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# Use of Digital Technologies for the Conduct of Work in the Government System Based on the Demans of the Current Times

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**Abstract:** This article deals with the issues of ensuring the safety of the population in the residences of citizens. It is planned to implement an electronic platform that allows for quick collection and analysis of information on the technical and social condition of residential areas. These strategies focus on digital transformation in the national economy, industry, and society. In Uzbekistan, significant steps have been taken to implement modern information and communication technologies (ICT) in public administration, education, healthcare, and agriculture. One notable challenge addressed in this study is the management of carbon monoxide poisoning, fire hazards, and explosions during the heating season. The research highlights the limitations of manual data collection, including the risk of data loss, difficulty in locating information, and inefficiencies in processing critical safety data. The program processes data in less than a minute, facilitating more efficient emergency management and preventive measures. This system exemplifies the role of digital technology in enhancing public safety and optimizing government operations.

**Keywords:** *digital transformation, digital economy, gas, technology, poisoning, security, analytics.* 

## Introduction

Nowadays, no matter what field or business, technique and technology are exactly reflected in every aspect of them. "Digital Uzbekistan - 2030" and "Development Strategy of New Uzbekistan aimed for 2022-2026" emphasize a number of measures aimed at implementing digital transformation in the national economy, industry and society in general (Shin, 2020a). Complex measures are being implemented in our country for the active development of the digital economy, the widespread introduction of modern information and communication technologies in all sectors and areas, first of all, in public administration, education, health care and agriculture (Mubenga, 2024).

In our republic, from the first cool days of autumn, the heating system is initially put into operation, until the time it is turned off in the spring, in the interim period (Mukhammadiev, 2022), the consequences of carbon monoxide poisoning, fire, explosion and the elimination of these consequences have been established in the district authorities,

prompt information on the security situation in the houses of all citizens accumulates (Korpali, 2024).

# Methodology

It takes a lot of personal content and effort to deal with this issue in a short period of time. Precisely, it takes a lot of time and effort to manually collect and sort the data collected during the study (photo and written data) into a computer database (Cassisi, 2024). In addition, there are some drawbacks in order to store data in a paper file. Let's talk about some of these disadvantages. Including:

- All data should be written down on paper, and while saving paper, they may be lost or difficult to find;
- The difficulty of finding the necessary information among so much paper or the waste of so much work if the paper is lost;
- It is very complicated to collect information in the form of paper if the information is not collected in time, it is not possible to take necessary measures to prevent gas, fire, explosion and other unpleasant incidents in the residences of citizens (Begum, 2020).

# **Result and Discussion**

Therefore, in order to save personal time and improve work efficiency, we can see the introduction of electronic software for the analysis of carbon monoxide poisoning, explosion and fire prevention in citizens' homes as an example for today's technology and technology era.



Figure 1. The current version of the mobile application of the platform

In every work or field, first of all, analyzes are carried out in order to carry out the work correctly (Erkudov, 2024). Only the correct, reliable, fast and high-quality of the analysis will lead to a perfect result. Therefore, accurate information is the basis for us to choose the right and decisive direction. Taking into account the above, "Electronic software

for the analysis of carbon monoxide poisoning, explosion and fire prevention in citizens' homes" has been developed. This software (i.e. platform) is structured in a very simple and convenient way. It is an electronic software platform for electronic registration and analysis of the security situation of citizens' homes in the case of flash of gas and air mixture, carbon monoxide poisoning, fire and other emergency situations by the Ministry of Emergency Situations (Daniel, 2021).

The examiner's information is immediately entered into the electronic program at the place of inspection, and the electronic program is entered automatically. This means that the data of several inspectors will be analyzed at the same time. Inside the platform, there is an opportunity to enter any information about the technical and social condition of the residence (Fig. 1). This software analyzes not only the technical conditions related to fire and gas flares, but also the social conditions related to the neighborhood (Nurimbetov, 2022). As stated in the "Development Strategy of New Uzbekistan aimed for 2022-2026", the procedure for leaders of all levels to come to the neighborhood, study the problems in their direction and find solutions to them, and determine the state of affairs in the neighborhood as the main criterion for evaluating the activities of the ministry, administration and authorities, this program it serves not only the Ministry of Emergency Situations, but also the head authority, sector leaders, local, gas and electricity supply enterprises, the Ministry of Internal Affairs, and other related organizations. This software also collects neighborhood information (Zarrati, 2024).

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#### Figure 2. Current view of the platform

Apart from this, it is possible to save pictures of each technical condition of the accommodation. In addition, it is possible to carry out work easily even in places where there is no Internet, and it is possible to send them to the electronic program through a mobile phone device in places where there is Internet (Fig. 2).

This program also provides an opportunity to carry out accurate control and analysis of the number of households, which have been carefully studied during the day, on one computer (Fig. 3).



Figure 3. Current view of the platform

Through this program, we will have the opportunity to analyze the residences of 50,000 or more citizens checked by personal content at the same time, as soon as the information is entered into the electronic program. On average, it takes 13 hours a day for employees to check accommodation, process the checked data, come to the workplace, submit a report, receive and analyze it, but this electronic program takes only 1 minute of this time (Dildor, 2023). Therefore, the information of the examiner immediately enters the electronic program at the place of inspection, and the electronic program automatically accepts and processes it.

