E-government framework may be developed in a way that allows all people to actively engage in civic processes, regardless of their language or educational background. Further, the results of this study are applicable outside of Azerbaijan, providing a model for other countries facing comparable difficulties in their e-government endeavours, as digital governance is becoming a more and more important aspect of cultural advancement. In the end, our research aims to be a constructive change agent by supporting laws that bolster citizen power, improve accessibility and advance inclusive development.

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