## Conclusion

Moreover, if it took hours or even days to get accurate information about who checked the last time in case of carbon monoxide poisoning, fire, explosion, and other similar unfortunate events in a house, this program only takes 1 minute at most.

Additionally, the analysis and data are processed with high accuracy and paperwork is significantly reduced, and all statistical data and analysis are carried out in Microsoft Excel by 1 employee, if 30 or 40 employees are needed, and if more employees are needed (Shin, 2020b).

Furthermore, the technical and safety conditions of residential areas are divided into red, yellow, and green categories in this program. This, in turn, makes it possible to carry out the work in a systematic manner, directing all tools and equipment only to the red category.

## References

- Begum, T. (2020). Perceptions and experiences with district health information system software to collect and utilize health data in Bangladesh: A qualitative exploratory study. *BMC Health Services Research*, 20(1). https://doi.org/10.1186/s12913-020-05322-2
- Cassisi, C. (2024). TSDSystem: a framework to collect, archive and share time series data at volcanological observatories. *Bulletin of Volcanology, 86*(8). https://doi.org/10.1007/s00445-024-01757-1
- Daniel, C. (2021). Digital disruption and planning–use of data and digital technology by professional planners, and perceptions of change to planning work. *Australian Planner*, 57(1), 50–64. https://doi.org/10.1080/07293682.2021.1920995
- Dildor, S. (2023). Implementing Digital Transformation in the Logistics System of Uzbekistan. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 13772, 149–155. https://doi.org/10.1007/978-3-031-30258-9\_13
- Decree of the President of the Republic of Uzbekistan. On the strategy "Uzbekistan 2030" dated 11.09.2023 No. PP-158.
- Decree of the President of the Republic of Uzbekistan dated January 28, 2022 "On the development strategy of New Uzbekistan for 2022-2026" No. PP-60.
- Erkudov, V. O. (2024). Validation of WHO Charts Mobile Applications for Body Length and Weight Assessment in Healthy Newborns. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 14848, 152–162. <u>https://doi.org/10.1007/978-3-031-64629-4\_12</u>
- Fang Z. E-government in digital era: concept, practice, and development //International journal of the Computer, the Internet and management. – 2002. – T. 10. – №. 2. – C. 1-22.
- Katsabian T. It's the end of working time as we know it: New challenges to the concept of working time in the digital reality //McGill Law Journal. – 2020. – T. 65. – №. 3. – C. 379-419.
- Korpali, M. (2024). Various Techniques and Applications of 5G Technology: A Comparison of 5G Versus 4G/3G. Lecture Notes in Networks and Systems, 991, 777–791. <u>https://doi.org/10.1007/978-981-97-2550-2\_56</u>
- Milakovich M. E. Digital governance: New technologies for improving public service and participation. Routledge, 2012.
- Margetts H. Public management change and e-government: the emergence of digital-era governance //Routledge handbook of internet politics. Routledge, 2008. C. 114-127.
- Mubenga, N. S. (2024). Batteries, Energy Storage Technologies, Energy-Efficient Systems, Power Conversion Topologies, and Related Control Techniques. *Studies in Systems*, *Decision and Control*, 472, 23–52. https://doi.org/10.1007/978-3-031-29586-7\_2
- Mukhammadiev, M. M. (2022). The Role of Renewable Energy Sources in Providing the Efficiency of the Power System in the Conditions of Digital Energy Transformation. *AIP Conference Proceedings*, 2552. https://doi.org/10.1063/5.0111764

- Nurimbetov, R. (2022). Multi-level diagnostics of agrarian economy subjects according to the degree of readiness for digital transformations. *IOP Conference Series: Earth and Environmental Science*, 1043(1). https://doi.org/10.1088/1755-1315/1043/1/012006
- Shin, S. C. (2020a). Digital Transformation through e-Government Innovation in Uzbekistan. International Conference on Advanced Communication Technology, ICACT, 2020, 632–639. https://doi.org/10.23919/ICACT48636.2020.9061507
- Shin, S. C. (2020b). Digital Transformation through e-Government Innovation in Uzbekistan. International Conference on Advanced Communication Technology, ICACT, 2020, 632–639. <u>https://doi.org/10.23919/ICACT48636.2020.9061507</u>
- Tanirbergenov S. THE SYSTEM OF ENVIRONMENTAL LEGISLATION OF THE REPUBLIC OF KARAKALPAKSTAN //Science and innovation. – 2023. – T. 2. – №. C2. – C. 20-25.
- Tanirbergenov S. B. Development of environmental legislation of the Republic of Karakalpakstan after gaining independence //ACADEMICIA: An International Multidisciplinary Research Journal. – 2021. – T. 11. – №. 4. – C. 1070-1073.
- Zarrati, Z. (2024). Cliché ELT and the Requirements of "Development Strategy of New Uzbekistan for 2022-2026": Expanding ELT Paradigms. *Journal of Higher Education Policy and Leadership Studies*, 5(1), 160–169. https://doi.org/10.61186/johepal.5.1.160